

Mini-Review: Envisioning Environmental Literacy toward Sustainable Tourism: China and Taiwan as a Case Study

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ABSTRACT

Sustainable tourism is regarded as an important alternative tourist system that seeks to ensure profitability as well as recreation quality and safety, while protecting the environment. Consumers' expectations for 'greener' products and leisure seeking to gain a competitive advantage in the marketplace are also key drivers for sustainability. However, little is known about its relationships with the pro-environmental behavior of individuals and environmental practices of tourism, which can impact achieving the goals of sustainable tourism. This paper provides a short review detecting environmental literacy toward sustainable tourism. I used China and Taiwan as a case study. Based on my previous publication, I summarize the topic with a brief conclusion representing that the environmental-governance behaviors, perceptions of sustainable tourism, and the environmental education system at these two places are postulated to differ.

Keywords: Behavioral studies; Ecotourism; Education; Environmental attitudes; Environmentally responsible behavior

INTRODUCTION

Increasingly stringent environmental enforcements and tourist awareness around environmental protection and sustainability are driving forces in the tourism industry. Tourism industry has traditionally focused on maximizing satisfaction of customers and tourism profitability, with limited consideration to the long-term consequences on the ecosystems as well as the Quality of Lives (QOLs). However, this has since changed with the increasing awareness of environmental issues as well as the travel market demand for 'greener' and more ecologically friendly tours. Sustainable tourism is regarded as an important alternative tourist system that seeks to ensure profitability as well as recreation quality and safety, while protecting the environment. Consumers' expectations for 'greener' products and leisure seeking to gain a competitive advantage in the marketplace are also key drivers for sustainability. While there is a growing acknowledgement of the importance of sustainable tourism, little is known about its relationships with the pro-environmental behavior of individuals and environmental practices of tourism, which can impact achieving the goals of sustainable tourism. Scholars should provide further insights

into the understanding of environmental literacy, pro-environmental behaviors, and environmental practices for sustainable tourism [1].

WHAT I SAW IN THIS FIELD?

In East Asia, both China and Taiwan are increasingly promoting ecotourism, but ecotourism has been developed to distinct levels because of the use of dissimilar political systems in these places. This mini-review mainly focuses on the environmental literacy studies on the mainland China (People's Republic of China; PRC) as well as a subtropical oceanic island, Taiwan, Republic of China (ROC) (Figure 1) [2].

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Figure 1: Overview map of the China Mainland (People's Republic of China; PRC) as well as a subtropical oceanic island, Taiwan, Republic of China (ROC)[2].

Taiwan, as an island nation, only owns an area of 36,193 km² of land. By May 2021, the registered population was up to 23,499,070 individuals in Taiwan 2021 by population census. Meanwhile, the registered population was up to 1,411,780,000 individuals in Mainland China by population census (Illustrated by Yi-Te Chiang) [2].

Both regions had been subjected to some controversial debates for true sustainable tourism. In Taiwan, for example, six Indigenous Seidok tribes had jointly developed sustainable tourism in Nantou County. This ecotourism program was supported by the government, with the intention to combine factual history associated with Seidok culture and local tourism. The successful stories were detected in Taiwan because this island nation features a prosperous economy, universal education, and a solid middle class, and Taiwan has successfully transformed from an authoritarian political system to a Western-style democracy. In China, ecotourism was also an emerging sector which had gained substantial attention. For example, new ecotourism resorts (e.g., Naked Stables Private Reserve, Red Capital Ranch) were built to promote sustainable tourism and sustainability as China sought to improve its global environmentalism reputation. Although the market is gradually opening up, and with people's lives improving, the voice for freedom and democracy is getting increasingly loud; however, China still adheres to a mixed socialism and state-capitalism system [3]. In this case, I used a structural equation model to develop and validate in an effort to explore the differences between Chinese and Taiwanese university students in terms of their environmental knowledge, environmental attitude, and behavioral intentions [1]. The results showed that the ecotourism perception of Chinese and Taiwanese university students affect their behavioral intentions. Chinese university students exhibited a higher correlation between ecotourism

knowledge and behavioral intentions than their Taiwanese counterparts. The findings also revealed differences between the Chinese and Taiwanese students in their perception of ecotourism, and this disparity was particularly evident with regards to how sustainable tourism should be governed. A moderate difference in sustainable tourism behavioral intentions was also identified, in which Taiwanese university students were less likely to engage in self-empowerment or private empowerment, to be more educated in the field of ecotourism than their Chinese counterparts. Please see Figures 2 and 3.

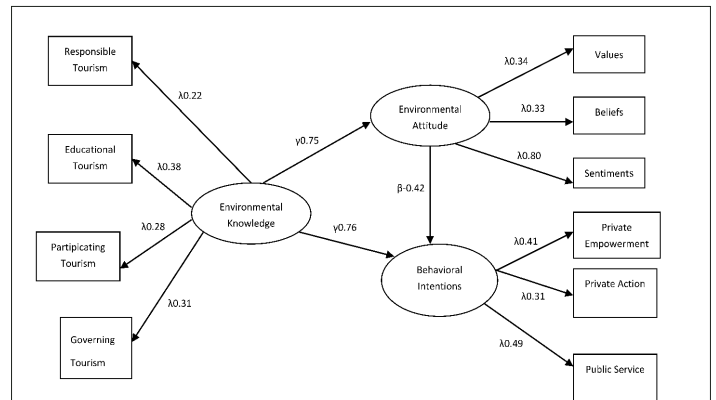


Figure 2: Empirical structure of environmental concern in Chinese students (n=420).

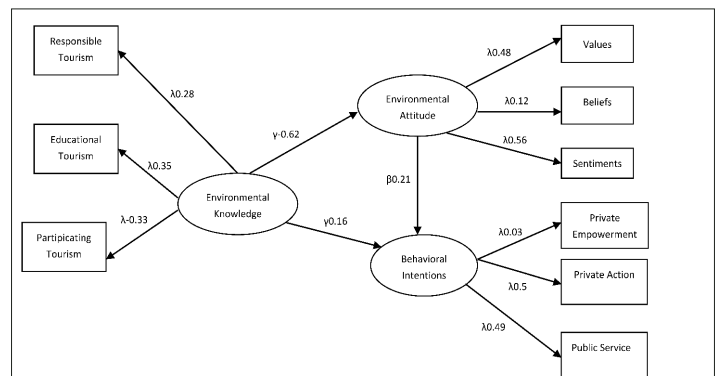


Figure 3: Empirical structure of environmental concern in Taiwanese students (n=415).

New arguments

I believe, in the planning of environmental education curriculum in China and Taiwan, the 'knowledge-attitude-behavior' theory is still accepted: the education system accepts the notion that increasing environmental knowledge can change a person's attitude toward the environment and produce responsible environmental behavior [4]. Thus, considerable argument and controversy exists regarding whether or not environmental attitude is the intermediary variable of environmental knowledge and environmental behavior. Because the concept of the 'knowledge-attitude-behavior' theory is used, the environmental education curriculum in China and Taiwan leans toward a one-way transfer of knowledge. However, a transfer of knowledge is not equal to the construction of environmental values and judgment. Freed [5] reported that no

effects on environmental behavior stemming from factual knowledge could be identified, thus the relationship between knowledge and behavior could not be established. Moreover, several studies have shown that a high degree of correlation does not necessarily exist among knowledge, sentiment, and behavior, and Fishbein reported that sentiment, knowledge, and behavior are not always strongly correlated [6]. However, the findings in this study suggested that an accurate understanding of ecotourism by Chinese and Taiwanese university students will elicit environmentally friendly behavioral intentions, which in turn lead to having comprehensive knowledge of ecotourism that will produce a self-driven ability to engage in environmentally friendly behaviors.

REMARKS

The level of importance attached to ‘environmental knowledge’ in Taiwan sustainable tourism education is slightly reduced because knowledge alone cannot always generate positive value judgment. Therefore, environmental education in Taiwan should focus instead on nurturing the training provided for environmental attitude and environment-friendly behaviors, to develop environmentally conscious citizens raised with high-quality environmental literacy in tourism business model [7]. In addition, the participation rates of sustainable tourism are low, and learning opportunities of ecotourism concepts through relevant courses at the university are limited. Therefore, the pedagogies of broader philosophies concerning the global tourism industry’s practices and operations are necessary. In the context of Sustainable Development Goals (SDGs), I tried to highlight the potential of tourism to contribute to economic growth, social inclusion and environmental preservation [8]. I recommend that both regions increase the number of courses that offer greater insights to envision environmental literacy about environmental education on sustainable tourism [2]. A closer exchange between Chinese and Taiwanese students will allow the mutual communication to alter the knowledge of students in both places and generate a fusion of ideas and action.

Meanwhile, a case in point could be reminded more than that of sustainable tourism. That is environmental literacy. Since there are now more than 185,650,000 cases in the world and 4,012,453 people have lost their lives up to July 9th, 2021. The virus of Covid-19 is nothing but a strand of RNA. It doesn’t think, have a family, go to work, have leisure time, or pay taxes, but it has brought the human species to its knees. This is a real redneck value. We should be concerned with living in harmony with all other species from this issue within COVID-19 pandemic. This definition, environmental literacy, thus, is based on the environmental and social issues that have been created by humans and predicated on the notion that society itself determines the people’s behavior or attitudes that are related to existing and emerging environmental and health issues. And, that there is an inherent expectation that the people who created the problems have the potential or should be held responsible to resolve the issues. We, therefore, all know that the basic spirit of environmental education lies in the “education process,” “societal values,” and our collective “knowledge,

attitude and skills,” and ability to solve “problems”. In short, the desired effect of environmental education is whether we can improve the environmental literacy of the people and formulate and implement corrective actions to resolve environmental problems without creating additional problems. Therefore, educating the public on the complex biological, chemical, and physical processes that occur and the risk of creating compounds that are more harmful to the environment and human health compared to the original pollutants is a challenge. In this mini-review of this article, I have explored the processes of environmental education, including learning motivation, environmental awareness and sensitivity, environmental values, attitudes, experience, and pro-environmental behaviors in sustainable tourism, with the goal of providing our readers with an appreciation for nature. The role nature plays in our way of life, and the knowledge and skills that citizens need to start taking action to correct some of the environmental issues that we are facing through environmental aesthetic literacy and sound science.

However, the development of environmental literacy for an entire population during their leisure time cannot be achieved over-night [9]. Such a process requires time and a group of individuals that consciously care for the environment and work individually and collaboratively, typically for generations. Through educational channels, environmentally consciousness people, accumulate knowledge that develops community and cultural pro-environmental behaviors that ultimately form a collective social force that is powerful and advocates for environmental rights.

CONCLUSION

I hope that, as Taiwan gradually receives increased numbers of tourists/sightseers from China after COVID-19 pandemic, the frequency of exchanges between the two sides will also increase after post-COVID-19 era. Cross-strait exchanges in ecotourism will be promoted, and the political gap between the two sides will be eliminated.

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