# Impact of Ecological Conservation Policy of Landscape Resources on the Behavior Intention of Stakeholders in Shennongjia National Park

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**Abstract:** Scenic resources are the essence of natural and human resources in national parks, and the effectiveness of conservation policy implementation is the key to achieving the ecological integrity, authenticity and typicality of national parks. Based on the research hypothesis of the relationship between "conservation behavior intention" and "conservation policy" of national park landscape resources proposed by Shennongjia National Park, this study establishes a second-order SEM, reveals the internal relationship between the conservation behavior intention and conservation policy of national park landscape resources, and puts forward the optimization path of the management and control path of national park landscape resources conservation through difference analysis. The research results show that national park landscape resource conservation policy has a significant positive impact on social norms, and directly affects conservation behavior intentions through social norms; Community residents are more concerned about the impact of conservation policies on their production and lifestyle, while tourists pay more attention to the ecological environment quality of landscape resources and the implementation of relevant policies such as recreational facilities. The management of legislation policy directly affects the existing way of scenic resources in Shennongjia National Park, and affects the establishment of community management and control mechanism and the behavior of community residents through social norms. This study puts forward the strategy of optimizing the national park landscape resource conservation policy in four aspects, namely, ecological environment sustainability, ecological conservation policy system, coordinated and orderly management and control mechanism, and joint construction of harmonious social relations.

**Keywords:** Landscape Resources; Conservation Policy; Behavioral Intention; SEM; Shennongjia

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## 1 Introduction

The concept of ecological conservation has rich theoretical and practical connotations. "Protection" can be understood as making each element of the ecosystem operate well and achieve ecological balance through corresponding planning and technical means; "Cultivation" can be regarded as ensuring ecological benefits of all elements of the natural and cultural ecosystems, meet the needs of self-development, promote intergenerational equity, and achieve sustainable development of the ecological environment through corresponding planning and technical means. The research of landscape resources has experienced a transformation from physical form planning to ecological space planning. The ecological conservation idea has gradually penetrated the process of implementing the management and control measures of landscape resources.

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Ecological conservation of landscape resources respects the characteristics of landscape resources by paying attention to not only the protection and restoration of the ecological environment but also the maintenance and cultivation of physical forms, such as aesthetic value of landscape resources conservation.

The subsistence of landscape resources has always been faced with the conflict between man and land. Ecological protection and landscape reconstruction of the original and typical natural resources and the cultivation of the original culture of rare cultural resources have become an important way to address the "conflict between man and land" in China's national park system construction. For natural landscape resources, the conflict between man and land is mainly reflected in the implementation of relevant policies, which leads to the occupation of the original living space of community residents, and indirectly affects the survival and development of the original culture [1]. For example, due to the establishment of ecological conservation areas and control areas, a large number of indigenous people have to carry out corresponding ecological relocation. The establishment of ecological monitoring stations, the planning of ecological recreation routes and science popularization bases have had a strong impact on the original living conditions and lifestyles of residents in the national park community [2]. In addition, tourists are also an important audience group of landscape resources. The implementation of various policies, such as the planning of recreational trails, the improvement of recreational facilities, and the utilization and development of landscape resources, has a great impact on tourists' landscape perception experience [3]. To achieve sustainable development of the national park landscape resources, it is imperative to pay attention to the impact of the implementation of ecological conservation policies on community residents and tourists. The conservation of landscape resources have been confronted with complex and multifaceted pressure. Its protection and development affect both tourists' recreational behavior and experience and community residents' behavioral intentions on landscape resources conservation.

In the process of the formation and development of national parks, developed countries have been paying close attention to the impact of resource protection and development on indigenous people. The research mainly focuses on aborigines' perception of various national park policies, such as the impact of recreation resources on aborigines and tourists [4], or aborigines' satisfaction with landscape resource development activities, and focuses on the resource allocation and well-being realization of relevant interest groups in the process of landscape resource protection and development [5-7], makes full use of local traditional materials, and explores sustainable development methods that adapt to various resources [8, 9], such as research on how to balance the relationship between ecological protection, ecotourism and sustainable development, and how to reconcile human-land conflicts through cooperation, and on biodiversity protection, demands and well-being of relevant interest groups [10, 11]; In the conservation of national park resources, advocating intergenerational equity and promote environmental harmony by increasing intergenerational interaction [12]; With the impact of global climate change, the role of national parks in improving the ecological environment has become increasingly prominent. More and more studies have begun to explore the views of local communities in national parks on landscape change, ecosystem services, climate change and livelihoods [13]; The interference of recreation activities to the aborigines is also a concern of the academic community. When developing the recreational value of resources, some national parks may fully understand the tourists' and aborigines' perceptions of the current situation and development direction of resource development through questionnaires, to understand the participation of these two groups in sustainable tourism and then to improve the management of their recreational behavior [14]; The research method generally adopts a questionnaire survey based on sample data, such as using internationally recognized Management Effectiveness Tracking Tool (METT) to collect questionnaires, and then establishing an SEM to judge the perception of indigenous people to these policies, and then the national park management department adjusts the policies according to the results. Multi-dimensional statistical methods are adopted to understand the livelihood capital status and well-being of indigenous people in the surrounding areas of the park from the perspective of landscape resources or landscapes [15].

Since ancient times, Chinese people have cherished simple environmental ethics on the surrounding environment. Regardless the ecological ideal of "timeliness" [16, 17], "conformity" and "unity" or the value protection of resource ecological conservation in long-term agricultural production activities [18, 19], all of them have implemented ecological conservation practices in the human-land relationship, demonstrating the

awareness of hardship and care for the natural and human environment. In China, the construction of the national park system is different from the large-scale wilderness landscape in the United States, or the means of handling human-land conflicts in the park United Kingdom, Germany and other countries. Its ecological philosophy and the aesthetics of the unity of heaven and man has existed since ancient times, resulting in Chinese people's special feelings and aesthetics for the natural landscape pattern, which is a blend of natural environment and mood experience. Therefore, the term "landscape resources" reflects the resource characteristics of the combination of nature and humanity in China. Landscape resources are not only the high-quality model of natural landscapes, but also the carrier of Chinese traditional culture and long history. At the same time, they play an important role in ecosystem services. In order to reflect Chinese characteristics in the construction of China's national park system, we must attach importance to the role of landscape resources in national parks. Relevant scholars have also made academic explorations in resource visual quality evaluation, ecosystem service function, landscape resource classification and other aspects, established a relatively mature classification and evaluation system, and objectively promoted the protection and development of landscape resources. With the development of national park system construction, each pilot area also began to pay attention to the satisfaction and perception of community aborigines on various policies of the national park. For example, the scholars study the role of resource development in promoting the well-being of residents [20]; Connect the sustainable ecosystem with social development [21], and explore the methods and degrees of indigenous people's active participation in the governance of various affairs in the national park, as well as the social and ecological adaptability of local residents [22-24]; begin to attach importance to the role of environmental education in promoting resource protection, clarify its positive impact on the environmental protection behavior of relevant interest groups, and drive the promotion of ecological compensation policies for national parks [25, 26].

The research on the behavior intention of resource conservation in China's national parks mostly refers to that of foreign countries, while there are few studies on the ecological environment of scenic resources and their sustainable development. Despite many studies on the relationship between aborigines and national parks, most of them focus on the macro perspective, that is, the impact of macro ecological policies and management policies on aborigines, and focus on the beneficial or adverse effects of ecological compensation policies, resource tourism development on aborigines, or the impact of ecosystems on social communities. However, few studies focus on the perspective of landscape resources. The academic research on scenic resources mostly focuses on the classification of scenic resources under the system of scenic spots, or the assessment of scenic beauty, or the evaluation of satisfaction as tourism resources. Less attention is paid to the characteristics of scenic resources, and the research on the ecological conservation of scenic resources is relatively simple. The concept of ecological conservation of scenic resources has only been discussed in scenic spots in China, but most provide evaluation while carrying out no targeted research on conservation policies. There is no discussion on whether the implementation process and effectiveness of conservation policies are conducive to the development of their own landscape resources, how to take into account the interests of relevant interest groups and the relevance between the two [27, 28]. In terms of policies implemented in ecological conservation, the academic circle has not systematically discussed the impact of aborigines' behavioral intentions, but has only done research on ecological monitoring, ecological compensation, franchising, etc. some research has been done to explore community aborigines, tourists and other interest groups' satisfaction with policies, perceptions and behavioral intentions, but the researchers select limited research object and pay more attention to the impact of natural resources and livelihood capital on interest groups, the perception and satisfaction of tourists and community residents on scenic resources, recreation and aesthetic value.

At the end of 2016, Shennongjia National Park became one of the first batch of nature reserves selected for the construction of national park system pilot area in China. Its rich landscape of vegetation vertical band distribution area, complete stratum of the Upper Precambrian Shennongjia Group, the mysterious legend of savages, and long Shennongjia culture constitute a good background of landscape resources in the whole Shennongjia area, demonstrating the uniqueness and authenticity of its natural and cultural landscape resources. However, since the construction and development of the pilot area, the ecological risks faced by its landscape resources have increased day by day, such as the

degradation of subalpine sphagnum wetland system, the destruction of the ecological environment of golden monkey habitat resulting from the development of recreational activities, and the urgent disappearance of geological heritage landscape. The implementation of the landscape resources conservation policy still has problems of anomie and invalidity. Hence, it is necessary to further analyze the impact of the main body's conservation behavior intention and propose a more practical optimization path of landscape resource management and control to implement the strategy of zoning and hierarchical management and control.

# 2 Research Methods and Assumptions

## 2.1 Applications of SEM

Structural Equation Modeling (SEM) can simultaneously process the estimation of multiple sets of regression equations, making the processing of variable relations more flexible [29]. SEM is widely used in the research of human land relationships, such as revealing the impact of ecological compensation policies on the satisfaction of farmers and villagers, the impact of various policies on the village living space, the impact of rural landscape resources development and community participation willingness, etc., focusing on solving various problems of sustainable development of people and the ecological environment; In terms of tourism resources and people's satisfaction, most studies focus on the impact of tourism destination facilities, public services or landscape image perception on tourists' satisfaction; In the meantime, the SEM is also widely used in the research of influencing factors of urban space vitality, participation in a certain behavioral willingness, or the correlation between two concepts. Relevant research has not paid attention to the scenic resources of national parks yet. Most researchers regard scenic resources as tourism resources and pay more attention to tourists' satisfaction with recreational behavior. The research on the relationship between its related latent variables focuses more on subjective perception and aesthetic interest, which separates the relationship between subjective aesthetics and objective ecological benefits; In terms of research on the impact of ecological policies on audience satisfaction, too much attention is paid to the behavioral impact of ecological compensation policies on farmers, while research on the behavioral impact of overall ecological policies on audience groups is relatively rare. Therefore, based on the multi-group SEM, this study can investigate the impact and consequences of the implementation of ecological conservation policies in national parks on relevant interest groups and different groups of people, and assess the cognitive attitude of community residents towards various policies of ecological conservation in national parks and their behavioral intentions of ecological conservation through a reasonable solution and according to the sample survey results, thus providing an empirical significance for establishing a reasonable landscape resource ecological conservation zoning and management and control mechanism framework, and optimizing the management and control mechanism.

SEM includes the measurement model and structural model. The measurement model can reflect the relationship between the latent variables and the indicators measuring the latent variables, and the structural model can reflect the relationship between the latent variables [30]. The implementation of the national park landscape resource conservation policy is both a constraint and a promotion to the conservation behavior of the audience. It is difficult to measure the relationship between the audience group's conservation behavior and conservation policies in the way of regular basic research. Therefore, it is necessary to clarify the impact of policy implementation on the behavior of the main audience groups, establish a behavior relationship model through relevant theories, and study the relationship between the two using multi group structural equations, thereby fully taking into account the social attributes of the national park landscape resources, and providing more scientific guidance for the research of landscape resources conservation, more comprehensive understanding of the current situation of national park landscape resources, more in-depth understanding of the connotation of landscape resources, more targeted research on landscape resources, and promotion of sustainable development and utilization of landscape resources.

## 2.2 Theoretical Basis

The actual behavior that can be completely controlled by non individual will is not only affected by behavior intention, but also restricted by the actual control conditions of the actor. In 1991 [31, 32], Ajzen proposed the Theory of Planned Behavior and believed that

non-behavior attitude, subjective norm and perceived behavior control are the three main pre variables determining behavior intention, and the three elements are respectively affected by behavior belief, norm belief and control belief. Through these three elements, several research hypotheses are proposed. The second-order SEM is used to measure the latent variables and study the relationship between them by using the observation variables that are convenient for statistical analysis. In other words, the measurement model part simultaneously deals with the multiple relationships including multiple causes and multiple results and the structural model part [33-35].

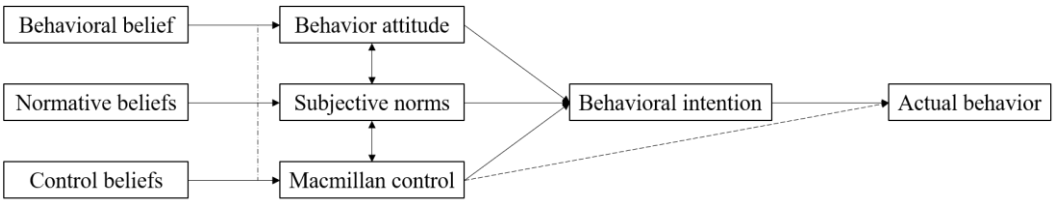


Figure 1 Model of Theory of Planned Behavior

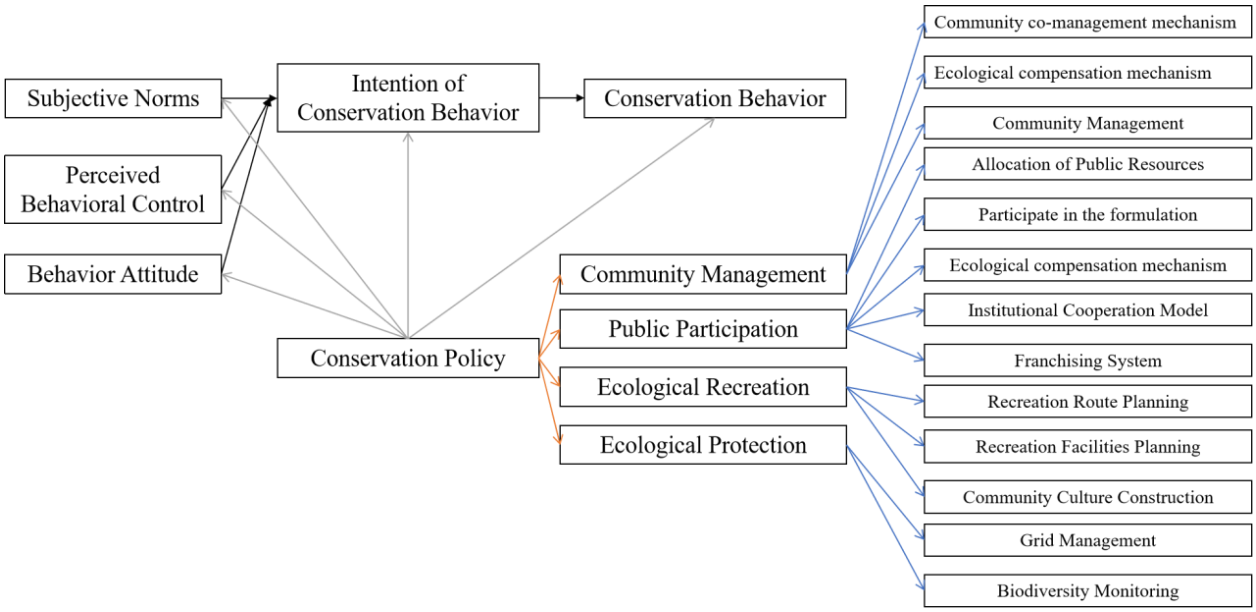


Figure 2 Behavior Intention Model

This study analyzes the impact of landscape resource conservation policies on the conservation behavior of relevant audience groups from the perspective of behavior attitude, subjective norms, and perceived behavior control. The conservation policy of landscape resources includes two main objectives. One is "protection", that is, to protect the ecological environment where the landscape resources are located by adopting ecological monitoring, returning farmland to forests, biodiversity protection and other policies, while reasonably planning the recreational routes, optimizing recreational facilities, and giving play to the aesthetic and recreational value of the landscape resources; The other is "cultivation", that is, take reasonable measures such as community co management and open public participation to revitalize the landscape function of the original landscape resources and standardize their management mechanism. From the perspective of practice and operation, the effective implementation of the conservation policy needs the cooperation of relevant interest groups. The key to the effectiveness of the policy lies in the mutual cooperation between the government and community residents. On the basis of meeting the environmental justice of the sustainable development of landscape resources, the needs of the people's livelihood and interests of the original residents should be taken into account, and the ecological value and economic value of landscape resources should be given full play to.

The two main audience groups of landscape resources are the aborigines in the national park and tourists in the

park. The relevant conservation policies directly affect the production and lifestyle of community residents, and indirectly affect their economic and social interests. Tourists' conservation policies for landscape resources mainly focus on four dimensions: community management, public participation, ecological recreation, and ecological protection; Community management includes community co-management mechanism, community ecological compensation mechanism and community industry development plan. Public participation includes public resource allocation, participation in the formulation of laws and regulations, volunteer incentive mechanism, establishment of institutional cooperation mode, and franchise. Ecological recreation includes recreation route planning, recreation facilities planning and community culture construction. Ecological protection includes grid management and biodiversity monitoring.

This study first designed a scale for individual characteristics, and shared four individual characteristics for questionnaire survey, namely: residence, gender, age, and occupation. Occupation is divided into two categories: community residents and tourists, because these two groups are the key groups to implement ecological conservation behavior, and also the stakeholder groups that can be deeply affected by ecological conservation policies. (Table 1)

Table 1 Individual characteristics measurement items

| **Individual traits** | **6 items** |
|---|---|
| Residence | Province/City |
| Gender | Male, female |
| Age | <18, 17-30, 31-45, 46-60, >60 |
| Occupation | Community residents, tourists |

## 2.3 Research Assumptions and Models

Through field research, the study obtained first-hand information about the ecological protection and destruction of community residents and tourists, their awareness of ecological environment protection, and the implementation of ecological conservation policies, and completed more than 300 grass-roots sampling questionnaires, eliminating 87 invalid questionnaires. Referring to the three main pre variables of "behavior attitude, subjective norm and perceived behavior control" (Figure 2), the study proposed a theoretical model of "landscape resource conservation intention conservation behavior/conservation policy relationship", and based on the SEM modeling method, empirical research, and carried out improvement and analysis of this theoretical model using empirical research data. This study takes the Shennongjia National Park pilot area as an example, takes the relevant factors that affect the ecological conservation mechanism of its scenic resources as latent variables, puts forward research assumptions, and sets the path on the basis of the tested research results. By establishing a second-order SEM, the set model is brought into the specific research sample data for fitting, and whether to adjust the model is determined according to the fitting results. According to this study, nine research hypotheses are proposed, which will be demonstrated one by one. The individual characteristics item scale, premise variable scale, and outcome variable scale (Tables 1-4) are established to explain the hypotheses.

*Hypothesis 1: Social norms positively and significantly affect the behavior intention of landscape resource conservation.*

Social norms are a kind of behavior paradigm formed by the specific group where the subject is located under the joint action of certain historical conditions, time and place, including customary customs, religious habits, moral standards, administrative group rules and regulations, laws and regulations, etc. In addition to the law, social norms are more in line with the requirements of social contracts. Under the established norms, the subject will have a positive will to take some social behavior.

*Hypothesis 2: Perceptual behavior control positively and significantly affect the behavior intention of landscape resource conservation.*

Perceptual behavior refers to the subject's intuitive and abstract feelings about some objective entity, social behavior or policy implementation process and effect. The subject obtains general sensory experience through five senses, and further abstracts thinking through the brain, thus forming an attitude to actively participate in landscape resource conservation. The hypothesis is that the deeper the perception behavior and the richer the situational experience, the more able to promote the participation of the subject in the conservation behavior.

*Hypothesis 3: Behavioral attitudes positively and significantly affect the behavioral intentions of landscape resource conservation*

Behavior attitude is the degree of cooperation and enthusiasm of the subject in the face of the implementation of landscape resource conservation policies. It is assumed that the more positive the behavior

attitude is, the more positive the impact on landscape resource conservation behavior will be.

*Hypothesis 4: The intention of childcare behavior positively and significantly affects childcare behavior*

Behavior intention refers to the degree of willingness of the subject to take a certain behavior. The assumption is that the stronger the behavior intention is, the more obvious the effect of the behavior process will be.

*Hypothesis 5: Conservation policies positively and significantly affect childcare behavior intentions*

Conservation policy is a series of measures, regulations and procedures for the protection, development and cultivation of landscape resources. It is assumed that a positive and effective conservation policy will enhance the subject's intention to protect the object. Make the subject more willing to participate in the conservation action.

*Hypothesis 6: Conservation policies positively and significantly affect conservation behavior*

It is assumed that the conservation policy will guide the conservation behavior of the subject towards the object, making the subject use the content, process and result of the conservation policy as a reference, subtly influencing or consciously exerting the subjective initiative.

*Hypothesis 7: Conservation policies positively and significantly affect subjective norms*

It is assumed that the effectiveness of the implementation of the conservation policy can in turn affect the subjective norms of the subject's behavior. Through the practical process of policy implementation, the previous existing experience and regulations are constantly improved, updated and even overturned, forming new social norms.

*Hypothesis 8: Conservation policy positively and significantly affect perceived behavior control*

As the subject behavior directly contacting the objective things, the perception behavior generally has a strong subjectivity, which is the reprocessing of the objective entity in the subjective thinking. It is the subjective cognition of objective things. It is assumed that the conservation policy will in turn affect the subjective cognition of the subject on objective things. The more oriented, targeted and typical the policy implementation is, the more oriented and targeted the perception behavior will be.

*Hypothesis 9: Conservation policies positively and significantly affect behavior and attitude*

It is assumed that a positive and scientific conservation policy will promote the subject to establish a positive attitude towards the protection of landscape resources, whereas a negative and unreasonable conservation policy will reduce the enthusiasm of the subject in conservation behavior.

The premise variable scale includes three latent variables: behavioral attitude, social norms and perceived behavior control. Behavioral attitude mainly measures the degree of interest groups' enthusiasm and concern for the protection of landscape resources; Social norms mainly measure the constraints of national park-related laws and regulations, administrative provisions, social conventions, etc. on interest groups in protecting landscape resources; Perceived behavior control mainly measures the role of the subjective initiative of interest groups in ecological conservation. (Table 2)

Table 2 Research assumptions and models

| **latent variable** | **Observation variable** |
|---|---|
| H1 Behavior and attitude | 1. Meet the requirements of the National Park Administration to protect and cultivate various landscape resources (such as forests, rivers, animals, and plants) |
| | 2. Willing to protect local landscape resources without subsidies |
| | 3. Do you pay attention to the scenic resources around you? Such as vegetation, animal landscape, rivers and lakes, forest landscape, etc |
| H2 Social norms | 4. Retain the willingness to protect landscape resources without being affected by others |
| | 5. The local township government and village committee encourage the protection of the ecological environment |
| | 6. Family, neighbors and friends encourage the protection of national park landscape resources |
| H3 Perceived behavior control | 7. Ecological conservation policy will affect your original income and living standard |
| | 8. My efforts will contribute to the conservation of local landscape resources |
| | 9. It is relatively easy to achieve ecological conservation of landscape resources |

The result variable scale 1 contains three latent variables: behavioral intention, conservation behavior and conservation policy. Behavioral intention mainly measures various behavioral motivations of people for landscape resources under the influence of behavioral attitude; Conservation behavior measures various practical actions taken by people for landscape resource conservation; Conservation policy measures specific ecological conservation measures taken by relevant departments. (Table 3)

Table 3 Result variable scale 1

| Latent variable | Observation variable |
|---|---|
| H4 Behavior intention | 10. Dissuade the action of destroying various landscape resources |
| | 11. Improve production and lifestyle |
| | 12. Actively cooperate with the National Park Administration to publicize relevant policies on landscape resources |
| H5 Conservation behavior | 13. Reduce unreasonable use of landscape resources |
| | 14. Participate in ecological conservation activities of scenic resources |
| | 15. Publicize landscape resource conservation knowledge |
| | 16. Participate in the development and management of landscape resources |
| | 17. Wildlife protection monitoring station |
| | 18. Ecological relocation |
| H6 Conservation policy | A1. Community management |
| | A2. Public participation |
| | A3. Ecological recreation |
| | A4. Ecological protection |

Result variable table 2 contains four latent variables: community management mainly measures the public's perception and satisfaction with ecological conservation policies at the community level; Public participation mainly includes participation in the formulation of regulations and measurement of satisfaction with the management and control mechanism; Ecological recreation mainly measures the impact of tourism development of scenic resources on relevant interest groups; Ecological protection mainly measures the effectiveness of ecological conservation. (Table 4)

Table 4 Result variable scale 2

| Latent variable | Observation variable |
|---|---|
| A1 Community management | 19 Can the current community co-management mechanism promote the conservation of landscape resources? |
| | 20 Has the ecological compensation policy achieved differentiated fairness? |
| | 21 How is the implementation of community industry development plan? |
| A2 Public participation | 22 How about the current allocation of public resources? Do you participate in the management of landscape resources? |
| | 23 Are you involved in the formulation and supervision of laws and regulations on scenic resources in national parks |
| | 24 Do you agree with the current volunteer control mechanism adopted by the community |
| | 25 How about the implementation of the multi-party cooperation mechanism of the government, the people, the community and tourists? |
| | 26 Does the franchise model work? |
| A3 Ecological recreation | 27 How about the implementation of community cultural landscape construction mode? |
| | 28 What is the status of recreational route planning and does it have a positive impact on your life? |
| | 29 Ia recreational facilities convenient and do them have a positive impact on life and recreational activities? |
| A4 Ecological protection | 30 What is the effect of grid management and protection? |
| | 31 How effective is biodiversity monitoring? |

# 3 Research Results on the Relationship Between Behavior Intention and Protective Policy

## 3.1 Reliability Analysis and Validity Test

Cronbach's Alpha coefficient is greater than the basic standard of 0.7. Therefore, the questionnaire has good reliability. In addition, the CITC between each item meets the requirement of more than 0.5, the setting of each item is good, and the reliability of the questionnaire is good. It can be seen from the common factor variance that the extracted value of each item is greater than 0.5 during factor extraction, indicating that the extracted common factor can well represent each item.

In the process of factor analysis, Principal Factor Analysis was adopted and factor rotation was conducted with the largest orthogonal rotation of variance. The total variance interpretation rate of the nine factors was 78.010%, more than 60%, so the validity of the scale was considered good. (Table 5) The final SEM is shown in Figure 3 below.

Table 5 Analysis of total variance

| Component | Initial eigenvalue | | | Extraction Sums of Squared Loadings | | | Rotation Sums of Squared Loadings | | |
|---|---|---|---|---|---|---|---|---|---|
| | Total | Variance% | Cumulative% | Total | Variance% | Cumulative% | Total | Variance% | Cumulative% |
| 1 | 11.999 | 38.706 | 38.706 | 11.999 | 38.706 | 38.706 | 4.219 | 13.610 | 13.610 |
| 2 | 2.536 | 8.182 | 46.888 | 2.536 | 8.182 | 46.888 | 3.630 | 11.79 | 25.319 |
| 3 | 1.882 | 6.071 | 52.959 | 1.882 | 6.071 | 52.959 | 2.612 | 8.427 | 33.746 |
| 4 | 1.657 | 5.344 | 58.304 | 1.657 | 5.344 | 58.304 | 2.481 | 8.003 | 41.750 |
| 5 | 1.536 | 4.954 | 63.258 | 1.536 | 4.954 | 63.258 | 2.459 | 7.933 | 49.682 |
| 6 | 1.294 | 4.174 | 67.432 | 1.294 | 4.174 | 67.432 | 2.428 | 7.831 | 57.514 |
| 7 | 1.146 | 3.697 | 71.129 | 1.146 | 3.697 | 71.129 | 2.345 | 7.566 | 65.079 |
| 8 | 1.107 | 3.572 | 74.701 | 1.107 | 3.572 | 74.701 | 2.295 | 7.402 | 72.482 |
| 9 | 1.026 | 3.310 | 78.010 | 1.026 | 3.310 | 78.010 | 1.714 | 5.529 | 78.010 |
| 10 | 0.499 | 1.611 | 79.621 | | | | | | |
| 11 | 0.465 | 1.500 | 81.121 | | | | | | |
| 12 | 0.442 | 1.424 | 82.545 | | | | | | |
| 13 | 0.433 | 1.396 | 83.941 | | | | | | |
| 14 | 0.427 | 1.377 | 85.318 | | | | | | |
| 15 | 0.413 | 1.333 | 86.651 | | | | | | |
| 16 | 0.392 | 1.264 | 87.915 | | | | | | |
| 17 | 0.341 | 1.101 | 89.015 | | | | | | |
| 18 | 0.331 | 1.067 | 90.082 | | | | | | |
| 19 | 0.320 | 1.031 | 91.114 | | | | | | |
| 20 | 0.315 | 1.016 | 92.130 | | | | | | |
| 21 | 0.298 | 0.963 | 93.093 | | | | | | |
| 22 | 0.283 | 0.913 | 94.005 | | | | | | |
| 23 | 0.249 | 0.803 | 94.808 | | | | | | |
| 24 | 0.246 | 0.793 | 95.601 | | | | | | |
| 25 | 0.236 | 0.762 | 96.363 | | | | | | |
| 26 | 0.218 | 0.702 | 97.065 | | | | | | |
| 27 | 0.202 | 0.653 | 97.718 | | | | | | |
| 28 | 0.187 | 0.603 | 98.321 | | | | | | |
| 29 | 0.183 | 0.591 | 98.912 | | | | | | |
| 30 | 0.176 | 0.566 | 99.478 | | | | | | |
| 31 | 0.162 | 0.522 | 100.000 | | | | | | |
| Extraction method: Principal Component Analysis | | | | | | | | | |

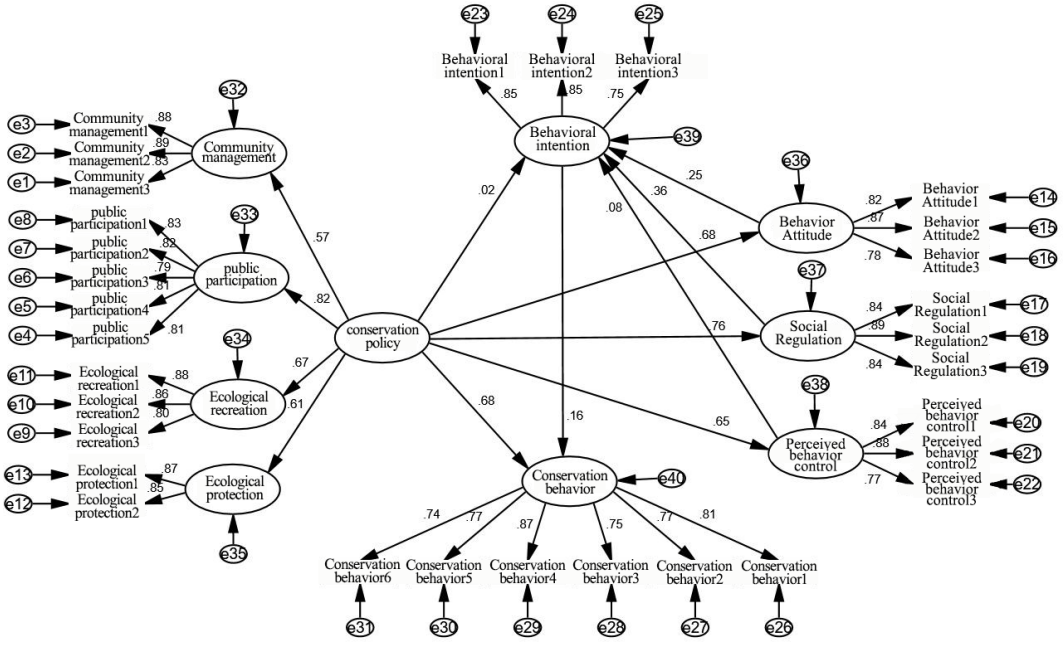


Figure 3 SEM

When judging whether the SEM is established, it is mainly measured by measuring some fitting indicators, among which $\chi 2/df$ is generally required to be less than 3. GFI is the goodness-of-fit index, AGFI is the Adjusted Goodness of Fit Index, NFI is Normed Fit Index, IFI is Incremental Fit Index, and CFI is Comparative Fit Index. Generally, these values are required to be greater than 0.9, indicating that the model has good adaptability, but greater than 0.8 indicates that the model is acceptable. RMSEA should be less than 0.08, indicating good adaptability and model fitting. It can be seen from the following table that the fitting effect is good. (Figure 3)

## 3.2 SEM Path Analysis Results

To sum up, the path analysis results of the SEM are as follows (Table 6):

Table 6 Path analysis results

| | Normalized path coefficient | S.E. | T | P | H |
|---|---|---|---|---|---|
| Behavior intention ← social norms | 0.359 | 0.114 | 3.334 | | tenable |
| Behavior intention ← perceived behavior control | 0.078 | 0.084 | 0.928 | 0.354 | untenable |
| Behavior intention ← behavior attitude | 0.251 | 0.091 | 2.762 | 0.006 | tenable |
| Conservation behavior ← behavioral intention | 0.155 | 0.067 | 2.467 | 0.014 | tenable |
| Behavior intention ← conservation policy | 0.018 | 0.269 | 0.112 | 0.911 | untenable |
| Conservation behavior ← conservation policy | 0.680 | 0.169 | 7.086 | | tenable |
| Social norms ← conservation policy | 0.760 | 0.149 | 7.943 | | tenable |
| Perceived behavior control ← conservation policy | 0.650 | 0.147 | 7.283 | | tenable |
| Behavior and attitude ← conservation policy | 0.681 | 0.149 | 7.424 | | tenable |

Among the 9 research hypotheses, Hypothesis 1: Social norms have a significant positive impact on behavioral intentions; Hypothesis 2: Perceived behavior control has no significant impact on behavior intention, and the hypothesis is not tenable; Hypothesis 3: Behavior attitude has a positive impact on behavior intention, but it is small; Hypothesis 4: Behavior intention has a positive impact on childcare behavior, but it is small; Hypothesis 5: There is no significant impact of childcare policies on behavioral intentions, and the hypothesis is not tenable; Hypothesis 6: Conservation policy has a very significant impact on conservation behavior; Hypothesis 7: The childcare policy has a very significant impact on social norms; Hypothesis 8: Conservation policy has a very significant positive impact on perceived behavior control; Hypothesis 9: The childcare policy has a very significant positive impact on behavior and attitude.

# 4 Conclusion

It can be seen from the study that most of the scenic resource conservation policies in the Shennongjia National Park pilot area have a direct impact on local aborigines and tourists, showing good publicity and education results. On the basis of forming good social norms and conservation awareness, the interest groups can usually make behavioral decisions that conform to the conservation concept, which should be further properly encouraged and guided ecologically.

First of all, the implementation of conservation policy has a significant impact on all aspects of conservation behavior of relevant interest groups, especially the implementation of conservation policy, which directly affects the social norms of national parks on landscape resources conservation. Therefore, ecological management of landscape resources should be strengthened. The construction and planning of ecological environment should follow the ecological evolution process of the environment itself, follow the principle of "let nature design", and weaken the adverse impact of human construction and production activities on the ecological environment, form a broad social consensus, thus generating a social norm of childcare behavior based on the encouragement and supervision of everyone. It is necessary to improve the operation mode of protected areas, appropriately relax the administrative control policies of relevant departments, reform the income mode of land operation, emphasize the public welfare attribute of landscape resources, balance the conflict of community interests, and enable community residents to obtain certain economic benefits or ecological compensation, give full play to the role of environmental education of landscape resources, guide community residents to improve their ecological conservation awareness in a more professional way through the design of interpretation system and the development of science

popularization activities, and form a social good custom of protecting landscape resources.

Secondly, conservation policies can significantly affect the conservation behaviors and attitudes of stakeholders. The results of questionnaire survey and SEM confirm that good policy implementation can help reduce the damage or unreasonable use of landscape resources by all kinds of people, and encourage them to actively participate in ecological conservation activities of landscape resources, actively publicize conservation knowledge for free, and even voluntarily carry out ecological relocation for the smooth progress of ecological conservation. The implementation of various conservation policies should be freed from the thinking shackles of environmental governance. From the perspective of "community management, public participation, ecological recreation, and ecological protection", and with the goal of "promoting sustainable health of the ecosystem, adequate cultivation of scenic resources, and harmonious coexistence between man and nature", a sound ecological conservation policy system should be established to comprehensively coordinate the sustainable development of scenic resources in the pilot area. The research results show that a considerable number of community residents are willing to actively participate in the study of relevant laws and regulations, participate in the management of some public affairs, participate in the formulation process of relevant policies and regulations as "masters", and supervise the work. We should attach importance to the role of environmental justice, take environmental justice as the last line of defense to maintain the ecological conservation of scenic resources in the pilot area, and implement the power of ecological environment, including the right to clean air, the right to clean water, the right to landscape and other public environmental rights, and the right to lighting, ventilation, peace and other private environmental rights. Promote the public interest litigation system for ecological conservation of scenic resources in the pilot area with environmental rights as the core, and promote the construction of ecological law enforcement, change unreasonable law enforcement procedures, and maintain the fairness and justice of law enforcement for the ecological environment.

Finally, the conservation policy does not have a significant direct impact on the behavior intention, but indirectly affects the behavior intention of the relevant interest groups through social norms. The conservation policy has a significant impact on attitude, perceived behavior control, social norms, conservation behavior and other aspects. In particular, the conservation policy has a greater impact on social norms. Therefore, it can be inferred that the relevant interest groups are relatively passive in implementing the landscape resource conservation behavior, and are greatly affected by the conservation policies at that time. It is easy to form a conventional conservation social norm, which proves that the relevant interest groups are more able to accept the guidance of the conservation policies to form a social norm for landscape resource protection. Through the difference analysis, it can be further found that community residents are more concerned about the impact of conservation policies on their own production and lifestyle, while tourists are more concerned about the ecological environment quality of scenic resources and the implementation of relevant policies such as recreational facilities. In the research on communities and tourists, it can be found that management legislation policies directly affect the existence of scenic resources in Shennongjia National Park, and through social norms, affect the establishment of community control mechanisms and the behavior of community residents. Thus, in the process of formulating and implementing childcare policies, policies with different characteristics should be proposed to meet the needs of different groups of people.

## Author Contributions

Data curation, S. Y. L.; Investigation, Y. F. S. and S. Y. L.; Methodology, S. Y. L.; Supervision, S. Y. L.; Writing-original draft, Y. F. S.; Writing-review & editing, Y. F. S. and M. S. Conflicts of Interest: The authors declare no conflict of interest.

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