

A Study on the Relationship between Place Identity and Leisure Benefits for Foreign Tourists in Taiwan

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Received: 27 Feb 2025; Received in revised form: 27 Mar 2025; Accepted: 03 Apr 2025; Available online: 09 Apr 2025

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Abstract— Taiwan is one of the world's renowned tourist destinations. The sustained growth in inbound tourism not only brings substantial economic benefits to Taiwan but also enhances global awareness and fosters goodwill among people worldwide. This study employs empirical research to examine the differences in foreign tourists' place attachment to Taiwan and the varying levels of leisure benefits they derive from recreational activities during their stay. Additionally, it investigates the correlation between place identity and leisure benefits. The key findings reveal that among foreign tourists, environmental identity scores the highest in place identity, while commitment scores the lowest. In terms of leisure benefits, social benefits rank the highest, whereas physiological benefits rank the lowest. A significant positive correlation exists between place identity and leisure benefits, with a canonical correlation relationship observed between the two. The research findings provide a valuable reference for future studies on the travel and leisure behaviors of tourists visiting Taiwan.

Keywords— Place Identity; Leisure Benefits; Taiwan Tourism; Empirical Research; Place Attachment

I. INTRODUCTION

Taiwan is renowned for its diverse and rich historical-cultural landscape, abundant natural resources, and a hospitable society. Additionally, its ubiquitous night markets and convenience stores, coupled with a wide array of distinctive local delicacies, attract gourmands from around the world. Visiting this beautiful island offers tourists a vibrant and rewarding experience, solidifying Taiwan's reputation as one of the world's premier tourist destinations. The sustained growth in inbound tourism not

only generates substantial economic benefits but also enhances global awareness and fosters cross-cultural goodwill.

This study employs empirical research to examine foreign tourists' place attachment to Taiwan, analyze variations in the leisure benefits derived from their recreational activities, and assess the correlation between place attachment and leisure benefits.

II. THEORETICAL CONCEPTS AND LITERATURE REVIEW

2.1 Theoretical Concepts

Place identity refers to an individual's association with a specific place through complex perceptual and non-perceptual processes involving thoughts, beliefs, preferences, feelings, values, goals, and behavioral intentions [1]. It represents an interactive process through which individuals transform a geographical area into a meaningful place concept [2], enabling them to distinguish one place from others [3]. In essence, place identity reflects an individual's psychological and emotional attachment and sense of belonging toward a particular place. When individuals interact with and experience a place, such engagement may fulfill certain specific needs, thereby generating symbolic meanings or emotional connections with the place. Place identity is not static but evolves in response to environmental changes. As an individual's place identity strengthens, it influences their cognitive perceptions and behaviors toward the place [4]. Regarding the measurement dimensions of place identity, Breakwell initially proposed three dimensions: continuity, self-esteem, and distinctiveness, later adding self-efficacy in 1992 [5]. Alternatively, Lalli (1992) suggested that an individual's familiarity with and sense of belonging to a place serve as evaluation criteria for place identity. Through conceptual integration, Lalli proposed five measurement dimensions: evaluation, familiarity, attachment, continuity, and commitment [6]."

The concept of "benefits" encompasses both monetary and non-monetary dimensions. Monetary benefits refer to economic gains that can be quantified in monetary units, representing the financial expenditure required to obtain goods or services. Non-monetary benefits denote positive transformations benefiting individuals, groups, societies, or entities, emphasizing the fulfillment of individuals' needs [7]. Leisure benefits generally refer to the physiological, psychological,

environmental, and social impacts individuals experience during leisure activities, stimulated by environmental, activity-related, temporal, and psychological factors. These impacts, when subjectively evaluated by individuals, constitute leisure benefits [8]. Essentially, leisure benefits represent individuals' subjective assessments of whether their leisure experiences meet their personal needs and objectives [9]. Regarding the measurement dimensions of leisure benefits, Bammel et al. (1982) proposed a six-dimensional framework comprising physiological benefits, social benefits, relaxation benefits, educational benefits, psychological benefits, and aesthetic benefits [10]. Cordes et al. (1999) identified that leisure participation yields physiological, emotional, psychological, and social benefits [11]. Alternatively, Bright (2000) suggested that leisure activities influence human lifestyles through psychological, physiological, social, economic, and environmental benefits [12].

2.2 Literature Review

Research on the relationship between leisure participants' place identity and the leisure benefits they derive from activities in a given location, or other leisure-related concepts, remains limited. Place identity is often considered a component of place attachment in leisure studies. For instance, Bricker et al. (2000) found that whitewater rafting participants' place identity strengthens with increased levels of recreation specialization, including investment, centrality, and experience [13]. Kyle et al. (2003) demonstrated that hikers' place identity on trails can be predicted by their leisure involvement, particularly through self-expression and attraction [14]. Liang (2005) suggested that birdwatchers with stronger serious leisure characteristics exhibit higher place identity toward birding sites [15]. Similarly, Alexandris et al. (2006) revealed that skiers' loyalty to ski resorts significantly influences their place identity [16].

Studies on leisure benefits are relatively more

extensive. Coleman (1993) argued that individuals experiencing higher life stress perceive greater leisure benefits from their activities [17]. Philipp's (1997) research highlighted that African American men primarily derive relaxation and self-actualization benefits from leisure, whereas women experience stronger social and self-affirmation benefits. In contrast, European American women reported significantly higher relaxation and self-actualization benefits than men [18]. Courneya et al. (1998) and Gordon et al. (2000) found that participants with higher leisure involvement gain greater physiological, psychological, and social benefits compared to those with lower involvement [19–20]. Additionally, Parry et al. (1999) indicated that leisure benefits contribute to positive emotions, enhance life satisfaction, and effectively predict participants' well-being [21].

III. EMPIRICAL RESEARCH METHODOLOGIES

3.1 Questionnaire Scale Design

The measurement scales used in this study's questionnaire were developed based on established references, as summarized in Table 1. Excluding basic demographic information, all items employed closed-ended single-choice questions requiring respondents to answer truthfully. Each item was measured using a 5-point Likert scale (ranging from 5 = strongly agree to 1 = strongly disagree), with higher scores indicating stronger perceived attributes. To assess foreign tourists' place identity toward Taiwan, this study integrated dimensions of History and Culture, and Environment, building upon existing theoretical frameworks while adapting to research needs. For measuring Leisure Benefits, Cultural Benefits and Cognitive Benefits dimensions were incorporated alongside conventional measures.

Table 1 Questionnaire design and compilation

Scale	Measurement Dimension	Questions	Question Content	Score Significance	Reference Source
Subject Profile	Personal Background	1-1 to 1-7	Gender, age, education, marriage, occupation, monthly income, nationality	The score reflects the basic situation of the subjects, and has nothing to do with the measurement of cognitive level.	Based on research needs.
	Itinerary Planning	1-8 to 1-14	Port of entry, length of stay in Taiwan, number of partners, type of activity, accommodation, diet, average daily expenditure		
Place Identity	History and Culture	2-1	I am very clear about Taiwan's historical context and related historical events and figures	The higher the score, the higher the degree of place identity, and the	References to Breakwell [5], Lalli [6] and research need to be
		2-2	I think Taiwan has better protected and inherited the culture and cultural landscape of the Chinese		

		nation	higher	the	adjusted.
		I think that the folk activities,	degree	of	
	2-3	festivals and celebrations in Taiwan can reflect the essence of Chinese folk culture.	place identity		to Taiwan.
Environment	2-4	I can clearly point out the geographical location of Taiwan.			
	2-5	I think the natural environment and climatic conditions in Taiwan are very suitable for living.			
	2-6	I think life in Taiwan is very convenient, and various living supporting facilities are quite complete.			
	2-7	I think the people in Taiwan are very warm and friendly, and the social order is very good. I am willing to live in Taiwan.			
Distinctiveness	2-8	I think I am a part of Taiwan society, and I will be proud to be a person from Taiwan.			
	2-9	I think Taiwan has many advantages that my hometown doesn't have.			
Attachment	2-10	I think living in Taiwan gives me a sense of home and makes me have a strong sense of belonging.			
	2-11	I think Taiwan and its people have great significance to me.			
	2-12	I have a strong emotional attachment to Taiwan. If possible, I will visit Taiwan frequently.			
Self-efficacy	2-13	I feel quite good about myself when I'm in Taiwan.			
	2-14	I feel that my daily needs can be easily met when I'm in Taiwan.			
	2-15	I feel safe, stable and relaxed when I am in Taiwan.			

Leisure Benefits	Promise	2-16	I think the future development of Taiwan is closely related to me.	The higher the score, the higher the degree of leisure benefit attributes, and the more they believe that they can get better leisure benefits in Taiwan.	Refer to Bammel et al. [10] Cordes et al. [11] Bright [12] and research need to adjust the compilation.
		2-17	I think the future development of Taiwan will be even better.		
		2-18	If possible, I am more than willing to make contributions to the future development of Taiwan.		
	Physiological Benefits	3-1	Engaging in leisure activities in Taiwan can prevent the occurrence of diseases and make the body healthier.		
		3-2	Engaging in leisure activities in Taiwan can exercise the muscles and build up the physique, making one stronger.		
		3-3	Engaging in leisure activities in Taiwan can make me more refreshed, and give me more drive and motivation.		
	Psychological Benefits	3-4	Engaging in leisure activities in Taiwan enables me to effectively adjust my stress and makes me feel much more relaxed.		
		3-5	Engaging in leisure activities in Taiwan can help me adjust negative emotions effectively and enhance positive emotions as well as emotional stability.		
		3-6	Engaging in leisure activities in Taiwan can make me forget my worries and depression for a while, making my mood cheerful and enabling me to feel the joy of life.		
		3-7	Engaging in leisure activities in Taiwan is helpful for my personal growth and experience, and it enables me to have a more		

		positive self-evaluation.
Social Benefits		Engaging in leisure activities in
	3-8	Taiwan can enable me to make more friends and expand my social circle.
		Engaging in leisure activities in
	3-9	Taiwan is helpful for my communication with the people of Taiwan and can broaden my horizons
		Engaging in leisure activities in
	3-10	Taiwan can enable me to receive more care from my Taiwanese friends and the outside world.
Educational Benefits		Engaging in leisure activities in
	3-11	Taiwan can inspire me to have a deeper understanding and insights in dealing with people and handling affairs.
		Engaging in leisure activities in
	3-12	Taiwan can enable me to learn a lot of new knowledge and skills.
		Engaging in leisure activities in
	3-13	Taiwan can make me realize the importance of protecting the global environment and maintaining ecological balance.
Cultural Benefits		Engaging in leisure activities in
	3-14	Taiwan can enable me to recognize the importance and necessity of protecting historical and cultural heritages.
		Engaging in leisure activities in
	3-15	Taiwan can enable me to learn how to immerse myself in the atmosphere endowed by the natural and cultural landscapes.
	3-16	Engaging in leisure activities in

Cognitive Benefits	3-17	Taiwan can help me deepen my understanding of the core values of things and the meaning of life.
		Engaging in leisure activities in Taiwan can enable me to recognize the social connotations of Taiwan and its diverse characteristics.
		Engaging in leisure activities in Taiwan can help me pay more attention to, identify with, and care for Taiwan.

3.2 Survey Implementation

The study targeted non-Taiwanese and non-Chinese international tourists, employing accidental sampling at departure halls of three major Taiwanese airports (Taipei Songshan Airport, Taoyuan International Airport, and Kaohsiung International Airport) during May 2024. Researchers administered paper questionnaires on-site and collected them immediately upon completion. Of 422 distributed questionnaires, 396 valid responses were obtained, yielding a 93.84% valid response rate.

3.3 Scale Validation Analysis

All questionnaire items demonstrated satisfactory discriminatory power, with critical ratio (CR) values

exceeding 3.0, significance levels $p < 0.05$, and correlation coefficients $r \geq 0.4$, thus retaining all items [22]. In addition, the Cronbach's alpha (α) values of the overall scale and the three scales of place identity and leisure benefits in this article are 0.914, 0.891, and 0.898, respectively, indicating high internal consistency and good reliability of the formal questionnaire scale [22-23].

IV. RESEARCH ANALYSIS RESULTS

4.1 Analysis of Scale Attribute Degree

The results of the subject scale measurement are presented in Table 2

Table 2 Scale measurement results

Component Scale			Questions		Component Scale		Scale	
Scale		Question	Average	Standard	Average	Standard	Average	Standard
		Number		Deviation		Deviation		Deviation
Place	History and	2-1	3.41	0.986	3.77	0.806	3.62	0.710
Identity	Culture	2-2	4.08	0.694				
		2-3	3.82	0.772				
	Environment	2-4	3.74	0.901	3.99	0.765		
		2-5	4.11	0.834				
		2-6	4.19	0.690				
		2-7	3.92	0.741				
	Distinctiveness	2-8	3.42	0.884	3.53	0.827		

Leisure Benefits	Attachment	2-9	3.63	0.907	3.46	0.741	3.81	0.654
		2-10	3.27	0.986				
		2-11	3.41	0.877				
	Self-efficacy	2-12	3.70	0.911	3.73	0.743		
		2-13	3.55	0.898				
		2-14	3.86	0.815				
	Promise	2-15	3.77	0.920	3.22	0.917		
		2-16	3.19	0.844				
		2-17	3.32	0.762				
	Physiological Benefits	2-18	3.44	0.799	3.32	0.841		
		3-1	3.03	0.972				
		3-2	3.39	0.877				
	Psychological Benefits	3-3	3.54	0.869	3.78	0.716		
		3-4	3.69	0.756				
		3-5	3.65	0.844				
	Social Benefits	3-6	3.85	0.793	4.08	0.698		
		3-7	3.93	0.816				
		3-8	4.05	0.790				
	Educational Benefits	3-9	4.21	0.671	3.80	7.818		
		3-10	3.97	0.812				
		3-11	3.61	0.922				
	Cultural Benefits	3-12	3.80	0.789	3.93	0.730		
		3-13	3.98	0.703				
		3-14	4.13	0.678				
	Cognitive Benefits	3-15	3.89	0.684	3.97	0.668		
		3-16	3.77	0.815				
		3-17	4.01	0.713				
		3-18	3.92	0.799				

The subjects exhibit the highest place identity towards Taiwan in terms of environmental identity and the lowest in terms of commitment. This indicates that foreign tourists tend to recognize the utility provided by Taiwan's natural, living, and social environment more than they do the future development of Taiwan.

In terms of history and culture, Taiwan is widely acknowledged for its preservation and inheritance of

Chinese national culture and cultural landscapes. Environmentally, there is consensus that life in Taiwan is highly convenient, supported by comprehensive living amenities. Differentiating factors also highlight numerous advantages unique to Taiwan, which are often absent in individuals' home regions. Regarding attachment attributes, the majority exhibit a strong emotional connection to Taiwan and express a willingness to visit frequently.

Concerning self-efficacy attributes, it is widely perceived that their daily requirements can be readily satisfied while in Taiwan. With respect to commitment attributes, most are eager to contribute to Taiwan's future development.

The leisure activities in Taiwan yield the highest benefits in the social domain and the lowest in the physical domain. This indicates that foreign tourists generally perceive these activities as opportunities to receive greater social care, expand their social networks, and foster friendships with the local people of Taiwan, while they find them less effective in maintaining physical health or enhancing physical fitness by leisure activities. Regarding physical benefits, participants often report feeling more refreshed, motivated, and energetic. In terms of psychological benefits, most believe these activities contribute to personal growth, positive self-evaluation, and a more enriched experience. Social benefits: Tourists finding these activities facilitate better communication with locals and broaden their perspectives. Educational benefits: they recognize the importance of environmental protection and ecological balance. Cultural benefits: Tourists appreciate the significance of preserving historical and cultural heritage. Cognitive benefits: they gain a deeper understanding of Taiwan's social connotations and diverse characteristics.

4.2 Analysis of the Correlation of Scale Attributes

This study employs Pearson product-moment correlation analysis (PPCA) to examine the relationships between various attribute factors of foreign tourists' place identity toward Taiwan and their perceived leisure benefits during their stay. Additionally, canonical correlation analysis (CCA) is applied to further validate these relationships.

4.2.1 Pearson Product-moment Correlation Analysis of Scale Attributes

The results of the PPCA indicate a positive relationship between place identity and each group of attribute factors associated with leisure benefits, as

detailed in Table 3. Specifically, 28 groups of attribute factors exhibit significant positive correlations, underscoring a significant positive relationship between foreign tourists' place identity toward Taiwan and the leisure benefits they derive from the island. Consequently, as the place identity of foreign tourists toward Taiwan increases, so does their recognition of the leisure benefits obtained from participating in activities in Taiwan. Among the attribute factors demonstrating significant positive correlations, the correlation between environmental identity and social benefits is the strongest, whereas the correlation between commitment identity and physical benefits is the weakest.

The analysis presented in Table 3 indicates that leisure benefit attributes exhibiting a relatively high correlation with place identity among foreign tourists include social benefits, cognitive benefits, and cultural benefits. Conversely, the attribute factors that do not demonstrate a significant positive correlation reveal lower associations between place identity aspects such as commitment, history, and attachment, and leisure benefits. This suggests that foreign tourists' considerations regarding Taiwan's future development, historical culture, and emotional belonging are less likely to contribute to enhanced overall leisure benefits during their participation in leisure activities within Taiwan.

4.4.2 Canonical Correlation Analysis of Scale Attributes

In this study, each attribute of place identity serves as a control variable (X variable), while each attribute of leisure benefits functions as a criterion variable (Y variable). Canonical Correlation Analysis (CCA) is utilized to examine the relationship between the attributes of foreign tourists' place identity regarding Taiwan and their perceived leisure benefits derived from visiting Taiwan. The findings are presented in Table 4 and Figure 1. According to the test results, this paper elucidates the correlation of two pairs of canonical factors, both of which

exhibit statistically significant canonical correlation coefficients.

Table 3 Pearson product moment correlation analysis results of scale

Scale Attributes		Leisure Benefits					
		Physiological Benefits	Psychological Benefits	Social Benefits	Educational Benefits	Cultural Benefits	Cognitive Benefits
Place	History and Culture	0.097	0.141	0.442 [*]	0.468 [*]	0.602 ^{**}	0.524 ^{**}
Identity	Environment	0.200	0.482 ^{**}	0.713 ^{**}	0.502 [*]	0.451 [*]	0.695 ^{***}
				*			
	Distinctiveness	0.156	0.406 [*]	0.417 [*]	0.478 ^{**}	0.557 ^{**}	0.491 ^{**}
	Attachment	0.132	0.494 [*]	0.535 ^{**}	0.187	0.400 [*]	0.475 ^{**}
	Self-efficacy	0.641 ^{***}	0.502 [*]	0.587 ^{**}	0.400 [*]	0.104	0.503 [*]
	Promise	0.090	0.498 ^{**}	0.596 ^{**}	0.522 ^{**}	0.615 ^{**}	0.704 ^{***}
				*			

^{*} $p < .05$ ^{**} $p < .01$ ^{***} $p < .001$

(1) The canonical correlation coefficient for the first pair of canonical factors is 0.753, with an overlap of 40.8%. For the second canonical factor, the correlation coefficient is 0.216, and the overlap is 5.5%. It is evident that the six control variables of place identity predominantly influence the six criterion variables of leisure benefits through the first pair of canonical factors.

(2) The first canonical factor χ_1 of the X variable accounts for 61.8% of the total variance of the first canonical factor η_1 of the Y variable. Conversely, the first canonical factor η_1 of the Y variable explains 72.6% of the variance within the Y variable. The overlap between the X variable and the Y variable is 40.8%, indicating that the X variable can explain 40.8% of the total variance of the Y variable through the first pair of canonical factors (χ_1 and η_1). Similarly, the X variable accounts for 5.5% of the total variance of the Y variable via the second pair of canonical factors (χ_2 and η_2).

(3) The total overlap between the X variable and the Y variable from the first pair to the second pair of canonical factors is 46.3%. This indicates that the six control variables related to place identity account for 46.3% of the total variance of the six criterion variables associated with

leisure benefits, as mediated by the first and second pairs of canonical factors. Furthermore, these two pairs of canonical factors directly explain 66.5% of the total variance in leisure benefits experienced by independent mainland tourists participating in leisure activities in Taiwan.

(4) Among the place identity attributes within the control variables, those exhibiting a relatively high correlation with the first canonical factor (χ_1) include, in descending order: 'environment', 'distinctiveness', 'historical culture', 'self-efficacy', 'commitment', and 'attachment'. All of these attributes have canonical structure coefficients exceeding 0.7. Similarly, among the leisure benefit attributes in the criterion variables, those demonstrating a significant correlation with the first canonical factor (η_1) are, in sequence: 'social benefits', 'cultural benefits', 'cognitive benefits', 'physical benefits', 'educational benefits', and 'psychological benefits', each with canonical structure coefficients surpassing 0.7. Given that the canonical structure coefficients share consistent positive and negative signs, it is clear that a positive relationship exists between these factors. Consequently, an elevated sense of place identity among foreign tourists

toward Taiwan correlates with a heightened recognition of the leisure benefits derived from engaging in recreational activities within the region.

(5) Among the place identity attributes within the control variables, those exhibiting a relatively high correlation with the second canonical factor χ^2 primarily include 'environment' and 'distinctiveness'. Similarly, among the leisure benefit attributes within the criterion variables, those demonstrating a relatively high correlation with the second canonical factor η^2 predominantly comprise 'social benefits' and 'cultural benefits'. Given that

the canonical structure coefficients share consistent positive and negative signs, a positive relationship exists between these factors. Consequently, an elevated environmental identity of foreign tourists toward Taiwan correlates with heightened awareness of the social benefits derived from engaging in leisure activities in Taiwan. Likewise, a stronger sense of distinctiveness identity of foreign tourists toward Taiwan is associated with increased recognition of the cultural benefits obtained through participation in leisure activities in Taiwan.

Table 4 Typical correlation analysis results of the scale

Control Variable (X variable)	Typical Factors		Criterion Variable (Y variable)	Typical Factors	
	χ^1	χ^2		η^1	η^2
History and Culture	-0.892	-0.397	Physiological Benefits	-0.787	-0.265
Environment	-0.916	0.594	Psychological Benefits	-0.766	-0.325
Distinctiveness	-0.909	0.473	Social Benefits	-0.898	0.467
Attachment	-0.773	-0.292	Educational Benefits	-0.785	-0.268
Self-efficacy	-0.833	-0.360	Cultural Benefits	-0.863	0.402
Promise	-0.794	-0.346	Cognitive Benefits	-0.817	-0.303
Extract the percentage of variance	78.5 %	16.2 %	Extract the percentage of variance	72.6 %	13.5 %
Percentage overlap	44.8 %	6.8 %	Percentage overlap	40.8 %	5.5 %
			Square of typical correlation coefficient	0.618	0.047
			Canonical correlation	0.753 **	0.216 *

* $p < .05$ ** $p < .01$

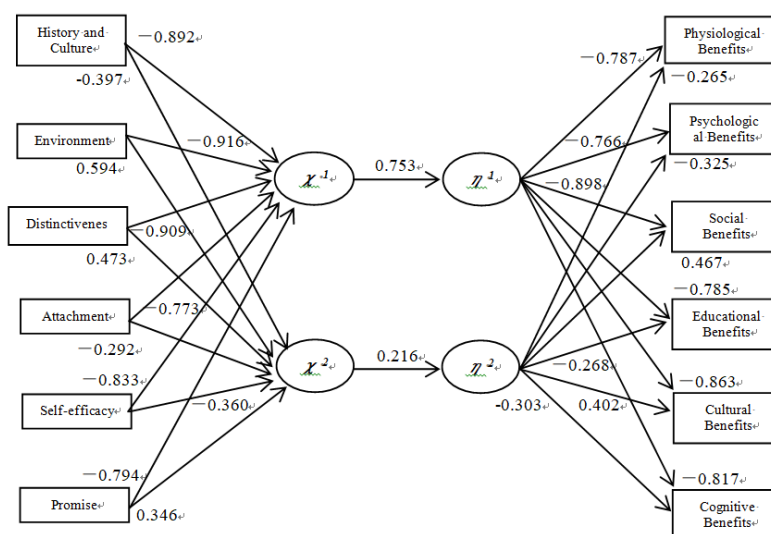


Fig.1 Typical correlation analysis path diagram of the scale

V. CONCLUSIONS

The principal findings of this study reveal three key conclusions:

1. Among foreign tourists' sense of place identity in Taiwan, environmental identity ranks the highest, whereas commitment identity ranks the lowest. In relation to their perception of leisure benefits derived from participating in leisure activities in Taiwan, awareness of social benefits is the highest, while awareness of physical benefits is the lowest.

2. A substantial positive correlation exists between foreign tourists' sense of local identity toward Taiwan and their awareness of the leisure benefits derived from engaging in leisure activities within Taiwan. Specifically, an increased sense of local identity toward Taiwan corresponds to a heightened awareness of the leisure advantages gained through participation in such activities.

3. A canonical correlation relationship exists between foreign tourists' local identity towards Taiwan and their awareness of the leisure benefits obtained from participating in leisure activities in Taiwan.

The aforementioned research findings can serve as valuable reference materials for studying the tourism and leisure behaviors of visitors to Taiwan.

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