



Exploring the Impact of Economic and Social Dimensions on Tourism Development in Traditional Villages: A Case Study of Guizhou, China

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Abstract. The development of tourism in traditional villages not only improve the income and living standards of community residents, thereby fostering the economic and social development as well as facilitating rural revitalization, but also induces impactful transformations in the natural, social, and economic environments of these villages. These positive changes come at a cost to local residents, changing their daily lives and causing to diverse psychological experiences that shape their overall perceptions of tourism effects. The study, therefore, focuses on the perceptions and attitudes of residents in traditional villages in Guizhou, China by adopting a quantitative method of data collection, grounded in social exchange theory. Smart PLS is used to analyse the complex relationships among constructs of the proposed structural models.

Keywords: Tourism Development, Traditional Villages, Attitudes, Social Exchange theory

1 Introduction

Traditional villages are characterized by ancient formations; abundant ancient cultural resources, typically full conservation, and high social, cultural economic historical, scientific, and artistic significance [1-3]. Hence, studies on the tourism development of traditional villages conservation are currently receiving increasing attention. These traditional villages not only have a long history but also hold economic, social, cultural, artistic, and scientific value. Conservation and preservation of traditional villages began in the early 1980s in China. However, the conservation of traditional villages as special conservation objects began in 2003 with the selection of noticeable ancient and cultural villages in China [4-5]. Hence, it is important to implement effective conservation measures while the tourism development of these villages to ensure the proper inheritance and promotion of this cultural heritage.

This study is structured into 3 sections, section 1 discusses the background and significance of this study. Section 2 discusses the literature review. It provides a theoretical perspective of social exchange theory, conceptual framework and hypotheses development. Section 3 provides further information about the data collection.

1.1 Background

Since the start of the 21st century, China's tourist industry has expanded rapidly. With the growth of different communication techniques and the ongoing enhancement of local infrastructure construction in the context of poverty alleviation in China, the range of groups facing tourism activities is becoming increasingly extensive, and tourism has gradually grown into a popular consumer product and is maintaining vigorous and upward growth vitality [6-7].

From the perspective of geographical distribution, China's economic development level as a whole shows a decreasing trend from the eastern region to the western area. The western region has the majority of China's traditional villages, and compared with the southeastern coast, this region has unique natural landform characteristics and extremely high tourism value [8]. Compared to eastern China, the economy in the western region of China, especially Guizhou, is relatively backward and interweaves with ethnic minority groups. Therefore, vigorously developing tourism in the western minority areas is highly important for developing the local economy and alleviating and eliminating poverty in this region [7-8].

China's tourism industry has grown significantly, and traditional villages have recently become tourist hotspots due to their unique resource value. The continual warming of tourism development has resulted in the economic development of traditional villages and the reversal of their decline [9-10]. Tourism promotes the growth of traditional villages and is one of the key solutions to China's national rural revitalization strategy [11]. In recent years, Chinese local governments have viewed tourism development as a powerful economic policy for promoting the long-term and continuous growth of the ecological environment and the local economy [12].

In 2020 and 2021, the added value of national tourism and related industries to GDP in China was 4.01% and 3.96%, respectively. The COVID-19 pandemic remains the primary cause of changes in domestic tourism industry demand. Domestic tourist visits totaled RMB25.3 billion in 2022, down 22.1 percent from the previous year. Domestic tourist income (total tourism expenditure) was RMB2.04 trillion, a 30.0% decrease each year (see Fig.1). With the improved status of COVID-19 in China, the tourism market is showing evidence of recovery [13-14].

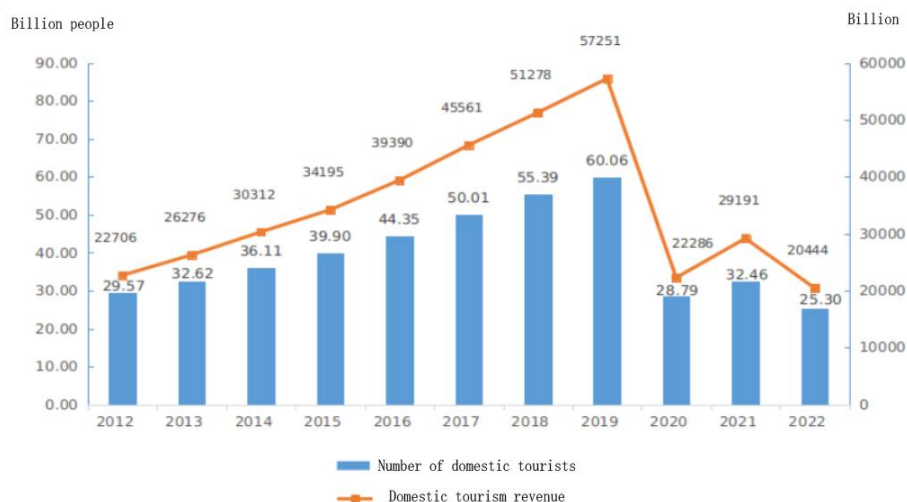


Fig. 1. Chinese domestic tourism development from 2012 to 2022

Traditional villages tourism has the potential to improve industrial integration, enhance the further value of agricultural products, and boost the revenue of farmers. A foundation for an efficient rural collective economy was established [15]. Furthermore, the growth of rural tourism has the potential to create an abundance of job possibilities for society. It could encourage people to go back to their hometowns to find jobs or create businesses [16]. The rural revitalization strategy has injected new impetus into the tourism development of traditional villages. The tourism development of traditional villages conservation is an essential approach for carrying out rural revitalization strategies while constructing beautiful villages in China [17].

From 2012 to 2023, China announced 6 batches of traditional villages, which totals 8,155 traditional villages [18]. The number of traditional villages in Guizhou ranks 1st in China (see Table 1), and these traditional villages have been preserved due to inconvenient transportation and information blockage. Their architectural culture, farming culture, clothing culture, language and writing culture, customs, etc., all have very high scientific research and aesthetic value [19]. The study attempts to offer some recommendations towards tourist development, including the economy, cultural inheritance and ecological environment of traditional villages in Guizhou Province.

Table 1. Number of traditional villages in China and Guizhou.

Year	Batch	Amount China	in	Amount Guizhou	in	The proportion of Guizhou traditional villages in China
2012	1st	646		90		13.93%
2013	2nd	915		202		22.08%
2014	3rd	994		134		13.48%
2016	4th	1598		119		7.45%
2019	5th	2666		179		6.71%
2023	6th	1336		33		2.47%
	Total	8155		757		9.28%

Currently, when the tourism industry is developing, it is also considering the particularity and importance of indigenous people’s perceptions and attitudes. A positive awareness of destination people toward tourism development can increase the growth and spread of tourism goods, provide useful recommendations for the future planning and management of tourism places, and be crucial for the conservation and inheritance of local ethnic and cultural property. The evaluation and analysis of the perceptions and attitudes of traditional village residents can provide valuable support for the formulation of tourism development [20-27].

The research aims to examine the structural relationships among community involvement, community attachment, environmental attitudes, the perceived benefits (costs) of tourism, and tourism development in Guizhou Province, China as a case study. The study advances the current literature in several ways. Firstly, the study proposes a strategy for tourism development in traditional villages conservation and discusses residents’ perceptions and attitudes toward tourism development in traditional villages conservation. It could be useful for local governments to make local tourism development more comprehensive, recognize possible conflicts between the development of tourism and local people, and identify priorities and strategic directions for developing strategies to motivate local people to support tourism development in their communities. Secondly, the study incorporates the antecedent variables (community involvement, community attachment, and environmental attitudes) in examining the connection between perceived benefits (costs) of tourism on tourism development by integrating social exchange theory (SET). These positive changes come at a cost to residents, changing their daily lives and causing diverse psychological experiences that shape their overall perceptions of tourism effects.

1.2 Significance

Firstly, this research will apply and integrate SET to study the factors that influence community involvement, community attachment, environmental attitudes, the perceived benefits (costs) of tourism. This study presents extensive information and a deep comprehension about the variables which influence the views of residents about growth in tourism and related issues.

Secondly, based on the SET perspective of the effect classic model, a conceptual model of tourism impact “perception--tourism development” was constructed, which provided a new idea for prospective research in the field of tourism development and conservation. This study emphasizes the influence of resource quality on residents' attitudes through the process of social exchange on residents' behavior so that research on residents' intentions to join in tourism development in traditional villages is more reflective and in line with the development situation of traditional villages in China and effectively expands the research ideas.

Thirdly, there is a concentration of ethnic minorities in Guizhou Province, and traditional villages have distinct ethnic characteristics and irreproducible cultural values. The traditional villages in Guizhou are mostly situated in Qiandongnan Autonomous Prefecture, Tongren City, Qiannan Autonomous Prefecture and Anshun City, with Qiandongnan Autonomous Prefecture being the most representative. Traditional villages are the significant foundation of rich historical and cultural resources in Guizhou Province and are also typical representatives and external material expressions of Guizhou culture. There are 757 traditional villages in this region, ranking first in China, making it the region with the highest number, greatest density, and most distinctive ethnic characteristics of traditional villages in China [28]. Therefore, studying traditional villages in Guizhou Province is more representative.

2 Literature Review

2.1 Social Exchange Theory

Social exchange theory (SET) emerged in the Western sociological community in the 1960s and spread globally; it is a sociological theory initially proposed by Homans with the publication of his work “Social Behavior as Exchange”. Key figures representing this theory included Blau, Emerson, and others [29-31]. Homans' SET focuses on explaining individual behavior at the personal level, commonly referred to as behaviorist exchange theory or deductive exchange theory. Blau's theory emphasizes exploring the exchange processes from interpersonal interactions to the exchange processes governing community and complex social structures, often referred to as social structural exchange theory. Emerson applied network analysis techniques to exchange theory, generally known as social exchange network analysis.

In social interactions, for individuals, giving things to others constitutes their incurred cost, while receiving things from others represents their gained benefits. Everyone wishes to obtain the maximum benefits with the minimum cost. Only when the benefits gained by both parties exceed the costs can the exchange be sustained [32].

SET refers to the psychological and behavioral exchange that individuals engage in during social interactions. The key to the success of social exchange lies in both parties involved obtaining equivalent benefits [33].

SET was briefly considered as a suitable paradigm for explaining inhabitants' perceptions of the effects of tourism [34]. From the perspective of tourism, it focuses on the attitudes of community residents in the face of various impacts brought about by tourism and proposes an exchange process model in tourism exchange relations to illustrate the dynamic interaction between community residents and tourism in social exchange. The model (see Fig. 2) illustrates the whole process of community residents in the exchange of tourism [35].

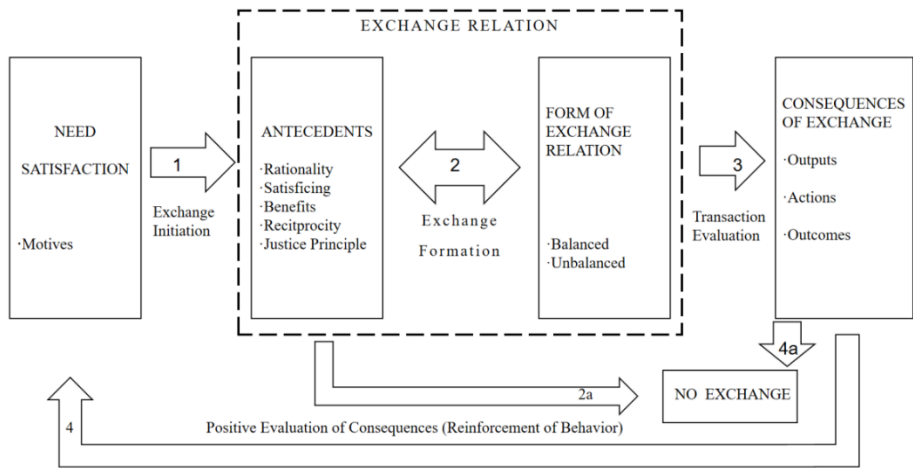


Fig. 2. Model of the social exchange process

In tourism research, SET is extensively used to illustrate the impact and perception of tourism on communities because the occurrence of tourism phenomena is often accompanied by the occurrence of exchange behavior between stakeholders [36]. [37] studied the attitudes and economic relationships of community people toward tourism development and compared two groups of variables: residents involved in tourism business activities, or the service industry and residents not involved in tourism business or service activities. The findings revealed that residents involved in tourism business activities, or the service industry held more positive and optimistic attitudes toward the local community's tourism development compared to those who did not benefit from such activities. This discovery validates the SET.

The initial conceptual frame SET was applied to achieve better results for the implementation work for tourism development based on SET was built by [38]. The model demonstrated that tourism development is influenced by attitudes toward its negative and positive aspects, as well as the status of the local economy. The SET serves as the model's theoretical underpinning. Several studies have investigated the impact of the predicted costs and benefits of tourism on support for it [35, 39-45]. SET concepts are suggested in the research they conduct since SET indicates that individuals select exchanges following the assessment of benefits and costs [46]. SET claimed that residents

who represented support for tourism development are considered willing to exchange [38, 42-44].

SET stated that residents select their support for the growth of tourism according to their perceptions of both its beneficial and adverse effects [46]. The majority of scholars utilize SET for the exchange connection between the local population and tourism, attempting to determine how this relationship influences people's views of tourism growth [47]. [48] applied the SET approach to examine people's perceptions of the tourism business. The findings also show that economic, socio-cultural and environmental components can be deduced to include residents' viewpoints regarding the influence of tourist growth.

SET aimed to provide locals with benefits such as tourism resources for tourism developers, travel vendors, and travelers to acquire what they considered desirable. The theory discusses the connection between residents' benefits and their perception of economic growth [49]. SET has stated that residents and tourism businesses have a considerable and reasonable level of resource exchange, or although it is unequal, they are inclined to the residents' side, and they are actively supportive of the tourism industry. Conversely, if the exchange of products and services is equal but the degree of exchange is small or if the status is unequal, the inhabitants' attitudes turn into passive opposition [50].

The theory of SET is relatively mature in sociology. In tourism research and the influence of tourism development research, the theory of social exchange has received considerable attention and gained practical application. This can explain the motivation for people to join in the exchange of tourism activities [51]. In the field of tourism, SET is usually utilized to develop a framework of tourism development attitudes or support degrees for tourists or residents and to explain the influencing factors or mechanisms of tourism costs, benefits and satisfaction perceived by different subjects on future behavior choices [52].

The development of tourism causes the emergence of social exchange. For some people, tourism is developed to meet their needs in all aspects and to improve the economic level and social conditions of the place. However, for other residents, tourism is imposed on them and is passive. Since tourism is a dynamic and continuous process, if, through rational judgment, residents believe that the exchange result is negative, they will stop continuing the exchange; if previously passively affected by tourism by reestimating the cost-benefit of their participation in tourism, when it is found that the benefits of exchange are higher than the costs paid, they change their perception of tourism and reintegrate into the tourism sector [23,53-54]. [7] explored the intrinsic mechanism of the attitudes of residents in ethnic regions toward tourism influences from the perspective of attitude.

In summary, the use of SET to study the phenomenon of tourism started relatively early. Many scholars [29, 35, 50] tend to use SET to study the impacts of tourism development. In the field of tourism phenomena, proponents of SET actually endorse the following judgment: social exchange is universal; the motivation for individual involvement in exchange is in line with the analytical conclusion of SET; the elements affecting the attitude and perception of tourism residents of tourism destinations are economic factors, social factors, environmental factors and psychological factors; what

determines the value of the ontology plays a decisive role; and with the change in tourism activities, economic, social, environmental and other factors may change to cause changes in the social psychology of the inhabitants of the tourism destination.

2.2 Conceptual Framework

The opinions on the impact of tourism development on the residents of tourism destinations are usually based on certain influencing variables, and these variables themselves also have a certain correlation with each other. To explain these correlations and focus on the research questions, it is necessary to construct a corresponding conceptual framework and conduct a verification study on the perceptions and attitudes of traditional village tourism.

Based on a review of the literature on the above variables and the connections between them, a conceptual research framework is provided (see Fig. 3). According to the initial conceptual framework of SET, the conceptual framework contains six variables. This study chose and integrated the relevant variables. The figure below represents the hypotheses, and the framework assists in tourism development.

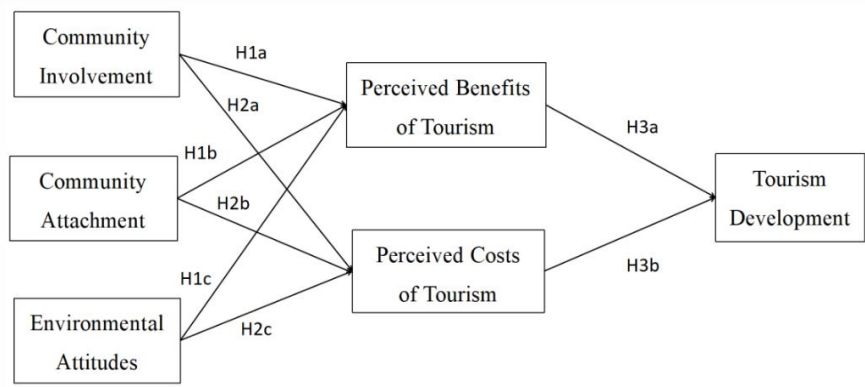


Fig. 3. The conceptual framework

The model shows that the dependent variable tourism development is impacted by residents' perceived benefits (costs) of tourism. It also proposes that community involvement, community attachment and environmental attitudes are antecedents of the perceived benefits (costs) of tourism.

2.3 Hypotheses Development

Community Involvement and Perceived Benefits of Tourism. Community involvement reflects the subjective consciousness of community residents, so their involvement in tourism development directly reflects whether their rights to the main position can be guaranteed, such as decision-making rights, profit rights, security rights, etc. [23-24, 50, 55]. The more people participate in the development of tourism, the greater the possibility of their benefits and the degree of protection of their rights, which also

promotes the support level of local residents for tourism development in the tourism destination [50].

Community involvement can empower residents, increase their potential tourism impact, and increase their attention for the culture and values. The influence of community involvement towards perceived benefits was significantly greater for the inhabitants support of Gunung Ciremai National Park [23]. According to their research, a high level of community involvement in tourism development enhances the benefits of tourism. Hence, the subsequent hypothesis is proposed:

H1a: There is a positive relationship between community involvement and the perceived benefits of tourism.

Community Attachment and Perceived Benefits of Tourism. Community attachment is a core topic of tourism that has long been widely discussed in the literature. Some scholars suggest that the deeper the sense of community attachment among residents is, the more they perceive tourism benefits, thereby influencing their support for community tourism [23, 56].

Residents perceive tourism influence positively when they are more attached to their surrounding area. [57] claimed that community attachment was positively correlated with residents' awareness of positive social impact when studying the perceptions and attitudes of Hong Kong residents toward non-casino gambling. They believed that residents with high levels of community attachment are more concerned about the future development of the community and pay more attention to the gains and costs of tourism development.

[23] suggested that perceived benefits were directly, positively, and significantly affected by community attachment according to evidence from the National Park of Gunung Ciremai, Indonesia. Community attachment increases residents' expectations of tourism impact perception higher, that is, residents with high local attachment expect government policies and behaviors to have more positive impacts and fewer negative impacts on tourism destinations [20, 43]. Hence, the subsequent hypothesis is proposed:

H1b: There is a positive relationship between community attachment and the perceived benefits of tourism.

Environmental Attitudes and Perceived Benefits of Tourism. When the environment and infrastructure construction of tourism attractions and the living environment of residents are improved by tourism development, residents will be more supportive of the development of local tourism [7, 58-59]. [60] suggested that a community with strong ecological value may not necessarily oppose the development of tourism, provided that the type of tourism development aligns with those values. It is a collection of meanings associated with an individual when he or she interacts with the environment [61]. Positive attitudes about the environment relate to stronger environmental identities [62].

[50] argued that there is a positive relationship between environmental attitudes and the perceived benefits of tourism. Tourism development has improved the living envi-

ronment, and the local economy and environmental friendliness have improved. Therefore, the stronger the attitude of the inhabitants towards the environment, the deeper the perception of tourism benefits [50].

[63] used Simingshan in Zhejiang Province as an example and found that the perceived benefits of tourism have a positive impact on forest environmental attitudes and tourism development attitudes. The empirical results further support the existing research; that is, the stronger the attitude of tourists toward environmental protection is, the more willing they are to pay for entrance fees and environmental conservation fees for scenic spots [64–65]. Hence, the subsequent hypothesis is proposed:

H1c: There is a positive relationship between environmental attitudes and the perceived benefits of tourism.

Community Involvement and Perceived Costs of Tourism. As stakeholders, villagers are often overlooked in the development of rural tourism; Their sense of political participation is generally not strong, and they do not actively put forward ideas for tourism development, which may be the most direct reason for villagers' opposition to rural tourism development because of their strong negative tourism perception [66].

The degree of residents' support for tourism development is negatively correlated with the perceived cost of residents. In ongoing village tourism development, factors such as institutional design and the benefit distribution model determine the level of community involvement, which is mainly reflected in the policymaking and income distribution of tourism destinations, and low participation is not conducive to residents' deep involvement in and attention to the results of tourism development [23].

[50] discovered that there is a negative correlation between community involvement and perceived costs of tourism in a study of the perceptions of residents of the seven-mile shoreline community in Dujiangyan regarding the impact of rural tourism. Theoretically, the deeper community residents are involved in the tourism industry, the stronger their sense of benefit, and the weaker their sense of cost. In fact, the low degree of participation of residents in Seven-mile Shitownship community leads to their high perception of tourism costs.

The negative impact of tourism is not obvious, indicating that the negative perceptions of the local economy, social culture, environment and supporting conditions had no obvious negative effect on residents' participation behavior; that is, residents' negative perceptions of residential places had a significant negative correlation with residents' community participation behavior [67]. In studies of tourism for small- and medium-sized sporting events, the impact of small and medium-sized sporting events is not as significant as that of large-scale sporting events, and residents may not be too concerned about their cost and may therefore ignore the associated negative impact [68]. Hence, the subsequent hypothesis is proposed:

H2a: There is a negative relationship between community involvement and the perceived costs of tourism.

Community Attachment and Perceived Costs of Tourism. Residents do not reduce their perception of economic costs due to a strong sense of community attachment, as they are sensitive to issues such as price increases brought about by tourism to the local

area. Therefore, residents not only perceive the beneficial impact of tourism development on the area but also objectively acknowledge its negative effects.

Researchers have discovered that community attachment has a significant influence on economic and social advantages but has no significant impact on social as well as cultural costs [32].

Some studies also believe that since the sense of community attachment mainly stems from the benefits that residents feel about the living environment, infrastructure, and interpersonal relationships of the community, the stronger the perception of tourism costs is, the stronger the residents' feelings about the negative impact on tourism development. Therefore, the stronger the sense of community attachment is, the weaker the perception of tourism costs should be [50]. Hence, the subsequent hypothesis is proposed:

H2b: There is a negative relationship between community attachment and the perceived costs of tourism.

Environmental Attitudes and Perceived Costs of Tourism. Using the example of the Virgin Islands, [69] found that the natural environment, which local residents depend on for their livelihood, suffers from pollution due to tourism development. This leads residents have a strong feeling about the negative impact of the environment, resulting in opposition among many residents to the continued development of tourism in the area.

[70] found a negative association between citizens' environmental attitudes and perceived economic, social, and environmental consequences. Environmental attitudes are negatively associated with the perceived costs of tourism development [71].

The perceptions and attitudes of residents toward tourism development in ethnic minority areas in the Yeliguang scenic area revealed that when the amount of tourists increases rapidly and the ecological environment and natural resources of the community are damaged and polluted, residents' negative perceptions of the environment will increase [7].

When community residents perceive that the environment essential for their survival is compromised, they are inclined to develop negative perceptions, leading to opposition toward the local tourism industry [69]. Additionally, some scholars specifically point out that if local tourism is environmentally friendly, residents with strong environmental attitudes may not necessarily resist local tourism development, even if they do not actively support it [38, 72-73]. Hence, the subsequent hypothesis is proposed:

H2c: There is a negative relationship between environmental attitudes and the perceived costs of tourism.

Perceived Benefits of Tourism and Tourism Development. According to SET, residents' support for tourism development is based on the benefits they receive and the costs they pay. When the tourism benefits received by residents outweigh the costs of expenditure, they will approve of tourism development, and the greater benefits residents perceive from tourism development, the greater they support tourism development [7].

The opinions of both positive and negative tourism influences may strongly influence support for tourism development, which falls within the realm of intention. According to SET, any exchange is a form of mutually beneficial behavior, and favorable outcomes can generate positive attitudes among the parties involved [74].

Through investigations and research on the attitudes of residents in the Colorado area of the United States toward tourism development, scholars believe that the attitudes of community residents have a positive relationship with the healthy development of scenic spots, and a positive attitude has a positive influence on the development of the tourism industry, and vice versa [34].

Studies have shown that residents' perceived tourism benefits are positively correlated with their supportive attitudes [75]. According to [76], residents' perceived benefits have a positive impact on their perceptions of life quality and supportive attitudes.

Inhabitants' views regarding tourism are the outcome of the comprehensive evaluation of the pros and cons of tourism development; community support is an encouraging view of locals toward tourism development; when residents feel that the advantages brought by tourism exceed the disadvantage, they will be supportive [44]. Tourism development not only increases household income and improves infrastructure but also enhances the living environment of residents. It is generally believed that there is a favorable connection among inhabitants' views concerning positive tourism advantages and attitudes [56]. Hence, the subsequent hypothesis is proposed:

H3a: There is a positive relationship between the perceived benefits of tourism and tourism development.

Perceived Costs of Tourism and Tourism Development. [34] conducted pioneering research and found that residents, when perceiving negative social impacts of tourism, tend to slightly decrease their extent of support for tourism development. The research by [77] confirmed Perdue's viewpoint. [77] indicated that residents exhibit a positive attitude only when the positive tourism impacts, they perceive outweigh the negative impacts. Conversely, if residents perceive negative tourism impacts to be greater, their attitude tends to be less favorable.

Residents' perceptions of negative tourism impacts are negatively correlated with their attitudes. The positive tourism influences perceived by dwellers tend to focus on economic aspects, while negative perceptions are more likely to arise in the areas of social and cultural issues, as well as environmental concerns. For instance, residents may develop negative perceptions when there is a rise in the expense of living, a rise in community crime rates, or traffic congestion in the local area [78].

The costs resulting from the influence of tourism development involve three aspects of residents' lives (society, economy, and environment) and the perceived costs of tourism. It may affect the life satisfaction of residents [79]. There are numerous possible variables that affect perceived costs, for example, an increase in noise and pollution, damage to historic and historic properties, an increase in the costs of products and services, and a greater cost of real estate and land [80].

[81] found through empirical research that perceptions of tourism significantly influence their support. Therefore, in the process of rural tourism development, the perception of the impact of tourism among community residents will affect their support

for tourism development. The Perceptions of the negative impact of tourism can affect the level of support for tourism development. Hence, the subsequent hypothesis is proposed:

H3b: There is a negative relationship between the perceived costs of tourism and tourism development.

Through a comparison with the above literature, it can be seen that there are many international studies on tourism attitudes and perceptions, China's research on tourism attitudes and perceptions is still in its infancy, and many aspects need to be further explored [7]. Fewer studies have investigated traditional villages in China. And Compared with the western developed countries, China is a strong government country, and government support plays an important role in studying China's issues to conduct an in-depth analysis of the problems and propose effective strategies. In future studies, particularly for the issues in China, it is recommended to include the concept of government support.

3 Data Collection

The data were gathered by researchers from the environment [82]. The collection of data involves acquiring and analyzing data from various places and sources to analyze them and obtain a solution for the research issue [83]. The quantitative data were collected from the primary data used in the study. This research was conducted on the primary data. Primary data is gathered from the initial material to answer each aspect of the study through a variety of techniques, including questionnaires and interviews [84]. The primary source of information is the original information, which is obtained directly by the researcher for a specific study aim [85]. The primary data was collected by questionnaires. For the primary data collection, questionnaires were collected in traditional villages in Guizhou, China.

3.1 Questionnaire Development

The procedure for analyzing the data starts with the data gathering from the questionnaire survey. This is to highlight the general data obtained from the gathering of information on the background descriptions of local inhabitants in Guizhou, China. This section covers demographic characteristics through demographic analysis, information on respondents' gender, age, present location of residence, income, education level, etc. This section provides a basic analysis for this paper. The second section evaluates respondents' perspectives about support for tourism development in traditional village conservation. The questionnaires all use closed-ended questions and answer questions that are easy for respondents to answer, and compared with open-ended questions, closed-ended questions have better recycling efficiency, clear results and accurate analysis.

The questionnaire was adapted from researchers such as [77,86-87]. After examining the questionnaires, it was discovered that many of them only partially fit the objectives

or goals of this study. As a result, it is important to develop a new set of research questionnaires by adapting and modifying existing questionnaires. The questionnaire has been split into six categories. Four items for the perceived benefits of tourism (PB) were adapted from the study of [87]. Five items for the perceived costs of tourism (PC) were adapted from the research of [87]. Four items for community involvement (CI) were adopted and adapted from the study of [77]. Five items for community attachment (CA) were adapted from the study of [79]. Five items for environmental attitudes (EA) were adopted and adapted from the study of [86]. Six items for tourism development (TD) were adopted and adapted from the study of [87]. All items employed in the questionnaire are calculated on a 5-point Likert scale. [88] proposed that a 5-point scale is less confusing, resulting in a greater response rate.

This research used a validated questionnaire developed from past studies, with a significant portion of the measurements in English. After the questionnaire completed in the English language, it was translated into mandarin.

3.2 Target Population

Choosing and identifying the target population is an essential step in research [89]. The target population of the current research consisted of local people from traditional villages in Guizhou, China. They must be over 18 years old to ensure that they can comprehend and have at least a basic understanding of tourism development in traditional villages conservation. For gathering high-quality survey data, the official questionnaire was delivered to local residents of traditional villages in Guizhou as target respondents of this sample.

3.3 Sampling

Currently, no specific study has been conducted to establish the optimal sample size for the perception of behavior. The minimal sample size may be determined using the rule of 10 times [90]. The study's minimal sample size was calculated using G Power software. First, a t-test was chosen for the test family, linear multiple regression was chosen for the fixed model, a single regression coefficient was chosen for statistical tests, and a priori was chosen for the computation of the required sample size—given α , power, and effect size for power analysis, and two for tail(s). For social and business academic studies, the recommended settings are a power of 0.80, an effect size of 0.15, and an α of 0.05 for the input parameter. The number of predictors is determined by the study's hypothesized model. The number of predictors in the model was defined as the maximum number of arrows pointing to the dependent variable. The conceptual framework is shown before. Two arrows point toward the dependent variable. Thus, there are two predictors in this study. According to G Power, 89 was the minimum sample size for this study.

Sampling includes the procedure of choosing a sample from the target population to provide findings that are representative of the overall population [91]. Moreover, to achieve the desired sample size, the data for this investigation were collected using a convenience sampling approach. Convenience sampling may be the only alternative in certain circumstances. It is possible that the group of people you would like to use as a

case study is convenient while you were able to get admitted through existing relationships [92]. Due to cost and time restrictions, this study used convenience sampling procedures. According to [93], convenience sampling may be used to find persons willing to answer questions in questionnaires conducting investigations in Guizhou. Convenience sampling, frequently referred to as availability sampling, is a method of non-probability sampling that involves gathering data from people who are easily accessible to participate in a research project [94].

3.4 Partial Least Square-Structural Equation Modeling

Partial Least Square Structural Equation Modeling (PLS-SEM) has evolved rapidly as a statistical modeling approach during the past few decades [95]. PLS-SEM will be used to evaluate the given assumptions. PLS-SEM, which is widely recognized for its capacity to test small sample numbers, maybe a superior statistical option than covariance-based structural equation modeling [96-97].

PLS-SEM also focuses on forecasting and calculation, which makes it effective for boosting the explained variance of variables that are independent and dependent. PLS-SEM is commonly used to identify major success aspects and areas of competitive advantage for essential objectives such as behavioral intentions, satisfaction with consumers, and customer behavior [98].

PLS is a component-based estimation technique [99], that can address reflecting and formative structures. It can estimate path loading coefficients with the minimum amount of latent variables [100]. According to the conceptual framework discussed before, this study's model was a reflective measurement approach in which construct validity was critical to the test's perceived overall validity. Reflecting indicators have identical substance and are interchangeable, meaning that adding or deleting one of the reflecting indicators does not affect the conceptual elements of the construct. Smart PLS can be utilized for testing hypotheses. Smart PLS is ideal for model building research and for investigating cause-and-effect connections [101-102]. Smart PLS could be utilized with fewer sample numbers and to examine an investigation framework with several constructs and variables [103].

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