

The Relationship of High-Speed Rail and Sustainability of Urban Tourism: Evidence from Discrete Choice Model of Chinese Tourists' Preference for City Destinations

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ABSTRACT

In China, the opening of High-Speed Rails (HSR) exerting varied HSR effects, because HSR reduces the traveling resistance over spatial distance and magnifies the impacts of tourism resource endowment, and tourist reception capacity. This paper compares Xiangtan City and Yueyang City as typical representatives of high-speed rail diffusion effect and high-speed rail corridor effect, in order to determine whether there are differences in tourist destination selection preferences under different High-Speed Rail effects and tourist preferences with different personal characteristics. The results show that:

- Under the diffusion effect of High-Speed Rail, the first three factors affecting tourists' destination preference are convenience, connection time and popularity; under the effect of High-Speed Rail corridor are reputation, convenience and Leisure Reception Facilities (LRF).
- Destination preference is closely related to personal characteristics such as gender, income, occupation and peers.

Tourists with different personality characteristics pay different attention to various influencing factors.

Keywords: High-Speed Rail (HSR); Destinations; Tourists; Policymakers

INTRODUCTION

The sustainable development of urban tourism hinges on transportation infrastructure. In China, the expansion of the High-Speed Rail (HSR) network optimizes and upgrades tourism transportation and facilitates further high-quality development of urban tourism [1]. The fundamental reason is that the opening of the HSR brings significant changes to the accessibility and spatial structure of city destinations, the structure of source markets, and the spatiotemporal distribution of tourist flows [2-5]. The existing studies summarize the following effects of HSR on tourism flows: The Matthew effect, filtering effect, diffusion effect, superposition effect and convergence effect.

The High-Speed Rail effect is analyzed from the perspective of tourists. In fact, the High-Speed Rail greatly shortens the time distance between the destination and the source [3] improves the accessibility of the destination and reshapes the tourism spatial structure of the destination. The existing research results show that the opening of high-speed rail reduces the travel resistance of spatial distance; the impact of traffic network density, tourism resource endowment and tourism reception capacity has become more important [6], which is an important exploration of this problem. However, tourists' destination selection behavior is the

result of the comprehensive action of multiple influencing factors such as tourists' personal characteristics, tourism destination attributes and travel characteristics [7-10], which needs to be explained from a more diversified perspective.

Therefore, the overall objective of this study is to determine whether there are differences in tourists' destination choice preferences under different High-Speed Rail effects and tourists' preferences with different personal characteristics.

METHODOLOGY

This paper selects Xiangtan City and Yueyang City, Hunan Province, China as cases to investigate the differences in tourist destination preference under the high-speed rail effect, because there are obvious differences in tourism resources, transportation, leisure facilities and High-Speed Rail effect between the two cities.

As for the approach and the methodological framework applied to this study. Firstly, through a literature review and expert interviews, the factors affecting destination choice were identified, and the attribute levels were configured as per the actual situation of the case cities, forming multiple virtual alternatives. Next, questionnaire surveys were carried out to

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collect tourists' selections between each pair of alternatives. Furthermore, a discrete choice model was constructed to assign a weight to each factor, reflecting its importance to tourists' decision-making of destination selection and to disclose the law of tourists' preferences for destinations. After that, model fitting was performed on the two case cities. The fitting results were compared to reveal the difference in importance between factors under different HSR effects. In addition, personal features were analyzed to identify the gap between groups in destination preference.

The questionnaires were distributed in famous scenic spots of Xiangtan and Yueyang in May 2021. The respondents, who were mainly tourists to the two cities, filled out the questionnaires face-to-face using cellphones and other electronic devices. After completing their tours, these tourists had a direct understanding of the resources and features of the scenic spots. Specifically, a small-sample pre-survey was carried out. Then, the questionnaires were adjusted according to the feedback. After that, four surveyors issued a total of 420 formal questionnaires over five days and 386 (92%) valid questionnaires were recovered.

DISCUSSION

This paper applies the SP method to investigate tourists' preferences for destinations under HSR effects. Xiangtan and Yueyang were taken as the cases to study the diffusion effect and corridor effect of the HSR in Central China's Hunan Province.

This research, as well as other similar research items, represents an important contribution to sustainable development of urban tourism. Previous studies have mostly focused on how the opening of HSR changes the degree of influence of a single factor, failing to measure the action of multiple factors or capture the group differences in the preference for destinations under the effects of HSR. This paper attempts to make up for these gaps. The relevant results will contribute greatly to the planning, marketing, management, and sustainable development of urban tourism.

The research results that in the context of HSR, the comparative advantage of urban tourism was an important impactor in tourists' destination selection. Comparing the fitting results on tourists' choices of the case cities under the HSR diffusion effect and HSR corridor effect, the top-ranking items were the comparative advantage of the case cities. This ought to be considered by policymakers for preparing sustainable development strategies for urban tourism.

CONCLUSION

The findings also allowed us to conclude that Tourists' selection between destinations could be affected by personal features. For

tourists to Yueyang, males attached great importance to reputation, entry time, and LRF, while females highlighted the importance of reputation. The analysis of the two case cities revealed that tourists to different cities differed in the law of destination selection. City-specific analysis contributes immensely to the planning, marketing, management, and sustainable development of urban tourism.

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CONFLICTS OF INTEREST

The author declares no conflict of interest.

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