



**THE EFFECT OF HEALTH AND BEAUTY PERCEPTION ON INTENTIONS TOWARD  
MEDICAL TOURISM IN KOREA AND JAPAN**

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**Abstract:** - Medical tourism is one of the fastest-growing businesses in Asia. Korean and Japanese governments are promoting medical tourism. Health and beauty perception is one of most important factor for understanding medical tourism. The purpose of this research is to analyze the effect of health and beauty perception on intentions toward medical tourism in Korea and Japanese. This study also intends to compare influence of health and beauty perception on medical tourism intentions between Korea and Japan. For this study, health and beauty perception was explained by the concept of “Health Belief”.

With regard to medical tour, results of analysis indicates two factors of ‘Thermal springs benefit’ and ‘Susceptibility’ respectably shows a positive significant influence in both Korea and Japanese. Especially in Korea, ‘Barrier’ has also a positive significant impact on intentions toward medical tour. With regard to beauty tour, the result has revealed ‘Korean medicine benefit’ and ‘Thermal springs benefit’ have a significant effect in both Korea and Japan. Only in Korea, ‘Anxiety’ has a positive significant impact on intentions toward beauty tour.

**Keyword:** Medical Tourism, Health Perception, Beauty Perception, Health Belief Model

**Introduction:** Medical tourism – the process of leaving home for treatments and care abroad or elsewhere domestically – is growing rapidly in Asia. Many travel agencies have developed

specialized packages, including a broad choice of rehabilitation and leisure activities, which can be integrated with the healthcare options. With the popularity, the classification of medical tourism is broadened, including cosmetics surgery, SPA, and alternative medicine.

Recently, Korean and Japan governments are making many efforts to improve medical tourism industry. Korean governments have emphasized provision of Korean traditional medicine, cosmetic surgery, etc., whereas

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Japanese medical tourism is being developed mainly with thermal springs, woodland walks, etc. The difference of these developments in medical tourism could be concerned with people's thinking and attitude toward health and beauty. In other words, health and beauty perception is reflected in medical tourism. However, there aren't enough researches about health and beauty perception in tourism research field.

Based on the above, the purpose of this research is to analyze the effect of health and beauty perception on intention toward medical tourism, and to compare influence of health and beauty perception on medical tourism intentions between Korea and Japan. It is expected that result of this study will provide practical implication for developing medical tourism packages in Korean and Japan.

**Review of Literature**

**Medical Tourism:** Medical tourism can be broadly defined as provision of medical care in collaboration with the tourism industry for

improving one's health. Medical tourism can be understood as part of "health tourism". Health tourism was defined by the International Union of Tourist Organizations (IUTO), as "the provision of health facilities utilizing the natural resources of the country, in particular mineral water and climate" (IUTO, 1973). Goodrich and Goodrich (1987) and Goodrich (1993, 1994) defined health tourism defined health tourism as the promotion by a tourist destination of its health care facilities and services. Laws (1996) define health tourism with a broad view: it is leisure taken away from home, where one of the objectives is to improve one s state of health.

Medical Tourism is the tourism services based on healthcare and nursing, sickness and health, and recovery and rehabilitation. Broadly speaking, medical tourism is the act of traveling to obtain medical and beauty care. As described in Figure 1, there are three categories of medical tourism: medical tour, health/wellness tour and beauty care tour.

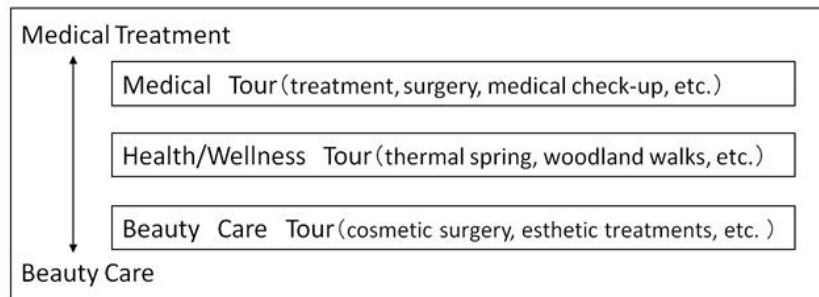


Figure 1 Categories of Medical Tourism

**Health and Beauty Perception:** Health and beauty perception can be explained by the concept of "Health Belief". The Health Belief Model (HBM) is by far the most important and well established health theory in the public health domain, and this model can help predict and understand the behavior and attitudes of people seeking medical care (Rosenstock, 1960; Becker, 1974a, 1974b; Mikhail, 1981).

The model originally consisted of four concepts: (a) perceived susceptibility, a person's subjective

perception of the risk of acquiring an illness or disease; (b) perceived severity, a person's feelings on the seriousness of contracting an illness or disease; (c) perceived benefits, a person's feelings on the obstacles to performing a recommended health action; and (d) perceived barriers, a person's feelings on the obstacles to performing a recommended health action (Rosenstock, 1960; Becker, 1974a, 1974b). HBM was selected as a theoretical framework for this study.



Figure 2 Health Belief Model

## Methodology

**Hypothesis and Survey Design:** The main purpose of this study is to investigate the relationship between health/ beauty perception and medical tourism intention in Korea and Japan. Based upon the review of literature and the study objectives, the following hypotheses were proposed:

H1: Health and beauty perception has a positive significant impact on medical tour intentions in Korea and Japan.

H2: Health and beauty perception has a positive significant impact on beauty tour intentions in Korea and Japan.

The questionnaire consisted of four parts; a) demographic and medical tourism specific characteristics (7 items), b) health and beauty perception (14 items), c) intentions toward medical tourism (5 items). A 5-point Likert scale was used with 1 being the lowest (strongly disagree/not at all satisfied) and 5 the highest (strongly agree /extremely satisfied).

**Data Collection and Analysis Procedure:** Data for this study were gathered from Korean and Japanese university students. Data were collected by Japanese research and Korean assistants in Korea and Japan during June in 2014. The purpose of the study was explained briefly to university students by these assistants. All variables were based on the subjects` self-report. A total of 428 questionnaires were accepted for the final data analysis.

The returned questionnaires were coded into the Statistical Package for Social Sciences (SPSS) 20.0. The analytical procedure is as follows. First, a descriptive analysis was conducted to examine demographic and medical tourism

specific characteristics. Second, an exploratory factor analysis was conducted to establish validity of the measurement scale. Third, multiple regression analyses were conducted to examine the impact of health and beauty perception on medical tourism intentions.

## Result

**Profile of the Respondents:** A total of 428 university students participated in the study. Of the 428 usable responses, the majority of respondents were female; 36% of the respondents (n = 154) were male while 64% of the respondents were female tourists (n = 274). Korean respondents were 49 % ( n = 209), and Japanese respondents were 51 % ( n = 219). 54% of the respondents (n=232) have already known medical tourism. 24% of respondents (n=102) have been experienced beauty service, whereas just 6% of respondents (n =25) had medical service experiences during travel.

**Reliability and Validity of the Survey Instrument:** An exploratory factor analysis was conducted to determine the dimensions of health and beauty perception. The results are shown in Table 1. Scales for health and beauty perception have a Cronbach's coefficient above .70 to be acceptable. Total distributed explanatory power of the three service quality factors was 79.910%. Each item's factor loading was greater than .5. Bartlett's test of sphericity for each construct was statistically significant at the  $p < .001$  level. The items used for each construct explained a substantial amount of the variance of their constructs. Thus, it was appropriate to proceed with the regression analysis that examined the relationships between health and beauty perception and intentions variables.

Table 1. Factor analysis for health and beauty perception factors

Dimensions	Items	Factor loading	Eigen value	% of Variance	Cronbach's alpha
Anxiety	Barrier to daily life by disease	.884	5.975	42.677	.955
	Agony of disease	.859			
	Inconvenience to family by disease	.840			
	Worry about being in good shape	.836			
	Difficulty of recovery to health	.829			
	Worry about skin care	.783			
Korean medicine Benefit	Medical effects of Korean medicine	.894	1.711	12.222	.928
	Aesthetic effects of Korean medicine	.819			
Thermal springs Benefit	Aesthetic effects of thermal springs	.914	1.324	9.456	.827
	Medical effects of thermal springs	.907			
Barrier	Annoyingness of medical check-up	.905	1.163	8.307	.859
	Annoyingness of hospital procedure	.645			
Susceptibility	Worry about disease by bad habit	.862	1.015	7.248	.798
	Worry about disease by seeing sufferers	.767			

Total variance explained=79.910, KMO=.873, Bartlett's Test(df)=3.812e3(91)\*\*\*

\*\*\*p<.001

An exploratory factor analysis was conducted to determine the dimensions of intentions toward medical tourism. It would be seen on table 2. Scales for intentions have a Cronbach's coefficient above .70 to be acceptable. Total distributed explanatory power of intention

factors was 83.958%. Each item's factor loading was greater than .7. Bartlett's test of sphericity for each construct was statistically significant at the p< .001 level. The items used for each construct explained a substantial amount of the variance of their constructs.

Table 2. Factor analysis for intentions toward medical tourism factors

Dimensions	Items	Factor loading	Eigen value	% of Variance	Cronbach's alpha
Medical tour	Intentions to medical check-up tour	.928	3.022	60.449	.852
	Intentions to medical treatment tour	.899			
	Intentions to Korean medicine tour	.801			
Beauty tour	Intentions to aesthetic care tour	.931	1.175	83.958	.780
	Intentions to Korean medicine tour for beauty	.781			

Total variance explained=83.958, KMO=.720, Bartlett's test(df)=1.201e3(10)\*\*\*

\*\*\*p<.001

**Test of Hypotheses:**

H1: Health and beauty perception has a positive significant impact on medical tour intentions in Korea and Japan.

To test this hypothesis, medical tour intentions was regressed on Anxiety, Korean medicine benefit, Thermal springs benefit, Barrier and Susceptibility dimensions of health and beauty perception. The multiple regression results are shown in Table 3. The variance inflation factor (VIF) indicated less than 2, indicating no

evidence of multicollinearity problems for any of the predictor variables. Three dimensions, Thermal springs benefit, Barrier and Susceptibility had a statistically significant effect on medical tour intentions in Korea. Two dimensions, Thermal springs benefit and Susceptibility had a statistically significant effect on medical tour intentions in Japan. H1 was partially accepted.

**Table 3 Influence of Health/beauty perception on medical tour intentions<sup>a)</sup>**

predictor <sub>i</sub>	dependent variable : medical tour intentions <sub>i</sub>			
	unstandardized coefficients <sub>i</sub>		standardized coefficients <sub>i</sub>	t <sub>i</sub>
	$\beta$ <sub>i</sub>	S.E. <sub>i</sub>	Beta <sub>i</sub>	
(constant) <sub>i</sub>	.536 <sub>i</sub>	.126 <sub>i</sub>	- <sub>i</sub>	4.242*** <sub>i</sub>
Anxiety <sub>i</sub>	-.041 <sub>i</sub>	.118 <sub>i</sub>	-.026 <sub>i</sub>	-.350 <sub>i</sub>
Korean medicine Benefit <sub>i</sub>	.110 <sub>i</sub>	.068 <sub>i</sub>	.117 <sub>i</sub>	1.607 <sub>i</sub>
Korea <sub>i</sub> Thermal springs Benefit <sub>i</sub>	.201 <sub>i</sub>	.065 <sub>i</sub>	.209 <sub>i</sub>	3.100** <sub>i</sub>
Barrier <sub>i</sub>	.123 <sub>i</sub>	.061 <sub>i</sub>	.139 <sub>i</sub>	2.004* <sub>i</sub>
Susceptibility <sub>i</sub>	.126 <sub>i</sub>	.054 <sub>i</sub>	.155 <sub>i</sub>	2.325* <sub>i</sub>
R <sup>2</sup> = .103 ..... adjusted R <sup>2</sup> = .081 ..... F = 4.664*** <sub>i</sub>				
(constant) <sub>i</sub>	-.286 <sub>i</sub>	.134 <sub>i</sub>	- <sub>i</sub>	-2.124* <sub>i</sub>
Anxiety <sub>i</sub>	-.232 <sub>i</sub>	.126 <sub>i</sub>	-.160 <sub>i</sub>	-1.846 <sub>i</sub>
Korean medicine Benefit <sub>i</sub>	.006 <sub>i</sub>	.070 <sub>i</sub>	.006 <sub>i</sub>	.080 <sub>i</sub>
Japan <sub>i</sub> Thermal springs Benefit <sub>i</sub>	.136 <sub>i</sub>	.053 <sub>i</sub>	.168 <sub>i</sub>	2.553* <sub>i</sub>
Barrier <sub>i</sub>	-.077 <sub>i</sub>	.067 <sub>i</sub>	-.086 <sub>i</sub>	-1.154 <sub>i</sub>
Susceptibility <sub>i</sub>	.198 <sub>i</sub>	.063 <sub>i</sub>	.213 <sub>i</sub>	3.154** <sub>i</sub>
R <sup>2</sup> = .089 ..... adjusted R <sup>2</sup> = .068 ..... F = 4.145*** <sub>i</sub>				

\*p<.05, \*\*p<.01, \*\*\*p<.001<sub>i</sub>

H2: Health and beauty perception has a positive significant impact on beauty tour intentions in Korea and Japan.

To test this hypothesis, behavioral intention was regressed on Anxiety, Korean medicine benefit, Thermal springs benefit, Barrier and Susceptibility dimensions of health and beauty perception. The results of multiple regression analysis are shown in Table 4. The variance inflation factor (VIF) indicated less than 2, indicating no evidence of multicollinearity problems for any of the predictor variables.

Three dimensions, Anxiety, Korean medicine benefit, and Thermal springs benefit had a statistically significant effect on intentions toward beauty tour in Korea. Two dimensions, Korean medicine benefit and Thermal springs benefit had a statistically significant effect on beauty tour intentions in Japan. HI was partially accepted.

Table 4 Influence of Health/beauty perception on beauty tour intentions

predictor	dependent variable: beauty tour intentions				
	unstandardized coefficients		standardized coefficients	t	
	$\beta$	S.E.	Beta		
(constant)	-.100	.118	-	-.847	
Korea	Anxiety	.223	.110	.152	2.025*
	Korean medicine Benefit	.217	.064	.248	3.399**
	Thermal springs Benefit	.156	.060	.175	2.583*
	Barrier	.086	.057	.105	1.513
	Susceptibility	.092	.050	.123	1.833
R <sup>2</sup> = .096 ..... adjusted R <sup>2</sup> = .074 ..... F = 4.315***					
(constant)	.132	.158	-	.835	
Japan	Anxiety	.199	.148	.115	1.345
	Korean medicine Benefit	.238	.082	.228	2.903**
	Thermal springs Benefit	.223	.063	.233	3.559*
	Barrier	-.066	.078	-.063	-.843
	Susceptibility	.035	.074	.032	.476
R <sup>2</sup> = .103 ..... adjusted R <sup>2</sup> = .082 ..... F = 4.857***					

\*p<.05, \*\*p<.01, \*\*\*p<.001

**Conclusion:** This paper aims to examine the effect of health and beauty perception on intentions toward medical tourism in Korea and Japanese. This study offers several important

findings and implications that can be summarized as follows.

First, health and beauty perception factors were grouped into five dimensions, including a) Anxiety, b) Korean medicine benefit, c) Thermal

springs benefit, d) Barrier and e) Susceptibility in this study. According to previous studies, health belief includes four dimensions; susceptibility, severity, benefit, barrier. The dimension of a) Anxiety included two dimensions: susceptibility and severity which related to worry about health and beauty care. The dimension of benefit was split into b) Korean medicine benefit, c) Thermal springs benefit. D) Barrier” was confirmed. E) Susceptibility was included only worry about disease. The reason for grouping three dimensions could be found in this regard.

Second, health and beauty perception has a positive significant impact on intentions toward medical tour in Korea and Japan. H1 was partially supported. In particular, two factors of ‘Thermal springs benefit’ and ‘Susceptibility’ respectably shows a positive significant influence in both Korea and Japanese. Especially in Korea, ‘Barrier’ has also a positive significant impact on intentions toward medical tour. The physical and psychological cost has to be considered in Korea.

Third, health and beauty perception has a positive significant impact on intentions toward beauty tour in Korea and Japan. H2 was partially supported. In particular, H2 test results indicated that ‘Korean medicine benefit’ and ‘Thermal springs benefit’ have a significant effect in both Korea and Japan. Only in Korea, ‘Anxiety’ has a positive significant impact on intentions toward beauty tour. Results of this study showed that

Korean is considering various factors of health and beauty perception more than Japanese. Medical tourism holds great potential in tourism industry. This study provides a better understanding of potential tourist perceived health and beauty perception in medical tourism industry. The findings of this study may suggest practical implications to improve medical tourism with Korean and Japanese tourists.

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