

Mainland Chinese Customers' Intention toward Medical Tourism in Taiwan

Hsiu-Yuan Wang and Shwu-Huey Wang

Abstract—This study proposes and tests a research model capturing elements of perceived gain and loss that, by affecting the perceived value of medical tourism products, influence the buying intention of potential customers. Data from 301 usable questionnaires were tested against the research model using the structural equation modeling approach. The results indicated that perceived value was a key predictor of customer intentions. As for benefits, perceived medical quality, service quality and enjoyment were critical components that significantly influenced the perception of value. Regarding sacrifice, the effects of perceived risk on perceived value were significant. The findings can provide insights into research on how destination countries can make medical tourism a win/win option for themselves and international patients.

Keywords—Medical tourism, perceived value, customer intention.

I. INTRODUCTION

TODAY, many people travel overseas to obtain medical, dental and surgical care, while at the same time taking a holiday abroad. Medical tourism in this study refers to “travel across international borders to seek healthcare while also taking a holiday in the foreign country.” As such, medical tourism goes beyond the usual relaxation, exercise and visits to spas that might be included in a recuperative vacation, to include medical and surgical interventions. Thus defined, medical tourism is a burgeoning industry that has taken the attempt of tourists to attain better health while on holiday to a whole new level [1].

The purposes of this study are thus twofold: (1) to propose and examine a research model capturing both gain and loss elements that could influence potential medical tourists' perceived value; and (2) to investigate the impact of perceived value on potential tourists' behavioral intention to travel for medical care to a foreign destination, in this case Taiwan.

II. THE PROPOSED RESEARCH MODEL

The research model for this study, shown in Fig. 1, is intended to cover important features that can account for most of the variance in the intention of medical tourists. Intention, which is defined as a person's subjective probability to perform a specified behavior, is chosen as the dependent variable for

theoretical and practical reasons. According to prior research [2], intention has a major influence on actual behavior in mediating the effect of other determinants on behavior. In this study, which focuses on medical tourism in Taiwan, intention was chosen instead of actual behavior as the dependent variable because it allowed for a timely investigation of the potential behavior among the target research group.

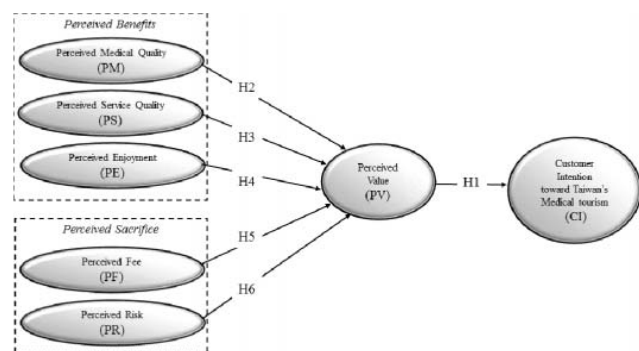


Fig. 1 Research model

From a customer choice perspective, this study expects that a high evaluation of perceived value among potential tourists will cause an increase in the intention to purchase or participate in medical tourism products or tours. The following hypothesis summarizes this expectation:

H1. The overall perceived value of medical tourism has a positive effect on the intention of potential customers to participate in these tourism activities.

This study suggests that there are three beneficial components of perceived value among potential medical tourists: perceived medical quality, perceived service quality and perceived enjoyment.

Perceived medical quality in this study is defined as the degree to which a potential tourist believes that hospitals and medical tourism agencies can provide patients with a technologically advanced medical environment, a high level of medical standards and expertise and a medical tourism package of high quality. This study anticipates that from the perspective of potential customers travelling to a foreign destination for medical care, a higher level of medical quality will be associated with a higher value of medical tourism products. Thus, the following hypothesis is formulated:

H2. Perceived medical quality has a positive effect on the perceived value of medical product offerings among potential customers.

This research defines perceived service quality as the degree

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to which a potential tourist thinks that medical tourism agencies and hospitals have the ability to perform the promised service, provide prompt service, resolve customer complaints and offer flexible services according to individual demands. Since prior research has confirmed that perceived service quality can predict the customer's value perception [3], this study hypothesizes the following:

H3. Perceived service quality has a positive effect on the perceived value of medical service offerings among potential customers.

In this study, perceived enjoyment is defined as the extent to which medical tourism can make potential tourists feel pleased, relaxed, joyful and even fantastic. Prior studies [4], [5] have confirmed that a positive emotional state has a significant influence on a customer's value perception. Therefore, this study formulates the following hypothesis:

H4. Perceived enjoyment has a positive effect on the perceived value of medical product and service offerings among potential customers.

Perceived sacrifice consists not only of actual monetary costs but also of non-monetary costs. Hence, this study assumes that among potential customers, the total perceived sacrifice of participating in medical tourism includes components such as perceived fee and perceived risk.

Perceived fee in this study refers to the monetary transaction costs of purchasing a medical tourism product. This fee includes the cost of flights, accommodation, a luxury holiday, medical treatment, etc. Some studies have indicated that price is always a key factor for consumers when purchasing tourism products [6]. Thus, based on the aforementioned findings, this study presents the following hypothesis:

H5. Perceived fee has a negative effect on the perceived value of medical product and service offerings among potential customers.

Perceived risk in this research refers to certain types of risk, such as the unavailability of post-operative care and the occurrence of malpractice, medical side-effects and complications, which are considered when potential customers decide to participate in medical tourism. Therefore, this study proposes a final hypothesis:

H6. Perceived risk has a negative effect on the perceived value of medical tourism product and service offerings among potential customers.

III. RESEARCH METHODOLOGY

A. Measurement Development

This study initially developed a 33-item questionnaire. In order to confirm the content validity of the questionnaire, a discussion was performed. As a result, 2 items were omitted, leaving 31 items to constitute a complete scale for this study. The original question items were in English; however, a bilingual expert was invited to translate them into Chinese to ensure the validity of the questionnaire.

B. Data Collection

This study used a non-random sampling technique (i.e.,

convenience sampling) to collect the sample data. The employees of Perfect (China) Co. Ltd. were chosen as the research subjects.

The main survey was conducted in a formal meeting inside the company. A total of 435 responses were received. Of the 435 responses, 134 questionnaires were invalid or incomplete, which left 301 usable responses, for a valid response rate of 69%. Among these responses, a total of 61.8% of the respondents were female.

IV. DATA ANALYSIS AND RESULTS

A. Assessment of Measurement Model

A confirmatory factor analysis via AMOS 17.0 was conducted to test the measurement model. All of the model-fit indices exceeded their respective common acceptance levels suggested by previous research. Reliability and convergent validity of the factors were calculated by composite reliability and by the average variance extracted. All of the factor loadings of the items in the research model were greater than 0.70.

To test discriminant validity, this study compared the shared variance between factors with the average variance extracted from the individual factors. In brief, the measurement model demonstrated adequate reliability, convergent validity and discriminant validity.

B. Structural Model Estimation and Hypotheses Testing

A similar set of model-fit indices was used to examine the structural model. The six common model-fit measures of the structural model also exceeded their respective common acceptance levels suggested by previous research. Fig. 2 shows the standardized path coefficients for all of the respondents in the hypothesized model.

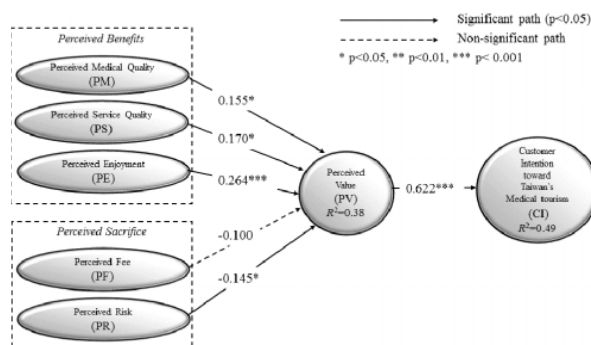


Fig. 2 Results of structural modeling analysis

V. DISCUSSION

From the perspective of the research subjects in this study, three constructs measuring perceived benefits: perceived medical quality, service quality and enjoyment, had a significant, positive influence on perceived value. Thus, it is believed that to enhance a medical tourism package, service providers need to give close attention to several dimensions related to the development of medical quality. In line with prior research on the consumer perception of value [3], the results of

this study revealed that perceived service quality has a significant influence on customers' value perception; this means that the majority of potential medical tourists are concerned about whether or not medical service providers can provide them with promised and prompt services, resolve their complaints and offer flexible services based on their demands. If the process of medical tourism entails slow, inflexible services and unsolvable complaints, then the benefits will be greatly decreased. Thus, medical travel providers should improve their reliability, responsiveness and level of consumer assurance in order to increase the perceived value of their services among potential customers. As expected, the greatest impact on the perceived value of tourism products and services in this study was derived from perceived enjoyment. Creating a consumption experience that is pleasurable is likely to induce positive customer reactions.

When considering the effect of perceived sacrifice, the results show that perceived risk has a significant negative influence on perceived value; this means that the majority of potential medical tourists think that medical treatment should be safe. In contrast to this study's expectation, it was found that one of the perceived sacrifice constructs, namely, the perceived fee, did not have a significant influence on perceived value. It has already been suggested, and previous research confirms [7], that travel for medical care is positively related to income. The larger the personal disposable income of the medical tourist, the more money is available for nonessential consumption, including travel for elective procedures and diagnostics. However, justifying and validating the foregoing explanations and propositions still requires further investigation.

VI. LIMITATIONS AND CONCLUSIONS

This study has some limitations that should be addressed in future studies. The findings and their implications were obtained from only one survey that targeted a certain group of tourists in mainland China. Therefore, a validation using another large sample gathered elsewhere is required to further generalize the findings

By combining various insights from the tourism and marketing field, this study proposes a research model that includes both the benefit and sacrifice measures which seem to be highly relevant to the purchase of medical tourism products. The proposed model is original and there is no existing article that presents a model with the same constructs and relationships among constructs as those which have been demonstrated. In conclusion, the findings of this empirical study serve not only to help medical tourism practitioners understand the perceptions of potential customers, but they also provide insights into research on how destination countries can make medical tourism a win/win option for themselves and their international patients.

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REFERENCES

- [1] J. Connell, "Medical tourism: Sea, sun, sand and ... surgery," *Tourism Management*, vol. 27, pp. 1093-1100, 2006.
- [2] I. Ajzen and M. Fishbein, *Understanding attitudes and predicting social behavior*. Englewood Cliffs, NJ: Prentice-Hall, 1980.
- [3] J.T. Walker, K. Backman, S.J. Backman, and D. Morais, "Using performance measurements to explore the influence of service quality dimensions on customer's perception of overall value of a nature based tourism outfitter," *Journal of Quality Assurance in Hospitality & Tourism*, vol. 2, no. 1/2, pp. 49-68, 2001.
- [4] M.J. Arnold, and K.E. Reynolds, "Hedonic shopping motivations," *Journal of Retailing*, vol. 79, no. 2, pp. 77-95, 2003.
- [5] C.H. Lin, P.J. Sher, and H.Y. Shih, "Past progress and future directions in conceptualizing customer perceived value," *International Journal of Service Industry Management*, vol. 16, no. 3-4, pp. 318-336, 2005.
- [6] R. Law, "Towards a multi-criteria weighting model for travel websites," *Review of Business Research*, vol. 1, no. 2, pp. 114-118, 2003.
- [7] M.Z. Bookman, and K.R. Bookman, *Medical tourism in developing countries*. New York: Palgrave Macmillan Ltd, 2007.