



## EXAMINING HOW PLACE DEPENDENCE AND PLACE IDENTITY AFFECT BEHAVIORAL INTENTION OF MARATHON TOURISTS IN TAIWAN

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### Abstract

The purpose of this study was to investigate the effects of place attachment on behavioral intention for participatory-sport tourists and the role played by the mediator of place identity. In recent years, the benefits generated by small-scale sports events have gained attentions in many countries. By means of the active surveying method and convenience sampling, 500 surveys were distributed at each of two major sporting events in Taiwan: the New Taipei City Wan Jin Shi Marathon and the Taiwan's Rice Heaven-Tianzhong Marathon; 458 (92%) and 433 (87%) valid surveys were respectively collected. The results were found for small-scale marathon tourists: place dependence directly and significantly affected place identity, place identity directly and significantly affected behavioral intention, place dependence directly and significantly affected behavioral intention, and place dependence affected behavioral intention through the mediator of place identity. The results of the study was expected to provide to the government, event organizers, and related agencies as a reference.

Keywords: participatory-sport tourists; small-scale sports events; place dependence; place identity; behavioral intention

### Introduction

Related studies from the past show that holding sports events has become a very important trend in attracting large numbers of sports tourists to tourist destinations (Dimanche, 2003). Over the past dozen years or so, the global travel

and tourism industry has seen significant growth; within that industry, the sports tourism aspect has grown the most rapidly and is viewed as the core of the international tourism market (Kaplanidou, Jordan, Funk, and Rindinger, 2012). Sports tourism is the fastest-growing form of tourism (Rodrigues, Valdunciel,

and Miguel-Dávila, 2014), and it benefits the hosting localities in numerous ways, such as by creating employment opportunity, increasing people's income, and bolstering the economy (Higham, 2007). As a result, the sports and tourism markets have major potential for development (Hallmann and Breuer, 2010). In recent years, small-scale sports events have gained global attention.

Previous studies on small-scale sports events include research on marathons (Gibson, Kaplanidou, and Kang, 2012; Keun, Byon, and Baker III, 2014); high school sporting events (Gibson et al., 2012; Kaplanidou, and Gibson, 2010); road-running races (Halpenny, Kulczycki, and Moghimehfar, 2016); rugby (Gibson, Willming, and Holdnak, 2003; Ritchie, 2004); basketball (Chen, 2006); soccer (Gibson et al., 2003; Gibson et al., 2012); archery, softball, and swimming (Gibson et al., 2012); cycling (Fotiadis, Vassiliadis, and Yeh, 2016; Kwiatkowski, 2016; Fotiadis, Vassiliadis, and Sotiriadis, 2016); mountain biking and motorcycling (Yusof, Omar-Fauzee, Shah, and Geok, 2009; Yusof, Shah, and Geok, 2012); windsurfing and ski jumping (Kwiatkowski, 2016); and hiking (Duglio and Beltramo, 2017). As such research shows, small-scale sports events are an important aspect of sports tourism.

Previous studies on small-scale sports events focused on place attachment (Halpenny et al., 2016), intention (Kaplanidou and Gibson, 2010; Keun et al., 2014), loyalty (Halpenny et al., 2016), attitude and destination image (Kaplanidou and Gibson, 2010), event image (Keun et al., 2014), motivation (Yusof et al., 2012), and satisfaction (Kaplanidou and Gibson, 2010; Keun et al., 2014). Place dependence (which is a component of place attachment) can be viewed as an antecedent variable for

place identity. However, only research in the areas of environmental education (Vaske and Kobrin, 2001) and recreation settings (Moore and Graefe, 1994) have looked at this aspect. In comparison, very little attention has been given to it with regard to small-scale sports events.

The place attachment concept, consisting of the two dimensions of place identity and place dependence and which is usually applied by those who study recreation resources, has proven reliable within different contexts (Hammit, Kyle, and Oh, 2009; Lee, Kyle, and Scott, 2012). In their study on water conservation and recycling of adolescents in a community environment, Vaske and Kobrin (2001) verified that place dependence has a positive effect on place identity. Place dependence and place identity are respectively important predictors for destination revisit intention (Tsai, 2012) and destination loyalty (Alexandris, Kouthouris, and Meligdis, 2006; Lee and Shen, 2013). However, there has yet to be a study on the relationship among place dependence, place identity, and behavioral intention.

## Literature Review

### *Sports Tourism, Participatory-Sport Tourists, And Small-Scale Sports Events*

Sports events have become an important aspect of tourism industry development (Tzetzis, Alexandris, and Kapsampeli, 2014; Wong and Tang, 2016), a way to create a positive image (Moon, Ko, Connaughton, and Lee, 2013; Tzetzis et al., 2014), a strategy for resolving the problem of seasonality in tourism (Tzetzis et al., 2014; Wong and Tang, 2016), and a magnetic force for tourist destinations (Jin, Lee, and Lee, 2013; Wong and Tang, 2016). Many people around the world completely disregard the issue of great distances

when it comes to having the opportunity to watch sports events they enjoy (Beaton, Funk, Ridinger, and Jordan, 2011). For all of these reasons, holding sports events produces complementary benefits at tourist destinations (Getz and Andersson, 2010; Kaplanidou and Vogt, 2007).

The term “sports tourism” refers to the type of tourism in which people travel to a certain destination for the purpose of participating in a sports competition at a famous destination or to take part in sports/recreational events (Shonk and Chelladurai, 2008). In recent years with increasing opportunities for people to participate in amateur competitions, researchers have studied the participants at such events and labeled them as “participatory-sport tourists” (e.g., McGehee, Yoon, and Cárdenas, 2003; Funk, Toohey, and Bruun, 2007). From a macroscopic point of view, participatory-sport tourism can be categorized as either non-competitive or competitive (Weed, 2009). The former includes such sports as golf, skiing, and watersports (Weed, 2009), while the latter includes such events such as marathons, high school sports competitions, and smaller-scale sports events (Kaplanidou and Gibson, 2010).

Small-scale sports events are sports competitions that are regularly held within a certain time frame (Chen, 2006; Gibson et al., 2003). They are usually held once a year, and the number of participants may exceed that of spectators. Compared to large-scale events, interest taken by the media and the amount of economic activity resulting from these small-scale events is limited (Veltri, Miller, and Harris, 2009). Smaller events are easier to organize and require less capital investment as they can be held despite infrastructural limits (Gibson et al., 2003; Tzetzis et al., 2014);

congestion and crowding is easier to manage, and the influence of season is less significant (Gibson et al., 2003); and there are no related taxes to impose (Gibson et al., 2003; Tzetzis et al., 2014).

Therefore, this study looks at two small-scale sports events (marathons) held in Taiwan. The subjects of the study are marathon participants who came to the localities for the primary purpose of participating in the event and the secondary purpose of tourism at or near the event venue. The author then looked at and analyzed the place attachment (composed of place dependence and place identity) and behavioral intention of these subjects.

#### *Place Attachment*

In general, place attachment is believed to be the core of sport-tourist intention and behavior (Kaplanidou et al., 2012; Song, Kim, and Yim, 2017; Su, Hsu, Huang, and Chang, 2018). The concept of “place attachment” comes from environmental psychology (Gross and Brown, 2008) and has been widely discussed. It was not until the 1980s that place attachment was applied to research in the recreation field (Hwang, Lee, and Chen, 2005). There are differing definitions and connotations for the term when spoken of in different contexts (Yuksel, Yuksel, and Bilim, 2010). In the field of tourism research, it is commonly accepted that place attachment refers to the emotional tie and sense of affiliation a tourist has with a certain place (Kyle, Graefe, Manning, and Bacon, 2004c; Tsai, 2012). The definition also includes the repeated interaction between a person and the place as well as the connection process of psychological interaction (Scannell and Gifford, 2010).

It has been repeatedly verified in

literature on environmental issues and recreation that the two major components of place attachment are place identity and place dependence (Bricker and Kerstetter, 2000; Gross and Brown, 2008; Kyle, Bricker, Graefe, and Wickham, 2004a; Kyle et al., 2004c; Lee et al., 2012; Lee and Shen, 2013; Moore and Graefe, 1994; Williams, Patterson, and Roggenbuck, 1992). “Place dependence” refers to how environmental resources promote enjoyable activities for tourists (Lee et al., 2012) and satisfy service support value (George and George, 2004) or functional objectives (Lai, Hsu, and Nepal, 2013; Moore and Graefe, 1994). “Place identity” refers to the idea that people can identify with a place in a unique way (Twigger-Ross and Uzzell, 1996) or that there is a sense of identity with the place that corresponds to the self (Proshansky, Fabian, and Kaminoff, 1983).

#### *Behavioral Intention*

Behavioral intention is a critical variable in studying all kinds of consumer behavior (Kaplanidou and Gibson, 2010). Within different contexts, sports event participation behavior by participatory-sport tourists may be evaluated by means of looking at behavioral intention. This includes the contexts of tourism (March and Woodside, 2005), recreation (Hrubes, Ajzen, and Daigle, 2001), sports (Brandon, 2017), sports

tourism (Gibson et al., 2003), and small-scale sports events (Kaplanidou and Gibson, 2010). The success of small- and large-scale sports events lies in repeated visits, especially since these events are themselves repeated (Lee, Jee, Funk, and Jordan, 2015). In previous studies, loyalty was found to include repurchase intention or behavioral intention (Zeithaml, Berry, and Parasuraman, 1996), and behavioral intention was found to represent loyalty (Maria and Loureiro, 2014). Therefore, regarding the behavioral intention to repeatedly participate in small-scale marathons in Taiwan, there are four latent variables in this study: whether participants will continue coming to this place to take part in marathons, whether they will continue coming to this place for tourism, whether they will recommend participating in marathons in this place to others, and whether they will recommend this place as a tourist destination to others.

#### *Theoretical Model*

The theory of reasoned action (Claire-Lise, and Adrian, 2014) is the theoretical model applied to this study. It seeks to discover the antecedent and outcome variables of place dependence and place identity and how they affect the behavioral intention of participatory-sport tourists. Figure 1 indicated the theoretical model of this study.

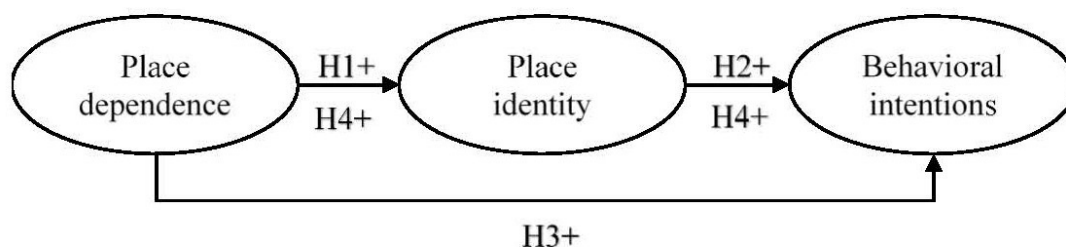


Figure 1. Theoretical Model

Place attachment is an important tool used in understanding sports tourism and sports-event tourist behavior (e.g., Kaplanidou et al., 2012; Song et al., 2017; Su et al., 2018). In such studies, place attachment is often taken as an antecedent variable (Song et al., 2017; Su et al., 2018), outcome variable (e.g., Kaplanidou et al., 2012), and mediator (e.g., Song et al., 2017; Su et al., 2018).

However, very limited attention has been given to the influences among place dependence and place identity (the two components of place attachment). Moore and Graefe (1994) point out that a personal sense of dependence for event-related equipment/facilities forms within a relatively short period of time, but a personal sense of identity for event-related recreational settings will only develop after a tangible connection is made with the environment (that is, the individual must be physically exposed to the place). In a Colorado community, Vaske and Kobrin (2001) explored and verified the cause-and-effect relationship between place dependence and place identity while studying the environmental behavior of adolescents with regard to water conservation and recycling. As result, it can be assumed that place dependence is an antecedent of place identity. Therefore:

Hypothesis 1: Place dependence of small-scale marathon tourists in Taiwan directly and significantly affects place identity.

Hypothesis 2: Place identity of small-scale marathon tourists in Taiwan directly and significantly affects behavioral intention.

In a study on international tourists who visited a famous destination in Singapore, Tsai (2012) found that with the foundation built by the overall travel

experience, the place attachment (that is, place dependence and place identity) which formed was a strong driver of repeated visits. In another study, Yuksel et al. (2010) show that place attachment may be an important indicator in measuring a tourist's loyalty.

Lee and Shen (2013) found that the place identity and place dependence of those who walk their dogs in urban parks had significant and direct influences on attitudinal loyalty. Place identity during a travel experience (that is, the uniqueness of and self-connection achieved during the experience) was found by Tsai (2012) to be a mediator in influencing repeated visit frequency. Lee and Shen (2013) further found that place identity is a mediator which influences loyalty in recreational activity participation. According to predictions by Vaske and Kobrin (2001), place dependence is an antecedent variable for place identity, and place dependence indirectly influences environmental responsibility behavior through the mediator of place identity. Therefore:

Hypothesis 3: Place dependence of small-scale marathon tourists in Taiwan directly and significantly affects behavioral intention.

Hypothesis 4: Place dependence of small-scale marathon tourists in Taiwan influences behavioral intention through the mediator of place identity.

## Research Method

### *Subjects*

The active surveying method and convenience sampling were used in this study. On September 14 and 16, a pilot test was conducted on 100 subjects chosen from participants in the Yunlin

Doubang Night Run. Since this event is a significant official international activity supported by the government, the participants are more diversified and it will enhance the objectivity in conducting data analysis.

Six people were hired and trained in advance on how to properly issue and collect questionnaires for the study. They then went to service counters (where timing chips were returned and result printouts were issued) and rest areas near the finish line of the race and personally distributed the questionnaires to athletes who had completed their races.

Study 1: The Taiwan's Rice-Heaven-Tianzhong Marathon, which takes place in Tianzhong of Changhua County (23°51'38.0"N, 120°34'52.1"E), is frequently named one of Taiwan's top ten marathons, and it is one of Taiwan's most representative competitions and attracts both domestic and international participant. The questionnaire was given to 500 participants on November 13, 2016; the number of valid questionnaires returned was 433 (87%).

SPSS 21.0 was used to process the data. For Study 1, the largest demographic groups were as follows: 271 (59.2% of the total) of the subjects were male, 158 (34.5%) were of ages 31 – 40, 155 (33.8%) were employed in industry or commerce, 151 (33.0%) had monthly incomes of NT\$40,001 – 60,000, and 252 (55.0%) had degrees from universities or colleges. Study 2: 278 (64.2%) of the subjects were male, 177 (40.9%) were of ages 31 – 40, 136 (31.4%) were employed in the agriculture, forestry, fishery, or livestock industries, 152 (35.1%) had monthly incomes of NT\$40,001 – 60,000, and 276 (63.7%) had degrees from universities or colleges.

Study 2: The New Taipei City Wan Jin Shi Marathon, which takes place in Wan Jin Shi of New Taipei City (25°11'22.4"N, 121°40'59.2"E), is Taiwan's first and only event conferred a silver label by the International Association of Athletics Federations, and it is also one of the most well-known marathons in Taiwan. The questionnaire was given to 500 of the marathon participants on March 18, 2018; the number of valid questionnaires returned was 458 (92%).

Before distributing the questionnaires, the researchers first made sure the subjects were not local residents. After explaining the purpose and content of the survey, that there would be no link to their personal information, and that the results would only be used for academic purposes, the subjects were instructed to fill out the questionnaires and return them as soon as they were finished. Table 1 indicated the profile of the respondents.

### *Research Instrument*

The subjects of this investigation were small-scale marathon tourists in Taiwan. The questionnaire they were given was translated into Chinese from English by a professional translation agency before being edited by two recreational-sports experts. To ensure the translation was as close as possible to the original English version, it was then back-translated into English. The measurement scales used are described below:

Regarding place dependence, the four questions used in the present study were based on those used by Vaske and Kobrin (2001), and the Cronbach's alpha for the scale was 0.82. The Cronbach's alphas for the present study were 0.91 (Study 1) and 0.92 (Study 2). Regarding

place identity, the four questions used in the present study were based on those used by Kyle, Bricker, Graefe, and Wickham (2004a) and Kyle, Graefe, and Manning (2004b), and the Cronbach's alpha for the scale was 0.87. The Cronbach's alphas for the present study were 0.94 (Study 1) and 0.89 (Study 2). Re-

garding behavioral intention, the four questions used in the present study were based on those used by Kaplanidou et al. (2012). The Cronbach's alphas for the present study were 0.90 (Study 1) and 0.90 (Study 2). The scales were 7-point Likert scales ranging from 7 (strongly agree) to 1 (strongly disagree).

Table 1. Profile of the respondents

Variable	Study 1*		Study 2*		Total samples	
	N	%	N	%	N	%
<b>Gender</b>						
Male	271	59.2	278	64.2	549	61.6
Female	187	40.8	155	35.8	342	38.4
<b>Age (years)</b>						
16-20	22	4.8	20	4.6	42	4.7
21-30	105	22.9	71	16.4	176	19.8
31-40	158	34.5	177	40.9	335	37.6
41-50	121	26.4	125	28.9	246	27.6
51-60	43	9.4	40	9.2	83	9.3
Over 61	9	2.0	0	0	9	1.0
<b>Occupation</b>						
Student	32	7.0	35	8.1	67	7.5
Office worker or teacher	70	15.3	70	16.2	140	15.7
Agriculture, forestry, fishery, livestock	2	0.4	136	31.4	138	15.5
Homemaker or retired	17	3.7	13	3.0	30	3.4
Service industry	87	19.0	87	20.1	174	19.5
Laborer or business	155	33.8	59	13.6	214	24.0
Professional	73	15.9	33	7.6	106	11.9
Other	22	4.8	0	0	22	2.5
<b>Educational level</b>						
High school	79	17.2%	65	15.0%	144	16.2%
University or college	252	55.0%	276	63.7%	528	59.3%
Graduate school	127	27.7%	92	21.2%	219	24.6%
<b>Monthly income (2016: US\$1 = NT\$32.66; 2018: US\$1 = NT\$29.27)</b>						
≤20,000	41	9.0%	40	9.2%	81	9.1%
20,001-40,000	139	30.3%	143	33.0%	282	31.6%
40,001-60,000	151	33.0%	152	35.1%	303	34.0%
≥60,001	127	27.7%	98	22.6%	225	25.3%

\*Study 1: New Taipei City Wan Jin Shi Marathon; Study 2: Taiwan's Rice Heaven-Tianzhong Marathon.

### Data Analysis

AMOS 21.0 was used to process the data. This study investigated the lin-

ear relationships between place dependence, place identity, and behavioral intention for small-scale marathon tourists in Taiwan. First was confirmatory factor analysis (CFA). By means of composite

reliability (CR) and average variance extracted (AVE), the convergent validity of the measurement model was evaluated. Then, investigations on discriminant validity, model fit, and path analysis were conducted to evaluate the structural model. For structural equation modeling (SEM) analysis, estimates were made by applying maximum likelihood (Gross and Brown, 2008). Finally, the PROCESS (v2.13) Model 4 was used and mediation analysis was carried out with place dependence as X, place identity as M, and behavioral intention as Y (Hayes, 2013).

## Results

### *Measurement Model*

The CFA for this study (see Table 2) shows that the factor loadings, CR, and AVE for each of the constructs met convergent validity standards:  $FL > 0.70$ ,  $CR > 0.70$ , and  $AVE > 0.50$  (Fornell and Larcker, 1981; Hair, Anderson, Tatham, and Black, 2009). The first-order CFA analysis thus did not violate standards and it achieved convergent validity. The AVE square root exceeded 75%, which is greater than the correlation coefficients of paired constructs, which means discriminant validity was achieved (Hair, Black, Babin, Anderson, and Tatham, 2006). All of the AVE square root values in this study (seen in Table 3) are greater than the correlation coefficients, meeting recommended standards and thus exhibiting the discriminant validity of the study.

### *Structural Model*

The structural model was evaluated by looking at the indices of  $\chi^2$ ,  $\chi^2/df$ , AGFI, CFI, GFI, SRMR, NFI, RMSEA, and NNFI (Jöreskog and Sörbom, 1996; McDonald and Ho, 2002). Model fit for Study 1 is as follows:  $\chi^2/df < 1.37$  ( $\chi^2 =$

769.732,  $df = 51$ ,  $p < 0.001$ ), GFI = 0.99, AGFI = 0.97, RMSEA = 0.03, SRMR = 0.06, CFI = 0.99, NFI = 0.99, and NNFI = 0.99. Model fit for Study 2:  $\chi^2/df < 1.30$  ( $\chi^2 = 66.44$ ,  $df = 51$ ,  $p < 0.001$ ), GFI = 0.98, AGFI = 0.97, RMSEA = 0.03, SRMR = 0.04, CFI = 0.99, NFI = 0.98, and NNFI = 0.99. Thus, all of the fit values met suggested standards, validating the results of this study (Hair et al., 2006). As a result, the model formed by data from the samples can be used to explain actually observed data.

Based on the structural model analysis results, place dependence and place identity have a significant and positive effect on behavioral intention. The path analysis for H1 in Study 1 was  $\beta = 0.81$  ( $t = 14.99$ ,  $p < 0.01$ ) and in Study 2 was  $\beta = 0.79$  ( $t = 15.28$ ,  $p < 0.01$ ); H2: (Study 1)  $\beta = 0.54$  ( $t = 7.59$ ,  $p < 0.01$ ) and (Study2)  $\beta = 0.37$  ( $t = 5.53$ ,  $p < 0.01$ ); H3: (Study1)  $\beta = 0.36$  ( $t = 5.44$ ,  $p < 0.01$ ) and (Study2)  $\beta = 0.43$  ( $t = 6.17$ ,  $p < 0.01$ ). Support can thus be seen for H1, H2, and H3 in Studies 1 and 2.

In addition, the  $R^2$  values for behavioral intention were 0.57 (Study1) and 0.74 (Study2), showing that the explanatory power of 57% (Study1) and 74% (Study2) of the variance for behavioral intention can be attributed to place dependence and place identity. The multiple correlation coefficient values for place identity were 0.63 (Study1) and 0.66 (Study2), showing that the explanatory power of 63% (Study1) and 66% (Study2) of the variance for place identity can be attributed to place dependence.



Table 2. CFA Model Parameter Estimates and Convergent Validity

Variables/measured items	Factor loadings (t-value)		CR*		AVE**	
	Study 1	Study 2	Study 1	Study 2	Study 1	Study 2
Place dependence			0.91	0.92	0.72	0.74
I prefer running in marathons here to other places.	0.79 (Fixed)	0.82 (Fixed)				
The marathons held in other places don't compare to the ones held here.	0.85 (20.06)	0.85 (20.69)				
I get more satisfaction out of running marathons here than in other places.	0.87 (20.57)	0.88 (21.66)				
Running in marathons here is more important to me than running in marathons in other places.	0.87 (20.57)	0.88 (21.83)				
Place identity			0.94	0.89	0.80	0.67
Since I have run in a marathon here, I really like this place.	0.78 (Fixed)	0.74 (Fixed)				
Since I have run in a marathon here, this place is deeply meaningful to me.	0.94 (23.29)	0.87 (18.07)				
Since I have run in a marathon here, I have a strong sense of identity with this place.	0.96 (23.95)	0.89 (18.37)				
Since I have run in a marathon here, this place is very important to me.	0.88 (21.50)	0.76 (15.65)				
Behavioral intention			0.90	0.90	0.70	0.70
I will continue running in marathons held here in the future.	0.70 (Fixed)	0.75 (Fixed)				
I will continue coming here for tourism in the future.	0.91 (18.01)	0.82 (17.18)				
I will recommend marathons here to others.	0.79 (15.90)	0.87 (18.32)				
I will recommend this place as a tourist destination to others.	0.92 (18.10)	0.88 (18.53)				

\*CR: composite reliability =  $(\sum\lambda)^2 / [(\sum\lambda)^2 + \sum(\theta)]$ .

\*\*AVE: average variance extracted =  $(\sum\lambda^2) / [\sum\lambda^2 + \sum(\theta)]$ .

Source: Jöreskog and Sörbom (1996).

Table 3. Discriminant Validity

	PD		PI		BI	
	Study1	Study2	Study1	Study2	Study1	Study2
Location of event						
Place dependence (PD)	<b>0.85</b>	<b>0.86</b>				
Place identity (PI)	0.76 <sup>***</sup>	0.75 <sup>***</sup>	<b>0.89</b>	<b>0.82</b>		
Behavioral intention (BI)	0.68 <sup>***</sup>	0.73 <sup>***</sup>	0.70 <sup>***</sup>	0.77 <sup>***</sup>	<b>0.84</b>	<b>0.84</b>

\*\*  $p < 0.01$ .

Note: Data in bold are AVE mean square root values

### Mediation Effect Analysis

Analysis on the indirect effects among place dependence, place identity, and behavioral intention for Studies 1 and 2 was carried out as shown in Figures 2 and 3.

Bootstrapping estimates were carried out 10,000 times, and mediation effect analysis was done using Model 4, with place dependence as  $X$ , place identity as  $M$ , and behavioral intention as  $Y$ . Since bootstrapping within PROCESS' mediation test process uses repeated sampling of non-parametric data (which is superior to the traditional regression method that does not lead to the normal distribution of variants or sampling), indirect effects can be directly detected (Preacher and Hayes, 2004). According to Hayes (2013), bootstrap sampling should be repeated 10,000 times, and Chin (2010) states that a two-step approach should be used in bootstrapping while looking at mediation effects. When  $p < 0.05$  and there is no zero value within the 95% confidence interval (CI) for the indirect effects, then the indirect effects are viewed as significant (Selvarajan, Cloninger, and Singh, 2013). As seen in Table 4, place dependence influenced behavioral intention through the mediator of place identity. Thus, the existence of direct and indirect effects resulting from partial mediation support H4.

Table 4 indicated the analysis of mediation effects.

### Discussion

#### Theoretical Implication

As held by previous research, place dependence and place identity directly and significantly affect behavioral intention. According to Lee and Shen (2013), place dependence and place identity directly and significantly affected attitudinal loyalty of those who walked their dogs in urban parks. The findings of the present study are also consistent with findings from other research on tourist destinations (Alexandris et al., 2006; Lee and Shen, 2013; Tsai, 2012; Yuksel et al., 2010). One possible reason is that small-scale marathon tourists have a certain degree of athletic ability and that they have a relatively functional demand for certain sports events, and as a result, they are very concerned with the tangible functionality (such as road conditions) and the specific features (such as beautiful scenery) offered by the event venue (Bricker and Kerstetter, 2000; Yuksel et al., 2010). The stronger the feelings are that participatory-sport tourists form toward the level of difficulty and comfort of the event venue, the greater their place dependence will be and the greater their behavioral intention to participate in an event at the same venue will be.

Table 4. Analysis of Mediation Effects

Variable	Effect	SE	t	p	95% confidence interval (CI)	
					LL	UL
<b>Total effect</b>						
Study 1	0.57	0.03	20.04	**	0.51	0.62
Study 2	0.61	0.03	22.42	**	0.56	0.67
<b>Direct effect</b>						
Study 1	0.30	0.04	7.49	**	0.22	0.38
Study 2	0.31	0.04	8.51	**	0.24	0.38
Bootstrapping (10,000 resamples)						
			Bias-corrected 95% CI		Percentile 95% CI	
Effect	Boot SE	Boot LL	Boot UL	Boot LL	Boot UL	
<b>Indirect effect</b>						
Study 1	0.27	0.03	0.20	0.34	0.20	0.34
Study 2	0.31	0.03	0.24	.038	0.24	.038

Note. SE = standard error, LL = lower limit, UL = upper limit, Boot = bootstrapping test.

\*\* $p < 0.01$ .

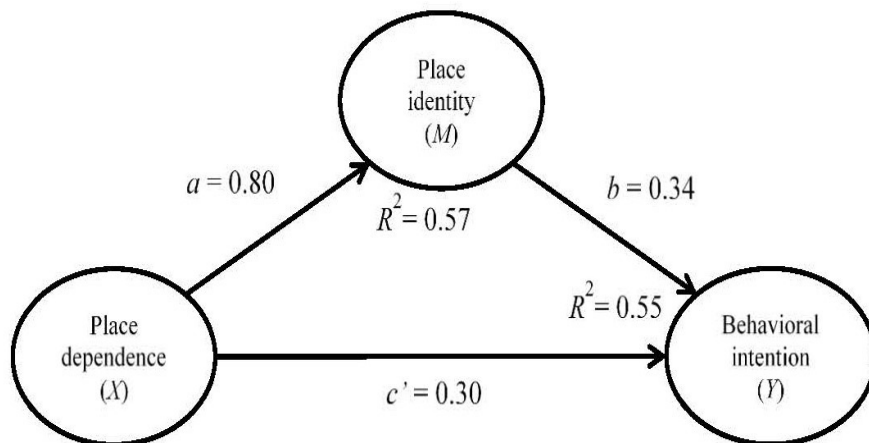


Figure 2. Mediation Model for Study 1

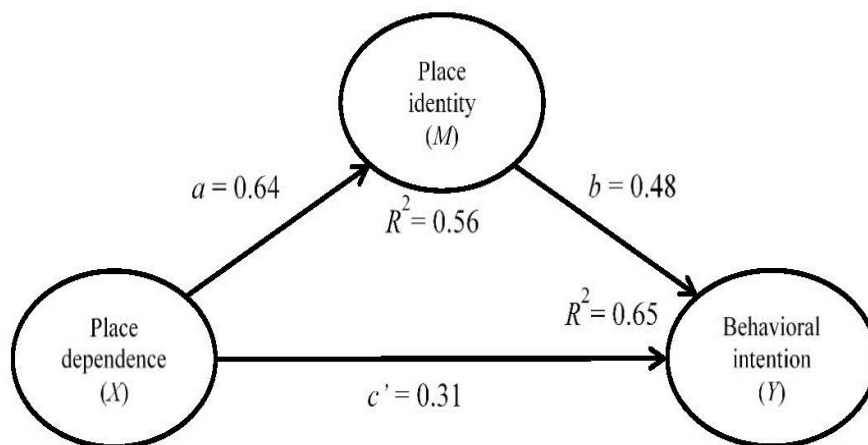


Figure 3. Mediation Model for Study 2

Place identity is an intermediary in the influence of place dependence on behavioral intention. This means that the greater place dependence is for participatory-sport tourists, the greater place identity will be and the greater their behavioral intention will be to return to the place for tourism, participate in competitions at that venue, and recommend the place to others. This conforms to the predictions of Vaske and Kobrin (2001): place dependence is an antecedent variable for place identity, and it influences environmental responsibility behavior through the mediator of place identity. Possible reasons for increased place identity are the professional accreditation of the venue and publicity given by the media or word of mouth.

#### *Managerial Implication*

This study has found that there are significant influences among place dependence, place identity, and behavioral intention for small-scale marathon tourists in Taiwan. Place dependence directly and significantly affects place identity, and place dependence can be viewed as an antecedent variable for place identity. Repeated visits to a destination may cause place dependence to bring about place identity (Moore and Graefe, 1994). This means that place dependence increases for people who repeatedly participate in small-scale marathons at a certain destination, in turn increasing place identity for that destination. This finding falls in line with that of Vaske and Kobrin (2001) in their study on the water conservation of adolescents in a community environment, that is, place dependence significantly affects place identity. In their study on recreational facilities and tourists, Moore and Graefe (1994) found the same. One possible reason is that the venue of the marathon may be extremely important to the participants—they may

strongly feel the specialness of the accredited event venue, which in turn may cause them to generate a degree of dependence for the place.

#### Limitations and Future Studies

There were certain limitations in this study. First, only small-scale marathon tourists were surveyed, so the results obtained cannot be inferred to be true for other small-scale sports events. The author suggests the theoretical model for this study be further investigated by surveying participants in triathlon and cycling competitions.

Second, localities should focus on holding small-scale sports events. Such events have an important effect on boosting the quality of life and the sense of pride of the hosting locality, allowing for sustainable development there (Gibson et al., 2003; Moon et al., 2013). As a result, the author suggests studies be done on the residents of localities where such events are held so as to gain an understanding of the differences in place attachment and behavioral intention between local residents and sports tourists.

Finally, small-scale sports events have gained attention around the world, and they generate major economic benefits for the regions/cities that hold them. Thus, these investigations should be carried out in other countries so that the present study's results may be compared to those from abroad.

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