Tourist Perspectives of Physical Tourism Impacts

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ABSTRACT

The globe is enjoying the tourism growth benefits (economically, socially and physically) at the expense of uncontrolled resource usage and as well as unmanageable development impacts. This study looks at the physical tourism impacts experienced by both Redang and Perhentian Islands, from the tourists’ perspective. More specifically, this study examines the infrastructure aspect through eight items (sustainability, environment, greenhouse effects, public and tourist facilities maintenance, sewage system management, small towns as well as deforestation). From a three-phase evaluation framework (Correlation, Regression and Correspondence analyses), we learned that results for the Redang Island indicate a serious situation for physical impact of tourism development, compared to the Perhentian Island. Interestingly, although both islands were observed to experience a tourism development progress that is well-blended with its natural environment, the level of physical impact dependency on tourism development can be assessed using the ‘visual integrity’ variable.

INTRODUCTION

Tourism industry, which falls under the psychology school of thought, can be broadly encapsulated into the following categories, but not limited to: travel [1], hospitality [2], facility [3] and marketing strategy [4]. The tourism industry can be both transient and real, where its basic foundation is based on four Ws: what, where, who and why. Island-based tourism is one of the internationally recognized nature-based tourism pillars. The basic notion of creating and indulging in island-based tourism is outlined by Stydilis et al. [5] who stated that islands present the complex relationship between land and water and more importantly, islands emphasize on ‘...the characteristics of separateness and difference ...given people’s desires for the different while in pursuit of leisure, different climates, physical environments and culture ...to further the attractiveness of islands as tourism destinations’. Central to the entire discipline of physical impact is the concept of protecting the demand and supply chain through carrying capacity [6]. Other than ensuring the islands longevity and sustainability, the act of controlling and managing the physical impact also serves the purpose of brandishing the islands’ image and identity. To Bozetka [7], the relationship between physical impact and the islands’ image and identity exists in the form of ‘...tremendous diversity with landscape ranging from arctic deserts or tropical forests to compact urbanized areas, and simultaneously exhibit great cultural differences’. The trajectory of island tourism moves toward and revolves around sustainable tourism development [8]. Located in the State of Terengganu in Malaysia, both Redang and Perhentian islands offer the visitors with a breathtakingly picturesque environment and magnificently beautiful coral reefs and marine wildlife. Against the stated background, this study aims to evaluate the degree of physical (infrastructure) impacts face by both Redang Island and Perhentian Island.

Research Method:

Working with the experts (lecturers, consultants and government officials) in related fields (social, physical and infrastructure), the development process of data collection instrument employed (self-administered questionnaire survey) gave specific focus on the following aspects, namely: solid waste, water quality, deforestation, land fertility, biodiversity, natural landscape and air pollution. Within this study coverage, the structure of assessment method employed is of similar to the damage schedule approach [9]. Out of 510
questionnaires (260 for Perhentian Island and 250 for Redang Island), 469 completed questionnaires (258 for Perhentian Island and 211 for Redang Island) were retrieved within two-week time frame. The 5-point Likert scale (1: strongly disagree, 2: disagree, 3: neutral, 4: agree and 5: strongly agree) was utilized to evaluate the tourists (minimum age of 18) perceptions and opinions regarding the level of physical impacts.

Research Findings:
This section presents the findings for eight physical impact variables, namely: sustainability, environment, greenhouse effects, public facilities, sewage system, tourism facilities, economic development and visual. From Table 1, it is learned that both islands recorded a higher number for first time tourists compared to repeat visitors, with male respondents’ figure is slightly higher than female respondents. Additionally, both islands were found to be famous with visitors aged between 18 to 39, compared to the remaining age classes.

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Results for Perhentian Island reveals three medium strength and 24 low strength relationships. More specifically, the medium strength relationships were observed for sustainability and environment ($r = .622$, $n = 258$, $p = .000$), environment and sewage system ($r = .581$, $n = 258$, $p = .000$) and sewage system and tourism facilities ($r = .586$, $n = 258$, $p = .000$). Meanwhile, the lowest result for low strength relationship was detected for public facilities-visual relationship ($r = .173$, $n = 258$, $p = .000$). In contrast, 15 medium strength and 11 low strength relationships were discovered for Redang Island and more importantly, a strong strength relationship was recorded by sewage system and tourism facilities ($r = .712$, $n = 258$, $p = .000$). In the case of Redang Island’s medium strength relationship, public facilities-economic development presents the highest result ($r = .693$, $n = 258$, $p = .000$) and the lowest result is sustainability-tourism facilities relationship ($r = .504$, $n = 258$, $p = .000$). When studying the low strength relationship, sustainability-visual relationship reported the lowest result ($r = .136$, $n = 258$, $p = .000$). At this point, it can be concluded tourism development in both Redang Island and Perhentian Island does not severely affecting the natural visual. In other words, the tourism projects fit accordingly with the nature environment of both islands.

When comparing both islands’ highest regression results, the potential of predicting tourism development impact towards sustainability in the Redang Island can be done by assessing the environment ($b = .664$, $t (210) = 12.832$, $p = .000$) and tourism facilities ($b = .712$, $t (210) = 14.649$, $p = .000$). On the other hand, assessment of sewage system ($b = .581$, $t (258) = 11.424$, $p = .000$) can be used to predict the tourism development impact towards environment in the Perhentian Island. The physical impact of tourism development in the Redang Island can be predicted by examining the following variables: economic development ($b = .693$, $t (210) = 13.906$, $p = .000$) and greenhouse effects ($b = .656$, $t (210) = 12.549$, $p = .000$). While ‘types of visitor’ was insignificant with all eight physical impact variables for Perhentian Island, ‘sewage system’ was found insignificant for the Redang Island. In the other hand, for both islands, ‘good facility’ was found significant for greenhouse effects [Perhentian Island: chi square = 32.183, $p = .001$; Redang Island: chi square = 52.803, $p = .000$] and visual [Perhentian Island: chi square = 26.923, $p = .008$; Redang Island: chi square = 23.495, $p = .023$], and interestingly, ‘public facilities’ was significant and insignificant for Perhentian Island (chi square = 29.552, $p = .003$) and Redang Island (chi square = 12.602, $p = .399$) archipelagos, respectively. For Perhentian Island, age was significant with four physical impact variables (sustainability: chi square = 32.036, $p = .963$; sewage system: chi square = 22.033, $p = 1.000$; economic development: chi square = 28.707, $p = .988$; and visual: chi square = 26.608, $p = .995$) and five for the Redang Island (sustainability: chi square = 33.121, $p = .950$; environment: chi square = 29.342, $p = .985$; greenhouse effects: chi square = 26.313, $p = .995$; tourism facilities: chi square = 32.571, $p = .957$; and economic development: chi square = 55.038, $p = .996$).
**Discussion and Conclusion:**

This study comes to conclude that both islands should pay specific attention to sewage systems management as well as tourism facilities maintenance aspects when planning, assessing and monitoring the physical impact of tourism development. This conclusion is made based on the high significant result when examining both variables with age. That is to say, these variables are the major concerns pointed out by tourists who visited both islands. Following these aspects, this study further emphasizes on these two criteria, namely: [1] greenhouse effects and [2] economic development benefits experience by the small towns. Despite presenting the medium strength relationship, these variables are highly predicting the physical impact of tourism development especially for the Redang Island. Nevertheless, it is within this study interest to address the importance of studying these four variables separately as both islands are undergoing a different phase of lifecycle. Simply stated, these islands are facing and experiencing different challenges in moving towards sustainable tourism development progress. This may suggest the pressing need of implementing a specific regulation/policy that is best suited for each island. That is to say, the carrying capacity law for the Redang Island may be stricter compare to the Perhentian Island. To a certain level, regulations and policies made for the Redang Island can be used as a development guideline for the Perhentian Island and other islands that are suffering less severe physical impacts compare to both Redang Island and Perhentian Island.

Additionally, a number of theories have been long utilized to study the relationship between perceptions, attitudes and tourism impact, for example, the Theory of Reasoned Action, the Social Exchange Theory, the Butler’s Lifecycle Theory, the Community-based Tourism Theory and the development theories (such as Modernisation, Dependency and Alternative). As some of these theories exclude the social values and beliefs, this study suggests complementing these theories with the Integrated Threat Theory. This is given the importance of evaluating how does people judge threats and whether their judgments are real or just a perception.

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**REFERENCES**


