

External and Internal Determinants Contributing to Event Participation and Destination Revisitation: A Sport Tourism Perspective

Author

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Published

2012

Thesis Type

Thesis (PhD Doctorate)

School

Griffith Business School

DOI

[10.25904/1912/2296](https://doi.org/10.25904/1912/2296)

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**External and Internal Determinants Contributing to
Event Participation and Destination Revisitation:
A Sport Tourism Perspective**

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**Submitted in fulfilment of the requirements of the degree of
Doctor of Philosophy**

February 2012

ABSTRACT

Sport tourism is one of the fastest growing sectors in the tourism industry and is gaining burgeoning research interest from academia. However, there are limited studies combining sport and tourism research to understand sport tourists' attitudes and decision-making related to an event-host destination. This PhD research addresses this gap by examining the formation and change of sport tourists' destination attitudes in order to understand why sport tourists travel to a specific place to attend sport events and why they decide to return to this destination in the future as leisure vacationers.

Specifically, the objectives of this research are threefold. Firstly, to identify and examine factors influencing sport tourist's initial attitude formation towards a specific event-host destination, thereby understanding their initial travel decisions. Secondly, to assess how the actual visit experience of sport tourists contributes to their attitude change towards the destination. Thirdly, to reveal how the sport tourists' post-visit destination attitude changes over time, thereby understanding the temporal effect of their future revisit decisions.

Destination image (DI), a construct normally regarded as interchangeable with destination attitude, is adopted to operationalise the destination attitude of sport tourists because of its longstanding popularity in tourism research. Moreover, a tripartite attitudinal perspective was utilised to examine how the three components of DI (i.e., cognition, affect, and conation) change when the overall DI undergoes a change. The Psychological Continuum Model (PCM) provides the theoretical framework to guide this investigation. Combining the staged decision-making process model and the literature of DI formation and change with the hierarchical PCM provides the rationale for the conceptual model of this study.

Two longitudinal panel studies were conducted to collectively monitor the DI formation and change of sport tourists from their initial travel decision-making, through their actual visit experience and evaluation, then to their future revisit decision-making. Each study contained two waves of data collection. Study 1 focused on the pre-and-post visit DI change of sport tourists who travelled to Miami, Florida to participate in the 2011 ING Miami marathon event. Two online questionnaires were administered one week before and one after the event and 413 respondents answered both surveys. Study 2 focused on the continuing change of the post-visit DI, held by sport tourists who attended the 2009 ING Miami marathon event, over a longer period of time. Two online questionnaires were employed over a 10-month interval after the sport tourists returned from the event and 234 respondents answered both surveys. The main data analysis techniques employed were Exploratory Factor Analysis, Second-order Confirmatory Factor Analysis, Structural Equation Modeling, and General Linear Model Repeated Measures Analysis.

The results of the pre-visit survey in Study 1 confirmed the tripartite structure of sport tourists' DI and showed that the prior travel motivation, rather than the sport motivation, exerted influence on their initial DI. Also, the initial DI of sport tourists is positively correlated with their psychological connection levels with the destination. Furthermore, the pre- and post-visit survey comparison revealed that the initial DI of sport tourists was enhanced by their actual visitation and this enhancement was dimensionally consistent. All three DI components were enhanced by a satisfactory experience with the destination. The pattern of enhancement, however, was moderated by the psychological connection change between a sport tourist and the destination. The higher a psychological connection level that a sport

tourist had developed with the destination after personal visitation, the greater enhancement was incurred in their tripartite DI.

Finally, the findings of Study 2 discovered a decline in sport tourists' post-visit DI over the 10-month interval and this decline was dimensionally specific. The affective and conative components of DI were more susceptible to change and weakened significantly over time, while the cognitive DI was more stable. Similarly, this pattern of decline was also moderated by the psychological connection level that a sport tourist held with the destination. The weaker the psychological connection sport tourists had with the destination, the more decline was incurred in their affective and conative DI.

This research has made three significant theoretical contributions. First, it advanced the knowledge of DI structure and its change patterns across different time periods. Second, it filled in the methodological deficiency of current tourism research by conducting longitudinal panel studies. Third, it expanded the application of the PCM framework to a sport tourism context and with a destination object. In addition, this research has provided valuable practical insights for sport tourism marketers and stakeholders from four aspects: a) creating a positive experience for sport tourists in order to build up and/or maintain a positive DI; b) regularly examining the DI of target markets given their dynamic nature; c) promoting emotional and relationship marketing due to the volatility of affective DI and the significance of loyalty for destination revisitation; d) assessing psychological connection levels between an individual and the destination to establish an alternative market segmentation strategy. In sum, it is hoped that this research can serve as a starting point for further exploration of sport tourists' destination attitude changes and the underlying psychological connection movement.

Key Words: Sport Tourist, Destination Choice and Revisitation, Destination Attitude Formation and Change, Tripartite Destination Image, Psychological Connection with Destination, Longitudinal Panel Study

STATEMENT OF ORIGINALITY

This work has not previously been submitted for a degree or diploma in any university. To the best of my knowledge and belief, the thesis contains no material previously published or written by another person except where due reference is made in the thesis itself.

Signature: _____

Nan Chen

February 2012

DEDICATION

*This dissertation is dedicated to my beloved
parents & grandma,
for their endless love, support and inspiration
throughout my life.*

谨以此论文献给我亲爱的父母与外婆

ACKNOWLEDGEMENTS

Looking back on the long journey I have undertaken while pursuing my PhD degree, there are many people who have provided guidance, support and encouragement. I would like to take this opportunity to express my gratitude to each of them.

First of all, sincere acknowledgement must be made to Professor Dan Funk, my principal supervisor. Thank you for offering me an opportunity to be your PhD student; for all the efforts you put forth in training me to become a qualified PhD scholar; and for all of the great ideas, wise guidance and kind help you have offered. Your high standards and strict requirements, especially intentional trainings on my theoretical thinking, have and will keep benefiting my future research, even teaching modules. I sincerely appreciate it! I hope eventually I do not disappoint you and that I have grasped a considerable amount of the “tools” you want to teach your students from your great “toolbox”.

Thank you also to Dr. Ceridwyn King and Dr. Kevin Filo, my associate supervisors. Ceri, I was very lucky to have you, an efficient and communicative supervisor whose door is always open; who always offers timely comfort and encouragement when I feel frustrated; and who has put much effort in training me to be a better writer. Kevin, although you joined in the supervision team only in the last year, your meticulous work attitude, encouraging manner and patient editing of my writing benefited me a lot.

In addition, several Griffith scholars and consultants have also offered me valuable guidance in methodology and statistical analysis. Among them, I would like to thank Mr. Philip Holmes-Smith, Dr. Bill Metcalf, and Dr. Elizabeth Conlon. Also special thanks to Professor Beverley Sparks, Dr. Ken Butcher, Dr. Hugh Wilkins, and Professor Gayle Jennings who organised regular PhD seminars and research groups to improve our knowledge of research methods and to stimulate academic communications and collaborations.

I am very grateful to the entities that funded this longitudinal PhD research: the Sport Tourism Event Research Network (STERN) of Temple University and the

Centre for Tourism, Sport, and Service Innovation (TSSI) of Griffith University. STERN continuously provided access, assistance and incentives for distributing multiple online surveys. Special thanks should be given to Dr. Jeremy Jordan of Temple University, who was in charge of this collaborative research project and contributed his valuable time and energy into contacting the event organisation staff and improving my questionnaires. Equally, acknowledgement is paid to the endless support of the TSSI research centre, in both academic training and travel grants, for my PhD study throughout the three and half years. In addition, my sincere gratitude is given to Griffith University who funded this PhD research through two postgraduate research scholarships – IPRS and GUPRS for three years.

Thanks also to the staff and my PhD peers in the Department of Tourism, Leisure, Hotel, and Sport Management for their unselfish support and encouragement. Dr. Millicent Kennelly, Dr. Scott Richardson, Dr. Ruijin Hoare, Dr. Ying Wang, Dr. Marlene Pratt, Dr. Amanda Ayling, Nana, Songee, Kevin, Huong, Thilo, Adele, Jason, Jenny, Jos, Pavel, and Miranda, thanks to all of you for sharing your research experiences, lessons and feelings during this tough PhD journey. It's your warm friendship which made this journey less lonely. Thank you to all my friends on the Gold Coast for providing me with numerous good times.

Finally and most importantly, a heartfelt thanks to my dearest parents – Mi Yuying (糜玉英) and Chen Wenshan (陈文山) for their constant love, support, and encouragement throughout my life. Thank you, Mum and Dad! Special thanks to my 90-year old grandmother – Wang Xinhua (王新华), who has put all her effort into understanding my pursuit of an academic career, instead of marriage, and providing patient support during my long study life. Before ending, I would like to dedicate this thesis to the memory of my dear grandfather - Mi Jiasong (糜家松, 1919~1999) who would have been very proud of my achievement.

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LIST OF ABBREVIATIONS

α	Cronbach's index of internal consistency
β	Regression Coefficients
χ^2 (CMIN)	Chi-square
χ^2 / df	Normed Chi-square
Δ	Increment of change
η^2	Eta Squared (measure of strength of relationship)
ADI	Affective Destination Image
AGFI	Adjusted Goodness-of-Fit Index
ANOVA	Analysis of Variance
AVE	Average Variance Extracted Percentage
BFS	Basic Facilities & Services
CAIC	Consistent Akaike Information Criterion
CDI	Cognitive Destination Image
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
Conative DI	Conative Destination Image
CR	Composite Reliability
C.R.	Critical Ratio
<i>df</i>	Degrees of Freedom
DI	Destination Image
EDP	Expectancy-Disconfirmation Paradigm
EFA	Exploratory Factor Analysis
EI	Event Image
EPC	Expected Parameter Change statistic
<i>F</i>	<i>F</i> distribution, Fisher's <i>F</i> ratio
GFI	Goodness-of-Fit Index
GLM	General Linear Model
GOFs	Goodness of Fit indices
KMO	Kaiser-Meyer-Olkin measure
M	Sample Mean, arithmetic average
MAR	Missing At Random
MCAR	Missing Completely At Random
M.I.	Modification Index
ML	Maximum Likelihood
n	Number of Cases (generally in a subsample)
N	Total Number of Cases
NFI	Normed Fit Index

<i>p</i>	Probability
PA	Place Attachment
PCM	Psychological Continuum Model
<i>r</i>	Estimate of the Pearson Product-moment correlation coefficient
<i>r</i> ²	Measure of strength of relationship
RI	Running Involvement
RMSEA	Root Mean Square Error of Approximation
SD	Standard Deviation
SEM	Structural Equation Modeling
SMC	Squared Multiple Correlation
SRC	Standardised Residual Covariance
SRMR	Standardised Root Mean-square Residual
SS	Support Services
STM	Strength of Travel Motivation
STQ	Perceived Quality of Sport Tourism
<i>t</i>	<i>t</i> -test Statistic
TA	Tourist Attractions
TC	Target Coefficient
TLI	Tucker-Lewis Index
VFR	Visit Friends & Relatives
WOM	Word-of-Mouth (recommendation)

STATEMENT OF PUBLISHED WORKS

Chen, N., & Funk, D. (2010). Exploring destination image, experience and revisit intention: A comparison of sport and non-sport tourist perceptions. *Journal of Sport & Tourism*, 15(3), 239-259.

Filo, K., Chen, N., King, C., & Funk, D. C. (2011). Sport tourists' involvement with a destination: A stage-based examination. *Journal of Hospitality & Tourism Research*. doi: 10.1177/1096348011425496

STATEMENT OF ETHICAL CLEARANCE

Ethical clearance was granted in 2009 and that the research was conducted in accordance with the approved protocol (GU Ref No: HSL/16/09/HREC).

CHAPTER 1 INTRODUCTION

This research adopts a longitudinal study approach to examine the attitude formation and change of sport tourists towards an event-host destination, with the purpose of understanding the decisions of sport tourists regarding event participation and destination revisitation. The introductory chapter starts by providing a presentation of the research background/context, followed by a synopsis of the theoretical rationale underpinning the research design. The research objectives and research questions are then stated. The subsequent section provides an overview of the research design and a brief description of the two longitudinal panel studies conducted to collect necessary data. This is followed by a statement on the significance of this research, from both academic and practical perspectives. Finally, the chapter ends with an outline of the structure of the whole thesis.

1.1 Research Background & Rationale

1.1.1 Sport Tourism & Sport Tourists

Sport tourism is “leisure-based travel that takes individuals temporarily outside of their home communities to participate in physical activities, to watch physical activities, or to venerate attractions associated with physical activities” (Gibson, 1998, p.49). With the demand for sport events and related travel activities increasing on a global scale, sport tourism is significant in terms of its popular appeal and ability to generate travel and associated benefits for destinations (Carmichael, Smith, & Canally, 2006; Getz, 1998). If using a supply-demand system model to interpret sport tourism, the supplier of sport tourism is composed of sport event venues and the destinations in which they are held; including all the facilities

and services necessary to host visitors. The demand side is the sport tourists, including active competition participants and passive spectators (Getz, 1998).

According to Gibson's (1998) categorisation, there are three types of sport tourism, each representing a cluster of tourist behaviour with common characteristics: active sport tourism, event sport tourism and nostalgia sport tourism. This research focuses on one category of sport tourism – sport event tourism, and examines the sport event tourists who travel to participate in a sport event. The reason for focusing on sport event tourism is that events are recognised by many researchers as a major component of sport tourism (Deery, Jago, & Fredline, 2004) and “perhaps the most significant in terms of tourist numbers and economic impact” (Getz, 2003, p. 49). Nogawa, Yamaguchi and Hagi (1996) identified that event participants' main purpose of travelling is to participate in an organised sport event (competitive or non-competitive), while event spectators' main purpose of travelling is to watch the organised sport event. Based on definitions given by Nogawa et al. (1996), sport (event) tourists can be defined as *temporary visitors staying at least 24 hours in the host location, whose primary purpose is to attend or watch a sports event, with the area visited being a secondary attraction.*

Being a highly desirable niche tourist market (Getz, 2002) in the global marketplace, sport tourists have received considerable attention in sport literature. The studies mainly focus on participation motivations (e.g., Funk & Bruun, 2007; Kim & Chalip, 2004; Robinson & Gammon, 2004), involvement or identification with the sports (e.g., Alexandris, Kouthouris, Funk, & Chatzigianni, 2008; Shipway & Jones, 2007), and expenditure patterns (e.g., Gibson, Willming, & Holdnak, 2003; Preuss, 2005). Limited research has been conducted from the tourism perspective to understand sport tourists as individuals consuming sport tourism experiences and

products (Davies & Williment, 2008; Nogawa et al., 1996). Even fewer studies have given consideration to what experiences produced by the host destination can stimulate sport tourists to revisit the destination as leisure vacationers in the future; or how destination marketers can affect sport tourists' decision-making through marketing strategies. Generally, the decision-making process of sport tourists, in terms of event-host destination choice and revisiting not for sports in the future, is seldom investigated.

The points delineated above collectively indicate that sport tourism research efforts are needed to identify the benefits sought by sport tourists from the destination, as well as the destination attributes/features that are capable of attracting this niche market to return as leisure vacationers. Nogawa et al. (1996) stated that sport tourists have great potential to become sightseers. Therefore, it is very important for destination marketers to appreciate the expectations and experience evaluations of this niche market. The major benefits sought by destinations from hosting sport events include increased awareness, and an enhanced, distinctive image or an improved image (Chalip & Costa, 2005). It is assumed that positive impressions held by potential visitors will provide the destination with a stronger competitive position and greater benefits from leveraging the tourism industry in the long run (Ritchie & Smith, 1991).

Furthermore, destination and event marketers are motivated to find out the reasons leading to sport tourists' revisitation, because the cost of retaining repeat visitors is much less than that of attracting new ones (Um, Chon, & Ro, 2006). The sport event host destination, being concerned with long-term economic benefits and local development, endeavours to persuade event participants to either stay beyond the period of the event or to attract them to revisit as typical tourists in the future

(Chalip & McGuirly, 2004). Currently, little is known regarding how to achieve this goal. This PhD research is thus designed to reveal the factors instigating sport tourists' initial travel decisions to participate in a sport event held outside their normal place of residence; and then to investigate their future revisit decisions that are not for sports, but for a leisure vacation.

1.1.2 Sport Tourists' Decision-Making & Destination Attitude

Studies of tourism consumer behaviour from the perspective of the decision-making processes began to appear in the 1970s (Correia & Pimpão, 2008), from which three popular topics stand out: destination choice sets (e.g., Um & Crompton, 1990; Woodside & Sherrell, 1977), information search and processing (e.g., Cai, Feng & Breiter, 2004; Gursoy & McCleary, 2004a; Maser & Weiermair, 1998), and the influence of the decision-making unit on leisure decision-making (e.g., Bronner & de Hoog, 2008; Jenkins, 1978; Kozak, 2010; Litvin, Xu & Kang, 2004; Thornton, Shaw & Williams, 1997). Although the dynamic system of decision-making processes has been used to explain tourist behaviour (e.g., motivations or external stimuli determine preferences, and satisfaction influences revisit intention), examination of the whole decision-making process from the pre-purchase stage to the post-purchase stage is relatively limited (Correia & Pimpão, 2008). Similarly, studies on sport consumers' decision-making processes are comparatively limited (Shilbury, 2011). Therefore, in this research, consideration is given to the entire travel decision-making process of sport tourists including the initial travel decision before the event, the actual visit experience evaluation, and the future revisit decision over time.

A travel decision-making process has been acknowledged as consisting of a number of different stages that are marked by specific actions, and influenced by a

number of external and internal factors (Hsu, Tsai, & Wu, 2009; Konu, Laukkanen, & Komppula, 2011; Van Raaij & Francken, 1984). Among the various influential factors, attitude has been one of the most popular variables used to explain and predict tourists' decision-making (Sirakaya & Woodside, 2005; Um & Crompton, 1990; Yoo & Chon, 2010). Given the dynamic nature of attitude, sport tourists' destination attitude in this study is able to bridge the two decisions under examination: an initial destination attitude is related to the initial travel decision (i.e., event and destination choice) and a modified destination attitude after event participation is related to future revisit decisions. To comprehend this dynamic concept, examining its formation and change process is necessary.

Destination image (DI), a concept normally regarded as interchangeable with *destination attitude* (White, 2004), is adopted by this study because of its longstanding popularity in tourism research (Aziz & Zainol, 2011). In particular, a tripartite attitudinal perspective is deliberately employed when inspecting sport tourists' DI formation and change across three periods of time: pre-visitation, visitation, and over time after visitation. The change patterns for each of the three DI components – cognitive, affective, and conative DI, are thus revealed simultaneously to clarify the relationship between the overall DI change and the changes in its composition.

To comprehensively examine sport tourists' DI formation and change process, as well as identify various influential factors, the Psychological Continuum Model (PCM) is adopted as the theoretical framework because of its focus on attitude formation and change processes. Standing from the perspective of a travel decision-making process, a comprehensive conceptual model is constructed by integrating the DI formation and change literature into the PCM. Thus, the main

research task of this thesis is to examine key constructs in the conceptual model and clarify their interrelationships with the purpose of identifying the key factors functioning in sport tourists' DI formation and change process. These factors underpin sport tourists' decision-making related to (re)visiting the destination.

1.2 Research Objectives & Research Questions

As stated above, the destination attitude of sport tourists (i.e., DI) has been chosen as the means of understanding and predicting their decisions to visit and/or revisit the destination. A core research problem can therefore be identified: how sport tourist's attitudes towards event-host destinations initially form, progressively develop and/or change throughout their travel decision-making processes from the pre-visit stage to the post-visit stage? Accordingly, the objectives of this research are threefold.

Firstly, this research aims to identify and examine the external and internal factors contributing to the formation of sport tourists' initial attitudes towards an event-host destination, thereby understanding their initial travel decisions to attend a sport event. Secondly, this research intends to clarify how sport tourists' actual visit experience of the destination contributes to their destination attitudes change; as well as how other influential factors moderate this change. The modified destination attitude after personal visitation is helpful in predicting sport tourists' revisit intentions (Lee, 2009). Thirdly, this research seeks to reveal the stability of sport tourists' post-visit destination attitudes over time as well as the most significant determinants of the attitude stability. This investigation helps to predict the sport tourists' future revisit decisions, which normally occur some time after event participation. Accordingly, the following specific research questions are proposed:

RQ1: How do external and internal factors influence the initial travel decision-making of sport tourists to attend a specific sport event?

RQ1a: What attributes of the event and host destination will contribute to the initial DI formation of sport tourists?

RQ1b: How do the prior motivations of sport tourists affect their initial DI formation?

RQ1c: How does the initial DI held by sport tourists affect their travel decision to attend a sport event?

RQ2: How do external and internal factors contribute to sport tourists' attitude change towards the host destination after actual visitation?

RQ2a: How does the actual visitation of sport tourists affect their DI change?

RQ2b: How do the travel-related characteristics of sport tourists affect their DI change after actual visitation?

RQ2c: How does the psychological connection of sport tourists with the destination interact with their DI change after actual visitation?

RQ3: How do external and internal factors influence the future revisit decision-making of sport tourists?

RQ3a: How does the post-visit DI of sport tourists change over time?

RQ3b: How do the travel-related characteristics of sport tourists affect their post-visit DI change over time?

RQ3c: How does the psychological connection of sport tourists with the destination affect their post-visit DI change over time?

The next section provides an overview of the research design for this investigation.

1.3 Overview of the Research Design

To achieve the three research objectives outlined in the previous section and to address each research question, a longitudinal research design is employed.

Within the overall design two separate longitudinal panel studies are conducted with the non-local participants of an annual international marathon event held in Miami, Florida (i.e., ING Miami Marathon and Half Marathon). Quantitative research methods are employed.

Each longitudinal panel study includes two waves of data collection through online questionnaire surveys (see Figure 1.1). Study 1 involves a pre-visit survey conducted ten days before the event and a post-visit survey conducted one week after the event, both were administered to the 2011 ING Miami marathon participants. The pre-visit survey aims to examine how sport tourists form an initial image of the destination as a result of the interaction between external stimuli and internal forces. The post-visit survey examines sport tourists' post-visit DI, which is also called "modified-induced DI" (Gunn, 1972). That is, the initial DI of travellers has now been modified by their actual visit experiences. Subsequently, the first change in sport tourists' DI was measured by comparing the pre- and post-visit DI. Five influential factors are investigated to clarify their moderating effect on the pre- and post-visit DI change (i.e., from an initial DI to a modified-induced DI).

Study 2 consists of a post-visit survey conducted two weeks after the event and a follow-up survey conducted ten months later, both were administered to 2009 ING Miami marathon participants. The objective of Study 2 is to examine the continuing change of post-visit DI held by sport tourists over a longer period of time (i.e., from a *modified-induced DI* to an *accumulated DI*). Six influential factors are examined to clarify their moderating effect on the post-visit DI change over time.

The findings of this study are expected to make valuable contributions to DI knowledge since change of a post-trip/travel DI is a neglected field in existing tourism studies. The psychological connection between individual sport tourists and the event-host destination, which is derived from the PCM framework, is highlighted in both studies to explain sport tourists' DI change patterns.

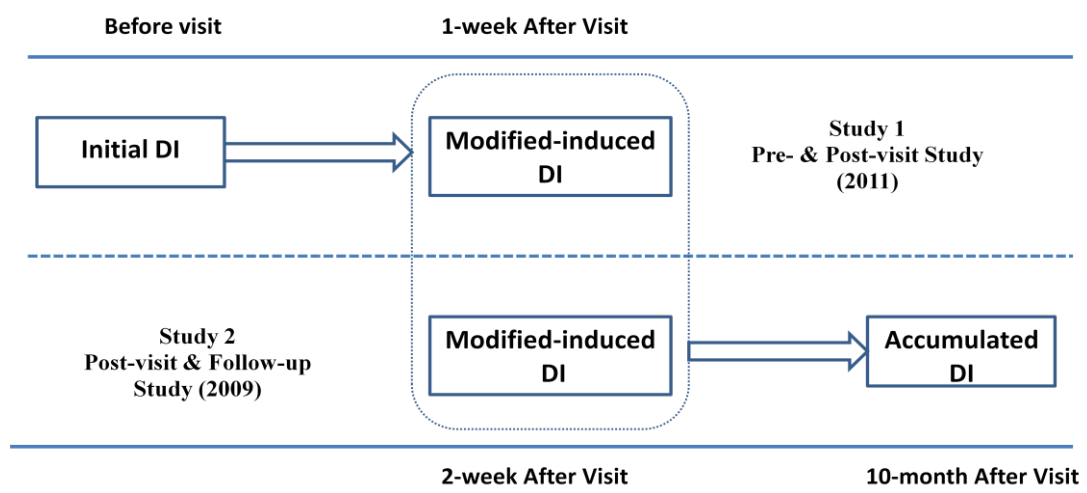


Figure 1.1 A Diagram for Research Design

Table 1.1 displays the main constructs and their definitions addressed in this thesis.

Table 1.1*Definitions of Main Constructs*

Constructs / Terms	Definition
Sport Tourism	Leisure-based travel that takes individuals temporarily outside of their home communities to participate in physical activities, to watch physical activities, or to venerate attractions associated with physical activities (Gibson, 1998, p.49).
Sport Event Tourist	Temporary visitors staying at least 24 hours in the host location whose primary purpose is to attend or watch a sport event, with the area visited being a secondary attraction (Nogawa, Yamaguchi, & Hagi, 1996).
Attitude	Psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour (Eagly & Chaiken, 1993, p.1).
Destination Image	An interactive system of objective knowledge, subjective impressions, prejudice, imaginations and emotional thoughts toward a destination, held by individuals or groups, which will lead to their behavioural intentions or behaviours (adapted from Lawson & Baud-Bovy, 1977).
Cognitive Destination Image	The evaluation of the known attributes of the destination according to information or direct personal experience (adapted from Dann, 1996).
Affective Destination Image	The feelings that an individual has about a destination which relate to the motives one has for destination selection (Gartner, 1994).
Conative Destination Image	The likelihood of (re)visiting a destination within a certain time period (Pike & Ryan, 2004).
Sport Involvement	An unobservable stage of motivation, arousal or interest toward a sport activity (adapted from Havitz & Dimanche, 1999).
Destination Involvement	The meaning tourists ascribe to a destination and how it serves as a central aspect of their lives providing both hedonic and symbolic value (Filo, Chen, King, & Funk, 2011, p.5).

1.4 Significance of the Research

The significance of this research is evident in its contributions to both academia and practice. The academic contributions manifest in three aspects: filling literature gaps, developing existing theories and contributing to sport tourism study methodology. The practical contributions are represented by managerial implications for event and tourism destination marketers.

Firstly, it is anticipated that the findings of this research will make a unique and valuable contribution to the existing sport event and tourism destination literature. By identifying the research gaps through a thorough literature review, this PhD study addresses the importance of conducting an integrated examination on sport tourists' travel decision-making and attitudinal change towards the host destination. Moreover, by combining the literature in the sport and tourism domains, this research is expected to contribute to the knowledge and theory development of sport tourism – a trans-disciplinary field.

Secondly, the application of an established theoretical framework, PCM, into the sport tourism destination context will make significant contributions to both sport tourism research and DI studies. Both research fields have been criticised by scholars for a lack of theoretical framework to drive hypotheses and guide investigations (Aziz & Zainol, 2011; Weed, 2005). The cognitive-behavioural framework of the PCM provides a means of understanding attitude formation and change of leisure consumers. However, it lacks empirical support, especially from a decision-making perspective, that examines the whole process of attitude formation and change throughout consumption stages.

By focusing on the decision-making perspective and integrating the DI literature into the PCM, this research examines how the entire DI and its three components form and change across sport tourists' whole travelling decision-making process from the pre-visit stage to the post-visit stage. In particular, the underlying psychological connection development between individual sport tourists and an event-host destination is examined for the first time and across a series of time points, in order to explain the attitude change patterns and associated decision-making.

Thirdly, the longitudinal study approach utilised by this research is expected to make a valuable contribution to the leisure and tourism literature from a methodological perspective. It realises a holistic process-tracing study on attitude formation and change progress by conducting two longitudinal panel studies, which is an approach seldom used in leisure or tourism studies (Gallarza, Saura, & García, 2002). This will increase the internal validity of the research findings by enabling one to track cause and effect (Leonard-Barton, 1990).

Finally, from a practical perspective, the findings of this research will encourage collaboration between sport and tourism sectors by revealing the operable influential factors to sport tourists' attitude formation and change, such as destination experiences. Designers and practitioners of sport tourism would thus have opportunities to react to and influence sport tourists' attitudes and the deeper psychological connections with the host destination, through effective communication and marketing strategies. Meanwhile, the research findings and suggested strategies may also help local event tourism stakeholders understand how to meet the needs and wants of sport tourists, while leveraging their destination revisitation in the long run.

1.5 Structure of Thesis

This chapter has provided an overview of the PhD research: previewing the research background and theoretical underpinnings; clarifying the research problems and objectives; justifying the research methodology, and stating the unique contributions of this study from both theoretical and practical perspectives. Chapter 2 presents a review of the literature on sport tourists' decision-making processes, and their destination attitude formation and change, with a particular emphasis on

the literature discussing DI formation and change. Next, a number of theories and models related to attitude change and attitude-behaviour relationships are briefly reviewed, outlining four criteria for selecting the potential theoretical framework best applied to a sport tourists' destination attitude examination. Then, the Psychological Continuum Model is introduced, providing a sound theoretical foundation for the proposed conceptual model for this study. The reviewed literature is synthesised within a detailed description of the conceptual framework, which reflects all research questions and associated hypotheses. Finally, a summary of the literature review is presented with a table listing all the research questions and hypotheses to be addressed.

In Chapter 3, justifications for the overall research design and specific research methods are provided, focusing on a longitudinal panel study approach employing quantitative research methods. Detailed data collection procedures, along with the respondents' profiles, the instruments which were adopted or adapted, and the analysis techniques utilised are described for each of the two main studies. The analysis results are then presented in sequence in Chapter 4. A summary of the key results is provided at the conclusion of this chapter to help readers understand the main findings, and to preview the content to be discussed in the following chapter. Chapter 5 discusses the research findings with reference to the literature review in Chapter 2 to re-address each research question and hypothesis. A synopsis of key findings further leads to the discussion on implications of this research for both theory and practice. The thesis ends with identified limitations and suggestions for future research directions.

CHAPTER 2 LITERATURE REVIEW

The current research addresses the formation and change process of sport tourists' destination attitudes as well as the external (e.g., actual experience and time) and internal (e.g., motivations and experience evaluations) influential factors, in order to understand why sport tourists decide to participate in a sport event away from home, and why they decide to revisit an event-host destination as leisure vacationers. A consensus has been achieved that understanding the concept of "attitude" and the process of attitude formation and change is very important to researchers and managers interested in altering consumers' evaluation of consuming objects in order to influence their preferences and tendencies to engage in particular behaviour (Argyriou & Melewar, 2011). As for a travel destination object, the attitude towards a destination has been generally accepted as an indicator of why a potential traveller can select a particular destination from alternatives (Sirakaya & Woodside, 2005). Furthermore, it is agreed that the revisit decision of travellers is also associated with their destination-related evaluations/attitudes (Fuchs & Reichel, 2011; Hui, Wan, & Ho, 2007). Generally speaking, destination attitude formation and change are believed to precede, guide, and influence a traveller's initial visit and revisit decisions (Reid & Crompton, 1993).

According to the three general stages of a sport tourist's travel decision-making process, that is, pre-event travel decision, travel experience evaluation, and post-event revisit decision, this research is conducted in three phases. First, examining how the initial destination attitude forms and contributes to the initial travel decision for event participation. Second, investigating how the travel experience is evaluated by sport tourists and how the evaluations influence their

destination attitude changes. Third, probing into the stability of sport tourists' re-organised destination attitudes over time after event participation.

The literature review is organised in the following three thematic sections. First, an overview of decision-making process is provided to outline three major decision-making stages for sport tourists across their entire consumption process. Second, destination attitude and destination image studies are reviewed, with a particular focus on their formation and change processes, as well as on the influential factors. Third, requirements for a theoretical framework in examining sport tourists' destination attitude formation and change are listed, and then the Psychological Continuum Model is expounded as an appropriate theoretical framework to guide this investigation. After the discussion of these thematic sections, a conceptual model is established to accommodate all research questions and associated hypotheses. Finally, an overview of the literature review section is provided and all research questions and hypotheses are displayed in a table.

2.1 Sport Tourists' Decision-making Process

Consumer decision-making is the mental process people employ when choosing which products and services to consume. It is the tool consumers use to evaluate and choose among alternative products that might satisfy their needs (Wells & Prensky, 1996). In brief, decision-making is a "goal-directed, problem-solving process" (Peter & Olson, 2008, p.165), and is reflected in one's ability to select the best option out of several alternatives (Vallerand, 1983). Consumer decision-making is a complex and contingent process (e.g., Correia & Pimpão, 2008; Lysonski, Durvasula, & Zotos, 1996). For example, in a sport tourism setting, sport tourists can choose from a massive array of sporting events held all over the world. What

determines their choice of a particular event to attend and what attracts them to return to a previously visited place, this is a complex mental process worthy of exploration.

Solomon (2002) believed that there are three traditional perspectives to consumer decision-making: rational, behavioural and experiential. The *rational perspective* views people as purely rational, integrating as much new information as possible with what they already know about a product and painstakingly weighing each alternative to arrive at a satisfactory decision. This perspective alone cannot completely interpret consumers' decision-making because in reality, consumers, especially leisure consumers, do not always go through such a rigid sequence in making decisions (Solomon, 2002). The second perspective, *behavioural*, is concentrated on low-involvement decisions which only employ simple heuristics (Hawkins & Hoch, 1992). This perspective may not apply to the current research because the purchase of expressive leisure products/services (e.g., a sport tourism experience) in an "affective choice mode" is by no means a low-involvement decision (Goossens, 2000). The third perspective, *experiential*, deals with cases in which consumers are highly involved in a decision, but their selections cannot wholly be explained rationally. It is suitable to view most experiential product consumption (e.g., a sport tourism experience) from this perspective, which "stresses the Gestalt, or totality, of the product or service" (Solomon, 2002, p.257). Therefore, sport tourists' decision-making related to a host destination should be investigated from the experiential perspective because of the experiential nature of sport tourism consumption.

It is agreed that the dynamic and complex process of consumer decision-making has been intensified in a leisure context given the intangibility of the

experiential product (Bronner & de Hoog, 2008; Correia & Pimpão, 2008).

Intangibility of experiential leisure products is a barrier to the formation of explicit customer perceptions (Bronner & de Hoog, 2008) and leads to a high perceived risk at the pre-consumption stage. Therefore, leisure consumers are thought to be more highly involved in leisure decision-making, compared with tangible-product consumers (Gursoy & McCleary, 2004b). Normally leisure consumers have to go through an extended problem-solving process (Bargeman & van der Poel, 2006), and the decision-makers are often influenced by both functional (utilitarian) and emotional elements while passing through this process (Mansfeld, 1992).

In particular, the sport tourist decision-making can be described as having dualistic features. Sport tourists possess both sport and travel motives – albeit with different degrees of importance (Robinson & Gammon, 2004). They have two consumption experiences – the sport event and the host destination; thereby having to make dual appraisals (i.e., of the event and of the hosting destination), which contribute directly to future revisit decisions. In order to clarify how sport tourists make decisions to visit and revisit an event-host destination from an experiential perspective, a process tracing approach is deemed to be a suitable method to monitor this complex decision-making process (Levin & Jasper, 1995; Payne, 1976; Todd & Benbasat, 1987). The process-tracing method incorporates intervening steps in the cognitive processing of choice situations (Abelson & Levi, 1985). Therefore, to apply this approach, a staged decision-making process model is required (Sirakaya & Woodside, 2005), which is able to facilitate monitoring each phase throughout the process.

A decision-making process model can provide information on consumer behaviour during decision-making that goes unnoticed by the individuals themselves

(e.g., attitude change). The measured variable in a process model is the actual decision-making process itself and the factors that influence it (Correia & Pimpão, 2008; Sirakaya, McLellan, & Uysal, 1996). Referring to this study, the required decision-making process model for sport tourists should not only incorporate all distinctive characteristics of sport tourism products/services such as intangibility, hedonic and experiential nature, but also provide a more intuitive insight into different decision-making steps that occur chronologically (Decrop & Snelders, 2004; Sirakaya & Woodside, 2005).

Based on the most widely accepted five-stage decision-making process model of non-routine purchases (Crompton, 1992; Wells & Prenskey, 1996; Widing, 2003), a six-step decision-making process model has evolved to highlight the experiential nature of sport tourism products. In particular, the step of experience consumption is separated from the post-purchase decision in order to reflect the fact that sport tourists' purchase and consumption are often detached both spatially and temporally (Litvin & Ng, 2001). As a result, the six steps that emerge for a sport tourist decision-making process are: need recognition (i.e., sports and travel motivation) → information acquisition → alternatives evaluation → purchase decision → experience consumption and evaluation → future repeat decision. These steps occur before (i.e., need recognition, information acquisition, alternatives evaluation and purchase decision), during (i.e., experience consumption and evaluation), and after travelling to attend a sport event (i.e., future repeat decision). Therefore, a more concise decision-making process model can be generalised as containing three essential stages, namely, the pre-visit decision (which covers the first four steps), the actual visit experience evaluation, and the post-visit repeat decision (e.g., Correia & Pimpão, 2008). This concise model serves as the basis for

the conceptual model proposed by this study reflecting two main decisions of sport tourists: an initial travel decision to participate in a sport event and a revisit decision as leisure vacationers.

Existing decision-making process models normally identify decision-making as a problem-solving task, suggesting that only cognitive factors need to be considered (Correia & Pimpão, 2008; Hansen, 2005). However, it has been recognised that consumer decision-making is characterised by the interplay between cognition and affective components (Shiv & Fedorikhin, 1999). Consequently, the current research adopts both perspectives of cognitive and affective features of decision-making, which collectively affect conation/behavioural intention, to understand how sport tourists make decisions related to an event-host destination. Such a tripartite perspective underpinning decision-making can be considered synonymous with attitude formation (see Argyriou & Melewar, 2011). Therefore, to understand the complex decision-making process of sport tourists in selecting and returning to an event host destination, examination of the sport tourists' attitude formation and change is considered relevant.

Attitude has been acknowledged as an important determinant of consumer behaviour and decision-making (Breckler, 1984; Reid & Crompton, 1993). According to Wells and Prensky (1996), attitude can simplify consumers' decision-making processes by providing a convenient way to evaluate alternatives based on existing knowledge of the attributes and benefits offered by each. In other words, attitude formation is the process by which individuals form opinions and/or feelings towards objects, which leads to corresponding decision-making. Furthermore, an attitude change might result in different decisions related to the same object. Reid and Crompton (1993) claimed further that in a high involvement situation (e.g.,

travelling to participate in a marathon event), the cognitive-affective-conative hierarchy of effects within the attitude structure is likely to accurately reflect the decision-making process of leisure participants.

As a result, the current research will investigate the attitude formation and change process of sport tourists towards the event-host destination to comprehend sport tourists' destination-related decision-making. The dynamic structure of attitude can drive the movement of the decision-making process, because sport tourists will only choose the destination that they believe will best satisfy their desires and/or needs (Joppe, Martin, & Waalen, 2001). In addition, sport tourists will only revisit the destination for future vacation if the place has satisfied their needs and left a positive image in their minds. The following section, therefore, will elaborate on destination attitude formation and change process of sport tourists.

2.2 Sport Tourists' Destination Attitude Formation and Change

2.2.1 Destination Attitude & Destination Image

Attitude is "a psychological tendency that is expressed by evaluating a particular entity with some degree of favour or disfavour" (Eagly & Chaiken, 1993, p.1). It has been one of the most popular and indispensable concepts in social psychology (Forgas, 2008), and its significance in understanding and predicting consumer behaviour remains undiminished to date (Peter & Olson, 2008). Consumers with a positive attitude towards a product are recognised to be more willing to consider buying the product (Hansen, 2005). Attitude towards a destination, therefore, is a generally accepted indicator of whether a potential traveller will select a particular destination from his/her awareness set or not (Sirakaya & Woodside, 2005).

Attitude is acknowledged to consist of three main components - affect, cognition and conation (Bagozzi, Tybout, Craig, & Sternthal, 1979; Fishbein & Ajzen, 1975; Georger & Jones, 1997; Lutz, 1977). This tripartite model emerged in the 1940s and has been popular in major attitude theories and attitude change literature since the 1960s (Breckler, 1984). The tripartite model suggests attitudes are evaluative statements formed through the interaction of cognitive, affective and behavioural components (White, 2004). The cognitive component represents the beliefs and knowledge an individual holds about an object. The affective component represents one's feeling towards an object. Meanwhile, the conative component is how one acts towards the object (Breckler, 1984).

In a sport tourism setting, consumers may hold attitudes towards several objects: the sport event they intend to attend; the host destination they will visit; and the participation or revisitation decision itself. The current research concentrates on sport tourists' attitude towards the event-host destination because this is a vital pulling force behind the initial travel decision to attend an event, as well as the driving force for revisiting this destination in the future. Beliefs about a destination's salient attributes provide sport tourists with a cognitive foundation upon which attitudes may be built. In addition, their attitudes may also form as a result of feelings about the destination. Feeling is an affective state or reaction, which may be positive or negative; may be overwhelming; or may be virtually nonexistent (Solomon, 2002). Combined cognition and affect will lead to sport tourists' conations, that is, to their visit and/or revisit intentions.

When discussing leisure tourists' attitudes towards a destination, destination image (DI) is an unavoidable concept because many tourism/vacation destination researchers habitually use DI synonymously or interchangeably with destination

attitude without clarification (White, 2004). Though much work has been done regarding tourism destination image, and many definitions have been given (Li & Vogelsong, 2006), the DI literature has generally failed to clarify the similarities and differences between image and other constructs such as perception and attitude (White, 2004). After conducting two preliminary studies to differentiate DI from perception and attitude, White (2004; 2005) did not discover any obvious differences between DI and the other two concepts. Therefore, he suggested DI researchers adopt the tri-component model of “attitude” because it is an understandable, reliable and robust model that can provide effective marketing and management intelligence.

The application of a multi-disciplinary approach to tourism is not uncommon. A considerable portion of the developed tourism theories or models are derived from traditional consumer behaviour studies, borrowing the main concepts from the grand models such as decision-making, motivation, and information search (Sirakaya & Woodside, 2005). The interdisciplinary nature of tourism research encourages the adoption of theory or methodology from other mature disciplines like social psychology and anthropology (Echtner & Jamal, 1997). The concept of image, moreover, is highly related to anthropology, social psychology, semiotics, and geography (Yilmaz, Yilmaz, İçigen, Ekin, & Utku, 2009). Therefore, adopting a broad attitudinal perspective to examine DI can facilitate the advancement of tourism DI studies because the knowledge of social psychology, in which attitude resides, can also be incorporated. As Roth and Diamantopoulos (2009) assert, the only concept in country image literature that does not suffer from conceptual limitations is the attitude perspective. Hence, this study treats DI as a conceptualised construct of sport tourists’ attitude towards host destinations.

Further support for this proposition is available in existing tourism DI studies. For example, when Gallarza et al. (2002) conducted a thorough review of the tourism DI literature since 1970, studies that examined attitude towards destinations were incorporated. Their reasons were twofold: first, because similar mathematical procedures are used to measure attitudes and images; second, because attitudes towards a destination can be a significant component of the destination image formation process. More direct evidence of treating DI the same as destination attitude can be found in the arguments on the composition of DI. Though there are still divergent views on the components of DI among scholars (Rezender-Parker, Morrison & Ismail, 2003), attitude theory has increasingly been regarded as a powerful tool to study the touristic image structure of destinations (Dann, 1996; Gartner, 1994). Gartner (1994) extracted three main components through synthesising the previous research of what constitutes DI: cognitive, affective and conative facets. Dann (1996) examined these three components in a socio-linguistic framework and argued that DI can be understood in terms of cognitive, affective, and conative components. These three components represent evaluative dimensions which are associated with intellectual appraisal, motivational evaluation and projected behavioural activity respectively.

The current research, therefore, views DI as a tripartite construct consisting of cognition, affect and conation, paralleling the structure of attitude. The cognitive image component, CDI, is defined *as the evaluation of the known attributes of the destination according to information or direct personal experience*. In this evaluation process, “two operations are at work – the receipt of information and the formation of attitudes towards that information later expressed in one or more judgements” (Dann, 1996, p.45). The affective image component, ADI, is defined *as*

the feelings that an individual has about a destination and relates to the motives one has for destination selection (Gartner, 1994). ADI usually becomes operational during the evaluation stage of the destination selection process. The conative image component, Conative DI, is the intent or action component which builds on the cognitive and affective components (Gartner, 1994). It is thus defined as *the likelihood of (re)visiting a destination within a certain time period* (Pike & Ryan, 2004), which emerges from the formed cognitive and affective image. Collectively, this comprehensive perspective of DI embodies what potential or actual tourists know about the destination (cognitive), how they feel about what they know (affective) and how they act on this information (conative) (Tasci, Gartner, & Cavusgil, 2007). This exactly reflects the tripartite model of attitude construct (Kaplanidou & Vogt, 2007).

In the extant DI studies, the cognitive component has received the most extensive examination (Aziz & Zainol, 2011; Beerli & Martín, 2004; San Martín & Rodríguez del Bosque, 2008). Only recently have tourism studies examined the cognitive and affective image of a travel destination collectively (e.g., Baloglu, 1998; Kim & Richardson, 2003; MacKay & Fesenmaier, 1997; San Martín & Rodríguez del Bosque, 2008). However, very few comprehensive examinations of the entire tripartite structure were found in empirical DI studies (Agapito, Mendes, & Valle, 2010; Li & Kaplanidou, 2011; Moon, Kim, Ko, Connaughton, & Lee, 2011). In view of this, the current research will make a comprehensive examination of the entire tripartite structure of DI, monitoring its formation and change process which drives sport tourists' decision-making to visit and revisit the destination. To better understand the dynamic nature of DI and its structure in a changing situation, as well as its causal relationships with other decision-making constructs (e.g.,

involvement and consumption evaluation), the following section will give a detailed review of the literature on DI formation and change.

2.2.2 Destination Image (DI) Formation and Change

Crompton (1979a) has explicitly indicated that the relationship between image and decision-making is vital since a decision maker often acts upon his image of the situation rather than upon objective reality. For this reason, the influence of DI on travellers' decision-making makes it one of the most studied research topics in tourism literature since the 1970's (Cai, Wu, & Bai, 2003; Pike, 2002; Tasci et al., 2007). Many theoretical and empirical works have demonstrated the multi-dimensionality of DI (e.g., Echtner & Ritchie, 1991); the role DI has on travellers' purchase behaviour and satisfaction (e.g., Chon, 1991; Wang & Hsu, 2010) and the complexity, relativism and dynamic nature of DI (Gallarza et al., 2002). However, the conceptualisation and measurement of DI remain arguable due to its abstractness and multiplicity (Tasci et al., 2007). To operationalise DI as a comprehensive tripartite construct, as discussed in section 2.2.1, this study draws on opinions from Lawson and Bond-Bovy (1977) as well as from Gartner (1994), defining DI as *an interactive system of objective knowledge, subjective impressions, prejudice, imaginings and emotional thoughts toward a destination, held by individuals or groups, which will lead to the formation of behavioural intentions or to behaviours.*

The formation and change of DI are normally examined jointly as an interwoven and continuous process (Fakeye & Crompton, 1991; Gartner, 1994), which should not be separated (Halloran, 1970). This process can be understood as the continual development of a mental construct on the basis of a few selected impressions among the flood of impressions (Reynolds, 1965). Gunn's (1972) popular seven-stage theory of DI formation was the first to promote image formation

and change as a constant building and modification process. From this perspective, DI formation includes the accumulation of mental images about the vacation experience, modification of these images by further information, the decision to take a trip, travel to the destination, participation at the destination, return travel and new accumulation of images based on the experience. These seven stages parallel the six-stage sport tourists' decision-making process presented in section 2.1.

It is worth noting that the modified-induced image after visitation is not the end of the process of DI formation and change. Academia has recognised that DI is not static but keeps changing (Chon, 1991; Echtner & Ritchie, 1991; Gallarza et al., 2002; Gartner, 1986; Kim & Morrison, 2005). The modified-induced image could become a new "input" factor entering the next re-formation or change cycle with the passage of time or in a changing circumstance. Thus, the DI formation and change process should be viewed as a constant cyclic chain (Chon, 1990). As a result of this cyclic process, three types of DI can emerge: initial image (an awareness present before visiting the destination); modified-induced image (result of personal experience with the destination); and re-formed image (formed over time after visitation and evaluated against modified-induced image).

Given that DI is closely related to tourists' behaviour and practical strategic implications are to be drawn from the dynamic images held by tourists, the importance of the stability of DI cannot be underestimated. It is for this reason that the focus of the current research is to monitor the change process of sport tourists' DI occurring before and after visitation, as well as over time. The following three sub-sections are organised around: first, presenting the extant studies on overall DI change. Second, demonstrating how each of the three DI components may change, as well as the correlation between three DI components' change and the overall DI

change. Third, addressing the most influential factors contribute to DI formation and change.

2.2.2.1 Overall DI Change

A considerable number of cross-sectional studies have been conducted focusing on one static form of DI, based on Gunn's (1972) model. For example, the research interest in pre-trip DI formation/development (i.e., the initial organic or induced image formation) mainly revolves around the influence of various marketing strategies, or of information search behaviours before travel (e.g., Buhalis, 2000; Frías, Rodríguez, & Castañeda, 2008; Li, Pan, Zhang, & Smith, 2009; McCartney, Butler, & Bennett, 2008; Tasci, 2009). In contrast, modified-induced DI is normally associated with experience satisfaction and revisit intention (e.g., Bigné, Sánchez, & Sánchez, 2001; Ibrahim & Gill, 2005; Lee, 2009).

Although limited, there are several studies that have attempted to trace DI change between different forms. Some examined the role of the event in modifying a destination's existing image by comparing a projected DI before and after the event (e.g., Gartner & Shen, 1992; Kim & Morrision, 2005). Some studies focused on the function of the actual travel experience in changing tourists' organic/induced images by comparing their post-trip images and pre-trip images (e.g., Phelps, 1986), or by comparing the images held by visitors and nonvisitors, or arriving and departing tourists, towards the same destination (e.g., Andreu, Bigné, & Cooper, 2001; Baloglu & McCleary, 1999; Pearce, 1982; Yilmaz et al., 2009). Other researchers have been concerned more about changing a negative/biased DI through advertising or other promotional activities (e.g., Ahmed, 1991; Perry, Izraeli, & Perry, 1976; Tasci & Holecek, 2007).

While there have been some DI change studies, only a few have observed how the same individual's impression of the same destination changes before and after trips. For example, Phelps (1986) examined a group of first-time visitors' image change towards Menorca. But he only obtained 23 responses, which is too small a sample to achieve a certain level of statistical power (Vogt, 2005). Li and Vogelsong (2006) conducted a comparison study on the same respondents' ratings of image attributes, but via on-site and mail-back questionnaires after event participation. The image formed on-site could not be equated with the pre-trip image since change of DI might start once the tourists arrived. In conclusion, limited research has monitored how the same individual traveller's image of the same destination changes over a longer time period throughout his/her travel consumption process. To address this paucity in the existing literature, this study will adopt a longitudinal approach thereby providing a valuable chance to assess the formation and change of sport tourists' DI along their travel decision-making stages.

Given that DI is dynamic, its structural components are presumed to be changeable as well. The three components of DI (cognitive, affective and conative) are all responses to environment stimuli, collectively forming a dynamically interactive and reciprocal system in which every component may be both a cause and an effect of a change at any time (Tasci et al., 2007). Therefore, the components could change to respond to the differing circumstances over time. As Tasci et al. (2007) addressed, image assessment should involve factual knowledge, personal beliefs, meanings, memories, evaluations, and decisions. As a result, examining the change of every component of a holistic image construct (i.e., cognitive, affective, and conative DI), and the structural relationship between these components, is essential for a study focusing on DI change assessment. Therefore, the following

section will review the literature on DI components change, as well as the correlations between the components when the overall DI changes.

2.2.2.2 Change of DI Components

Given that the studies on DI components are limited and the conclusion that the tripartite attitudinal perspective is appropriate for DI examination, the extant literature on attitude components change will be reviewed first. It is expected to shed light on the studies of DI component change. Most academic work on attitude change in social psychology is normally related to information search, persuasive communications and personality (Halloran, 1970; Krech, Crutchfield, & Ballachey, 1962), since they are perceived as the major factors contributing to attitude modifiability and changeability. Moreover, these studies are normally related to a cognitive process, learning or cognitive response (e.g., Greenwald, 1968). In other words, a considerable number of attitude change studies have focused on exploring the means of inducing individuals' cognitive changes (e.g., Kamins & Assael, 1987). In contrast, empirical studies on affective component change are comparatively few. The conative attitude change is often examined in terms of behaviour or behavioural intention change as a result of attitude or feeling change in a variety of settings, for example, psychology and marketing (see Albarracín & McNatt, 2005). Changing individuals' behaviour is an important purpose of studying attitude change. Accordingly, a large number of attitude studies focus on predicting individual behaviour intention or actual behaviour through attitudinal variables (e.g., Sanbonmatsu & Fazio, 1990).

Consistency among the three components of attitude is one of the most common topics that has emerged from extant attitude change studies (e.g., Flay, 1978; Insko & Schopler, 1967; Millar & Tesser, 1989). Some studies examined the

triadic consistency of affective-cognitive-conative (e.g., Insko & Schopler, 1967). While more studies have focused on the affective/evaluative and cognitive consistency, as well as the effects of a single affective or cognitive focus or their interplay on the attitude-behaviour relationship (e.g., Flay, 1978; Millar & Tesser, 1989; Regan & Fazio, 1977). According to Breckler (1984), consistency among the attitude components might be expected because all three components represent the response of a single individual to the same object.

However, affect, cognitions, and behaviour are acknowledged to not necessarily be consistent, despite there being a tendency towards such consistency (Breckler, 1984). This explains why many scholars agree that attitude can be changed by changing any of these components. In other words, if a situation arises that generates a change in any one of the three attitudinal components; there will be a tendency to change the remaining components (Halloran, 1970). Rosenberg (1960) worked on the assumption that disruption of attitude structural consistency will lead to a general reorganisation of attitude, which is regarded as a basic condition for attitude change. However, few empirical findings have been presented with respect to what happens within the individual in relation to all the three components of cognition, affect or conation when attitude changes. The current research, therefore, is expecting to make a contribution to the attitude components change literature by examining the change of each DI component when the overall DI of sport tourists changes.

Within the limited componential DI literature, it is ordinarily assumed that cognition, affect, and behaviour intention display some degree of positive correlation (e.g., Baloglu, 2000; Hong, Kim, Jang, & Lee, 2006; Pike & Ryan, 2004; Woodside & Lysonski, 1989). CDI is considered to occur prior to ADI because the

type and amount of external stimuli (i.e., information sources) are believed to influence the formation of the CDI but not the ADI (Gartner, 1994). Furthermore, Kim and Yoon (2003) revealed that the affective image component had more impact on developing overall DI than the cognitive component. In addition, Baloglu (2000) found that cognition was more influential on visit intention than affect, before visiting a tourist destination. Based on a review of the current studies, it is evident that the relationship/association between the three components varies in different circumstances. Therefore, to achieve a comprehensive understanding of sport tourists' overall DI change, this study will test the intra-relationship between DI components when DI undergoes any changes.

A dynamic DI has been viewed by this study as the most important antecedent determining sport tourists' decision-making for attending an event and revisiting the destination (Chen & Funk, 2010). Accordingly, this study focuses primarily on the change process of DI which is critical for the decision-making of sport tourists. In addition, the main external and internal factors contributing to this change process also need to be probed more deeply because the influential factors of an antecedent variable (i.e., attitude/DI) will bring about direct or indirect effects on the consequent variable (i.e., decision-making). Furthermore, in practice, successful tourism marketing requires an understanding of the factors that have an effect on an individual's DI change in order to sustain enduring attractiveness (Haahti, 1986). The following section, therefore, will review literature on influential factors contributing to the change of DI or general attitude.

2.2.2.3 Influential Factors of DI Change

As Brokaw (1990) stated, before images can be used to influence behaviour, it is essential to understand what influences images. Krech et al. (1962) argued that

attitude change mainly depended on the characteristics of the pre-existing attitude, the new information or new factors introduced into the situation, and the personal features of the individual (e.g., general susceptibility to persuasion, intelligence, the cognitive needs and styles of the person, general readiness to accept change and the strength of the individual's group affiliations). Following this view, empirical studies emerged focusing on the influence of persuasive communications/information on attitude change (e.g., Cialdini, Petty, & Cacioppo, 1981; Edwards, 1990; Millar & Millar, 1990; Petty, Wegener, & Fabrigar, 1997; Regan & Fazio, 1977), or the impact of "need for cognition" (personality) on attitude change as a result of exposure to advertising messages (Haugtvedt & Petty, 1992; Haugtvedt, Petty & Cacioppo, 1992). Numerous aspects of the information source, message, and recipient that regulate this impact have been identified (Krosnick, 1988).

However, the provision of new information is not the only reason that leads to attitude change. Through exploring the extant literature, time, memory, space, personal features (e.g., Haugtvedt & Petty, 1992; Haugtvedt et al., 1992), as well as external stimuli such as a new environment, all contribute to attitude change (e.g., Petty et al., 1997; Yoo & Chon, 2010). From this, it can be seen that exploring the inducements/determinants of attitude change is a very complicated social psychological research task. A well-developed model is thus required to help comprehensively examine all the influential factors of attitude change.

Empirical studies focused on DI change and its antecedents and impacts are limited (Yilmaz et al., 2009). Previous studies on DI formation and change predominantly revolve around two themes. Firstly, following the information processing perspective of cognitive attitude, DI formation studies are mainly focused

on the role of information agents (e.g., Baloglue & McCleary, 1999; Gartner, 1994; Li et al., 2009; Selby & Morgan, 1996), or on previous experience and memory (e.g., Hsu, Wolfe, & Kang, 2004; Milman & Pizam, 1995) in forming or modifying DI. Secondly, research has tested the hypothesis that tourists can change their perceptions or impressions of the visited destination as a consequence of travelling. In other words, attitudinal changes do occur between the pre- and post- travel assessments of the visited destination (Pearce, 1982). However, insights into what kind of collective changes occur in leisure tourists' cognitive, affective and conative image components, and all potential factors contributing to that change, are limited.

It is acknowledged that the representation of a tourist destination in the individual's mind is generally based on stimuli processing, which is significantly influenced by psychological factors of the individual, such as motivations, values, and personality (Baloglu & McCleary, 1999; San Martín & Rodríguez del Bosque, 2008). By demonstrating a General Framework of Destination Image Formation, Baloglu and McCleary (1999) conclude from previous literature across fields and disciplines that there are two groups of factors contributing to image formation before actual visitation: stimulus factors (stem from external stimuli, physical object and previous experience) and personal factors (psychological and social characteristics of the perceiver).

The role of stimulus (e.g., information sources) and social factors (e.g., socio-demographics) in the image formation process has been explored by many previous studies. For example, McCartney et al. (2008) discovered varying degrees of influence that different information sources had on DI formation. Moreover, among a range of socio-demographic characteristics, age and education have been found to be major determinants of image (e.g., Stern & Krakover, 1993; Walmsley

& Jenkins, 1993). However, either theoretical or empirical research focusing on the effect of psychological characteristics (e.g., values, personality, lifestyle) of tourists on their DI has been very limited (San Martín & Rodríguez del Bosque, 2008), except the studies examining socio-psychological motivations (e.g., Beerli & Martín, 2004). Therefore, even less has been known about the psychological factors that cause or influence DI change.

For this reason, the influence of psychological forces on DI formation and change requires further exploration. It is from this perspective that a theoretical framework focusing on the in-depth psychological connection between an individual and leisure objects (e.g., a travel destination), which underpins attitude change (see Funk & James, 2001), is required. Adopting an appropriate theoretical framework can stimulate the theorisation and systematisation of DI formation and change study, thereby overcoming a major weakness of contemporary DI research which is lack of conceptual frameworks, therefore being atheoretical (Aziz & Zainol, 2011; Gallarza et al., 2002).

In summary, this study will examine the formation and change of DI held by sport tourists, as well as the influential factors guiding this change process. In particular, the role of psychological factors in DI formation and change requires further exploration. To search for a proper theoretical framework addressing all the research objectives, the next section will focus on the requirements for the potential framework and then elaborate on an integrative theoretical framework that meets the requirements.

2.3 The Theoretical Framework

2.3.1 Requirements for Potential Framework

The current research calls for a suitable theoretical framework to assist in understanding the formation and change of sport tourists' destination attitude (i.e., DI) across the three decision-making stages. In addition, consideration needs to be given to influential factors contributing to the formation and change of DI. Accordingly, some potential theories or models focusing on attitude formation and/or change, as well as attitude-behaviour relationships are reviewed.

Many well-grounded theories of attitude formation and change exist in the psychological literature, such as *Congruity Theory* (Osgood & Tannenbaum, 1955), *Summation Theory* (Fishbein & Hunter, 1964), *Balance Theory* (Feather, 1964), *Theory of Information Integration* (Anderson, 1971), *Elaboration Likelihood Model* (Petty & Cacioppo, 1986), and *Assimilation-Contrast Theory* (Sherif & Hovland, 1961). The common ground of these theories is the source-communication-issue schema (Hovland, 1957), which means the attitude change results from exposure to information or opinions from others (Chaiken & Stangor, 1987; Olson & Zanna, 1993). From the perspective of information-processing, the bulk of the attitude change literature focuses on taking the initiative to change subjects' attitudes by means of persuasion, intervention, or change-inducing communications (Chaiken & Stangor, 1987). In other words, these theories were founded on the postulation that an attitude is changeable, and thus, they focus on *how* to artificially change or manipulate an attitude, rather than on inspecting the naturally occurring attitude change. The research interest of this study is to explore **how** an attitude changes in a natural state and if it does change, **what factors**

contribute to the change, as well as **how** the changed attitude affects decision-making. Hence, none of above theories is suitable for this research.

In regard to the popular theoretical models in the attitude-behaviour literature, such as *Theory of Reasoned Action/ Planned Behaviour* (Ajzen, 1985; Fishbein & Ajzen, 1975), *MODE model* (Fazio, 1990), and *Composite Model* (Eagly & Chaiken, 1993), they are not appropriate for this study either. These models have mainly been used to predict intentions or behaviours in various domains (Olson & Zanna, 1993) and are considered as a parsimonious approach to account for the human decision-making processes and behaviours (Han & Ryu, 2011). However, scholars had never stopped questioning the sufficiency of these theories/models (e.g., Han & Ryu, 2011; Perugini & Bagozzi, 2001; Poels & Dewitte, 2008).

For instance, as Han and Ryu (2011) criticised, these socio-psychological models mainly focus on volitional and non-volitional elements with less consideration for the motivational element, the affective/emotional aspects, and past experiences, which are critical in the decision-making process, especially for repurchase decision-making. In addition, even if these models take into account the role of attitude in decision-making/behaviour, they are not concerned with the “conditions and variables influencing the erection or reorganisation of attitudes as with the problem of what attitudes are and the related problem of what happens ‘inside’ them as they undergo change” (Rosenberg, 1960, p. 319). Moreover, they generally target broad decision-making, lacking specificity in the domains of sport and tourism. Therefore, the theoretical frameworks of attitude-behaviour relationship cannot cover the essential research problems of the current study.

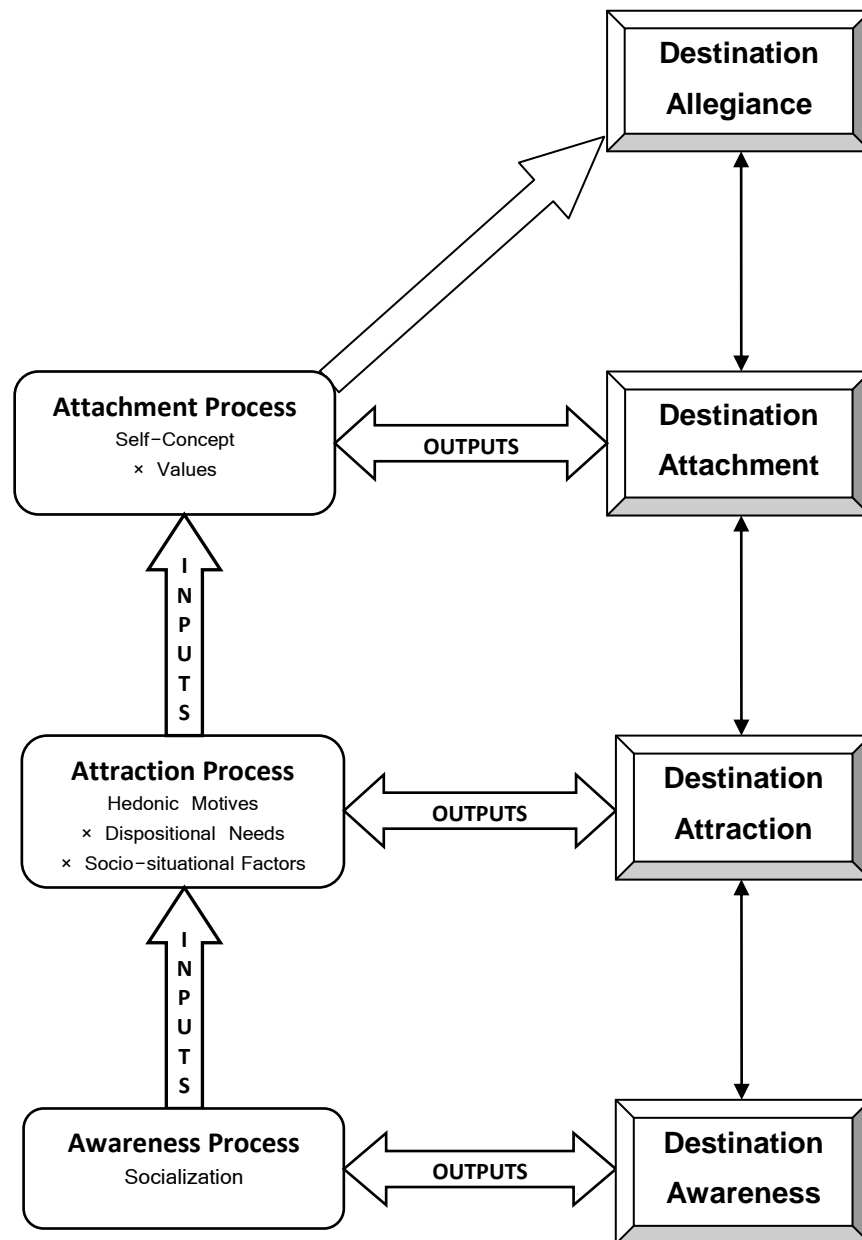
Accordingly, four requirements were established from the perspective of the current core research problem, in order to select an optimised theoretical framework to guide this study on sport tourists' destination attitude formation and change over decision-making stages. Firstly, the potential theoretical framework should be able to account for attitude formation and change process, as well as the influential factors contributing to this process. Secondly, the expected theoretical framework should be underpinned by a decision-making perspective in order to facilitate understanding of the attitude-behaviour interrelationship. Thirdly, the expected framework should be capable of integrating literature from sport, consumer behaviour and tourism studies to provide comprehensive understanding of sport tourists' psychological activities and behaviours. Finally, a well-established framework in studies of sport consumer behaviour is preferred because of its potential for systematically examining sports consumer attitudes towards their consumption objects such as a sport game or a sport event.

In view of the above criteria, the Psychological Continuum Model (PCM) established by Funk & James (2001; 2006) is considered the most appropriate theoretical framework for this research. The key point is that the PCM is based on attitude formation and change that occurs in stages. Additionally, the PCM adopts a decision-making perspective by suggesting a chain of "inputs – process – outputs" which allows the integration of literature from various disciplines to assist in understanding how an individual forms and develops specific attitudes towards leisure objects. The PCM also serves as a sound operational framework to understand how various internal and external determinants influence an individual's attitude formation and change. Application of the PCM to a sport tourism setting facilitates the synthesis of sport, event, leisure, tourism and marketing literature,

which are all drawn upon in this multidisciplinary research. The following section will elaborate this cognitive-behavioural model outlining attitude formation and change process.

2.3.2 The Psychological Continuum Model (PCM)

The Psychological Continuum Model (PCM) provides a comprehensive and systematic explanation for *how* and *why* an attitude forms and changes (Beaton & Funk, 2008). The current research adopts the PCM as the theoretical framework to examine how sport tourists' destination attitudes form and change, and how the external and internal factors influence this formation and change process. The PCM is a four-stage developmental model organising various literature streams from social psychology to explain how a psychological connection between an individual and various leisure objects (e.g., sport event, tourism destination) changes under the influence of personal, psychological, and environmental factors (Funk, Toohey, & Bruun, 2007). The psychological connection is supported by various attitude properties (Funk & James, 2006). Figure 2.1 illustrates an adaptation of the PCM framework for this research, focusing on sport tourists' psychological connection with the event host destination. Detailed description and discussion of the framework are provided in the following two sections.



Source: Funk and James (2006)

Figure 2.1 Psychological Continuum Model for Sport Tourists towards an Event-host Destination

The PCM conceptualises the variety of ways consumers relate to a sport object in terms of four hierarchical stages operating along a vertical continuum: awareness, attraction, attachment and allegiance. Since the primary concern of this research is sport tourists' attitude formation and change towards the event host destination, each of the four stages represents an upgraded level of psychological connection a sport tourist may have with the host destination (Filo, Chen, King, & Funk, 2011). In Figure 2.1, the lowest stage of the hierarchy, *destination awareness*, describes the situation when a potential sport tourist knows about a destination, but has no special interest in or preference for it. The second stage, *destination attraction*, indicates a distinct interest/preference and initial attitudes have been formed towards a destination. The third stage, *destination attachment*, indicates the sport tourist has formed a meaningful psychological connection with the destination by assigning emotional, functional, and symbolic meaning to this place (Filo et al., 2011). The final stage of the hierarchy, *destination allegiance*, represents the strength and continuance of a sport tourist's psychological commitment to the destination. The first two stages are relatively unstable in terms of behaviour (Beaton, Funk, & Alexandris, 2009) while the final two stages reflect a stronger individual-object relationship as personalised meaning increases (Funk & James, 2006). The four hierarchical stages are considered to represent four distinct levels of psychological connection that sport tourists hold with an event host destination.

To better understand how individuals progressively develop their specific psychological connection with sport objects, Funk & James (2006) propose that sociological and psychological processes account for the progressive development. The progression occurs from the interaction of sociological and psychological processing and leads to unique stage-based hierarchical outcomes. Accordingly,

three evaluative processes are advanced: awareness, attraction, and attachment (Funk & James, 2006).

As Figure 2.1 demonstrates, the *awareness process* for sport tourists arises from external inputs such as various socialising agents (e.g., information sources), producing general knowledge of a potential event-hosting destination; but no preference has formed. The outcome of destination knowledge serves as an input for the next attraction process. The *attraction process* occurs when the environmental stimuli (e.g., destination attributes/features) interact with psychological (e.g., hedonic motives) and personal (e.g., dispositional needs) factors. This process triggers sport tourists' desire to meet a need or seek a benefit through visiting a specific destination (Beaton & Funk, 2008). As a result of the interaction between the internal stimuli (e.g., need recognition/motivation) and external (e.g., socio-situational) stimuli, the initial attitude towards a specific destination is formed (Gartner, 1994). The *attachment process* describes how attraction outputs (initial attitudes and preference) interact with core values, trust and self-concept over time to create functional, emotional and symbolic meaning held for the destination (Filo, Funk, & Alexandris, 2008; Funk & James, 2006). Continued attachment process can lead individuals to the highest stage of allegiance corresponding to commitment and behavioural loyalty (Funk et al., 2007).

By introducing the above three internal processes among the four hierarchical stages, the PCM provides a special means from the decision-making process perspective to further understand the complexity of the individual-object relationship and its associated attitudinal and behavioural properties (Beaton & Funk, 2008; Funk & James, 2006). The internal process represents a transformation from inputs/stimuli to outputs/responses, which is generated prior to the final

attitude being formed and decision being made (Abelson & Levi, 1985; Sirakaya et al., 1996). As a result, a chain of “inputs – processing – outputs” emerges operating within and between each of the four PCM stages and producing corresponding attitudes and decisions (behaviours).

As for the current research on sport tourist destination attitudes, the inputs to processing include a number of external factors such as socio-situational stimuli (e.g., built environment of the destination and various socializing agents), as well as a series of internal psychological and personal factors (e.g., motives and personal values). The interaction between the external and internal factors influences the sport tourists' evaluation occurring in a cognitive process. Briefly, this internal process represents an invisible mental synthesis of inputs via internal forces (e.g., motivation, personality, perception, and memory) (Chen & Funk, 2010). Such synthesis shapes the evaluation of the sport tourism consumption, leading to attitudinal and behavioural outcomes (Funk & James, 2006). In other words, the internal processing “represents the manner in which an individual evaluates external inputs and utilises internal inputs to conduct the evaluation” (Funk, 2008, p.34). To further understand the evaluation processes, the interaction between external inputs and internal inputs should be examined. Before ending, there is one point which deserves mentioning: the outputs can be looped back to processing, serving as new inputs for subsequent evaluation in the same stage or different stages to influence attitude change. In conclusion, the dynamic “inputs - processing - outputs” chain is critical to this research since it accounts for the attitude formation, development and modification process.

From the above description, the attitude of sport tourists can be regarded as the function of processing internal factors (i.e., psychological and personal) as well

as external factors (i.e., environmental). These factors serve separately and interactively as inputs to impact sport tourists' attitude formation and change, and corresponding decision-making / behaviours. In the context of the present study, the attributes possessed by sport events and their host destinations can be viewed as external inputs. The psychological inputs represent intrinsic and extrinsic factors, such as hedonic and utilitarian motives, attitudes towards the destination, and experience satisfaction. Personal inputs include person-specific characteristics and dispositions, for instance, the demographics and socio-cultural backgrounds of sport tourists.

In conclusion, the PCM has integrated the principles of decision-making from two aspects. Firstly, the "inputs – processing – outputs" chain operating within and among stages demonstrates the decision-making process (Abelson & Levi, 1985). Secondly, the external and internal inputs have covered most of the key constructs and influential factors of the decision-making process (e.g., Blackwell, Miniard, & Engel, 2001), as well as the influential forces of DI formation (e.g., Baloglu & McCleary, 1999). However, the existing empirical studies that employed this theoretical framework lack details on the inner processes and are underdeveloped regarding the decision-making process that occurs at each stage. The close connection of the PCM with decision-making rationales and its demand for further development from the decision-making perspective provides a solid reason for adopting the PCM, a theoretical model elaborating attitudes formation and change, to examine how sport tourists make an initial travel decision to participate in a non-local sport event, and how they make a revisit decision to the same destination.

Integrating the aforementioned three-stage general decision-making process of sport tourists and the DI formation and change literature with the PCM theoretical framework provides a comprehensive and holistic conceptual map governing the current study. The combination is demonstrated by embedding the “inputs - processing - outputs” chain of the PCM, which drives the formation and change of attitudes and psychological connections, into each of the three stages of the sport tourists’ travel decision-making (destination choice – experience evaluation – future revisit decision). This reflects that every decision is underpinned by a dynamic attitude and psychological connection. In addition, various influential factors of attitude (i.e., DI) formation and change are allocated into the “inputs” and “outputs” of the processing chain which operates within and among the three decision-making stages.

2.4 Conceptual Model for Sport Tourists’ Destination Attitude Formation & Change

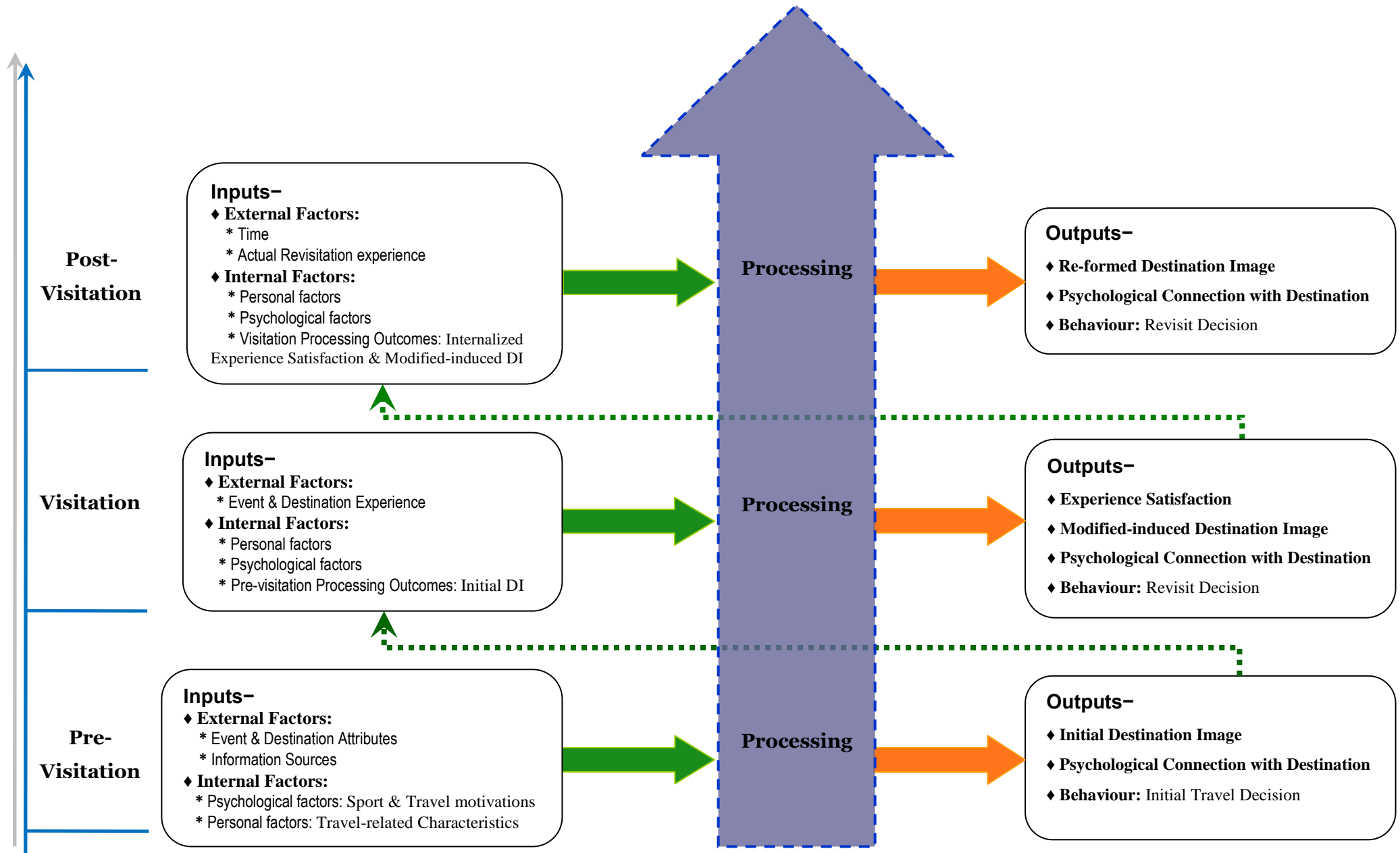
Based on the previous discussion, a conceptual model is developed for this study, as presented in Figure 2.2. Firstly, this model outlines three general consecutive stages of sport tourists’ travel decision-making process: the initial travel decision before the event (i.e., event and destination choice prior to travel), the actual visit experience evaluation, and the post-visit repeat decision (i.e., future revisit decisions) (Chen & Tsai, 2007; Lee, Lee, & Lee, 2005; Moutinho, 1987). Secondly, the conceptual model depicts how the destination attitudes of sport tourists form and change through a chain of “inputs – processing – outputs” operating at each decision-making stage. Finally, this model highlights a progressive

psychological connection between sport tourists and the host destination which develops/changes along with the sport tourists' dynamic destination attitudes.

As displayed in the three dialogue boxes on the left of the block arrow in Figure 2.2, *Inputs* are identified as both internal (i.e., intrinsic psychological forces like motivation and personal characteristics), and external variables (e.g., environmental stimuli, information sources) that influence sport tourists' attitude formation and change processes (Sirakaya & Woodside, 2005). However, the inputs are slightly different for each of the three attitude formation and change processes (e.g., socialising agents mainly dominate in the initial DI formation process). In addition, several personal and psychological elements as well as external forces play an ongoing role in the individual evaluation processes. For example, motivation and personality can determine initial DI formation (which is conducive to initial participation decision), and also determine experience evaluation (which is conducive to DI change and future decision-making) (Corriea & Pimpão, 2008). Information agents can always exert influence throughout the DI formation and change process. Different inputs would produce different attitudinal and behavioural outcomes at different decision-making stages, reflecting the attitude change process.

Processing, as illustrated by the block arrow in Figure 2.2, represents a collection of psychological processes which are established by the PCM framework, describing how internal and external inputs are evaluated via three types of evaluations – cognitive, affective and conative, which are believed to lead to the three components of attitude (Funk, 2008). Accordingly, the internal process can be treated as the mechanism that activates attitude formation, development and change. The *outputs* represent the attitudinal (e.g., attitudes, psychological connections), and behavioural outcomes (e.g., visit/revisit decisions) produced by the inner processing.

Figure 2.2 The Conceptual Model for Sport Tourists' Destination Attitude Formation & Change



A more detailed description to the structure of the conceptual model is presented as follows. The attitude formation and change of sport tourists towards the host destination are assumed to occur throughout their travel decision-making processes, influenced by time, space, and circumstances. This process starts from choosing a specific event to attend, then shifts to the actual visit experience and evaluation, and progresses to the revisit decision-making at a future time point based on memorised experience.

When facing several optional destinations which hold similar sport events in terms of type, size and status, sport tourists' destination choice, just like that of a typical tourist, is also derived from their awareness sets, which are composed of alternative destinations without a specific favourite (Sirakaya, Sonmez, & Choi, 2001). This choice involves the first four steps of an extended decision-making process (i.e., need recognition, information acquisition, alternatives evaluation and purchase decision). For sport tourists, once a preferred event is selected and the travel decision is made to attend the event, there is an indication that an indifferent attitude towards the destination has been formed through information processing. This is because it is assumed for most sport tourists; the primary travel purpose is to attend the sport event. Though the initial cognitions of the destination might be vague or distorted, they will still impact on prospective visitors' affective attitudes towards the destination and subsequently lead to visit intention (Funk & Bruun, 2007).

Given that the influence of DI on destination choice at the **pre-visitation stage** has been acknowledged by researchers (Chon, Weaver, & Kim, 1991; Echtner & Ritchie, 1991), this study will focus on the formation of initial DI held by sport tourists. Specifically, which of the environmental factors/attributes related to the

event and its host destination are perceived as attractive by sport tourists before visiting, as well as how these attributes contribute to a tripartite structure of the initial DI will be investigated. In addition, how the special motive of sport tourists (i.e., to participate in sports) affects their initial DI is of more interest for this study, rather than the influence from information agents, which has already been widely examined (Kurtzman & Zauhar, 2005).

Further, more attention is given to the **visitation stage** in this research, as most research into event attendees has focused on motivation and event satisfaction rather than on the overall sport tourism experiences (Morgan, 2009). Sport tourists consume both sports and the host destination, which contribute to a dual experience (Papadimitriou & Gibson, 2008). However, existing studies lack an examination of the sport tourist experience with the event-host destination and how this experience influences DI change and subsequent revisit decisions (Lee et al., 2005). Within this visit experience evaluation stage, the initial DI serves as an input factor to sport tourists' experience evaluations. The output is the modified-induced DI, derived from practical evaluations by the sport tourist of the actual experiences during their stay at the destination. To understand the DI transformation induced by tourists' personal travel experiences, comparing the modified-induced DI with the original DI is the most effective approach (Oliver, 1980). Specifically, comparing tourists' pre-visit perception of destination attributes/offerings with the evaluations of the same set of attributes after visitation will help to reveal the change of cognitive DI. Changes in affective and conative DI are thus stirred.

Finally, a destination's ability to successfully deliver the projected DI through providing a particular type of experience expected by tourists will affect its enduring competitiveness in attracting repeat visitors (Jenkins, 1999; Litvin & Ng,

2001). However, sport tourists' actual revisit decision-making might often occur some time after their participatory trip. It is not necessarily the immediate effects of modified-induced DI that are crucial for revisitation but whether, and how, this DI is remembered at a later time and then determine the revisit decision, that is crucial. As a result, continual monitoring of the change of post-visit DI held by sport tourists over time is significant. In this study, the examination of the post-visit DI change over time and future revisit decision-making is, therefore, considered meaningful. This finding will make contribution to the current tourism destination literature because there is a lack of understanding about the relationship between a continually changing modified-induced DI and revisit decision-making over a longer period of time (Tasci & Gartner, 2007). In other words, this underpins the third research objective of revealing how DI that has reformed after the visitation, based on memorised experiential evaluation and new circumstances, affects sport tourists' future revisit decision-making.

In summary, the integration of the three general travel decision-making stages with the PCM framework, combining the DI formation and change literature, is capable of tracing sport tourists' destination attitude formation and change process and the underpinning in-depth psychological activities. Additionally, this integrative conceptual model helps to clarify which variables dominate in each attitude formation and change period by examining the operation of the "inputs – processing – outputs" chain working within and between the three decision-making stages. The following three sub-sections will present the detailed attitude formation and change process occurring at each decision-making stage.

2.4.1 Initial DI Formation & Initial Travel Decisions before Visitation

As the first stage in Figure 2.2, the initial travel decision to attend an event lies in choosing a specific sport event and its host destination. This stage serves to identify personal needs or motivations, search relevant information and evaluate alternatives, thereby forming initial attitudes towards the chosen sport tourism destination. To clarify how these factors promote sport tourists to make a travel decision to attend a sport event, the first research question is advanced:

RQ1: How do external and internal factors influence the initial travel decision-making of sport tourists to attend a specific sport event?

2.4.1.1 Inputs

As the lowest input box in Figure 2.2 shows, the inputs to initial DI formation include both external and internal factors. The external factors are the essential materials for sport tourists' initial DI formation because DI can exist only if there is at least a small amount of knowledge (Milman & Pizam, 1995). The internal inputting factors are the intrinsic forces to process these external stimuli. The interaction of external factors and internal forces would lead to internalising those objective attributes into subjective perspectives and impressions, thus producing the initial DI.

External Factors

Event & Destination Attributes

In Figure 2.2, the attributes of a sport event and its host destination are combined to form an important external inputting element. Although a few preliminary studies have examined the influence of event image and destination image (e.g., Kaplanidou, 2009), little is known regarding which sport event related

features, along with the attributes of the host destination, contribute to sport tourists' initial DI formation. Thus, **RQ1a** is stated as:

RQ1a: What attributes of the event and host destination will contribute to the initial DI formation of sport tourists?

Shonk and Chelladurai (2008) suggest that the perceived quality of sport tourism (STQ) influences tourist satisfaction and intention to return to the host destination and/or the event. Four primary dimensions are believed to indicate STQ: access quality (composed of access to destination, sport venue, hotel); accommodation quality; venue quality and contest quality (including processes and results of the contest). Shonk and Chelladurai's study (2008) facilitates research into the sport tourist experience by proposing a multidimensional model of STQ. However, STQ overlooks the diversity of sport tourists' experiences during the stay at the destination, for example with typical tourist activities such as sightseeing. In addition, the accommodation and access dimensions of STQ are also usually included in the infrastructure attribute of tourism DI studies (e.g., Holloway, 2002). Therefore, only the sport-related attributes in the STQ inventory are adopted (i.e., sport venue and contest dimensions) to measure how a sport event is perceived by sport tourists. Other attributes related to basic hospitality facilities/services are discussed as destination attributes because they are common requirements of all types of tourists.

Destination attributes are defined as a set of attributes, when aggregated together, that could describe a place as a travel destination (Heung & Qu, 2000). They include all elements related to a destination and to travelling to this place, such as the destination's physical and nonmaterial attractions, the mental distance, required transportation to get to the place and so forth (Heung & Qu, 2000).

Lancaster (1966) suggests that normally consumers use their perceptions of attributes possessed by the goods, rather than the goods themselves as input factors to assess utility. Klenosky (2002) found that there are definite links between desired destination attributes and benefits sought by tourists.

Given the complexity of the composition of a tourism destination product, a widely recognised and accepted generic attribute list does not exist. Nevertheless, if the attributes that correspond to the characteristics of a particular destination are not taken into account (e.g., snow quality at ski resort), a list of universal attributes can be developed regardless of the destination context. Previous DI researchers have provided guidance for establishing a set of common tourism destination attributes through their focus on the tangible physical attributes of the destination (Pike, 2002). Thus, it is possible to develop a common DI inventory suitable for all sport tourism destinations. For example, Chen and Funk (2010) made a primary test on a generic list of seventeen sport tourism DI attributes. However, they did not consider any attributes related to the sport/sport events, which have been found to positively influence DI (Kaplanidou & Vogt, 2007). Thus, the first hypothesis under **RQ1a** is proposed:

***Hypothesis 1.1:** Event attributes will positively contribute to the initial DI formation of sport tourists.*

Information Sources

As Figure 2.2 indicated, information source is another important external factor contributing to sport tourists' initial DI formation. Mok and Armstrong (1996) stated that tourists' destination choice is often dependent on symbolic information acquired from various information sources, either media or social groups, if they have not visited this place previously. Moreover, information sources, called by

Gartner (1994, p.197) as “image formation agents”, have been treated as the main force which stimulates the formation of tourists’ initial perceptions and evaluations. In other words, the initial DI is based on many impressions chosen from a flood of information from various sources (Beerli & Martín, 2004). Previous studies have also asserted that the amount and type of information sources could contribute differently to DI formation (e.g., Choi, Lehto, & Morrison, 2007; Kenyon, 2009; MacKay & Fesenmaier, 1997). As a major research topic in tourism destination studies, the role of information sources in DI formation and change has already received a great deal of attention (e.g., Frías et al., 2008; Li et al., 2009); therefore, this will not be tested in this study.

Internal Factors

Psychological Factors

As Figure 2.2 shows, the intrinsic psychological forces input to this initial DI formation stage are sport and travel motivations. Motivation is an important contributor to the formation of attitudes (Chon, 1989), as well as a vital driving force that governs and regulates all the behaviours directed towards achieving goals (Kurtzman & Zauhar, 2005; Pyo, Mihalik, & Uysal, 1989). For sport tourists, the motives of travelling to participate in a sport event are likely to originate from the interaction of sport and tourism sources (Funk et al., 2007), and primarily derive from sport interests or needs (Deery et al., 2004). On the other hand, it is the act of travelling that allows the sporting identity of sport event tourists to become more salient and more enduring, because they are able to escape the identities associated with routine home lives (Shipway & Jones, 2007). Thus, two motivational constructs – sport involvement and travel motivation – are considered intertwined to engender sport tourism consumption attitude and behaviour.

As Chon (1989) advocated, at the point when a potential tourist selects a destination as a possible choice based on needs and motivations, a primary image of a destination has been constructed. Therefore, assessing primary DI formation must include the psychological needs and motivations of potential tourists (Lubbe, 1998). Thus the **RQ1b** is set as:

RQ1b: How do the prior motivations of sport tourists affect their initial DI formation?

Sport Involvement

Prior sport involvement is acknowledged to be the prime mover of sport event participation (Funk & Bruun, 2007). Sport involvement accounts more for the inherent sports interest, needs and values than the motivation perspective (Nicholson & Pearce, 2001; Zaichkowsky, 1985). Involvement is an important construct because of its potential effect on people's attitudes towards an object, their behaviour related to the object and to decision-making. It has received widespread attention in the fields of marketing and consumer behaviour (e.g., Bauer, Sauer, & Becker, 2006; Laurent & Kapferer, 1985; Zaichkowsky, 1985) as well as leisure activity and tourism (e.g., Brown, Havitz, & Getz, 2007; Dimanche, Havitz, & Howard, 1993; Gross & Brown, 2006; 2008; Hwang, Lee, & Chen, 2005; Kyle, Graefe, Manning, & Bacon, 2003). Based on the well-accepted definition of leisure involvement (Havitz & Dimanche, 1999), sport involvement can be defined as *an unobservable stage of motivation, arousal or interest towards a sport activity*.

It is reported that different involvement levels impact consumers' attention, information search efforts, purchase, and consumption satisfaction differently (Arnould, Price, & Zinkhan, 2004; Beaton et al., 2009). In short, the involvement level affects decision-making, attitudes and consuming behaviours. As such,

involvement is a significant input that requires consideration when understanding how attitudes form and change. However, the relationships between physically active leisure involvement and tourist behaviours or destination choices are still less developed (Chang & Gibson, 2011) even if some scholars have proposed theoretical assumptions that leisure involvement played a critical role in the decision-making process for travel choices (e.g., Brey & Lehto, 2007; Carr, 2002; Currie, 1997).

For example, McGehee, Yoon, and Cárdenas (2003) found that recreational runners with a high involvement level in overnight race travel will make more overnight trips for races than those with medium or low levels of involvement. Similarly, several related studies found that for the people being highly-involved in some physically active leisure, vacations were seen as good opportunities to take part in the leisure activities in different locations around the world, testing their skills in novel settings, and renewing friendships formed on previous tours (Chang & Gibson, 2011; Kane & Zink, 2004). Nevertheless there have been few empirical studies investigating the impact of leisure involvement on touristic decision-making or destination attitudes. Therefore, it is considered necessary to clarify whether and how the prior involvement level of sport tourists with the sport will affect their pre-visit DI formation and initial travel decision-making.

Based on previous research findings, it can be assumed that in a sport tourism context, high sport-involved event participants might be more concerned about the event and the host destination because of the higher significance of this participatory trip for them than for the low sport-involved sport tourists. As a consequence, their evaluation criteria for selecting an alternative sport event destination and their information-search efforts would be expected to be higher than

that of the low-involved segment, thereby forming a more precise DI. This leads to the hypothesis associated *RQ1b*:

Hypothesis 1.2: The prior sport involvement of sport tourists will positively influence their initial DI.

While sport involvement has been recognised as a vital antecedent of sport participation (Beaton et al., 2009), it cannot completely account for the travel behaviour of sport tourists to take part in a non-local sport event. Secondary considerations exist that lead sports consumers to travel to participate in a sport event. Thus, travel motivation needs to be reviewed.

Travel Motivation

It is agreed that travel is a key part in the sport tourist's initial decision-making for event participation (Kaplanidou, 2009). When a sport tourist begins to select a specific event to participate in from other alternatives, consideration for the travel destination is inevitably involved in the selection process (Funk & Bruun, 2007). The weight of this consideration, although, might vary according to their different levels of sport involvement. Previous study findings (e.g., Fairley, 2003; Gillett & Kelly, 2006) provide broad support for the argument that travel contributes significantly to the uniqueness of an entire sport tourist experience (Weed & Bull, 2004). Thus it should not be regarded simply as an instrumental means of participating (Gillett & Kelly, 2006). However, little is known about what specific benefits the sport tourist expects to seek from the destination (Papadimitriou & Gibson, 2008), and how prior attitudes towards the host destination affect sport tourists' event choice as well as their actual participation experience. Hence, travel motivation, the other important stimulating force for sport tourists, needs further examination.

Travel motivations are habitually conceptualised in leisure tourism literature in terms of push and pull factors (Baloglu & Uysal, 1996; Bogari, Crowther, & Marr, 2003). The underlying assumption is that people travel to a place because they are pushed by their own intrinsic forces and pulled by external forces of the destination attributes (Baloglu & Uysal, 1996; Crompton, 1979b; Dann, 1977; 1981). Accordingly, the push factors are intrinsic socio-psychological motivations that predispose the individual to travel, while the pull factors are those that “emerge as a result of the attractiveness of a destination as it is perceived by the traveller” (Oh, Uysal, & Weaver, 1995, p.125).

As a result, the push motives are considered to be useful for explaining the desire for travel while the pull motives are useful for explaining the actual destination choice (Baloglu & Uysal, 1996; Crompton & McKay, 1997). Moreover, general consensus has been achieved on push factors that motivate travel or leisure vacations (Beard & Ragheb, 1983; Crompton, 1979b; Crompton & McKay, 1997; Uysal & Jurowski, 1994). These push motives of travel also overlap with sport consumption motives (e.g., escape, relaxation & entertainment, family & social interaction, and cultural learning) (Smith & Stewart, 2007). In other words, sport and tourism share a number of common motives (Weed & Bull, 2004). Since the current research is more interested in the unexplored influence of sport involvement on sport tourists’ DI formation, these common push motives for all types of tourists will not be examined.

The substitute is a construct of strength of motivation, which is more common in leisure studies (e.g., Funk & Bruun, 2007; Ragheb & Tate, 1993), that can be utilised to measure the intensity of an individual’s motivation for travelling to participate in sport events. The reason for adopting this construct is that it represents

a broader conceptualisation of motivation able to capture specific motives (Carroll & Alexandris, 1997; Funk et al., 2007). As a result, the strength of travel motivation, combined with sport involvement, is able to measure sport tourists' various motivations more efficiently. Strength of travel motivation represents a personal moderator that gauges the intensity of a sport tourists' attitude towards engaging in sport tourism (Funk & Brunn, 2007). Therefore, it is assumed that a sport event participant with a strong travel motivation might have stronger desires to know more about their travel destination than the individuals with weak travel motivation (see Goossens, 2000). Therefore, the former may search for more information about the host destination and so form a clearer initial DI than the latter. Another hypothesis associated with sport tourists' prior motivations under RQ1b is also tested:

***Hypothesis 1.3:** The strength of travel motivation will positively influence sport tourists' initial DI.*

In contrast with the agreement that has been achieved in the literature on push motives, there is little consistency regarding the pull motive factors because these tend to be destination and event specific (Boo, Kim, & Jones, 2009). Researchers are still struggling with the measurement inconsistencies and lack of replication (Fodness, 1994; Funk, Alexandris, & Ping, 2009) of pull motivation. Thus, the current research strives to identify a set of event and destination attributes (pull factors) that can be generally applied to all sport tourism destinations. The perceived attractiveness before visiting indicates potential visitors' "ideal" expectations of a destination's capacity for meeting their needs and wants. This information could assist academics and practitioners in understanding which DI attributes are considered to be meaningful when promoting the place to the sport tourist market. Due to the relationship between pull travel motivation and

destination attributes, it is reasonable to infer that if the evaluation of projected destination attributes by potential visitors is positive, the travel motivation pulling sport tourists to visit is produced. This deduction can be examined by the attitudinal and behavioural outcomes (i.e., initial DI and travel decision) of the evaluation process occurring before travelling to participate in the event.

Personal Factors

The personal factors influencing sport tourists' awareness and perceptions of a potential destination mainly include socio-demographic characteristics and personal travel features. According to Boo et al. (2009), investigating visitor characteristics is one of the most common components in tourism and hospitality studies because they are critical for determining the targeted research population. Moreover, two types of personal characteristic indicators are mostly employed by tourism scholars (Boo et al., 2009): one focuses on socio-demographics and the other involves behavioural factors related to travel (e.g., length of stay, information used, and expenditure). The demographic characteristics are always considered as basic market descriptors (Moutinho & Trimble, 1991). Moreover, in tourism studies, socio-demographic characteristics (e.g., gender, age, occupation, education, family status, and socioeconomic class) have been extensively examined as internal inputs that influence tourist DI formation (e.g., Beerli & Martín, 2004; Heung, Qu, & Chu, 2001; Um & Crompton, 1990; Woodside & Lysonski, 1989). Therefore, the current research will focus more on the latter indicator group, the travel-related behavioural factors, to explore how sport tourists' travel-related characteristics affect their DI change.

Travel-related Characteristics

The most investigated travel-related behavioural factors include travel purposes, length of stay, previous experience, as well as geographic origin (e.g., Boo et al., 2009; Kim & Prideaux, 2005). The *length of stay* is often related to tourist expenditure or tourism economic impact analysis (e.g., Alegre & Pou, 2006; Tierney, 1993). Studies examining its role in tourists' experience or DI formation and change are limited (e.g., Chen & Kerstetter, 1999; Vogt & Andereck, 2003). Further examinations are thus required. It is assumed that the longer sport tourists stay, the more likely they will spend some time at the destination engaging in tourist activities and form a clearer and more stable image towards the destination.

As for the *previous experience*, it has been treated as one of the most important variables by tourism researchers when examining tourists' satisfaction and behavioural intentions, especially for repeat tourists (e.g., Gitelson & Crompton, 1984; Pearce & Kang, 2009; Petrick, Morais, & Norman, 2001; Sonmez & Graefe, 1998). Moreover, personal past experience is a more important and reliable information source for travellers, compared with other external sources (Beerli & Martín, 2004; Mazursky, 1989). Therefore, the proposed study will further examine the influence of previous experience on DI change within the sport tourism setting.

Since DI change is a focus of this research, the effects of the aforementioned travel-related characteristics will be targeted at DI change, rather than any static forms of DI. This will fill the gap in the extant DI studies which have emphasised the importance of influential variables on DI but lacking the consideration of the dynamic nature of DI (Boo & Busser, 2005). In the conceptual model of this study, the first change of DI occurs after the personal visitation (the second stage of Figure 2.2), deriving from actual travel experiences; and the second change of DI occurs

over time after visitation (the third stage of Figure 2.2). Therefore, the travel-related characteristics will only be examined in the final two stages of Figure 2.2 (i.e., visit experience evaluation and future revisit decision-making). The results can help to reveal how the personal characteristics of sport tourists will influence their DI stability after actual visitation and over a longer time period.

2.4.1.2 Processing

The processing for initial DI formation and initial travel decision occurs before the personal visitation. As Figure 2.2 demonstrates, this is the process by which a sport event participant selects, organises and interprets incoming information in order to create awareness or form attitudes toward a potential destination. This initial attitude of sport tourists towards the event-host destination not only depends on specific stimuli (e.g., the sport event), but also on stimuli more generally related to the destination environment and the individual's own characteristics and circumstances (Beerli & Martín, 2004). Within this process, behavioural learning, and minimal cognitive evaluation prevail, creating an elementary psychological connection with the object such as "I know about this destination".

2.4.1.3 Outputs

As the lowest outputs box in Figure 2.2 shows, the outputs of this initial DI formation and initial travel decision-making stage comprise the initial attitude of sport tourists formed towards the host destination, presented by the tripartite DI construct. The initial psychological connection between sport tourists and the potential/selected host destination might exist because their initial DI formation has taken place mainly based upon external information sources and environmental

stimuli, or previous experiences. The behavioural outcome is the initial travel decision to attend the event.

Initial Destination Image

A range of DI studies has been reviewed in Section 2.3.2 and it has been decided to adopt a tripartite attitudinal perspective to examine the DI formation and change of sport tourists. Although a growing number of tourism scholars agree with the tripartite structure of DI (e.g., Moon et al., 2011; Prayag & Ryan, 2011a), most empirical studies utilise a cognitive-affective bi-dimensional model of DI (e.g., Baloglu & McCleary, 1999; Vogt & Andereck, 2003; Wang & Hsu, 2010). Conative DI was seldom mentioned in empirical DI studies (Shani & Wang, 2011), being replaced by the revisit intention variable instead. In this study, Conative DI was operationalised as the intention to return for a vacation and word-of-mouth (Agapito et al., 2010), an anticipated outcome of an enjoyable experience. Therefore, the current research will answer the last sub-research question under RQ1 by examining the tripartite initial DI held by sport tourists:

RQ1c: How does the initial DI held by sport tourists affect their travel decision to attend a sport event?

To validate the tripartite composition of DI, a hypothesis associated with RQ1c needs to be tested:

Hypothesis 1.4: The initial DI held by sport tourists is jointly formed by cognitive, affective, and conative evaluations of the event-host destination.

It is agreed that cognitive DI is mainly derived from external information sources or previous visit experience (Reid & Crompton, 1993). Because DI can exist only if there is at least a small amount of knowledge (Milman & Pizam, 1995), cognition is believed to be an antecedent of affect (Gartner, 1994; Ryan & Cave,

2005; Vogt & Andereck, 2003). Most researchers agree that the affective DI is formed as a function of the cognitive responses (Baloglu & Brinberg, 1997), and is harder to change via external information (Li et al., 2009). However, different opinions exist as to when the affective image forms. Some scholars suggest the ADI can only be developed from actual visiting experience, and the initial DI formed before actual visitation is assumed to be more cognitive. While others believe affect and cognition are always interrelated (e.g., Baloglu & Brinberg, 1997), therefore emerging simultaneously. The current research agrees with Russel and Snodgrass's (1987) statement that people could develop an affective appraisal of a place *before* entering the environment, *in* the environment, and *after* leaving the environment. Furthermore, the conative image (i.e., behavioural intention) should be influenced by the estimated, or perceived, or remembered affective evaluation of the place before entering, during and after leaving respectively, rather than by the objective properties (i.e., cognitive component) directly (Russel & Snodgrass, 1987).

However, at the current initial travel decision-making stage of sport tourists, the ADI of the first-time sport tourists is assumed to be indifferent because their primary travel purpose is to attend the event, not visit the place. Thus, the visit intention and initial visit decision may be mainly derived from cognitive DI. Based on the above discussion, the hypothesis associated with RQ1c is proposed as:

***Hypothesis 1.5:** The cognitive component has more impact on the initial DI than does the affective and conative component.*

Evidence to support this hypothesis will help with understanding the sequence of the three components of DI, reflecting the initial travel decision-making process of sport tourists at the pre-visit stage.

Psychological Connection with the Destination

As the PCM framework suggests, the proposed study will classify the progressive development of sport tourists' psychological connection with the event host destination. The involvement construct is adopted by the PCM to interpret the individual's four different psychological connection levels with leisure objects since it is recognised as an indicator of people's attitude strength and stability over time (Krosnick, 1988; Thomsen, Borgida, & Lavine, 1995). The internal processing in the PCM, which governs the evaluation of internal and external inputs, is thus varied based on involvement levels. When the level of involvement progresses/develops, the type of processing will increase the attitude of individuals from minimal to enhanced, and improve their behavioural engagement from simple to complex (Funk, 2008). Seeing that positive correlation between the in-depth psychological connection and its attitudinal and behavioural outcomes, the last hypothesis under RQ1 is proposed as:

***Hypothesis 1.6:** The initial DI held by sport tourists is positively related to their psychological connection levels with the destination.*

To test the above hypothesis, this study introduces a "place" object to leisure involvement studies. Most leisure and tourism research has focused on activity contexts (Gross & Brown, 2006; Lee, Scott, & Kim, 2008). Tourists' involvement with an actual travel destination, which is a special leisure product, has received minimal consideration. Considering the usefulness of involvement in explaining tourists' attitudes and decision-making process, destination involvement is believed to be able to capture the in-depth psychological state of tourists with their destinations (e.g., Josiam, Smeaton, & Clements, 1999). In addition, the utility of the involvement construct is capable of examining the different facets of involvement

within every level of the psychological connection continuum (Funk & James, 2001).

In conclusion, at the initial travel decision-making stage, sport tourists utilise various information agents to acquire the information they need to make the decision of travelling to participate in a sport event. Their intrinsic psychological forces (i.e., sport and travel motives) as well as personal characteristics will guide their evaluation of the external determinants (i.e., event and destination attributes), to produce general knowledge and initial image of a destination (e.g., “I know about this host destination”). The following section will focus on sport tourists’ visit experience evaluation and the corresponding attitudinal and behavioural changes.

2.4.2 Experience Evaluation & DI Change

Smith (1994) acknowledges the role of travel services in creating a tourism product experience, and describes how various inputs from the destination could produce an experiential output for tourists. This section will examine how the “input – processing - output” chain works in jointly creating an experience by sport tourists and the experience provider, the event and its host destination in the current sport tourism context. Thus, the second research question is advanced:

RQ2: How do external and internal factors contribute to sport tourists’ attitude change towards the host destination after actual visitation?

The initial DI held by sport tourists may start to develop or change on arrival at the destination, in response to the changing space and various service encounters.

2.4.2.1 Inputs

As the second input box in Figure 2.2 shows, the inputs to the actual visit experience evaluation not only include external factors (i.e., direct experiences with

event and destination) and the same personal and psychological factors as held in the pre-visit processing (i.e., personal travel characteristics and motivations), but also incorporate the attitudinal outcomes produced by the previous stage (i.e., initial DI). The interaction of external factors and internal forces at this stage would lead to sport tourists' evaluation of the actual experience with the destination, thereby developing or changing their initial attitudes towards the host destination. The modified-induced image derived from direct experience is believed to play an important role in arousing sport tourists' revisit interest.

External Factors

Event & Destination Experience

Sport tourists' consumption experience is composed of two facets- event participation experience and destination experience. However, it can be seen generally as a cognitive and evaluative response to the external stimuli provided by the event organisers and destination marketers (Morgan, 2009). Therefore, if the components of the sport tourist experience contributing to a positive response could be identified, it would be possible to manage these elements to create a desired experience for potential sport tourists and maximise their satisfaction. Sport tourists can obtain event experience from encounters with various event attributes (Shonk & Chelladurai, 2008), such as sporting performance of athletes or themselves (as participants), the event atmosphere, event organisation and management, associated activities and supportive services (e.g., parking, food and beverage). Event participation experiences may have a great influence on sport tourists' overall experience evaluation because participating in the sport event is the sport tourists' primary travel purpose. However, it does not account for the overall sport tourism

experience because sport tourists also have a chance to create personal experiences with the host destination.

As Higham and Hinch (2006) state, the further sports tourists travel, the more likely they are to spend some time at the destination engaging in tourist activities. Accordingly, this study will investigate the sport tourists' evaluation of their experiences with the destination. People can have a sport experience in a residential environment, but it is impossible to have a tourist experience in their home environment (Pigeassou, 2004). Thus, the destination experience counts for as much as the event experience, and is even more important for sport tourism due to its direct impact on sport tourists' revisit intention as leisure travellers.

The influence of actual visitation on DI has been recognised in extant tourism literature although the results vary (Huang & Hsu, 2009; Li & Vogelsong, 2006; Tasci, 2006). A majority of researchers have found a positive impact of actual visitation on DI (e.g., Chon, 1991; Konečnik & Ruzzier, 2006; Phelps, 1986; Tasci, 2006; Yilmaz et al., 2009); while some studies discovered mixed results – both positive and negative influences on DI from personal visitation (e.g., Ahmed, 1996; Hu & Ritchie, 1993) or a purely negative impact (Anastasopoulos, 1992); yet others did not find significant impact from visitation on a destination's image (e.g., Chen & Kerstetter, 1999). Due to the lack of consensus as to how the actual visit experience leads to DI change – enhancement or diminishment – the first sub-research question is proposed:

RQ2a: How does the actual visitation of sport tourists affect their DI change?

Internal Factors

Personal & Psychological Characteristics

As Andersson (2007) maintains, it is the active tourist who is the true maker of his/her own experience – they construct the experience based on their available resources, such as time, skills, own goods and services. Similarly, Mossberg (2007) argues that a tourist organisation is not able to give or sell an experience to the tourist, because the tourist is a co-builder of this experience environment (experiencescape). Consequently, the personal and psychological factors that have influenced the initial travelling participation decision of sport tourists will continue to play a role in the sport tourists' actual visit experiences and the subsequent DI change. To clarify the impact of personal characteristics of sport tourists on their DI change occurring after travelling to the destination, the second sub-research question is put forward:

RQ2b: How do the travel-related characteristics of sport tourists affect their DI change after actual visitation?

By exploring relevant literature and assessing the personal characteristics of sport tourists that have been discussed in Section 2.4.1.1, three travel-related features: previous experience with the destination, length of stay, and sightseeing participation, were assumed to exert influence on DI change caused by actual travel/visit experience. As Aho (2001) asserted, individuals vary a lot in their personal ability and resources for obtaining and enjoying experiences. These resources include time (e.g., length of stay), money, knowledge (e.g., familiarity/past travel experiences), and skills (e.g., information used). Therefore, these personal factors are assumed to exert influence on the attitude change that is subsequent to experience evaluation.

Previous visitation is recognised as an important factor in the process of tourists' evaluation of a destination (Fuchs & Reichel, 2011; Konečnik & Ruzzier, 2006). A positive relationship between the frequency of past visits to the destination and the revisit intention has been widely recognised (Campo-Martínez, Garau-Vadell, & Martínez-Ruiz, 2010), but few studies have included this variable as a predictor of DI stability. If a sport tourist has visited the host destination before or frequently, he/she might have formed a relatively stable DI which is resistant to change, leading to the first hypothesis associated with RQ2b:

***Hypothesis 2.1:** Sport tourists who have previously visited the destination prior to the event will incur less DI change after this participatory trip.*

Additionally, length of stay, as a potential predictor of destination familiarity, is also assumed to influence the destination perceptions or evaluations (e.g., Fakeye & Crompton, 1991). The longer sport tourists stay, the more likely they are to become aware of local attractions, facilities and services at the event-host destination, and the more experiences they are likely to have with the destination, thereby greatly changing their prior DI or previous perceptions (Gokovali, Bahar, & Kozak, 2007; Vogt & Andereck, 2003). Thus, the second hypothesis associated with RQ2b is:

***Hypothesis 2.2:** Sport tourists who stay longer at the destination will incur greater DI change.*

Lastly, once sport tourists arrive they are more likely to be involved in sightseeing, even though they may have had no prior sightseeing plans, due to the attractiveness of the destination they personally experienced during their stay. This direct contact/experience is much more powerful than the indirect information obtained from external sources before visiting (Fuchs & Reichel, 2011). Therefore,

the actual sightseeing activities in which sport tourists were involved could contribute significantly to their DI modification/change, which leads to the following hypothesis:

***Hypothesis 2.3:** Sport tourists who participate in sightseeing activities during their stay will incur greater DI change.*

2.4.2.2 Processing

A prominent cognitive-affective form of processing emerges when sport tourists start evaluating their actual visit experience to the destination, as shown in the second level of Figure 2.2. Bearing an initial weak attitude or ambiguous image of the destination, sport tourists visit the destination in person for participating in the sport event. The mental processing at this stage may introduce a strong emotional element to the attitudes of sport tourists, through their evaluation of the host destination in terms of personal benefit and need fulfilment. The evaluation of the destination experiences is accomplished by sport tourists using intrinsic forces, such as motivations and expectations to assess both the event and the destination offerings constituting their overall experience. The experience evaluation provides the foundation for sport tourists to develop or modify their initial DI.

2.4.2.3 Outputs

The outputs of processing at the stage of visit experience evaluation are demonstrated by experience satisfaction, modified-induced DI, developed psychological connection to the destination, as well as repeated behaviours (i.e., actual revisitation), which can be found in the middle output box in Figure 2.2. It is agreed that visitors' actual experiences are the antecedents to their assessment of the destination's ability in meeting their expectations and needs, or, in delivering a good or bad trip experience (Martin, 2007; Quan & Wang, 2004). Therefore, exposure to

the destination serves as a catalyst for affecting attitude and behaviour of visitors (Martin, 2007). As for the current context, the actual experience of sport tourists with an event-host destination may affect their original DI and incur revisit decision-making.

Experience Satisfaction

Consumer behaviour studies highlight consumption satisfaction, a positive affective reaction to an outcome of a prior experience, as the core of the post-consumption period (Westbrook & Oliver, 1991) because satisfaction informs consumers' repeat purchases. Homburg, Koschate, and Hoyer (2005) conceptualised tourist satisfaction as a cumulative, global evaluation based on experience with a destination over time. Pizam, Neumann and Reichel (1978) defined tourist satisfaction as a result of comparing tourists' experiences at the destination and their original expectations of the destination. In general, recreation satisfaction has been conceptualised as a cognitive appraisal of the degree to which a leisure product or service performs relative to a subjective standard (Petrick et al., 2001).

Nevertheless, this study aims to produce a more comprehensive understanding of destination experience evaluation by combining the cognitive (e.g., "the historical sites really attract me"), affective (e.g., "I love the relaxing atmosphere") and conative (e.g., "I would like to go back here") perspectives of sport tourists. Despite capturing a more significant amount of variations than *overall satisfaction* (Chi & Qu, 2008; Cole & Scott, 2004), destination attributes assessment is considered to be lopsided in demonstrating sport tourists' complete evaluation of the host destination because it is cognition-based. In contrast, the holistic evaluation implied by overall satisfaction, which is acknowledged to be broader than the sum of

the attribute assessments, and more inclined to affective aspects (e.g., Bigné et al. 2001; Chen & Tsai, 2007; Jang & Feng, 2007), is adopted by this study.

Bigné et al. (2001) argue that initial DI exercises a positive influence on the perceived quality and experience satisfaction of tourists, because it moulds the expectation of tourists before they visit. Subsequently, the perceived quality and experience satisfaction of tourists, which depend on the comparison between actual performance evaluation and expectancy, may result in modifying the original image if disconfirmation occurs (Chon, 1991; Echtner & Ritchie, 1991; Fakeye & Crompton, 1991; Ross, 1993). According to Oliver (1980), if the perceived performance is better than expected, a positive disconfirmation occurs and leads to consumer satisfaction and attitude improvement. Conversely, if the perceived performance is poorer than the expectation, a negative disconfirmation occurs and leads to dissatisfaction and attitude decline. From the above discussions on the relationship between pre-visit DI and experience evaluation, as well as the relationship between experience satisfaction and post-visit DI, a hypothesis associated with RQ2a can be advanced:

***Hypothesis 2.4:** The experience satisfaction of sport tourists with the host destination will mediate the DI change before and after visitation.*

Modified-induced Destination Image

The modified-induced image, also called a “complex image” (Fakeye & Crompton, 1991), is produced by personal experience with the destination (Jenkins, 1999). It is complex because it allows a more differentiated outlook and authentic comprehension of the destination rather than simple stereotyping, especially if the visitor spends enough time to be “exposed to the destination’s varying dimensions through developing contacts and establishing relationships” (Fakeye & Crompton,

1991, p.11). Many scholars have agreed that actual visitation does create an image more realistic, complex, and differentiated than the original one existing prior to visitation (Chon, 1991; Gartner, 1986; Gunn, 1972; Hsu et al., 2004; Li & Vogelsong, 2006; Pearce, 1982). Given that most empirical tourism studies found that personal visitation to a destination could improve travellers' perceptions/ images of this place (Tasci, 2006), as well as the consensus found among sport tourism researchers that onsite experience enable strengthening of sport participants' destination attitudes (e.g., Morgan, 2007; Papadimitriou & Gibson, 2008), another hypothesis associated with **RQ2a** can be proposed:

***Hypothesis 2.5:** The DI held by sport tourists will be enhanced by their actual visitation.*

To further identify whether the three components of cognition, affect and conation will undergo the same enhancement as the overall DI after personal visitation, the following three sub-hypotheses are established:

***Hypothesis 2.5a:** The cognitive DI held by sport tourists will be enhanced by their actual visitation.*

***Hypothesis 2.5b:** The affective DI held by sport tourists will be enhanced by their actual visitation.*

***Hypothesis 2.5c:** The conative DI held by sport tourists will be enhanced by their actual visitation.*

Psychological Connection with Destination

As assumed in this section, if sport tourists obtained positive experiences from the host destination, a positive affect could be triggered (e.g., “this event host destination is attractive for me”; “I would like to visit this destination again, not just for sports”). This desire to experience more or revisit occurs because the individual believes the destination could provide the opportunity to meet their needs and wants.

At this stage, the psychological connection level may have been enhanced as the previous weak DI has been developed or changed by the actual experience and a clearer, more completed DI has begun to take shape. On the contrary, if the sport tourists received very negative experiences from the destination and thus their original DI started to decline, then their psychological connections may be decreased. In brief, the movement of psychological connection levels after actual visitation is positively related to the DI change of sport tourists.

On the other hand, as discussed in section 2.4.1.3, the psychological connection has been defined as an attitudinal outcome deeper than specific attitudes but deriving from the attitude. However, once formed, the psychological connection, in turn, exerts a certain degree of influence on the stability of attitudes. In other words, the psychological connection can be used to predict or estimate the attitude change. For example, if a sport tourist still holds a weak psychological connection with the destination after visiting, then it is reasonable to speculate the enhancement in their destination attitudes would be very limited. Due to the dearth of studies on tourists' psychological connections with a travel destination, empirical investigations are required to discover the interaction between psychological connections and attitudes, as proposed above. Therefore, the last sub-research question under RQ2 and its associated two hypotheses could be established as:

RQ2c: How does the psychological connection of sport tourists with the destination interact with their DI change after actual visitation?

Hypothesis 2.6: The change of sport tourists' psychological connections with the destination is positively related to their DI enhancement.

Hypothesis 2.7: The sport tourists holding a weak psychological connection with the destination after actual visitation must incur less DI enhancement.

In conclusion, at the experience evaluation stage, sport tourists utilised personal experiences of the event and the host destination to enrich or modify their original vague or distorted DI. Based on the experience evaluation and the completion of DI modification, a sport tourist's in-depth psychological connection with the destination may be developed / changed along the continuum. The individuals who had a positive experience and enhanced their DI could produce a special interest in the destination (e.g., "I like this host destination." / "I would like to return to this destination for a leisure vacation."). If the modified-induced DI is resistant to change after the sport tourists finish their trip and over time, it might lead individuals to develop an attachment or an allegiance to the destination under the interaction between personal values and self-concept (Funk & James, 2006). Thus the next section will be focused on the stability of sport tourists' post-visit DI over time.

2.4.3 DI Change over Time & Future Revisit Decisions

2.4.3.1 Inputs

As the highest input box in Figure 2.2 shows, the inputs at this post-visit stage represent the outcomes of previous stage which have been internalised (e.g., evaluations), and new external factors. The previous stage outcomes are experience evaluation and modified-induced DI. External factors are primarily time, new information searched from various socialising agents and new personal experience of the destination. The interaction of external and internal factors at this stage would

create an enduring meaningful psychological connection or even a commitment to the host destination. All these factors will influence the continuing change of the post-visit DI (i.e., modified-induced DI), and will finally affect sport tourists' future revisit decisions. Thus, the third research question is stated as:

RQ3: How do external and internal factors influence the future revisit decision of sport tourists?

External Factors

The external inputting factor to the continuing change of post-visit DI is time and new personal experiences with the destination obtained after returning from the event participation. Gallarza et al. (2002) point out that image change depends essentially on two variables: time and space. The influence of the space variable (i.e., circumstance and geographic distance) was normally studied in the image formation process, or along with the influence of time. When sport tourists finished their participatory trip and returned to their normal residence, the change of environment may have caused a re-evaluation of the destination they had just visited. Or, if some of them really revisited the destination after the event because of various purposes, the new visit experiences will serve as a new foundation for the continuing change of their DI. Actually, no image can be studied without a reference to the space variable (Gallarza et al., 2002). Therefore, the time variable becomes the key consideration in the current study on sport tourists' post-visit DI change.

Time

The influence of time on image change is relatively logical as DI formation is a process (Gunn, 1972). Three types of studies can be observed from the literature focusing on the influence of time on image change (Gallarza et al., 2002): those studying the influence of length of stay on DI (e.g., Fakeye & Crompton, 1991);

works that repeat previous studies after a period of time, on the same destination but with different samples (e.g., Gartner & Hunt, 1987; Tasci & Holecek, 2007); and those investigating the effect of previous visitation on image formation/change (e.g., Baloglu, 2001a). However, all these studies fail to use the optimal approach of a longitudinal panel study to assess the influence of time on image change held by the same respondents (Gallarza et al., 2002). In particular, there is a paucity of research examining the change of tourist post-visit DI. Even fewer studies have investigated on the stability of the DI structure when the DI undergoes changes. As Mazursky and Geva (1989) suggested, measuring customers' behaviour intention in a controlled delay after product trial or consumption is extremely important given that in many contexts, the purchase/repurchase decision is formed only some time after trial/consumption. Hence, the current research will monitor the same individuals' post-visit DI change over a longer time period through a longitudinal study approach. **RQ3a** thus asks:

RQ3a: How does the post-visit DI of sport tourists change over time?

In the current attitude change literature, only a limited number of studies can be found which consider the change in the affective component of attitude over time. For example, Holmes (1970) discovered that the predominant change in affect over time was a decrease in intensity, and this affective intensity decrease was caused by forgetting rather than the reverse. However, this study did not make further investigation into the affect decay per se because of its concern for selective recall of personal experience. Generally, the natural decay of human memory should be taken into account by researchers when discussing affect depression. This time dependent memory decay has been verified in research fields such as industrial medicine

(Jenkins, Earle-Richardson, Slingerland, & May, 2002) and brand association (Quester & Farrelly, 1998). However, the natural decay of memory has not attracted the attention it deserves in tracking studies of DI change. The current study makes an assumption on the direction of DI change over time based on this memory decay theory and leads to the first hypothesis under RQ3a:

Hypothesis 3.1: *The DI held by sport tourists after attending the event will decay over time.*

Testing this hypothesis will contribute to advancing knowledge about the role of memory decay in sport tourists' post-visit DI change over time. To further investigating the changes in each DI component as time goes by, three sub-hypotheses are to be tested:

Hypothesis 3.1a: *The cognitive DI held by sport tourists after attending the event will decay over time.*

Hypothesis 3.1b: *The affective DI held by sport tourists after attending the event will decay over time.*

Hypothesis 3.1c: *The conative DI held by sport tourists after attending the event will decay over time.*

Actual Revisitation Experience

The actual revisit(s) to the destination after the event for different purposes (rather than sports participation) provide sport tourists with the most direct means of receiving new information and renewed experience. New personal experiences have been regarded as the strongest stimuli or inducements of strengthening or modifying the post-visit image (e.g., Andreu et al., 2001; Tasci & Holecek, 2007). Therefore, as a result of revisitation and acquiring further experience with the destination, revisitors are considered less likely to decrease their existing DI in contrast to the non-revisitors. As such, it is hypothesised that:

***Hypothesis 3.2:** The sport tourists who have revisited the destination after attending the event will incur less DI decay over time.*

Internal Factors

As Figure 2.2 indicates, compared with external factors, more internal factors will contribute to the processing at this post-visitation stage. The personal and psychological factors discussed in the previous stage, such as the travel-related features of sport tourists, will continue to influence the post-visit DI change and future revisit decision-making. However, the internalised/memorised experience satisfaction, modified-induced DI generated from the actual visitation and the developed psychological connection become new internal influential factors. Accordingly, the second sub-research question will be focused on identifying how these personal inputs of sport tourists influence their DI decay over time:

RQ3b: How do the travel-related characteristics of sport tourists affect their post-visit DI change over time?

Among various personal characteristics affecting DI formation and change (see Beerli & Martín, 2004), previous experiences/familiarity, geographic origin and satisfaction level are believed to be the most influential on DI stability over a long period of time. For instance, it is understandable that visitors who are more familiar with the destination (e.g., repeated and domestic travellers) tend to be more reluctant to change their image than those unfamiliar with the destination (e.g., first-timers and international/long-haul travellers). Moreover, the tourists with higher satisfaction levels tend to hold more stable DI over time than those with lower satisfaction levels. Three hypotheses are thus established:

***Hypothesis 3.3:** The sport tourists who had previously visited the destination prior to the event will incur less DI decay over time.*

***Hypothesis 3.4:** Domestic sport tourists will incur less DI decay over time than the international sport tourists.*

***Hypothesis 3.5:** The sport tourists satisfied with the destination will incur less DI decay over time than the unsatisfied sport tourists.*

2.4.3.2 Processing

Within this phase of processing, the cognitive-affective elevation might become more complex by creating a meaningful connection between sport tourists and the destination (Funk & James, 2006). The modified-induced DI held by sport tourists begin to strengthen, producing consistency between affective DI and cognitive DI. Further, the attitude evaluation might function in a manner that aligns the object with important personal values and self-concept. Behavioural engagement becomes standard and repetitive, creating opportunities for self-expression (Funk & James, 2006).

2.4.3.3 Outputs

As the highest outputs box in Figure 2.2 shows, the outputs of this stage are not only manifested by the same attitudinal and behaviour intentional aspects as previous stage outputs, but also include actual repeated behaviours. The actual revisit decision is mainly dependent on previous experience or impression, which has been transformed into stored memory. According to Moutinho (1987), memory plays a major role in consumer choice, especially for repeat consumers. On the other hand, as Niininen, Szivas and Riley (2004) conclude, when actual behaviour is a variable in an empirical study, it is normally combined with an antecedent attitude

such as a psychological attachment. Thus, the intrinsic likability/psychological connection level of sport tourists with destination becomes imperative to reveal the in-depth psychological reason for repeat visitation as overt behaviour (George & George, 2004). Tourists may revisit a destination for superficial or external reasons, such as inertia, visiting relatives/friends, or for business. However, only a stable, strong psychological connection between the individual tourist and the destination can ensure retention of a group of loyal revisitors with constant DI. This leads to the last research question and its associated hypothesis:

RQ3c: How does the psychological connection of sport tourists with the destination affect their post-visit DI change over time?

Hypothesis 3.6: The sport tourists with a stronger psychological connection to the destination will incur less DI decay over time.

2.5 Summary

To summarise, this study integrated the three-stage decision-making process model with the PCM framework and combined DI formation and change literature, thereby developing an integrative conceptual model for sport tourists' destination attitude formation and change. The integrative model facilitates understanding of the sport tourists' whole destination attitude formation and change process occurring along three decision-making stages, as well as the underlying progressive psychological connections. Two main effects from the actual visit experience and time were highlighted. In addition, other external and internal influential factors functioning in sport tourists' attitude formation and change are also examined. In conclusion, all the research problems have been accommodated in the conceptual model. Required research methods to answer these research questions and test the

associated hypotheses will be introduced in the next chapter of methodology. Table 2.1 summarises all the research questions and hypotheses addressed by the proposed study.

Table 2.1

Research Questions & Proposed Hypotheses

	RESEARCH QUESTIONS & HYPOTHESES
Initial DI Formation & Initial Travel Decision-making	RQ1: How do external and internal factors influence the initial travel decision-making of sport tourists to attend a specific sport event?
	RQ1a: What attributes of the event and host destination will contribute to the initial DI formation of sport tourists?
	RQ1b: How do the prior motivations of sport tourists affect their initial DI formation?
	RQ1c: How does the initial DI held by sport tourists affect their travel decision to attend a sport event?
	<i>Hypothesis 1.1: Event attributes will positively contribute to the initial DI formation of sport tourists.</i>
	<i>Hypothesis 1.2: The prior sport involvement of sport tourists will positively influence their initial DI.</i>
	<i>Hypothesis 1.3: The strength of travel motivation will positively influence sport tourists' initial DI.</i>
	<i>Hypothesis 1.4: The initial DI held by sport tourists is jointly formed by cognitive, affective, and conative evaluations of the event-host destination.</i>
	<i>Hypothesis 1.5: The cognitive component has more impact on the initial DI than does the affective and conative component.</i>
<i>Hypothesis 1.6: The initial DI held by sport tourists is positively related to their psychological connection levels with the destination.</i>	
Experience Evaluation & DI Change	RQ2: How do external and internal factors contribute to sport tourists' attitude change towards the host destination after actual visitation?
	RQ2a: How does the actual visitation of sport tourists affect their DI change?
	RQ2b: How do the travel-related characteristics of sport tourists affect their DI change after actual visitation?
	RQ2c: How does the psychological connection of sport tourists with the destination interact with their DI change after actual visitation?
	<i>Hypothesis 2.1: The sport tourists who have previously visited the destination prior to the event will incur less DI change after this participatory trip.</i>
	<i>Hypothesis 2.2: The sport tourists who stay longer at the destination will incur greater DI change.</i>
	<i>Hypothesis 2.3: The sport tourists who participate in sightseeing activities during their stay will incur greater DI change.</i>

	<i>Hypothesis 2.4: The experience satisfaction of sport tourists with the host destination will mediate the DI change before and after visitation.</i>
	<i>Hypothesis 2.5: The DI held by sport tourists will be enhanced by their actual visitation.</i>
	<i>Hypothesis 2.5a: The cognitive DI held by sport tourists will be enhanced by their actual visitation.</i>
	<i>Hypothesis 2.5b: The affective DI held by sport tourists will be enhanced by their actual visitation.</i>
	<i>Hypothesis 2.5c: The conative DI held by sport tourists will be enhanced by their actual visitation.</i>
	<i>Hypothesis 2.6: The change of sport tourists' psychological connections with the destination is positively related to their DI change.</i>
	<i>Hypothesis 2.7: The sport tourists holding a weak psychological connection with the destination after actual visitation must incur less DI enhancement.</i>
Future Decision-Making	RQ3: How do external and internal factors influence the future revisit decision-making of sport tourists?
	RQ3a: How does the post-visit DI of sport tourists change over time?
	RQ3b: How do the travel-related characteristics of sport tourists affect their post-visit DI change over time?
	RQ3c: How does the psychological connection of sport tourists with the destination affect their post-visit DI change over time?
	<i>Hypothesis 3.1: The DI held by sport tourists after attending the event will decay over time.</i>
	<i>Hypothesis 3.1a: The cognitive DI held by sport tourists after attending the event will decay over time.</i>
	<i>Hypothesis 3.1b: The affective DI held by sport tourists after attending the event will decay over time.</i>
	<i>Hypothesis 3.1c: The conative DI held by sport tourists after attending the event will decay over time.</i>
	<i>Hypothesis 3.2: The sport tourists who have revisited the destination after attending the event will incur less DI decay over time.</i>
	<i>Hypothesis 3.3: The sport tourists who had previously visited the destination prior to the event will incur less DI decay over time.</i>
	<i>Hypothesis 3.4: Domestic sport tourists will incur less DI decay over time than the international sport tourists.</i>
	<i>Hypothesis 3.5: The sport tourists satisfied with the destination will incur less DI decay over time than the unsatisfied sport tourists.</i>
	<i>Hypothesis 3.6: The sport tourists with a stronger psychological connection to the destination will incur less DI decay over time.</i>

CHAPTER 3 METHODOLOGY

After identifying the research questions and determining the information requirements in Chapter 2, an appropriate research design should be developed for a given set of research objectives (Hair, Bush, & Ortinau, 2006a). Chapter 2 reviewed the relevant literature on the sport tourist decision-making process, attitude formation and change, as well as the theoretical framework. A core research problem was identified through developing the conceptual model for this study: *How does the destination attitude of sport tourists initially form, progressively develop and/or change throughout their travel decision-making processes from pre-visit stage to post-visit stage?* The answer to this research question can facilitate understanding of why sport tourists decide to participate in a sport event away from home, as well as why they decide to come back to the event-host destination for a leisure vacation, rather than for sports.

To assist in examining the attitude formation and change process of sport tourists towards the event-host destination, a process-tracing technique, which is commonly used in consumer decision-making studies, was adopted. This process-tracing method can provide insights into individuals' attentional processes during judgement or decision tasks; which refers to the information on which cues are attended to and when and whether consumers' attention to cues shifts as the decision task is learned (Abelson & Levi, 1985). As consumers acquire more knowledge or experience, their decision-making basis and process might change. It is for this reason that a longitudinal study approach is required to monitor sport tourists' destination attitude formation and change along different decision-making stages.

To address all the research questions and test the associated hypotheses (*see* Table 2.1 in Chapter 2), multiple studies using a longitudinal approach were

designed. This chapter elaborates on the quantitative research method utilised to collect and analyse the required data, thereby justifying a quantitative approach as appropriate and effective for the current research. The overall research incorporated two longitudinal panel studies: a pre- and post-event study and a post-event and follow-up study. Each study covers two waves of data collection. Due to the practical difficulties in collecting longitudinal data, the two studies were not conducted in chronological order; the pre-event study was only realised in the data-collection round of 2011. However, the research design and the following results will be reported in the order of the decision-making stages as described in the conceptual framework. Four topics dominate the presentation of the two studies: identifying respondents/participants, developing measurement instruments, data collection procedures, and analytical techniques. The chapter starts with an overview of the research design, and then illuminates concrete research methods and analysis techniques for each data collection procedure.

3.1 Research Design

The research design is a constructed plan and strategy developed to seek, explore and discover answers to research questions (Taylor, 2005). Pragmatists contend it is the research question that is of the greatest importance in driving the research design, not a method nor the paradigm (Onwuegbuzie & Leech, 2005; Tashakkori & Teddlie, 2003). The present study examines how sport tourists' attitudes form and change towards a host destination, underpinning their decision-making process, as well as how external and internal factors influence this formation and change process. Accordingly, a longitudinal study approach with a case study strategy and quantitative research methods were adopted for three reasons: firstly,

longitudinal is recognised as the ideal way to study social changes and the combined effects of social change and aging (Veal, 2006). Secondly, the case study strategy is able to facilitate understanding of a phenomenon through studying one or more single examples (Gerring, 2007). Thirdly, a quantitative methodology is most often utilised when the objectives of the research are explanation, description, or evaluation (Schutt, 2006).

3.1.1 Longitudinal Study Approach

To address the three research questions investigating sport tourists' destination attitude formation and change occurring throughout their travel decision-making processes, a longitudinal research design was preferred. This was because of its advantage in providing information that describes processes over time (Babbie, 2010) as well as allowing for the measurement of any changes and possibly an explanation for these changes (Menard, 2008). In a longitudinal study, data are collected at two or more points in time, permitting observations of the same phenomenon/sample periodically over an extended period (Babbie, 2010; Schutt, 2006). It is for this reason that a longitudinal study is believed to be the correct way of assessing the influence of time on DI formation and change (Gallarza et al., 2002). Despite the obvious advantage of a longitudinal study in providing information describing processes over time, few leisure or tourism studies have used this approach because of the heavy cost in time, money and researchers' energy (Ellis, 1999; Gallarza et al., 2002; Ritchie, 2004; Xiao & Smith, 2006). According to Babbie (2010), longitudinal studies can be more difficult for quantitative studies such as large-scale surveys. Therefore, the longitudinal approach adopted by this study on sport tourists' attitude formation and change is expected to contribute valuable findings to tourism and leisure research.

It is acknowledged that there are three major types of longitudinal design (Babbie, 2010; Menard, 2008; Schutt, 2006): repeated cross-sectional design (i.e., trend studies); fixed-sample panel design (i.e., panel studies); and event-based design (i.e., cohort studies). Panel studies can provide the most comprehensive information on changes over time since they allow the identification of changes on the individual or case level (Menard, 2008; Schutt, 2006). The present study, which aims to monitor the individual sport tourist's destination attitude formation and change, adopts the fixed-sample panel design, in which data are collected from the same set of individuals (i.e., the panel) at two or more points in time. The process for conducting a fixed-sample panel study is described as follows by Schutt (2006): (1) draw a sample/panel from a population at Time 1, and collect the data from this sample; (2) as time passes, some panel members become unavailable for the follow-up; (3) at Time 2, data are collected from the same people as at Time 1 – except for those people who dropped out or became unavailable.

From the above procedures, a special problem needs to be noted - panel attrition. Panel attrition often occurs when some of the respondents studied in the first wave of the survey may not participate in later waves, whether by choice or circumstance (Babbie, 2010; Schutt, 2006). The danger is that the participants who drop out of the study maybe atypical, thereby distorting the results of the study (Babbie, 2010). Thus, it is necessary to examine the characteristics of dropouts and ensure the representativeness of the sustained sample. Fortunately, the present research had a large enough potential population at the beginning to allow for the inevitable attrition to the sample over time.

However, thoughtful measures and techniques are still required to ensure that a qualified panel is established. For instance, designing a respondent-friendly

questionnaire is very important to diminish nonresponse errors (Van Selm & Jankowski, 2006). This longitudinal study distributed measurements into several survey waves in order to maintain an appropriate length for each questionnaire. Additionally, vouchers or lotteries with small prizes but a higher chance of winning were used as incentives for panel studies, to sustain the commitment of participants and increase the response rate (Cook & Ware, 1983; Deutskens, de Ruyter, Wetzels, & Oosterveld, 2004). Finally, by confining the longitudinal study samples to a specific sport event context, this research utilised a case study approach to explore possible influential factors of sport tourists' DI formation and change. This strategy is more advantageous than using a more general sample where many extraneous variables may be encountered (Chang & Gibson, 2011).

3.1.2 Case Study Strategy

The case study has been recognised by more and more social science researchers as an adequate research strategy, overcoming the long-existing stereotype of this method as being non-representative (Kompier, Cooper, & Geurts, 2000; Xiao & Smith, 2006). As Yin (1994) indicates, the case study is most appropriate when *how* and *why* questions are posed, when investigators have little control over events, and when the focus is on a contemporary phenomenon within a real-life context. Accordingly, the current study on sport tourists' attitude formation and change fits into this study practice: Firstly, sport tourism is a contemporary phenomenon. Secondly, *how* and *why* questions are posed on sport tourists' attitude formation and change, as well as on relevant decision-making. Thirdly, the sport events and their host destinations are a "real-life context", in which the researcher is an observer with restricted "control over events". In addition, as Hartley (1994, p.212) notes, the case study allows for "processual, contextual and generally

longitudinal analysis of the various actions and meanings”, which is particularly useful for the current longitudinal study on sport tourists’ attitude formation and change process.

The most common criticism concerning the case study approach is its limitation in generalising the findings – that is, the question of external validity (Leonard-Barton, 1990; Yin, 1994). However, Yin (1994) defends the approach, saying that these critics are implicitly contrasting the situation with survey research, in which a properly chosen sample readily generalises to a larger universe. Yin (1994, p.36) believes the “analogy to samples and universes is incorrect when dealing with case studies”, as case study relies on *analytical generalisation*, not the *statistical generalisation* on which survey research depends. In other words, the findings of a case study should be generalisable to theoretical propositions and not to populations (Kompier et al., 2000). With analytical generalisation, the investigator should strive to generalise findings to some broader theory, analogous to the way a scientist generalises from experimental results to theory, rather than attempting to select representative experiments (Yin, 1994).

However, the generalised theory must be tested through replication of the findings in a second or in multiple cases (Sorte, 1972). Once such replication has been made, the results might be applicable to a larger number of similar cases. This replication logic underpins the multiple-case study approach, which is believed to augment external validity, help guard against observer biases and improve the generalisability of the results. Therefore, the primary step of case studies is to develop a rich theoretical framework that can serve as the vehicle for generalising to new cases (Yin, 1994). Given this review, the current study fits in well with rationales of the case study approach from two perspectives: first, the objective of

this study is to produce a set of theoretical propositions relevant to sport tourists' attitude formation and change towards the host destination on a generic level, regardless of different event types or cultural settings. Second, this study has developed a comprehensive theoretical framework rich in both process and hierarchical structure. Although the multiple-case study approach is normally preferred, given the practical difficulties in implementing, such as over-consumption of resources (Maton & Salem, 1995), this research selected only one specific sport event as the study case to carry out longitudinal investigation. The work of replicating studies with other types of sport events/cases and verifying the findings of this research will be undertaken in future projects.

Selecting a critical case to test a well-formulated theory is the most crucial element of a case study design (Riege & Perry, 2000). The ING Miami Marathon and Half Marathon was chosen as the study case for this PhD research project, as it meets all conditions for testing the initial set of theoretical propositions. In doing so, it will provide compelling support or new evidence to revise them (Yin, 1994). The ING Miami Marathon and Half Marathon is an annual marathon event with a nine-year history hosted by the cities of Miami and Miami Beach, Florida, as well as the county of Miami-Dade (Wikipedia, 2011). It covers three races in the last weekend of January: a Tropical 5K on Saturday and a full marathon (42.195 km) and a half marathon (21.075 km) starting concurrently on Sunday. US Road Sports & Entertainment Group launched this event in 2003 with the goal of bringing a world-class marathon to South Florida, promoting Miami County and raising funds for various local, national and international charities. It has been one of the fastest-growing annual marathons, attracting worldwide participants: from 5,000 registered runners in 2003 to 21,116 registered runners in 2011, over 65% of whom were non-

local participants. This growth demonstrates the event's success and its significance for the host destination.

The representativeness (represented by its size, reputation, and significance for local tourism) and accessibility for conducting a longitudinal study of this sport event defined its suitability. Accordingly, the destination studied in this research was the hosting location of the ING Miami marathon event, Miami (also called Greater Miami or Miami Dade County). Miami has become a world-famous health resort and Mecca for tourists since the early 20th century due to its unsurpassed semi-tropical climate and wonderful resources, both natural and man-made (George, 1981). The promotion of sport tourism is believed to rejuvenate the mature tourism industry of Miami as it is able to create new reasons and exciting offerings to entice special visitors to return, which is a vital growth strategy for a tourism destination that has reached the maturity stage (Kozak & Martin, 2012).

In summary, a case study strategy was employed within a longitudinal research design. According to Leonard-Barton (1990), the longitudinal approach can increase the internal validity of a study by enabling researchers to track the cause and effect. On the other hand, the case study strategy can ensure external validity through analytical generalisation. After designing the research approach and selecting an appropriate strategy, the specific research methods are justified.

3.1.3 Quantitative Research Methods

Despite the long-lasting fervent debate over the superiority of quantitative versus qualitative research among social science researchers, as well as the recent popularity and strong advocacy for a mixture of quantitative and qualitative research approaches (Rudd & Johnson, 2010); pragmatism is exerting a tremendous influence on contemporary social scholars. More and more researchers contend that

methodological choices should be directed by research questions rather than world views (e.g., Creswell, 2009; Johnson & Onwuegbuzie, 2004; Rudd & Johnson, 2010; Taylor, 2005). In this study, the research questions were specific and well defined as *how* the sport tourists' destination attitudes form and change, and *how* the dynamic attitude influences their decision-making related to visiting and/or revisiting the destination. They are descriptive and causal-natured research problems; therefore, quantitative methodology is believed to be appropriate (Hair, Lukas, Miller, Bush, & Ortinau, 2008). Quantitative research can be termed as variable-oriented research, focusing on variables that represent particular aspects of the units studied and then examining the relations among these variables across sets of cases. In other words, quantitative methods can test and validate theories about how phenomena occur (Johnson & Onwuegbuzie, 2004), as well as generalise findings to a large group (Schutt, 2006).

Creswell (2009) suggests that there are two strategies of inquiry in quantitative research: surveys and experiments. The present study will collect primary data through a series of self-administered questionnaires because it has been deemed to be appropriate for examining the general facts and trends in the survey sample's attitudes and behaviours (Black, 1999). Furthermore, an online survey has been chosen as the main tool and platform to collect the primary data for this study. The most important reason is the online survey is particularly attractive "when the population under study is distributed across a large geographic region" (Van Selm & Jankowski, 2006, p.438). The potential respondents of this research are all marathon participants registered online, coming from all over the world. An electronic survey is the most efficient means of accessing each participant under the requirement of ensuring respondents' anonymity. Furthermore, market researchers

have long recognised that the most outstanding advantage of internet-based surveys is lower research costs and faster distribution and response (Babbie, 2010; Deutskens et al., 2004; Ilieva, Baron, & Healey, 2002). Adopting an online survey method could effectively offset the high costs of a longitudinal study approach for the current project. However, non-response error is the most noteworthy problem when conducting online surveys. The most effective measures to maximise response rates and response quality are follow-up mailings, proper incentives, and optimum presentation of the questionnaire (Deutskens et al., 2004; Dillman, 2007). These were all taken into account when designing the online questionnaires for this study.

3.1.4 Instrument Development

The self-administered online questionnaires were developed through a comprehensive review of relevant literature, as well as through group discussions with experts in sport, tourism, and hospitality marketing. Three types of attitudinal scaling formats (Hair et al., 2008) were utilised in the longitudinal surveys: Likert-scale, semantic differential scale and behavioural intention scale. The Likert scale was adopted as it is the most widely-used attitude scale type in social sciences, which is “comparatively easy to construct, can deal with attitudes of more than one dimension, and tend to have high reliabilities” (Vogt, 2005, p.175). However, Likert scales are only partial measures of attitude since they can only capture the cognitive component of an individual’s attitude (Hair et al., 2008).

Semantic differential scales, with a bipolar scale format, were thus required to capture a person’s feelings and overall attitudes towards a given object. This type of scale is unique in its use of bipolar adjectives (e.g., “good/bad”, “high/low”, “reliable/unreliable”) as the endpoints of a symmetrical continuum (Hair et al., 2008). To capture the likelihood that individuals will demonstrate some type of

predictable behavioural intention towards an object in a future time frame (i.e., the conative component of attitude), a special type of “behavioural intention” rating scale (e.g., “definitely/probably would/would not”, “not sure”) was used. This scale has been found to be a good predictor of consumer choices of either frequently purchased or durable products (Hair et al., 2008).

A major concern related to these scales is whether such categorical scales can be treated as continuous in statistical analysis (Byrne, 2010), since a considerable number of multivariate statistical techniques are only applicable to continuous scales (Hair, Anderson, Tatham, & Black, 1995). Bentler and Chou (1987, p.88) suggest as long as the categorical variables are normally distributed, “continuous methods can be used with little worry when a variable has four or more categories.” Byrne (2010) further confirms that this problem may be negligible when the number of categories is large. In view of this, the present study adopted a 7-point Likert scale to measure all attitudinal and behavioural constructs, following the advice of Green and Rao (1970). The reasons of selecting the scale with seven response categories, rather than five or nine-point scales were not only to ensure the reliability, validity and sensitivity/preciseness of measurement (Cicchetti, Shoinralter, & Tyrer, 1985; Preston & Colman, 2000), but also to avoid respondent fatigue or confusion caused by excessive categories (Birkett, 1986).

Furthermore, despite some critiques regarding the use of multiple items to measure a construct (e.g., Gardner, Cummings, Dunham, & Pierce, 1998), this study preferred multiple-indicator measurement to gauge sport tourists’ destination attitudes and destination involvement. This is not only because of the multi-dimensional nature of these constructs (see Gartner, 1994; Laurent & Kapferer, 1985), but also because of the capabilities of multi-item measurements in increasing

reliability, decreasing measurement errors, and segmenting respondents (Li, 2006). Additionally, for some statistical techniques like structural equation modeling, the use of a minimum of three items per construct is generally recommended (Kline, 2010).

After the initial questionnaire was developed, an email invitation to review and pre-test the instrument was sent to 15 academic staff and PhD candidates in the Department of Tourism, Leisure, Hotel and Sport Management, within the university at which the author was studying. The purpose of conducting such a small-scale trial is to experimentally determine the effect of format and design parameters on response accuracy and completeness, thereby improving the response rate and data quality (Deutskens et al., 2004). Some modifications were then made in rephrasing specific measurement items. The questionnaire design and format was also changed based on comments and suggestions collected from this professional panel. In view of the fact that the main constructs examined here have been mostly well-established in previous literature (e.g., ADI, involvement, experience satisfaction), and their measurements can be adopted and/or adapted from previous studies, a pilot study before embarking on the main data collection became less necessary (Veal, 2006).

3.1.5 Research Ethics

Ethics approval for this longitudinal study was obtained from the Griffith University Human Ethics Committee in 2009 and three steps were implemented to minimise any potential risks for study participants. These steps included: first, a cover letter and an information sheet were composed for each questionnaire survey (See Appendix 3-1); second, participants were primarily contacted by the event organisers through emails, not the researchers; third, the contact emails provided by respondents were used solely to notify the winner of the prize draw.

The cover letter included an invitation to participate in the study, a brief instruction of what was required to participate, an option to review more detailed Ethics information, and the contact details of the research team. The information sheet was an extension of the cover letter, providing information in regards to: a) the purpose of the study; b) the voluntary nature of the participant involvement and potential risks; c) a confidentiality statement on how the received responses will be treated and that the research was anonymous; and d) a consent expression. In addition, the sheet provided a statement indicating the research is conducted in accordance with the *Australian National Statement on Ethical Conduct in Research Involving Humans*.

The contact details of the Griffith University Research Ethics Manager and the research team were also provided. These details were offered to any potential respondents to voice any concerns or complaints about the ethical conduct of this PhD study. It was anticipated that the use of these mechanisms would increase the potential respondents' confidence and trust in the research, and make them feel their participation was important and worthwhile. Details regarding each of the two main studies are provided in the following order: identifying respondents' demographic characteristics, developing measure instruments, presenting data-collection procedures, and then introducing analytical techniques.

3.2 Study 1: Pre- and Post-Event Study

The first study adopted a pre- and post-event research design to examine how sport tourists' DI changes after travelling to participate in the 2011 ING Miami Marathon and Half Marathon. Two online self-administered questionnaires were employed to collect the data both before and after the event. Utilising SPSS 18,

Exploratory Factor Analysis (EFA) was employed to identify the underlying dimensions of DI. The Confirmatory Factor Analysis (CFA) was subsequently conducted through AMOS 18 to substantiate the tripartite structure of DI and the measurement model for each multi-dimensional construct. The Structural Equation Modeling (SEM) method was adopted to test the hypotheses on initial DI formation and change (i.e., H1.2, H1.3, and H2.4). Moreover, to facilitate comparison between the pre-visit DI and the post-visit DI, the General Linear Model (GLM) Repeated Measures analysis was employed to examine the DI change before and after travelling for event participation. The repeated measures method lends itself to gathering insight into the progressive nature of the human psyche (Chajewski, 2009).

3.2.1 Participants

3.2.1.1 Pre-event Sample

The participants in the pre-event questionnaire survey consisted of 1,181 nonlocal participants of the 2011 ING Miami Marathon event, among whom 68.6% were United States residents, and 77.5% had visited Miami prior to the trip for the 2011 event. Among these repeat visitors, 55.6% have visited Miami more than five times. Only 22.5% of the sample visited Miami for the first time when they participated in the 2011 event. The demographic breakdown was 52.1% female; 76% were aged between 25 and 49, with the biggest age group being 30 to 34 year-olds. The ethnic backgrounds of participants varied, with 65.6% of the sample being Caucasian, 26% Hispanic or Latino, 3.4% African-American, and 2.5% Asian. The majority of the sample (81%) had completed higher education and over 60% of them possessed a graduate degree or above. Seventy-one percent were full-time employed and 14.7% were self-employed; 61% reported an annual household income of

US\$60,000 or above. In addition, half of the respondents (50.5%) reported they had other travelling purposes besides attending the event. Among the various travel purposes, leisure vacations occupied the primary intention (67.4%); followed by VFR (visiting friends and relatives), (60.4%); and then attending other events or festivals (15.4%). Sixty-five percent planned on doing sightseeing during their stay in Miami.

3.2.1.2 Post-event Sample & The Panel

The participants in the post-event questionnaire survey consisted of 2,203 nonlocal participants of the 2011 ING Miami Marathon event, among whom 83% were United States residents, and 82.7% had visited Miami prior to their trip for attending this event. The demographic breakdown was 52.4% female and 84% was aged between 25 and 54. The ethnic background of participants varied, with 72.3% of the sample being Caucasian, and 19% Hispanic or Latino. The majority of the sample (82%) had completed higher education and 64.5% reported an annual household income of US\$75,000 or above. Forty-four percent did sightseeing during their stay in Miami. However, only 19.4% of them had responded to the pre-event survey. The attitude comparison analysis can only be conducted with the respondents who replied to both pre- and post-event surveys, thus this sample group is of most interest for this research.

The respondents who completed both pre- and post-event surveys composed a panel, consisting of 413 nonlocal participants in the 2011 ING Miami Marathon event. The demographic breakdown was 52.5% female with 58.8% married or living with a partner. Seventy-six percent were aged between 25 and 49 with the biggest age group being 30 to 34 year-olds. The ethnic background of participants varied, with 71.7% of the sample being Caucasian, 21% Hispanic or Latino, and 3.4%

Asian. Among them, 71% were United States citizens, and 51% had visited Miami more than 5 times. Only 23.2% of the panel had visited Miami for the first time when they participated in the 2011 event. The majority of the sample (85.7%) had completed higher education and 48% possessed a graduate degree or above. Seventy-four percent were full-time employed, 11% self-employed and 59% reported an annual household income of US\$60,000 and above. In addition, 60.8% did sightseeing when they stayed in Miami and 31.4% searched for more information about Miami after returning from the event.

3.2.2 Materials

The materials for Study 1 included two online questionnaires which employed identical questions to measure change on the following constructs: *Cognitive DI*, *Affective DI*, *Conative DI*, and the psychological connection with the destination (i.e., *Destination Involvement* and *Place Attachment*). In addition, four travel-related questions were included in both surveys: previous experience with the destination, length of stay, sightseeing participation and experience satisfaction with the destination.

However, the pre- and post-event questionnaires contained some different constructs because of the timing of the data collection. For example, the pre-event questionnaire measured sport tourist's prior motivation – sport involvement and the strength of motive for travelling to participate in an event. On the other hand, the post-event questionnaire contained a construct of destination satisfaction which can only be evaluated by respondents after the actual visitation. Given that the main constructs were also measured in the other longitudinal panel study (i.e., Study 2), which occurred earlier than this study, a thorough review of these constructs is provided now to avoid repetition in later sections. A particular focus will be on the

justification of choices or adaptation of measurement items. Appendix 3-1 provides a copy of the pre-event questionnaire, along with a covering letter and information sheet. This survey instrument package was employed by the other three data collections as well.

3.2.2.1 Cognitive DI (DI Attributes)

Although the use of attribute lists in measuring DI has received recurring criticism, there is not yet an accepted theory to replace the multi-attribute model (Pike, 2002). Various destination attributes are used by potential or actual tourists to aid in DI formation (Bonn, Joseph, & Dai, 2005) and most DI researchers adopted a tailored list of destination attributes to measure the cognitive component of DI (e.g., Chen, 2001; Kim & Morrision, 2005). Twenty-three attributes of Miami as a sport tourism destination were identified for this study, based on a comprehensive literature review on leisure and tourism DI and event image (e.g., Kaplanidou, 2009; Shonk & Chelladurai 2008; Tapachai & Waryszak, 2000) as well as a content analysis of promotional materials for mega sport events and their host locations. Subsequently, in both phases of this study, respondents were asked to indicate their “current impression of Miami as a travel destination by grading its attributes/features listed below”, on a 7-point Likert scale with “1” = “Offers Very Little”, and “7” = “Offers Very Much”.

3.2.2.2 Affective DI

Most tourism DI studies considering the affective component of DI adopted the popular four bipolar affective items (i.e., “pleasant – unpleasant”; “relaxing – distressing”; “arousing – sleepy”; “exciting – gloomy”) as their measurement tool (e.g., Li et al., 2009; Walmsley & Young, 1998; Yilmaz et al., 2009). These four bipolar ADI scales have been adapted by Baloglu & Brinberg (1997) from the

Circumplex Model of Affect (Russel, 1980; Russel, Ward, & Pratt, 1981).

Specifically, the subsequent affective environmental studies have provided stable and consistent results over samples, different languages, and cultures on the adequacy and validity of the two dimensions of the scale (i.e., “pleasant – unpleasant” and “arousing – sleepy”) (Baloglu & Brinberg, 1997; Walmsley & Young, 1998). These two dimensions are deemed to adequately define the numerous descriptors that are commonly used in environmental evaluation (Russell et al., 1981), as well as represent the fundamental mode of affective space and image evaluation (Walmsley & Young, 1998). However, the present study kept all four dimensions of the ADI scale, expecting to provide more empirical support for the ADI measurement scale which can be generalised in a sport tourism destination context. The respondents were thus asked to indicate their feelings/impressions on each of the four pairs of bipolar adjectives: “Unpleasant – Pleasant”, “Distressing – Relaxing”, “Dull – Arousing”, and “Gloomy – Exciting”.

In addition, the present study adopted a specific attitudinal perspective to examine DI held by sport tourists. As a result, measurements of the affective component of sport tourists’ DI should also be sought from the attitude literature. According to the validation work of Batra and Ahtola (1991) on the semantic differential measurement scale for the bi-dimensional attitude (e.g., positive – negative, like – dislike, good – bad), these semantic differential items were found to not only clearly measure an overall attitude but also to load on the hedonic component of the attitude construct. This finding suggests that it is not necessary to utilise those strong emotional descriptors to measure the affective component of attitude (e.g., nice – awful, happy – sad). The more general descriptors, such as “positive – negative”, are also able to capture the hedonic nature of affective

attitudes. Therefore, the respondents in this study were also asked to evaluate their attitudes towards Miami on a 7-point bipolar scale, with another two semantic items: “Dislike – Like”, and “Negative – Positive”. The positions of the positive and negative pole descriptors were randomly mixed to avoid creating a halo effect bias (Babbie, 2010; Hair et al., 2008). Bi-dimensional scales have been acknowledged as superior to the uni-dimensional views (Jang & Wu, 2006), because they allow for the simultaneous occurrence of positive and negative feelings, which demonstrate human emotional states more precisely.

3.2.2.3 Conative DI

Revisit and recommend intention were used to operationalise the conative DI through two behavioural intention questions. Revisit intention and word-of-mouth (WOM) communication are the two most frequently used behavioural intention variables (Chi & Qu, 2008; Hutchinson, Lai, & Wang, 2009). These two attitudinal measurements have been recognised as the pertinent measure (Jones & Sasser, 1995) for behavioural intention. Moreover, methodology experts suggest that a specific time frame should be included in the set-up portion of the behavioural intention scale, as an expressed time frame can decrease the possibility that the respondents will bias their response towards the “definitely/probably would” categories (Hair et al., 2008).

As for the revisit intention of tourists to a visited destination, tourism scholars have suggested that it might vary depending on time (Jang & Feng, 2007). Therefore, considering the influence of time frames on tourists’ conation in relation to a destination, the sport tourists’ Miami revisit intention was defined in three time frames, as suggested by Jang and Feng (2007): short-term (within the next 12 months), mid-term (within the next 3 years), and long-term (within the next 5 years).

Accordingly, the behavioural intention of sport tourists, in the current research was operationalised by the likelihood of revisiting Miami for leisure vacations within three different time frames, not for sports; as well as the likelihood of recommending Miami as a leisure travel destination. A 7-point Likert scale, in which “1” = “Extremely Unlikely” to “7” = “Extremely Likely”, was used to gauge the future intentions of sport tourists with regard to revisiting and recommending Miami. However, the time frames were only applied in the post-event and follow-up surveys in this research, not in the pre-event survey because the revisit intention within a specific time frame would be too difficult to answer for first-time visitors. First-time visitors are people who have never been to the destination previously, and are not able to assess how satisfied they would be with the upcoming experience, thus cannot make precise predictions.

3.2.2.4 Destination Involvement

The psychological connection of sport tourists with Miami was operationalised by the involvement construct (Funk & James, 2001), as discussed in Chapter 2. A three-dimensional (i.e., “attraction”, “centrality” and “sign”) measure approach dominates the current leisure involvement studies (Havitz & Dimanche, 1997; Kyle & Mowen, 2005) though there is still dissent as to the number of its dimensions (Alexandris et al., 2008). The tri-dimensional measurement has been shown to be reliable and valid within a variety of leisure contexts (e.g., Gross & Brown, 2008; Kyle et al., 2003; Kyle, Mowen, & Tarrant, 2004). However, Beaton et al. (2009, p.183) re-termed the attraction dimension the “pleasure facet”, believing “importance should be held conceptually distinct from enjoyment and interest”. Moreover, Beaton and colleagues (Beaton et al., 2009; Beaton, Funk, Ridinger, & Jordan, 2011) have empirically tested this new three-dimensional involvement

measurement and validated it as an effective staging tool to allocate individuals into respective psychological connection levels with leisure objects. The present study will apply this staging mechanism in the sport tourism setting, with the purpose of differentiating sport tourists' four psychological connection levels with the event-host destination. Therefore, this adapted tri-dimensional measurement of the involvement construct (i.e., "pleasure", "centrality", and "sign") utilised for the staging algorithm is adopted by this study to measure sport tourists' involvement with Miami. Consequently, destination involvement can be defined as "the meaning tourists ascribe to a destination and how it serves as a central aspect of their lives providing both hedonic and symbolic value" (Filo et al., 2011, p.5).

Pleasure embodies the enjoyment derived from visiting the destination.

Centrality refers to the role of a destination in an individual's overall life (Iwasaki & Havitz, 2004). *Sign* is the self-expression, which refers to self-representation or the impression of the self that individuals wish to convey to others through visiting a specific destination (Kyle & Chick, 2004). A Nine-item scale, adapted from Beaton et al. (2009), with three items for each involvement dimension, was used to examine the psychological connection of sport tourists with Miami. Based on respondents' various mean scores on each involvement facet, a preset tripartite split will be used to classify individuals into high, medium and low on respective facets, thus a specific profile can be generated for every respondent. These profiles are then used in the staging algorithm tool to allocate sampled respondents into specific stages within the four-level PCM. More details about the three-step staging procedure will be provided in Chapter 4.

In addition, place attachment, a concept originating from environmental psychology (Gross & Brown, 2008) describing the affective bond or link between

individuals and specific places (Hidalgo & Hernández, 2001), was adopted to validate whether the PCM staging algorithm works for psychological connection to a destination. This scale has previously demonstrated acceptable internal reliability in leisure studies (Alexandris, Kouthouris, & Meligdis, 2006; George & George, 2004; Hou, Lin, & Morais, 2005; Hwang et al., 2005; Kyle et al., 2003; Yuksel, Yuksel, & Bilim, 2010). Therefore, a six-item measurement for the two-dimensional place attachment construct (i.e. “place dependency” and “place identity”) (Kyle et al., 2003), was used to examine the results of the staging procedure in order to internally verify the theoretical hierarchy of the PCM framework in the destination context. Seven-point Likert scales, anchored with “1” = “Strongly Disagree” to “7” = “Strongly Agree”, were used to assess all items.

3.2.2.5 Destination Satisfaction

Satisfaction has been a popular subject received extensive studies in psychology, marketing, and tourism literature, and has been recognised as a key outcome measure and direct determinant of tourists’ revisit intention (Jang & Feng, 2007; Simpson & Sigauw, 2008). Several methods have been developed over the years to explain consumer satisfaction (Hui et al., 2007), among which the expectancy-disconfirmation paradigm (EDP) is one of the most widely accepted in leisure studies (Petrick et al., 2001; Pizam & Milman, 1993; Weber, 1997). However, EDP has always been questioned regarding its reliability in evaluating consumer satisfaction with the experiential product due to several unresolved problems (Yuksel & Yuksel, 2001). For example, the diverse understanding of the “expectation” concept by different individuals might lead to various comparative standards being used, which in turn yield an incomparable satisfaction level. Thus, it is not surprising that researchers have argued a single and direct measure of

satisfaction may be a better measure than using expectancy-disconfirmation (Petrick et al., 2001), such as performance-only evaluation (e.g., Brady, Cronin, & Brand, 2002) or a unidimensional overall satisfaction rating (Assaker, Vinzi, & O'Connor, 2010).

However, Madrigal (1995) advocated there can be limitations to measuring satisfaction with a single item, thus three items adapted from Oliver (1980) were used to measure the overall satisfaction of sport tourists with Miami in this study. The items were as follows: "I felt satisfied with Miami's offerings to visitors"; "I was satisfied with my overall experience in Miami"; and "I had a positive experience in Miami". A 7-point Likert scale, anchored with "1" = "Strongly Disagree" to "7" = "Strongly Agree", was used.

3.2.3 Procedures

The present study employed two online self-administered questionnaires to collect longitudinal data on how sport tourists' destination attitude changed through personal participation experience. The pre-event questionnaire was distributed by the researcher through email to 7,934 non-local registered runners on January 19, ten days before the 2011 ING Miami Marathon event. It is believed that a majority of non-local participants had made their travelling decisions to participate in the event and had completed registration for it at this time. A reminder email was sent out five days after the initial email to promote more responses within a short period before the event started. Finally, 1,647 responses were obtained for a response rate of 20.8%. After cleaning the data and dealing with missing values, 1,181 usable responses were prepared in an SPSS 18 data file for further analysis.

The post-event questionnaire was distributed by the researchers one week after the event (February 8, 2011) to all registered runners ($N = 19,359$) and a

reminder email was sent out one week later. The questionnaire was kept available online for nearly three weeks, obtaining 3,855 responses for a response rate of 19.9%. Among them, 42.6% were local participants, being excluded from the current study, thus 2,212 usable responses were accepted. The respondents of this questionnaire survey were matched with the pre-event questionnaire respondents via their contact email addresses. Finally, the responses from 413 respondents who answered both pre- and post-event questionnaires were merged into one SPSS data file for further comparison analysis. The panel size ($n = 413$) for Study 1 (Pre- and Post-event study) has met the recommended number of 20 respondents per cell for the multiple treatments in a repeated ANOVA analysis (Hair et al., 2006b).

3.2.4 Analysis

Analysis of the data collected in Study 1 consisted of the following five stages. The first stage involved cleaning the data and dealing with the missing values. The next stage was concerned with descriptive statistics (e.g., means, standard deviations), with the aim of developing sample profiles and identifying distributions of main variables. The third analysis stage was focused on refining the measurements of DI and validating its tripartite structure through exploratory and confirmatory factor analysis. The dataset was randomly divided into two subsamples at this stage for the cross-validation purpose. Moreover, other main multidimensional constructs, such as running involvement and psychological connections with the destination, were also examined by CFA to confirm whether the scales accurately measured each construct. Reliability and validity assessment were reported for each construct.

Once the measurement models were confirmed, the structural equation modeling procedure was employed in the fourth stage to test the causal relationships

between the pre-visit DI and its antecedents (prior motivations) and consequences (experience satisfaction and the post-visit DI). In the final stage, a series of GLM repeated measures analyses was employed to test how the destination attitude of sport tourists changes before and after the event participation: (1) the overall DI change was assessed. If changes were observed, then subsequent tests to assess each individual component of CDI, ADI, and Conative DI were conducted; (2) Any changes to CDI, ADI and Conative DI were examined under the moderating effects of previous experience, length of stay, sightseeing participation, and the psychological connection level. Further details of the main analytic stages are provided next.

3.2.4.1 Data Cleaning & Missing Value Replacement

After renaming the variables automatically imported into the SPSS data file, the negatively phrased and reverse scaled items were re-coded. Subsequently, the data were subjected to the examination of errors and missing values because of their significant impacts on the multivariate analysis (Hair, Black, Babin, Anderson, & Tatham, 2006b). The four-step missing data process suggested by Hair et al. (2006a) was adopted: firstly, missing values on categorical variables (e.g., age, gender, and travel purposes) were ignored in this study because they were not the main variables that would be involved in the multivariate analysis. No remedies were needed for this type of missing data.

Second, the pattern of missing data was examined. The number of missing variables per case was indicated by a new computed variable named “Flag” using the “NMISS” function of SPSS. All cases with more than half the variables missing, which was considered excessively high (Hair et al., 2006b), were removed from the dataset. Additionally, the percentage of cases with missing data on each variable was

also examined by the descriptive statistics for the observations with valid values. With regard to the proportions of missing data on a variable basis, under 10% missing values on a variable can be judged trivial (Hair et al., 2006b) while more than 40% missing is considered severe (Raymond & Roberts, 1987). Subsequently, a diagnosis of randomness of the missing data was made before proceeding to the remedy.

Third, the pattern of randomness present in the missing data was identified, which determines the choice of appropriate remedies. According to Downey and King (1998), data that are missing in a non-random pattern/systematic fashion need to be treated as a separate set of problems, and thus was not discussed here. Conversely, two levels of randomness are mostly discussed by researchers: missing at random (MAR) and missing completely at random (MCAR) (Rubin, 1976). In the current research, as the measurement for most main constructs have been well-established in the literature (e.g., satisfaction, involvement, and place attachment), the items would be more likely to be omitted in a random pattern (Downey & King, 1998). Moreover, by using the “missing value analysis” function of SPSS, no specific missing pattern was identified, indicating the missing data were considered as MCAR. As a result, more potential remedies are applicable.

Finally, an appropriate imputation method was selected to estimate and replace the missing values based on valid data available for other variables and/or cases in the sample (Hair et al., 2006b). Among the several popular schemes for replacing the missing data (e.g., the mean substitution, the regression-based techniques, or a model-building approach), the current study selected the maximum likelihood (ML) estimation method. Based on an expectation-maximization algorithm, the ML estimation has been increasingly recognised as a superior method

for dealing with missing data due to its advantages in avoiding impossible matrices, avoiding over fitting and producing realistic estimates of variance (Tabachnick & Fidell, 2007). Furthermore, ML methods have been demonstrated to be able to yield unbiased and more efficient estimates than the other techniques under both MCAR and MAR situations (Enders & Bandalos, 2001).

3.2.4.2 Exploratory & Confirmatory Factor Analysis

Exploratory factor analysis (EFA) is particularly useful as preliminary analysis in the absence of sufficient theory about the relationships of the indicators to the underlying constructs (Gerbing & Anderson, 1988; Meyers, Gamst, & Guarino, 2006). Due to the lack of consensus on the composite pattern of CDI, even less has been known about which attributes can contribute to the image of a sport tourism destination. Therefore, EFA was conducted on the cognitive destination and event attributes to identify the underlying dimensions of the CDI held by sport tourists, as well as to reduce the number of these attributes. A maximum likelihood extraction method was selected to understand both the unique and common proportion of total variance that each variable contributes to the common factors extracted (Hair et al., 1995; Meyers et al., 2006). Oblique rotation was utilised given the theoretical consideration that the derived factors would likely be interdependent (Ferguson & Cox, 1993; Meyers et al., 2006). In general, EFA represents an inductive approach in that conclusions can be developed from specific observations.

On the other hand, the confirmatory factor analysis (CFA) represents a deductive approach in that researchers can predict an outcome from a theoretical framework (Meyers et al., 2006). The outcome is the specification of the variable indicators as well as of the relationships between the variables. The main purpose of CFA is to verify the factor structure derived from the EFA results and to explore

whether further modifications are necessary. In brief, CFA can validate the EFA results. In the present study, the method of estimation employed in CFA was Maximum Likelihood (ML), which is the most widely used estimation that demonstrates robustness against moderate violation of normality (Hair et al., 1995). Moreover, ML is considered favourable to other estimation methods when sample size is medium to large (Tabachnick & Fidell, 2007). As for this study, the CFA started with a first-order measurement model containing three DI components and their measurement items, and then tested a second-order model on the tripartite structure of overall DI. The second-order CFA posits that the first-order factors estimated can be explained by some higher-order structure (Hagger & Chatzisarantis, 2005; Rindskopf & Rose, 1988). This study has postulated that cognitive DI, affective DI, and conative DI are sub-dimensions of the higher-order factor – DI. Through identifying and refining the CDI structure, as well as examining the tripartite structure of DI, the three hypotheses under RQ1 (H1.1, H1.4, and H1.5) were tested.

Goodness-of-fit Indices (GOFs)

There are a series of indicators that assess the goodness-of-fit (GOF) of a hypothesised factor structure to the data in CFA (Hair et al., 2006b). In assessing the GOF of the confirmatory model, a non-significant Chi-square statistic ($\chi^2, p > .05$) is probably the most widely employed criterion (Golob, 2003; Mulaik et al., 1989). However, most researchers have recognised that Chi-square is highly sensitive to sample size, multivariate non-normality and model complexity (e.g., Byrne, 2010; Hu & Bentler, 1999; Netemeyer, Bearden, & Sharma, 2003; Sun, 2005). Hence, it is not very helpful in determining the extent to which a model does not fit (Arbuckle, 2009; Byrne, 2001). Instead, a variety of other fit indices have been developed to

assess model fit (Byrne, 2010; Kline, 2010; Netemeyer et al., 2003), which can be generally classified into four types (Holmes-Smith, 2010): (1) Absolute fit index (e.g., Chi-square, RMSEA); (2) Residual-based fit index (e.g., RMR, SRMR); (3) Incremental/comparative fit index (e.g., CFI, GFI, AGFI, NFI, TLI); (4) parsimonious fit index (e.g., PGFI, AIC, CAIC).

Despite their common goal being to determine whether the proposed model should be accepted or rejected, these various goodness-of-fit indices (GOFs) still vary in their appropriateness for specific circumstances (Sun, 2005). To select fit indices that perform better than others under a particular situation, individual features of different types of GOFs and various study purposes need to be understood. As for which fit indices are the best to report for a CFA, it is still controversial in practical studies due to the lack of structured criteria (Sun, 2005). For example, Hu and Bentler (1999) recommend TLI, CFI, SRMR and RMSEA because they are relatively robust to sample size effects, and perform relatively stable across all estimation methods (Sun, 2005). Nonetheless, the parsimony fit index such as AIC, is only recommended for the comparison of candidate models (Burnham & Anderson, 2002) and no defined acceptable level is available. Garson (2006) has warned that a researcher should avoid reporting all indices, since this implies that the researcher is fishing for a good fit. Jaccard and Wan (1996) advocate the use of at least one index from each GOF classification/type, so as to reflect a diverse fit criterion and ensure that four categories of fit indices are well represented (Jackson, 2001).

As a result, the current longitudinal research adopted a list of nine fitness indices to report in CFA results: the Chi-square (χ^2); the normed Chi square (χ^2/df); the Goodness-of-Fit Index (GFI) and Adjusted Goodness-of-Fit Index (AGFI); the

Normed Fit Index (NFI); the Tucker-Lewis Index (TLI); the Comparative Fit Index (CFI); the Root Mean Square Error of Approximation (RMSEA); and the Standardised Root Mean-square Residual (SRMR). The selection of these fit indices reflects the consideration of including all types of fit indices, as well of the most frequently reported CFA and SEM fitness indices in extant leisure and tourism studies (e.g., Golob, 2003) or psychological studies (e.g., Mulaik et al., 1989). In addition, the CFA analysis can assist in testing, or improving the construct reliability and validity which will be clarified as follows.

Reliability & Validity Assessment

The reliability of a construct refers to the degree to which consecutive measurements of a particular concept yield the same result, given that the underlying score on the concept has not changed. In longitudinal research, two forms of reliability estimation are of the same importance: coefficients of internal consistency and coefficients of stability (test-retest reliability) (Taris, 2008). The reliability of the measurement instrument (i.e., internal consistency) refers to the ability of a scale item to correlate with other items of the same scale that are intended to measure the same construct (Gursoy, 2001). Cronbach's alpha coefficient is currently the most widely used coefficient to test the internal consistency of measurements (Hair et al., 1995; Peterson, 1994). The test-retest reliability focuses on equivalence; in other words, the degree to which measures that are presumed to measure the same construct are correlated (Taris, 2008). Examination of the test-retest reliability coefficient/structural invariance requires specific procedures and relies on the CFA. The virtues of CFA for examining across-time stability are that factor models can be specified on a high level of detail, and that statistical tests are available to test whether one factor model fits the data better than a competing factor model. In this

longitudinal study, reliability deserves particular attention because unreliability would pose more threats to the validity of findings in longitudinal research than in cross-sectional research (Taris, 2008).

Construct validity refers to the extent to which an empirical measure adequately reflects the real meaning of the concept (Babbie, 2010), or, the extent to which the variables under investigation are completely and accurately identified before hypothesising any functional relationships (Hair et al., 2008). In this study, the validity issue is mainly related to convergent validity and discriminant validity. Convergent validity can be achieved if the indicators specified to measure a common underlying factor have relatively high loadings on that factor (Gerbing & Anderson, 1988). Discriminant validity can be achieved if the indicators specified to measure one concept are not associated strongly with the measures of different concepts (Field, 2009). Discriminant validity is especially crucial when the concepts/constructs are interrelated (Hair et al., 2006b). As Kline (2010) indicated, the SEM method of confirmatory factor analysis is a valuable tool for evaluating construct validity. The current study assessed both convergent and discriminant validity of each main construct by conducting CFA with AMOS 18.

3.2.4.3 Structural Equation Modeling

After adequate measurements and construct validity were established by CFA, Structural Equation Modeling (SEM) was employed to test the hypotheses of interest (H1.2, H1.3 and H2.4). SEM is a technique for simultaneously estimating the relationships between observed and latent variables (the measurement model), and the relationships among latent variables (the structural model) (Finkel, 2008; Osborne, 2008). SEM has gained popularity because it combines CFA and regression analysis to model a variety of psychological, sociological, and other

relationships (Bigné et al., 2001; Ko & Stewart, 2002). SEM is the preferred mode of analysis when “multiple regression is required to test for several dependent variables from the same set of independent variables simultaneously, particularly if it is possible for one dependent variable to simultaneously cause another” (Reisinger & Turner, 1999, p.72). The SEM analyses were conducted using AMOS 18, and followed guidelines suggested by Byrne (2010) as well as Tabachnick and Fidell (2007). AMOS (Arbuckle, 2009) was chosen over other model-fitting programs such as EQS (Bentler, 2006), LISREL (Jöreskog & Sörbom, 1989), and Mplus (Muthén & Muthén, 2007), for its “unique strength in preventing errors in model specification, and its extensive bootstrapping capabilities, which is an effective tool for dealing with non-normal data” (Li, 2006, p.117).

The major task of SEM is assessing how well a hypothesised model fits the observed data and estimating the parameters of the hypothesised model (Hu & Bentler, 1999). Following considerations stated in the CFA section (refer to 3.2.4.2), as well as the recommendations of previous SEM studies in leisure and tourism (Golob, 2003; Reisinger & Mavondo, 2007), eight GOF indices besides the Chi-square statistic were chosen to indicate the model fitness. They are: Normed Chi-square, GFI, AGFI, NFI, TLI, CFI, RMSEA, and SRMR.

According to Marsh, Hau, and Wen (2004, p.321), the main reason that GOF statistics have gained popularity is their “elusive promise of golden rules – the absolute cut-off values that allow researchers to decide whether or not a model adequately fits the data – that have broad generality across different conditions and sample sizes”. Therefore, in order to take a more pragmatic approach to facilitate the fitness assessment, the adequate “rules of thumb” conventional cut-off criteria for given fit indices were set based on a broad review of pertinent literature. The

adequacy of these acceptable levels for model fitting is of great significance to both Type I (i.e., wrongly rejecting a true null hypothesis) and Type II (i.e., wrongly retaining a false null hypothesis) error minimisation. Accordingly, the cut-off point of the ratio of Chi-square to degrees of freedom (χ^2/df) was set at 3:1 (Hair et al., 2006b); and the cut-off values of .95, .90, .95, .95, .95, .08, and .06 were adopted for GFI, AGFI, NFI, TLI, CFI, RMSEA, and SRMR respectively (Browne & Cudeck, 1992; Hu & Bentler, 1999; Schermelleh-Engel, Moosbrugger, & Müller, 2003).

3.2.4.4 General Linear Model Repeated Measures Analysis

The current research realised sequential examinations concerning how sport tourists' destination attitude formed and changed by employing a repeated measures design. However, research design and statistical analyses are related yet conceptually distinct (Ellis, 1999). Even if the longitudinal panel study has been acknowledged as one of the most powerful research designs to investigate developmental inferences (Menard, 2008), spurious results and erroneous conclusions may still be produced by improper analysis methods on the longitudinal data (Ellis, 1999). Therefore, the researcher should select the most appropriate statistical method that best fits the hypotheses of interest, the research design (e.g., sampling and number of waves) and the type of variables being collected (continuous or nominal) (Ellis, 1999; Menard, 2002).

The repeated measures ANOVA or MANOVA are most frequently used to compare group means on a dependent variable across repeated measurements of time (Krueger & Tian, 2004), although a variety of statistical techniques associated with diverse disciplines exist for the analysis of longitudinal data (e.g., paired *t*-test, mixed model, time series, and log-linear analysis) (Ellis, 1999). The underlying rationale of repeated measures ANOVA is to regard time as a within-subjects factor

in a hierarchical design with individual subjects as subplots (Krueger & Tian, 2004). Its emphasis is placed on quantitative differences between time points or between-group differences across time, which exactly matches the interest of the current research questions.

However, the General Linear Model (GLM) has recently become the preferred means of estimating ANOVA and MANOVA models among researchers and some statistical packages, such as SPSS, due to its flexibility and simplicity in model design (Hair et al., 2006b). Furthermore, the repeated-measures GLM has been recognised by researchers as a powerful tool for modelling change “when the interest is primarily in understanding mean change for groups of observations and, in particular, whether one group differs from another” (Ployhart & Vandenberg, 2010, p.111). Therefore, the GLM repeated measures method was adopted by this study to analyse sport tourists’ destination attitude change over decision-making stages, and to test the potential predictors’ moderation effect on the discovered change pattern. The sphericity assumption has to be tested first due to its effect on the statistical significance test of GLM (Field, 2009).

3.3 Study 2: Post-event and Follow-up Study

Study 2, consisting of a post-event survey and a follow-up survey, adopts a longitudinal panel study approach to examine whether and how sport tourists’ post-visit DI changes over time after attending the 2009 ING Miami Marathon and Half Marathon. Two online self-administered questionnaires were employed to collect longitudinal data two weeks after the event and 10 months later. The first post-event survey was carried out prior to the establishment of the conceptual model, due to the timing of the chosen event. At that time, the construct of “destination involvement”,

which is important for this PhD research, had not yet been identified. The follow-up survey was conducted 10 months later and therefore included this construct for the first time. The GLM Repeated Measures analysis was adopted to examine the post-visit DI change over time since this method allows the researcher to evaluate a situation in which respondents are investigated at multiple time-points (Kneesel, Baloglu, & Millar, 2010).

3.3.1 Participants

3.3.1.1 Post-event Sample

The participants in the first post-event survey consisted of 1,989 nonlocal registered runners travelling to Miami to attend the 2009 ING Miami Marathon event. Among this sample, around 80% were American citizens; and only 18.9% were first-time visitors to Miami. Among the majority who had visited Miami prior to their trip for the 2009 event, 53.6% were frequent visitors (≥ 5 times). Nearly half of the sample (45.4%) reported they did sightseeing during stay in Miami for the event. The gender breakdown was approximately even with 52.7% female participants, while 62.3% of respondents were married or living with a partner. Seventy-five percent were aged between 25 and 49. In terms of ethnicity, 71.4% were Caucasian and 19.6% Hispanic or Latino. The majority of the sample (89.6%) had completed higher education, and 52.6% possessed a graduate degree or above. Seventy-two percent reported an annual household income of US\$60,000 and above.

3.3.1.2 The Panel

The participants in this longitudinal study consisted of 234 nonlocal participants who completed both post-event and follow-up surveys, and thus composed a panel. Among this panel, 72.2% were American citizens, and 70.9% had visited Miami more than 5 times. Only 8% visited Miami for the first time when

they participated in the 2009 ING Miami Marathon event. The demographic breakdown was 57.3% male, and 64.7% were married or living with a partner. Seventy-two percent were aged between 30 and 54 with the biggest age group being 40 to 44 year-olds. The ethnic background of participants varied, with 63.7% of the sample being Caucasian, 24.8% Hispanic or Latino, 3.4% African American, and 3% Asian. The majority of the sample (90%) had completed higher education and 60% possessed a graduate degree or above. Seventy-two percent reported an annual household income of US\$60,000 or above. In addition, 50.4% of the sample did revisit Miami after attending the event.

3.3.2 Materials

The two online questionnaire surveys contained identical questions to measure change of the following constructs: *CDI*, *ADI*, *Conative DI*, and *Place Attachment*. Nonetheless, a number of different constructs were included in the follow-up questionnaire survey such as *Destination Involvement* and *Destination Satisfaction*, as this was the first survey designed specifically for this PhD research. The importance of these two constructs had not been recognised when designed the first post-event survey. The details of their measurements are as follows.

The respondents were asked in both surveys to rate the importance of each of 23 destination related attributes to their decision of visiting Miami, on a 7-point Likert scale with two endpoint anchors of “1” = “Extremely Unimportant” and “7” = “Extremely Important”. The cognitive attributes perceived as important are considered as determinant factors in shaping visitor image of a specific destination, which can differentiate the destination from others (Pike, 2003). Furthermore, the self-stated importance ratings are believed to be able to demonstrate tourists’ cognitive images of a destination, which might be caused by diverse personal

desires/concerns, actual experience, or various travelling purposes (Taplin, 2012). Similarly, Bass and Talarzyk (1972) commented that a consumer's attitude towards a particular brand could be hypothesised to be a function of the relative importance of each of the product attributes and evaluations about the brand on each attribute. Thus, this study measured the weights for the evaluative image component, which were determined from each respondent's forced ranking of the importance of the cognitive DI attributes in the selection of a sport tourism destination.

In addition, examining the relative importance of event and destination attributes perceived by the sport tourist could assist researchers to specify a relatively parsimonious multi-attribute model of CDI (see Holbrook, 1978). The role of DI attribute importance may be explained theoretically by the principle of information-processing parsimony (Haines, 1974) which advocates that decision-makers (i.e., potential tourists) normally adopt heuristics that permit them to process as little information as is necessary in order to make rational decisions/choices. Moreover, since only the important attributes would have the capacity to engender sufficient appeal for sport tourists, the importance assessment will effectively facilitate a sport event host destination to deliver the exact benefits sought by potential visitors (Heung & Qu, 2000).

ADI was measured using three semantic bipolar questions with the endpoint descriptors of "Unpleasant – Pleasant", "Dislike – Like", and "Bad – Good" which were adopted from the literature of attitude (Batra & Ahtola, 1991). The intentions to revisit within three time frames (i.e., one-year, three-year, and five-year) and WOM were used to operationalise the conative DI. Respondents were asked to gauge their intention of revisiting Miami for a leisure vacation, and recommending Miami as a vacation destination on 7-point Likert scales, from "1" = "Extremely

Unlikely” to “7” = “Extremely Likely”. Moreover, the six-item place attachment was also included in both questionnaires. However, the nine-item *destination involvement* and three-item *destination satisfaction* were examined only within the follow-up survey. The measurements of these three constructs have been described in Sections 3.2.2.4 and 3.2.2.5.

Finally, personal experience of the destination was measured by two single questions. Respondents were asked to indicate if participation in the 2009 event coincided with their first visit to Miami or if they had previously visited multiple times. In the follow-up survey, the respondents were asked whether they had revisited Miami after attending the 2009 event during the interval between the two surveys. The information was used to create two dichotomous variables of previous experience (first-timers vs. repeaters) and actual re-visitation (actual re-visitors vs. non-re-visitors). In addition, the residency of respondents was assessed through a simple question of “*Are you a United States citizen?*” thereby generating a dichotomous variable of domestic versus international visitors. Sport tourists’ satisfaction with the destination was also measured by the aforementioned three items, and then the respondents were categorised into two groups based on their satisfaction level of less satisfied or very satisfied.

3.3.3 Procedures

Study 2 employed two online self-administered questionnaires to collect longitudinal data on how sport tourists’ post-visit DI changed over time. The first post-event questionnaire survey was opened online from February 18 to March 8, 2009. Around two weeks after the 2009 ING Miami Marathon event, an email invitation containing the online survey link was disseminated by the event organising committee to 13,925 registered runners. Sport tourists had just completed

their trip and returned home, so their perceptions/evaluations of the facilities, attractions and services were believed to be still fresh in their minds. A reminder email was sent out two weeks after the initial email to promote more responses. Finally, 3,008 usable questionnaires were obtained with a response rate of 21.6%. However, 33.9% of the sample were local participants and thus excluded from this study; 1,989 non-local responses were prepared for future analysis.

The follow-up questionnaire survey was distributed ten months later to the 956 non-local respondents of the previous survey who indicated their willingness to participate in the follow-up study. An email invitation containing the survey link was sent out on December 5, 2009 and a reminder email was sent out two weeks later. The questionnaire was kept available online for four weeks, yielding 234 usable questionnaires with a response rate of 24.5%. The responses to this survey were transferred into an SPSS data file; then the variables of the first post-event survey were imported by the “merge files” function of SPSS. The responses at the two timings were matched up through the unique authentic key assigned by the event organisation for every participant.

A combined SPSS data file containing 234 subjects’ responses to both surveys was prepared for further analyses. This panel size ($n = 234$) for Study 2 (Post-event and Follow-up study) has met the recommended number of 20 respondents per cell for the multiple treatments in a repeated ANOVA analysis (Hair et al., 2006b). One issue that needs to be pointed out particularly is the interval setting between the two surveys. Previous researchers have adopted three months (Gartner, 1986) or one year (e.g. Gartner & Shen, 1992; Tasci & Holecek, 2007) as study intervals. Gartner (1986) suggested that a longer time frame should be given to allow for enough image shifts to affect research results and consequently promotion

and marketing efforts. Given the chosen event is held annually, 12-month is the maximum time frame to observe the respondents' post-visit DI change if the effect of re-participation needs to be controlled. The time span of 10-month was chosen to track the same group of 2009 event participants' DI change so as not to affect the data-collection plan with the potential participants of 2010 event.

3.3.4 Analysis

Data analysis for Study 2 occurred across four stages. First, descriptive statistics were produced for the six main constructs of *Cognitive DI*, *Affective DI*, *Conative DI*, *Destination Involvement*, *Place Attachment* and *Destination Satisfaction*. A simple *t*-test was conducted specifically on the cognitive destination attributes to examine their importance for the sport tourist. Second, EFA was conducted to identify the underlying structure of the CDI attributes, followed by a CFA to verify this component structure of CDI. Third, second-order CFA was conducted to confirm the tripartite structure of DI, and then the composite variable was calculated for each of the three DI components as well as for the overall DI. Finally, the computed composite variables were input into a series of GLM repeated measures analyses to examine their changes over time. Any observed changes to CDI, ADI and Conative DI were further examined under the moderating effects of previous experience with the destination, actual revisitation during the interval, destination satisfaction, residency, and the psychological connection level.

3.4 Summary

This chapter was devoted to explaining the research methods employed in this PhD research project. The overall research design was reviewed first, with particular focus on the justification of using an online panel study approach to

monitor sport tourists' attitude formation and change process towards the host destination. The potential limitations of the chosen study approach (a longitudinal research with a case study strategy and quantitative methods) have been preliminarily mentioned in the justification for the research design. For example, the high cost and implementary difficulties of a longitudinal study, the generalisability of the case study results, and the constraints of a pure quantitative research method. In addition, two panels were examined in this study to reveal the pre-post DI change and the post-DI's durability respectively, rather than monitoring the DI change of a single panel throughout all the time points. Therefore, a conclusion about the continuous DI change patterns should be drawn with caution. Moreover, the convenience sampling approach adopted and the online survey technique may generate potential bias and affect the representativeness of the samples. The problems/limitations derived from the actual research execution and the study results will be probed in-depth in the last chapter of the thesis.

What followed was a review of the data collection process, addressing the participants, materials, procedures, and data analysis techniques employed within each study. In conclusion, data collection for this research consisted of two separate longitudinal panel studies: Study 1, a pre- and post-event study, examining how sport tourists' initial DI formed, and then changed through a personal visit to the destination; and Study 2, a post-event and follow-up study monitoring the continuing change of sport tourists' post-visit DI over time. The two studies, employing quantitative data, combined to test *how* and *why* sport tourists' DI formed and changed throughout their decision-making process. The next chapter will present and analyse the results based upon the research questions and associated hypotheses.

In the end, in order to give readers a clearer picture of the whole research process, a synopsis of the sample profile is provided in Table 3.1; all the main constructs measured repeatedly are demonstrated in Table 3.2. Moreover, Figure 3.1 illustrates the data analysis procedure, which includes six major steps, from descriptive analysis, preliminary data analysis (EFA & CFA), ANOVA, GLM repeated measures analysis to two hypotheses testing through SEM.

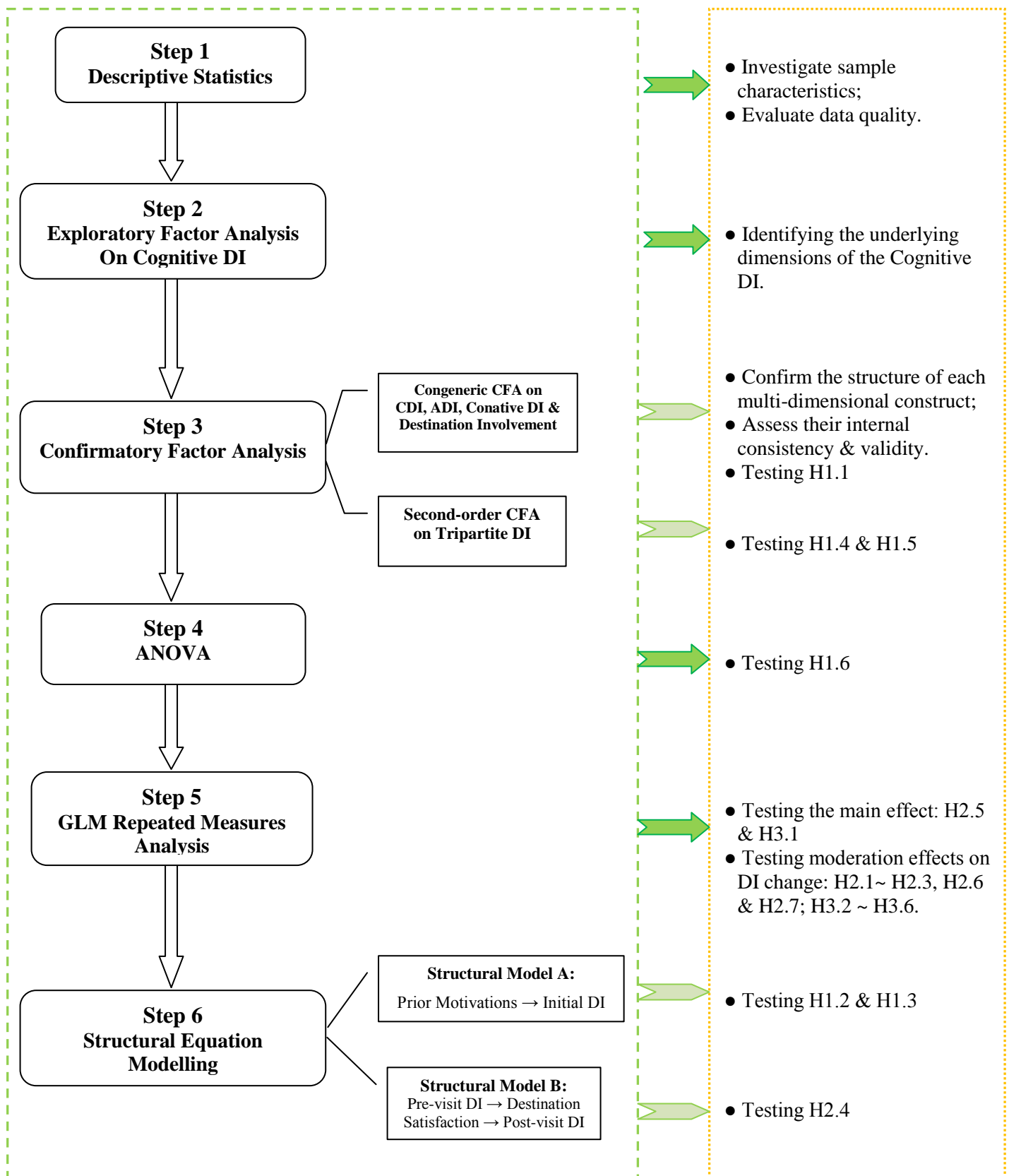


Figure 3.1 Data Analysis Procedures

Table 3.1

Respondents Profile

	Study 1 (2011)			Study 2 (2009)	
	Pre-event Survey	Post-event Survey	Panel	Post-event Survey	Follow-up Survey
Population	7934	19,359	/	13,925	956
Sample Size (Response rate)	1,647 (20.8%)	3,855 (19.9%)	/	3,008 (21.6%)	279 (29.2%)
Usable Non-local Respondents	1181	2203	413	1989	234
Gender	52.1% female	52.4% female	52.5% female	52.7% female	57.3% male
Age	76% aged 25 ~ 49	84% aged 25 ~ 54	75.5% aged 25 ~ 49	75% aged 25 ~ 49	70% aged 25 ~ 49
Marital Status	/	61.7% married or living with partner	58.8% married or living with partner	62.3% married or living with partner	64.7% married or living with partner
Citizenship	68.6% US resident	83% US resident	71% US resident	79.7% US citizen	72.2% US citizen
Ethnicity	65.6% Caucasian; 26% Hispanic/Latino	72.3% Caucasian; 19% Hispanic/Latino	71.7% Caucasian; 21% Hispanic/Latino	71.4% Caucasian, 19.6% Hispanic/Latino	63.7% Caucasian, 24.8% Hispanic/Latino
Education	81% high education	82% high education	85.7% high education	89.6% high education	90% high education
Employment	71% Full-time 14.7% Self-employed	/	74% Full-time 11% Self-employed	/	/
Annual Income	61% ≥ US\$60 000	64.5% ≥ US\$75 000	59% ≥ US\$60 000	72.4% ≥ US\$60 000	72% ≥ US\$60 000
Previous Visits	22.5% First-timers; 55.6% visited ≥ 5times.	17.3% First-timers; 62.9% visited ≥ 5times.	23.2% First-timers; 51% visited ≥ 5times.	18.9% First-timers; 53.6% visited ≥ 5times.	8% First-timers; 71% visited ≥ 5times.
Sightseeing Participation	64.9% (planning)	44%	60.8%	45.4%	/
Actual Revisitation	/	/	/	/	50.4% (n = 118)

Table 3.2

Construct Measurements

CONSTRUCT		MEASUREMENT SCALE	SOURCE	STUDY 1		STUDY 2	
				TIME 1	TIME 2	TIME 1	TIME 2
				2011 PRE-EVENT SURVEY	2011 POST-EVENT SURVEY	2009 POST-EVENT SURVEY	2009 FOLLOW-UP SURVEY
Running Involvement		Three-dimension; 9-item (Pleasure, Centrality, sign)	Beaton, Funk, Ridinger, & Jordan (2011)	√			
Strength of Travel Motivation		4-item	Carroll & Alexandris (1997)	√			
Attitude toward Destination (DI)	<i>Cognitive DI</i>	23-item (Attributes list)	Self-developed	√	√	√	√
	<i>Affective DI</i>	6 Bipolar dimensions	Russell (1980); Batra & Ahtola (1991)	√	√	√	√
	<i>Conative DI</i>	4-item (revisit intentions & WOM intention)	Jang & Feng (2007)	√	√	√	√
Destination Involvement		Three-dimension; 9-item (Pleasure, Centrality, sign)	Beaton, Funk, & Alexandris (2009)	√	√		√
Place Attachment		Two-dimension; 6-Item (Place Dependency & Place Identity)	Kyle, Graefe, Manning, & Bacon, (2003)	√	√	√	√
Destination Satisfaction		Unidimensional; 3-item	Oliver (1980)		√		√
Previous Experience		Single-item	Self-developed	√	√	√	√
Actual Revisitation		Single-item	Self-developed				√

CHAPTER 4 RESULTS

This chapter presents the results of the data analysis and hypothesis testing. The results for the two longitudinal panel studies – Study 1 (i.e., the pre- & post-event study in 2011) and Study 2 (i.e., the post-event & follow-up study in 2009), are presented in two separate subsections. The first section presents the results of Study 1 which focused on the initial DI formation and change, as well as the influential factors affecting this process. The second section presents the results of Study 2 which concerned the continuing change of post-visit DI over time and its moderating factors.

In general, the results of these two longitudinal panel studies are reported using a similar procedure: first, primary analyses results using EFA and CFA are demonstrated to clarify and refine the multiple dimensions of DI, as well as to test its tripartite structure. Next, composite scores are computed for DI and its three components based on their respective one-factor congeneric models to facilitate further analyses in both longitudinal panel studies. The reliability and validity of all the main variables are tested. Subsequently, ANOVA or SEM results of testing the relevant hypotheses which concerned the correlations between the sport tourists' DI and other psychological factors (i.e., motivations, psychological connections, and experience satisfaction) are shown. Finally, the repeated measures analysis results revealing the two changes of sport tourists' DI – one occurring after the personal visit to the destination and the other occurring over a longer period of time after returning from the trip, are highlighted. Possible influential factors of the DI change are also tested and reported.

4.1 Results of Study 1: 2011 Pre- & Post-event Study

Study 1 focused on the formation of the initial DI of sport tourists before their travel to participate in the sport event, as well as on how this DI changed as a result of the actual travel experience. The pre-event study examined the formation of a tripartite initial DI held by sport tourists before travelling to attend the event, and then further investigated the impact of prior motivations on the initial DI as well as the relationship between the initial DI and the psychological connection with the destination. The post-event study measured sport tourists' modified-induced DI as a result of personal visitations. Subsequently, a series of GLM repeated measures analyses were conducted comparing the initial DI with the modified-induced DI in order to reveal the sport tourists' DI change after their event participatory trip, as well as potential factors may influence this change. Before elaborating the analysis procedures and respective results, descriptive statistics for all main constructs utilised in this pre- and post-event study are briefly reported in Appendix 4-1.

4.1.1 Results of Pre-event Study

The data analysis for the pre-event study consisted of the following procedure. First, Hypothesis 1.1 regarding the event attributes' contribution to sport tourists' initial cognitions of the host destination was examined. Second, Hypotheses 1.4 and 1.5 regarding the tripartite structure of DI were examined by a second-order CFA. Third, the influence of prior sport and travel motivations on the initial DI was tested by a SEM model, aiming to address Hypotheses 1.2 and 1.3. Finally, an ANOVA was employed using the composite scores of DI and its three components to determine whether the four PCM-staged groups varied in terms of DI and place attachment. This analysis addressed Hypothesis 1.6 regarding the positive

correlation between initial DIs and psychological connections of sport tourists with the destination.

The first step of formal analysis started with exploring the multiple underlying dimensions of the DI by an EFA, followed by a CFA to confirm the EFA results and/or further refine the measurement scales for DI and its components (e.g., the multi-dimensional cognitive component of DI). However, as suggested by Henson and Roberts (2006), following an EFA with a CFA on the same data set is potentially misleading, or not informative. To improve the validity of the EFA results, the whole sample was randomly split into two halves, one as a calibration sample ($n = 601$) and the other as a validation sample ($n = 580$). Following a general procedure, the EFA was first used to identify the underlying structure of the main construct of DI with the calibration sample; then the CFA was employed with the validation sample to test whether the underlying structure could form a tenable measurement model for the construct, with required modifications and adjustments (DeVellis, 2003; Huang & Hsu, 2009).

Next, a second-order CFA model was formulated for DI by combining individual first-order measurement models identified earlier for DI components. After confirming the tripartite structure of DI by the higher-order CFA, the following analyses were all employed with the whole sample of the pre-event study ($N = 1,181$). This is because only a large sample size would ensure a relatively stable estimation solution with a complicated model. The results for above analyses are reported in the following four sub-sections.

4.1.1.1 EFA Results – Exploring the Latent Structure of DI

The DI was measured by 23 cognitive attributes/features related to the sport event and its host destination (i.e., ING Miami Marathon and its location, Miami),

six bipolar affective items and four behavioural intention scales. In order to develop a reliable, yet parsimonious, set of scales to measure the DI construct (i.e., reduce this list of 33 indicators into a few correlated and meaningful dimensions), the EFA was employed with the calibration sample. Although the principal component analysis with varimax rotation is the most commonly adopted method in tourism DI studies (e.g., Pike & Ryan, 2004; Sirakaya et al., 2001), it is not optimal (Costello & Osborne, 2005). Instead, the maximum likelihood (ML) extraction method with oblique rotation has been supported by more and more researchers as an optimal choice (e.g., Bienstock & Stafford, 2006; Leung, 2008), given that this rotation method assumes the resulting factors are correlated.

In order to run the EFA, the distribution normality of the 33 variables was examined to test whether they violate the assumption of multivariate normality requested by the ML extraction method. According to Field (2009), when sample size is big, it is more significant to look at the shape of the distribution visually and to look at the absolute value of the skewness and kurtosis statistics rather than to calculate their significance. Therefore, neither the Kolmogorov-Smirnov (K-S) test nor Shapiro-Wilk (S-W) test was conducted to test the significance of distribution normality in the current study due to its large sample size. By checking the absolute value of skewness and kurtosis, as well as the histograms of each indicator, it can be concluded that none of the absolute value of univariate skewness exceeded 1.4, and the absolute value of univariate kurtosis did not exceed 2.9. Judging by Kline's (2010) criteria (i.e., skew index should \leq "3.0", and kurtosis index should \leq "8.0"), the data did not appear to deviate from a normal distribution, so ML extraction can be adopted.

Before conducting the EFA, the data were examined via measures such as the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity to determine the appropriateness of factor analysis (Hair et al., 1995). The KMO value of the 33 DI indicators is 0.94 ("superb" according to Field, 2009), indicating interrelations among the variables. In other words, there is probably a factor structure underlying the data. Moreover, all KMO values for individual items were > 0.87 , which is well above the acceptable limit of 0.5 (Field, 2009). The Bartlett's test for sphericity $\chi^2(561) = 12123.72, p < .001$, indicated that correlations between items were sufficiently large for factor analysis (Field, 2009; Hair et al., 1995).

The 33 items were then subjected to the EFA, using ML extraction with oblimin rotation to examine initial structure for the DI items and potential dimensions. Four criteria were used to form factors: (1) only the factors with eigenvalues greater than one were extracted (i.e., eigenvalues > 1.0) (Kaiser, 1960); (2) items displaying low communalities (i.e., < 0.4) were removed from the scale (Costello & Osborne, 2005); (3) items with factor loading less than 0.5 were removed from the scale (i.e., factor loadings ≥ 0.5); and (4) the cross-loadings of an item (i.e., item loadings on more than one factor) had to be lower than 50% of the highest loading to be retained (e.g., Hammitt, Backlund, & Bixler, 2006). Following these criteria, nine items were removed from the scale and 24 out of the 33 items were retained, resulting in five factors with eigenvalues greater than one.

Examination of the scree plot further indicated that this 5-factor solution was the most appropriate. The five factors explained 60% of the total variance of DI, which can be considered as a satisfactory solution in the social sciences (Hair et al., 2006b). Table 4.1 provides the factor loadings after rotation, eigenvalues and

percentages of variance explained by each factor. It was found that most of the factor loadings were greater than 0.6, indicating a good correlation between the attribute items and the factor to which they belonged.

The internal consistency of the five factors was assessed using Cronbach's coefficient alpha (Churchill, 1979). The reliability coefficient values for the five factors ranged from .78 to .89, higher than the recommended benchmark of 0.7 in social science (Nunnally & Bernstein, 1994), indicating all the variables retained are satisfactory measures for the factor to which they belonged. Following the identification of this final factor solution, the items within each of the three factors were reviewed and then named.

Table 4.1

EFA Results for the Multi-Dimensional DI

Destination Image Measurements	Destination Image Components				
	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
<i>Distressing – Relaxing</i>	.569	.027	-.032	.103	.012
<i>Unpleasant – Pleasant</i>	.829	.058	.062	-.003	.077
<i>Dislike – Like</i>	.735	.028	.065	.004	.097
<i>Negative – Positive</i>	.865	-.019	.097	.031	.047
<i>Good Event Organisation & Facilities</i>	.063	.674	-.003	.081	.029
<i>Acceptable Registration Fee</i>	-.050	.526	.043	.190	.015
<i>High Level of Competition</i>	.009	.750	.023	.005	.015
<i>High Status of the Event</i>	.025	.954	-.068	-.076	-.038
<i>Entertainment Value of the Event</i>	-.026	.823	.086	-.055	.061
<i>Chance of Experiencing Different Cultures/customs</i>	-.088	-.041	.759	.077	.101
<i>Sightseeing Opportunities</i>	.018	.063	.768	.092	-.013
<i>Cultural, Arts & Historic Attractions</i>	.066	-.007	.854	-.067	-.061
<i>Natural/ Scenic Attractions</i>	.142	.086	.635	-.045	.001
<i>Ease of Travel</i>	.060	.035	-.028	.589	.078
<i>Personal Safety</i>	.202	.045	-.045	.597	-.029
<i>Acceptable Price Level</i>	.079	-.056	-.017	.628	.035
<i>High Quality of Accommodation</i>	-.027	.050	.001	.667	.159
<i>High Quality of Food</i>	-.111	.019	.114	.626	.166
<i>Good Local Infrastructure & Transportation</i>	-.057	.083	.146	.693	-.198
<i>Green & Clean Environment</i>	.144	.039	.046	.686	-.133
<i>Shopping Facilities</i>	.017	.077	-.007	.671	.122
<i>I will return to Miami for a vacation after participating in the 2011 ING Miami Marathon event.</i>	.098	.032	.028	.016	.684
<i>I will recommend Miami to others as a leisure travel destination.</i>	.202	.026	.118	.172	.526
<i>I will not return to Miami again.</i>	.052	.073	-.004	.015	.575
Initial Eigenvalues	9.72	2.07	1.75	1.70	1.02
% of Variance Explained	37.91	7.55	5.65	5.86	2.74
Cronbach's Alpha	.894	.885	.867	.889	.775

Note. EFA on DI measurements, with the calibration subsample ($n = 601$). Factor loadings $> .50$ are in boldface.

Extraction method – maximum likelihood

Rotation method – Direct Oblimin with Kaiser Normalization

Cumulative % of variance explained by five factors = 59.71%

KMO measure of sampling adequacy = .925.

As shown in Table 4.1, the items that cluster on the same factor suggest Factor 1 consisted of the four items measuring the feelings of sport tourists for Miami, and was therefore labelled “Affective DI”. This factor explained 40.5% of the total variance (ADI, $\alpha = .89$). The second factor concerned the event-related features/impressions, with five items accounting for 8.6% of the total variance, and was thus labelled “Event Image” (EI, $\alpha = .89$). Factor 3 represented the touristic attractions, with four items accounting for 7.3% of the total variance, and was labelled “Tourist Attractions” (TA, $\alpha = .87$). The fourth factor contained eight items that reflected basic facilities and services demanded by tourists, accounting for 7.1% of the total variance, and was then labelled “Supporting Factors” (SF, $\alpha = .89$). The last factor contained the three items that were designed to measure the behavioural intention of sport tourists with regard to the host destination. Hence, the factor was labelled “Conative DI” and explained 4.3% of the total variance (Conative DI, $\alpha = .78$).

These results show that the DI could be represented by five components: *Event Image, Tourist Attractions, Supporting Factors, Affective, and Conative components*. Among them, the three factors of EI, TA, and SF were drawn from the 23 attributes/features related to the sport event and its host destination, which were developed to measure the cognitive DI. Recalling the tripartite attitudinal perspective adopted by this study to examine the DI construct, it can be said that the overall DI, in the current study, consisted of three distinct components: the *affective DI*, the multifaceted *cognitive DI*, and the *conative DI*.

However, as Costello and Osborne (2005) cautioned, no substantive conclusions can be drawn based on exploratory analyses since the nature of EFA is just *exploratory*. EFA is only appropriate for exploring the data, rather than testing

hypotheses or theories. Therefore, once an instrument has been explored by EFA, it is time to move to CFA to verify whether this instrument has the same structure across certain population subgroups (Costello & Osborne, 2005), as well as to verify to what extent this structure matches reality (Hair et al., 2006b). The advantages of CFA over EFA have been well documented (e.g., Hair et al., 2006b; O'Leary-Kelly & Vokurka, 1998). CFA models allow for unequal contributions of indicators to the measurement of latent variables and the models will fit only when the indicator variables associated with any one latent variable are valid indicators of that trait (Rowe, 2002).

4.1.1.2 CFA Results – Validating the Tripartite Structure of DI

The measurement structure of DI derived from the EFA was then subjected to a second-order confirmatory factor analysis with maximum likelihood estimation in AMOS 18. Second-order CFA, also known as hierarchical factor analysis, is becoming a more preferred skill in the psychology area (Chen, Sousa, & West, 2005). However, it is less well known and rarely applied in tourism studies (Kim & Yoon, 2003). Second-order factor structure contains two layers of latent constructs: a second-order latent factor(s) being reflected by multiple first-order latent factors, each of which is represented by one or several manifest variables. The principal benefit of applying a second-order CFA on the DI structure is to capture a broader perspective on the theoretical concept of DI, as well as the level of generalisation that cannot be revealed by first-order factor analysis on the DI components (Kim & Yoon, 2003). Moreover, a higher-order factor model of DI can facilitate generalisation across the primary factors (i.e., correlations between the tripartite components) (Gorsuch, 1983).

Accordingly, in the current study, a second-order CFA was conducted on the DI construct to improve the generalisability of the DI tripartite structure. For cross-validation, this analysis was conducted with the randomly split validation sample ($n = 580$), in order to verify and refine the exploratory factor structure and latent constructs. First of all, the three latent components of cognitive DI derived from the EFA results (i.e., EI, TA, & SF) should be refined, and then the corresponding three composite variables can be computed from their refined observed indicators respectively. Such composite variables can be treated as observable continuous variables in omnibus general linear model techniques (Holmes-Smith & Rowe, 1994), to avoid a hard-to-interpret three-order factor model for DI in this case. Second, based on the EFA results and theories generated by previous studies, a hypothesised second-order factor model was proposed for the DI construct. Next, by respecifying the hypothesised model, evidence of a second-order factor was assessed using several GOFs. Finally, the reliability and validity of the factors and items in the confirmed model were assessed.

Scale Purification for Cognitive DI

There is a general agreement among tourism destination researchers that cognitive DI is a multifaceted construct (Son & Pearce, 2005; Tasci & Gartner, 2007). However, a generic CDI sub-components structure does not yet exist, or has never been explored due to the variable CDI attributes adopted across a wide variety of travel destinations. Most previous tourism destination studies have been limited to exploring the sub-dimensions composing a cognitive DI through principal component analysis (e.g., Sirakaya et al., 2001; Yilmaz et al., 2009), seldom testing the stability and generalisability of the latent CDI components that they identified. Therefore, before testing the tripartite structure of DI, the current study refined the

measurement scales for CDI and its latent components, in order to confirm a relative stable latent structure of CDI exists.

Initial Confirmatory Model of Cognitive DI & Alternatives

Based on the EFA results, a total of 17 indicators loaded on three latent components – five items for *Event Image (EI)*, four for *Tourist Attractions (TA)*, and eight for *Supporting Factor (SF)* – were retained in the measurement model of the cognitive DI. Accordingly, the initial hypothesised confirmatory factor model of CDI (Model 1) comprised of three latent factors/components with 17 manifest variables, and each pair of the latent factors was permitted to co-vary (see Figure 4.1). This model hypothesises that the three factors are correlated, indicating the three latent dimensions of CDI influence each other.

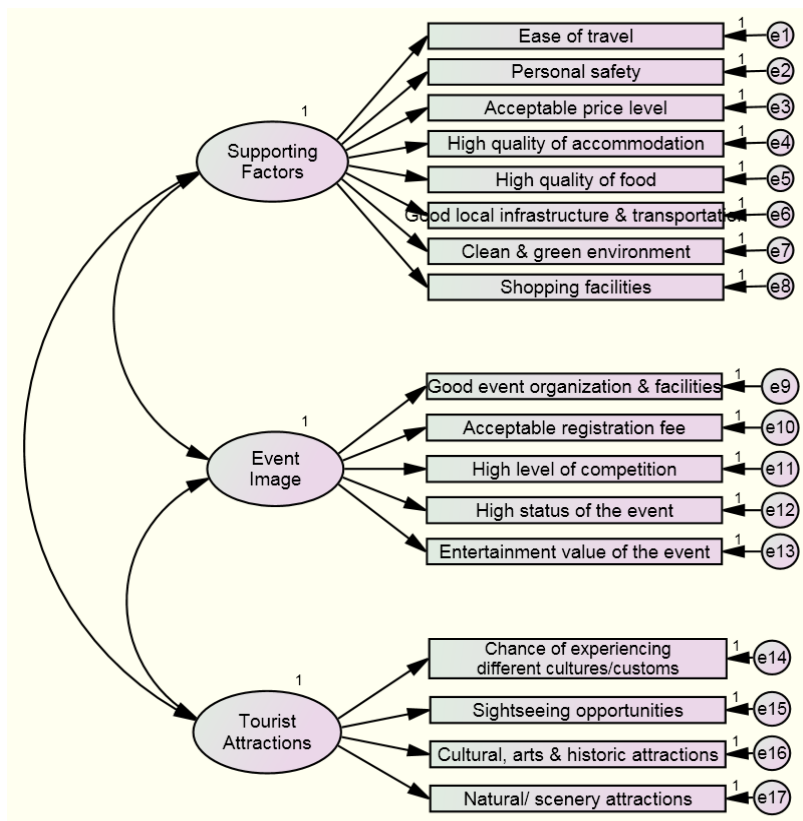


Figure 4.1 The Proposed Measurement Model of CDI (Model 1)

Furthermore, in order to confirm the existence of a general higher-order concept of CDI, several more-or-less restricted models (alternative models) should be examined to compare their effectiveness (Neuman, Bolin, & Briggs, 2000; Rindskopf & Rose, 1988). To explore how the CDI dimensions are structured, another three alternative models were proposed: Model 2 was a one-factor model in which the 17 observable attributes were hypothesised to form a single factor that was deemed to be the general construct of CDI. This model tested a unidimensional conceptualisation of the CDI construct, rejecting the three latent dimensions suggested by EFA results. Model 3, a first-order uncorrelated factor model, hypothesised that the same three dimensions of CDI existed independently. It was a nested model within Model 1, testing the uncorrelated three latent factors of CDI, implying an orthogonal solution (Gustafsson & Balke, 1993). Model 4, a bi-factor, general-plus-correlated-group factors model, consists of one general factor plus group factors as in Model 1. This bifactor model hypothesised that there was a general factor (i.e., CDI) underlying the diverse aspects of the construct accounting for the commonality/ intercorrelations of the observed indicators. In addition, there were group/ domain-specific factors (i.e., EI, TA, & SS) simultaneously capturing the item covariation that is independent of the covariation due to the general factor.

The bifactor model is a variant of the hierarchical model (Rindskopf & Rose, 1988); it is less restricted but has similar interpretations to the second-order factor model. It has been documented that the bifactor model has several advantages over the second-order model when researchers are interested in both the group factors and the general factor (Chen, West, & Sousa, 2006; Reise, Morizot, & Hays, 2007; Rindskopf & Rose, 1988). The fit indices of the proposed first-order confirmatory

factor model on the CDI structure and its three alternative models are displayed in Table 4.2.

Table 4.2

Fit Indices for Initial & Revised CFA Models of CDI

CDI Structure		χ^2	df	CMIN/df	p	GFI	AGFI	NFI	TLI	CFI	RMSEA	SRMR
Model 1	Initial Group-factor Model (correlated 3-factor Model)	676.87	116	5.84	.000	.871	.829	.862	.862	.882	.091	.060
Model 2	One-factor Model	2119.23	119	17.81	.000	.626	.519	.568	.520	.580	.170	.121
Model 3	Orthogonal Model (uncorrelated 3-factor Model)	976.64	119	8.21	.000	.827	.777	.801	.794	.820	.112	.213
Model 4	Bi-factor Model	446.19	99	4.51	.000	.916	.870	.909	.900	.927	.078	/
Model 5	Respecified CDI Model	137.17	41	3.35	.000	.961	.937	.957	.959	.970	.064	.035

Note. $n = 580$.

From Table 4.2, the fit indices demonstrated that the unidimensional model (Model 2) had the worst fit to the data, indicating that CDI is not a unidimensional construct and the 17 indicators assessed more than one single factor. Thus, Model 2 was unacceptable. Next, as shown by the changes in the indices, Model 3 (uncorrelated 3-factor model) showed substantial deterioration when compared to Model 1 (correlated 3-factor model), providing less satisfactory solutions. Although the fit indices of Model 1 were indicative of a poor fit and further modification is required, Model 1 presented considerable improvement (CAIC = 949.31) over Model 3 (CAIC = 1226.99). Thus, it was determined that the poor-fitting, uncorrelated 3-factor model (Model 3) could be rejected.

A comparison between Model 1 (group-factor model) and Model 4 (bifactor model) is equivalent to a test that all the factor loadings for the general factor are equal to zero. The difference in their respective Chi-square and degrees of freedom ($\Delta\chi^2 = 230.68$, $\Delta df = 17$, $p < .001$) shows that Model 4 provides a better statistical fit

to the data. This fit improvement suggests a superordination concept of CDI, which has no direct effect on the observed variables, might be too restrictive. The bifactor model of CDI has more conceptual breadth than a second-order CDI, with a general CDI factor directly affecting the observed variables in the same domain as the domain-specific/group factors (Yung, Thissen, & McLeod, 1999). However, none of the above models provided a satisfactory fit to the data; therefore, any misspecifications in the initially proposed CFA model (Model 1) deserved further detection, identification and respecification. Moreover, due to the lack of theoretical agreement, the CDI structure model needs to be respecified/ modified to achieve better parsimony and fitness.

Model Respecification

Schumacker and Lomax (2004) suggest that critical ratios (*t*-values), standardised residual covariance (SRC), and modification indices (MIs) are the main indices that should be examined when detecting model misspecification. As for the initial CFA model on CDI (Model 1), all parameter estimates had Critical Ratios (C.R., i.e., *t*-value) larger than ± 1.96 at the significance level of .001 (see Table 4.3), indicating that they were significantly different from zero and therefore should remain in the model (Holmes-Smith, 2010). In other words, all indicators did measure their respective underlying factors (Hatcher, 1994). However, the average percentage of variance explained (AVE) for the *Supporting Factors* is lower than the rule of thumb at 50% (Hair et al., 2006b), suggesting the variance of items that can be explained by this construct is lower than the variance due to error (Fornell & Larcker, 1981). The convergent validity of this factor cannot be supported, thus improvement to the measurement model should be made.

Table 4.3

Initial Confirmatory Model Factor Loadings & Inter-Correlations

Parameter Estimates			
<i>Factor Correlations</i>	Event Image	Tourist Attractions	Supporting Factors
Event Image	-		
Tourist Attractions	.473***	-	
Supporting Factors	.544***	.466***	-
Factor Loadings^a / AVE%^b			C.R.
Event Image	57.7%		
<i>Good event organisation & facilities</i>	.739		19.914
<i>Acceptable Registration fee</i>	.600		15.179
<i>High level of competition</i>	.770		21.095
<i>High status of the event</i>	.865		25.092
<i>Entertainment value of the event</i>	.799		22.273
Tourist Attractions	61.2%		
<i>Chance of experiencing different cultures/customs</i>		.742	19.884
<i>Sightseeing opportunities</i>		.889	25.752
<i>Cultural, arts & historical attractions</i>		.772	21.002
<i>Natural/scenery attractions</i>		.714	18.868
Supporting Factors	42.9%		
<i>Ease of travel</i>		.585	14.539
<i>Personal safety</i>		.598	14.962
<i>Acceptable price level</i>		.535	13.084
<i>High quality of accommodation</i>		.775	21.044
<i>High quality of food</i>		.728	19.295
<i>Good local infrastructure & transportation</i>		.620	15.644
<i>Clean & green environment</i>		.688	17.883
<i>Shopping facilities</i>		.676	17.454

Note. Initial CFA on CDI measurements, with the validation subsample ($n = 580$).

^a All loadings are significantly above 0.5 ($p < .001$).

^b The AVEs were computed as an indicator of convergent validity.

*** $p < .001$, two-tailed.

Before checking the SRC and MIs, the Squared Multiple Correlation coefficient (SMC), another very useful statistic that is independent of all units of measurement (Byrne, 2001), was adopted to assess the strength of the relationship between latent constructs and their manifest variables (Reisinger & Turner, 1999). The SMC value represents the proportion of variance that is explained by the predictors of the latent variable. From a measurement perspective, the SMC value represents how well an item measures a construct, and thus can be referred to as

item reliability (Hair et al., 2006b). A cut-off point of “0.5” has been suggested as the benchmark for a good SMC value (Bagozzi & Yi, 1988; Holmes-Smith, 2010) for reflective indicators.

In the current CFA test on three-component CDI, any observed measure item with an extremely weak SMC value (< 0.30) was dropped directly from the model: “acceptable price level”, with an SMC value of .29, was thus removed. In addition, the SMC values of “ease of travel” (.34), “personal safety” (.36), “acceptable registration fee” (.36), and “good local infrastructure & transportation” (.39) indicated that these four items were also weak measures of their respective factors but still adequate (Holmes-Smith, 2010). Thus, the remaining 16 indicators would undergo further inspection.

Based on the SRCs, MIs and the expected parameter change (EPC) statistic, a step-by-step removal process was used to achieve appropriate model fit (Douglas & Mills, 2004; Holmes-Smith, 2010). Firstly, residual covariance between “ease of travel” and “personal safety” displayed extremely large SRC estimates (> 2.58) (Byrne, 2001). In addition, a review of the modification indices revealed the model re-specification would yield a substantially better fit if the error terms of these two items were allowed to covary. The modification index of this pair of error terms was larger than those remaining (M.I. = 60.32) and the benchmark of 3.84 (Netemeyer et al., 2003), thus represented misspecified indicators (Chu, 2008). Consequently, these two items were removed from the model. Similarly, another pair of observed variables - “good infrastructure & transportation” and “clean & green environment” was also removed from the model due to their large SRCs and suggested error covariance. Furthermore, “acceptable registration fee” was dropped since it had two residuals greater than 2.0 in absolute value (Hatcher, 1994), indicating that it might

be multi-factorial. These deletions substantially improved the model ($\Delta\chi^2 = 539.7$, $\Delta df = 75$, $p < .001$).

As Byrne (2001) advocated, it is very important for the researcher to know when to stop fitting a model. Three yardsticks were suggested, although there are no firm rules or regulations to guide this decision: first, a thorough knowledge of the substantive theory; second, an adequate assessment of statistical criteria based on information pooled from various indexes of fit; and third, a watchful eye on parsimony (Byrne, 2001). The respecified CFA model of CDI could attain an even better statistical fit if items continued to be dropped based on MIs. However, the author decided to stop fitting this model in order to retain sufficient information describing the CDI.

Thereafter, the resulting measurement model of CDI consisted of four indicators for the *Event Image*, four items for *Tourist Attractions*, and three items for *Supporting Factors* which was renamed as “Support Services” (see Figure 4.2). The adequacy of the modified measurement model for the cognitive DI was evaluated by examining its goodness-of-fit indices, reliability, and validity (i.e., convergent validity and discriminant validity). As indicated in the last row of Table 4.2, Model 5, the respecified CFA model of CDI, has reached a satisfying level across multiple goodness-of-fit indices. For instance, the RMSEA is .064, with a 90% confidence interval ranging from .052 to .076, indicating that over all possible randomly sampled RMSEA values, 90% of them will fall within the bounds of .052 – .076, which represents a good degree of precision (Browne & Cudeck, 1992).

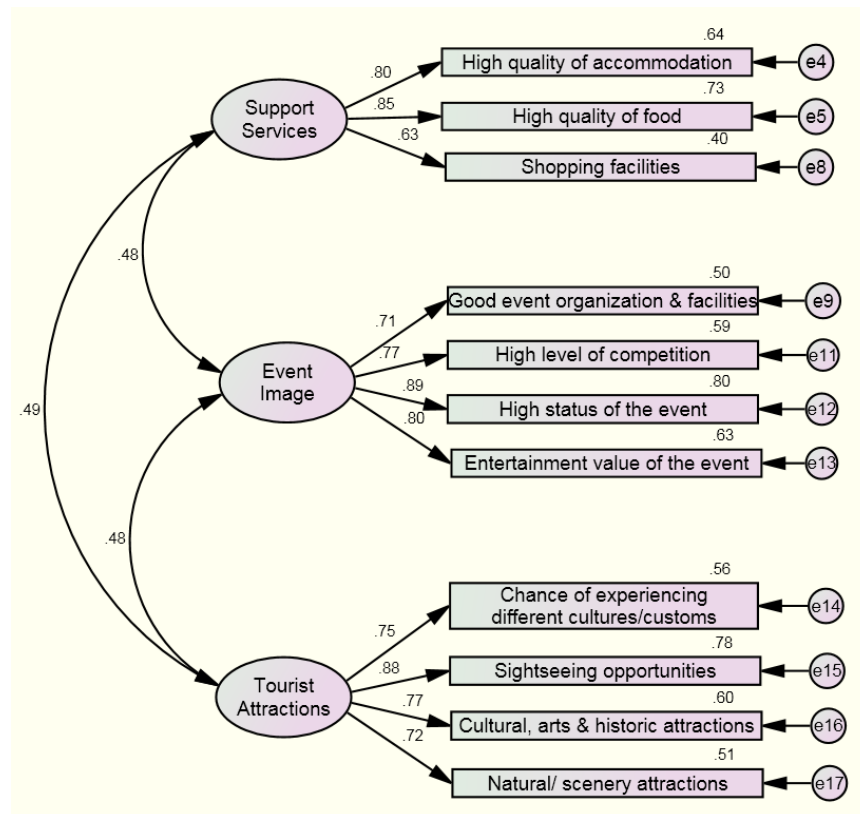


Figure 4.2 The Respecified Measurement Model of Initial Cognitive DI (Model 5)

Table 4.4 reports the standardised factor loadings, AVE and composite reliability (CR) values for each of the latent factors in the respecified model. It can be seen that all standardised factor loadings were substantively reliable (most > 0.7 , except “*shopping facilities*”) (Hair et al., 2006b), and statistically significant at the significance level of .001 (t -value $> \pm 1.96$). This provided evidence of convergent validity for the measurement model (Anderson & Gerbing, 1988).

Moreover, AVE and Composite Reliability were also calculated for each of the three CDI factors, using the equations provided by Hair et al. (2006b), with the purpose of lending further evidence to the internal consistency and construct validity. From Table 4.4, all three components recorded AVE values above the benchmark of 0.5 (Fornell & Larcker, 1981) and composite reliability scores greater

than 0.7 (Hair et al., 2006b), indicating convergent validity has been achieved.

Finally, the AVE test was used to examine the discriminant validity of the three CDI components. All the inter-factor correlations were less than 0.5, within the recommended criteria of 0.8 (Holmes-Smith, 2010). In addition, the AVE for any pair of factors exceeded the square of the correlation between these two factors (Fornell & Larcker, 1981; Hair et al., 2006b; Hatcher, 1994). The discriminant validity was thus verified.

Table 4.4

Factor Loadings for the Revised CFA Model of CDI

Label	Factors & Indicators	Standardised Loadings ^a	AVE ^b	C.R.	Composite Reliability
	Event Image		0.63		0.87
EI1	<i>Good event organisation & facilities</i>	.709		18.81	
EI2	<i>High level of competition</i>	.768		20.99	
EI3	<i>High status of the event</i>	.892		26.12	
EI4	<i>Entertainment value of the event</i>	.796		22.08	
	Tourist Attractions		0.61		0.86
TA1	<i>Chance of experiencing different cultures/customs</i>	.746		20.01	
TA2	<i>Sightseeing opportunities</i>	.883		25.53	
TA3	<i>Cultural, arts & historical attractions</i>	.775		21.10	
TA4	<i>Natural/scenery attractions</i>	.716		18.94	
	Support Services		0.59		0.81
SS1	<i>High quality of accommodation</i>	.797		20.74	
SS2	<i>High quality of food</i>	.853		22.54	
SS3	<i>Shopping facilities</i>	.633		15.69	

	<u>Event Image</u>	<u>Tourist Attractions</u>	<u>Support Services</u>
Event Image	1.00	0.229 ^d	0.228
Tourist Attractions	.479*** ^c	1.00	0.242
Support Services	.478***	.492***	1.00

Note. CFA modification on CDI measurements, with the validation subsample ($n = 580$)

^a All loadings are significantly above 0.5 ($p < .001$).

^b AVE values were shown as decimals for ease in comparison with the squared correlations.

^c Values shown below the diagonal are correlation estimates (at 2-tailed p level of .001).

^d Values above the diagonal are the squared correlations.

Composite Variables

As the respecified CFA model indicated, the three components of cognitive DI had been verified. Subsequently, three one-factor congeneric models could be

built for these three latent CDI components, each having several observed indicators. By fitting the one-factor congeneric measurement model, the factor score weights were employed to compute a composite score for each CDI component. The new composite variables, then, can be used as observed variables in multilevel or structure equation models (Holmes-Smith & Rowe, 1994).

Composite scores computed by the one-factor congeneric model are single indicators of their component items, each of which has been weighted for its relative contribution to the composite variable (Holmes-Smith & Rowe, 1994; Rowe, 2002). This one-factor approach to data reduction was originally put forward by Jöreskog and Sörbom (1989) and then elaborated by Holmes-Smith and Rowe (1994). The main benefit of computing a weighted composite variable is to minimise measurement error in the items contributing to each scale, and increase the reliability and validity of the computed scale scores (Rowe, 2002). As for this case, use of congeneric models allowed the 11 indicators of three CDI components to be reduced to three composite scales, each representing one component of CDI. The CDI construct, then, can be described as a first-order latent variable accounting for the covariance of three observed variables (i.e., EI, TA, & SS). An additional advantage is that the fit statistic for each congeneric model is a quasi test of construct validity (Holmes-Smith & Rowe, 1994).

A one-factor congeneric model was tested for each of the three domains under CDI. The four-item congeneric model of *Event Image (EI)* provides an example; the well-established but rarely used procedures were described as follows. As shown in Figure 4.2, *Event Image* contained four attributes/ features pertaining to the sport event for which sport tourists travelled. In a one-factor congeneric model, the latent variable of EI was given a scale by fixing its variance to 1, while the four

items' regression coefficients and error variances were constrained to be uncorrelated. CFA was conducted to fit this congeneric model, and the results demonstrated it failed to fit the data ($\chi^2/df = 16.6$, $p = .00$, RMSEA = .164). The SMCs and MIs suggested by dropping the item of "good event organisation & facilities" ($SMC = .49$), the model could achieve a perfect fit ($\chi^2/df = .05$, $p = .82$, RMSEA = .000) and all items have very good reliabilities (all above 0.5). The measure of internal consistency (scale reliability $\alpha = .85$) is also good, and the factor score regressions make substantive sense – the composite scale for pre-perceived *Event Image* received its greatest contribution from the "high status of the event" since sport tourists have not yet experienced the event.

In a similar way, one-factor congeneric models were fitted for the other two CDI components. Both congeneric models of *Support Services* ($\chi^2/df = .07$, $p = .79$, RMSEA = .000) and *Tourist Attractions* ($\chi^2/df = .112$, $p = .33$, RMSEA = .014) could fit the data very well without modifications. Table 4.5 presents the item factor score regression coefficients for each composite variable which were generated from respective one-factor congeneric models, as well as the proportionally weighted score weights which add to one. The AVE values were also calculated to demonstrate the amount of variance captured by the retained indicators within each construct, relative to the variance due to measurement error.

Table 4.5
Composite Scale Parameters for CDI Components

Scale	TD ^a	Item Weights ^b				AVE ^c
ξ_{c1} - Tourist Attractions	/	TA_1 Sightseeing opportunities	TA_2 Cultural attractions	TA_3 Natural attractions	TA_4 Chance of experiencing different cultures/customs	61%
		.375	.160	.133	.146	
		.461	.197	.163	.179	
ξ_{c2} - Support Services	1, 2	SS_1 High quality of accommodation	SS_2 High quality of food	SS_3 Shopping facilities		59%
		.355	.381	.131		
		.409	.439	.152		
ξ_{c3} - Event Image	1, 3	EI_1 High level of competition	EI_2 High status of the event	EI_3 Entertainment value of the event		68%
		.065	.690	.07		
		.079	.836	.085		

Note. $n = 580$.

^a TD indicates constrained error variance estimates.

^b The second row for each scale are Factor Score Weights of each item obtained from accepted one-factor congeneric models; the third row are the proportionally-weighted factor score weights which add to 1.

^c The AVE percentages were computed as an indicator of convergent validity.

As shown in Table 4.5, a proportionally weighted scale score for the composite variable *Event Image* that takes into account the individual and joint measurement error of the three indicators, can now be computed as a continuous variable for each case as follows (using SPSS format nomenclature) (Rowe, 2002):

$$\text{Compute Event Image} = (EI_1 \times 0.079) + (EI_2 \times 0.836) + (EI_3 \times 0.085),$$

Where EI_1, EI_2, and EI_3 are the raw score rated by each respondent on the three indicator items respectively. This process ensured that the estimation of the composite variable *Event Image* (adjusted for measurement error) was proportionally weighted by the actual different contributions made by its three indicators. The composite scores for TA and SS were also calculated in the same way. The AVE percentages of all three CDI components were above 50%, indicating the variance of retained indicators that can be explained by their

respective latent factors is greater than the variance due to error, and the convergent validity of the three dimensions of CDI was thus achieved.

Finally, correlations, descriptive statistics and reliability estimates for these new computed composite variables are presented in Table 4.6. To assess the reliability of the composite variable in this study, the maximised reliability coefficient (Coefficient H) developed by Hancock and Mueller (2001) was adopted since it incorporates factor score regression weights to determine the composite scale reliability for congeneric measures. The other advantages of Coefficient H over other reliability measures have been discussed by Holmes-Smith (2010).

Table 4.6

Correlations, Means, Standard Deviations of Three CDI Facets

	Event Image	Tourist Attractions	Support Services	MEAN	SD	Coefficient H ^c
Event Image	1.00	.154 ^b	.136	5.16	1.18	.95
Tourist Attractions	.392** ^a	1.00	.174	4.93	1.15	.88
Support Services	.369**	.417**	1.00	5.33	1.05	.83

Note. $n = 580$. ** Correlation is significant at the p level of .01 (2-tailed).

^a Values shown below the diagonal are correlations.

^b Values above the diagonal are the squared correlations.

^c *Coefficient H* is the maximised reliability coefficient developed by Hancock & Mueller (2001).

As shown by *coefficient H*, the scale reliabilities for all three composite CDI dimensions were above 0.8, suggesting that all three sets of indicator variables were reliable measures of the underlying latent factors that they belonged to. In addition, to assess the discriminant validity of the three CDI components, the AVEs were compared with the square of the correlation between each pair of components. As shown in both Table 4.5 and Table 4.6, the AVE of each CDI component is greater than the square of the correlations between the three components; discriminant validity was thus achieved. Subsequently, the three reliable and valid newly-computed composite variables (EI, TA, & SS) were able to be used as observed

variables in further explanatory analyses, for instance, in fitting hierarchical models or structural equation models.

Congeneric Measurement Model for CDI

To examine how well the newly computed three composite variables can account for their higher-order CDI construct, a one-factor measurement congeneric model was tested for the CDI as a latent variable having three observed indicators (i.e., composite scores of EI, AT, & SS). The fit indices suggested the congeneric model of CDI fit the data very well ($\chi^2/df = .33$, $p = .57$; GFI = 1.00; AGFI = .998; NFI = .999; CFI = 1.00; RMSEA = .000). Each of the three composite indicators has significant factor loadings ($p < .001$): .59 for EI, .69 for TA, and .61 for SS, above the reasonable level of .50 (Bagozzi & Yi, 1988).

The reliability coefficient of CDI (*coefficient H* = .67) was lower than the 0.7 benchmark but still was deemed acceptable for two reasons. First, Bagozzi and Yi (1988) have recommended 0.6 as the cut-off point of composite reliability. Second, when Hair et al. (2006b) suggested a threshold value of 0.7, they reminded readers that this is not an absolute standard, and values below 0.7 can be accepted if the research is exploratory in nature. The three components of CDI identified by this study have never been found in previous literature, thus can be treated as an exploratory finding. Moreover, the value of 0.67 was not substantially below the desired threshold.

In addition, as Holmes-Smith and Rowe (1994) indicated, a significant benefit of testing a one-factor congeneric model for a latent construct is the fit statistics of an acceptable congeneric model can be viewed as confirming the validity of this latent construct. Therefore, the accepted congeneric model of CDI could be embedded directly in a second-order factor structure of DI. This is

supported by Gerbing and Anderson (1988) who claimed that when the items are unidimensional with respect to a single common construct (EI, TA, SS in this case), but that construct itself is not of general interest, a good option is to embed the unidimensional scales within a higher order factor structure.

Second-order CFA on Tripartite Structure of DI

In the following investigation, a second-order CFA was conducted to test Hypothesis 1.4 which proposed a tripartite structure for DI based on attitude theory. This single second-order factor model hypothesised that there exists a latent higher-order factor of DI, which cannot be directly measured, and can only be inferred from three first-order factors of cognitive DI, affective DI, and conative DI. Kline (2010) pointed out that in order for a second-order CFA model to be identified, there must be at least three first-order factors, and also, each first-order factor should have at least two observed indicators. In the current study, the single second-order factor of DI would account for the covariance among the three first-order factors; each of which has three or four indicators.

A second-order CFA starts with a model involving first-order factors only, and ends with a model with factors at two levels (Kim & Yoon, 2003). In the initial step at the first-order level, CFA was conducted to specify the hypothesised relationships between the 10 observed variables and three first-order latent constructs. Cognitive DI is presented by three composite variables: *EI*, *TA*, and *SS*. Affective DI is represented by the four bipolar attitudinal scales of “distressing - relaxing”, “unpleasant - pleasant”, “dislike - like”, and “negative - positive”. Conative DI is represented by *revisit likelihood*, *recommend likelihood*, and *no-return likelihood*.

Moreover, three alternative first-order models were constructed: Model 1 was a first-order factor model, combining all 10 indicators to form a single construct of DI. It assumes there are high levels of correlation between all the items as they are measuring the same construct. Model 2 was an orthogonal three-factor first-order model assuming the three components of DI existed in a separate or independent form. Model 3, a group-factor model, hypothesised that the three first-order factors were correlated with one another. After that, Model 4, the second-order model, which is of greatest interest to the current study, was assumed to be nested under the three-factor group model inasmuch as the model attempts to explain DI in a more parsimonious way. It is a structural model with relationships between the three first-order latent constructs (cognitive, affective, and conative DI) and the second order latent construct (DI). Nine goodness-of-fit indices are reported for all proposed models in Table 4.7.

Table 4.7

Fit Indices for Measurement & Structural Second-order DI Models

CDI Structure		χ^2	df	CMIN/df	p	GFI	AGFI	NFI	TLI	CFI	RMSEA	SRMR
Model 1	One-factor Model	390.42	35	11.16	.000	.865	.788	.872	.848	.882	.132	.08
Model 2	Orthogonal Model (uncorrelated 3-factor Model)	607.20	35	17.35	.000	.824	.723	.801	.755	.810	.168	.29
Model 3	Group-factor Model (correlated 3-factor Model)	92.84	32	2.90	.000	.967	.944	.970	.972	.980	.057	.03
Model 4	Second-order Factor Model	91.84	32	2.90	.000	.967	.944	.970	.972	.980	.057	.03
Model 5	Modified Second-order Model	10.87	11	.988	.454	.995	.986	.995	1.00	1.00	.000	.01

Note. $n = 580$.

From Table 4.7, the results for Model 1 and Model 2 demonstrated a range of poor fit indices that fall outside the acceptable ranges. These two models were thus rejected. Rejection of the one-factor model and the orthogonal model indicated that

the 10 indicators were not unidimensional, and the three dimensions underlying did not exist independently; they were correlated. On the contrary, all fit indices of Model 3 and Model 4 were exactly the same and within the recommended tolerances, indicating that the correlated three first-order factor model and the second-order model of DI were all good-fitting models. According to Marsh and Hocevar (1985), to provide evidence of the existence of a higher-order factor, the Target Coefficient (TC) should be computed (e.g., Cheung, 2000; Spence, 1998). This index is the ratio of the Chi-square of the first-order model to the Chi-square of the second-order model, assessing the ability of the second-order model to explain the covariance among the first-order factors. TC has a maximum value of one, which implies that all the covariances among the first-order factors can be explained by the second-order factor. In this case, the TC was equal to one, indicating that the second-order DI explained 100% of the covariation among the three first-order factors. Thus it provided reasonable evidence of a second-order DI construct and its nomological validity (Hair et al., 2006b).

However, when checking the SRCs and MIs, it was found that further modification could yield a substantially better fit if the “*No Return*” scale for the Conative DI, the *EI* dimension for the CDI, and the “*Distressing - Relaxing*” item for the ADI were removed from the model. Specifically, the *Event Image* component was dropped from the DI structure because it obtained the lowest SMC value (.31) and the lowest factor loading (.55), even though it was still significant (C.R. = 10.00, $p < .001$). As a result, Hypothesis 1.1 proposing a significant contribution of event-related attributes to the initial DI was still supported despite the fact that this factor was a very weak indicator of CDI.

The goodness-of-fit indices of the revised second-order DI model (Model 5), represented in Table 4.7, suggested the model fit perfectly with the data.

Additionally, a Chi-square difference test was conducted between Model 5 and Model 4 ($\Delta\chi^2 = 80.97$; $\Delta df = 21$; $p < .001$), indicating a significant improvement in fit has been achieved by the modified model. This modification did not jeopardise the theoretical implication of the hypothesised model, but improved its parsimoniousness and fitness. As Neuman et al. (2000) suggest, if fewer reliable items/constructs can adequately model the entire content domain, then they should be adopted to describe the factor structure for the purpose of parsimony. Therefore, Model 5 was considered to be the most satisfactory solution in representing the underlying structure of DI, as demonstrated in Figure 4.3. All the good fit indices lent sufficient support to deem this result a good representation of the hypothesised theoretical construct of DI: the variance in the three first-order factors of CDI, ADI, and Conative DI can be statistically represented by a higher-order DI.

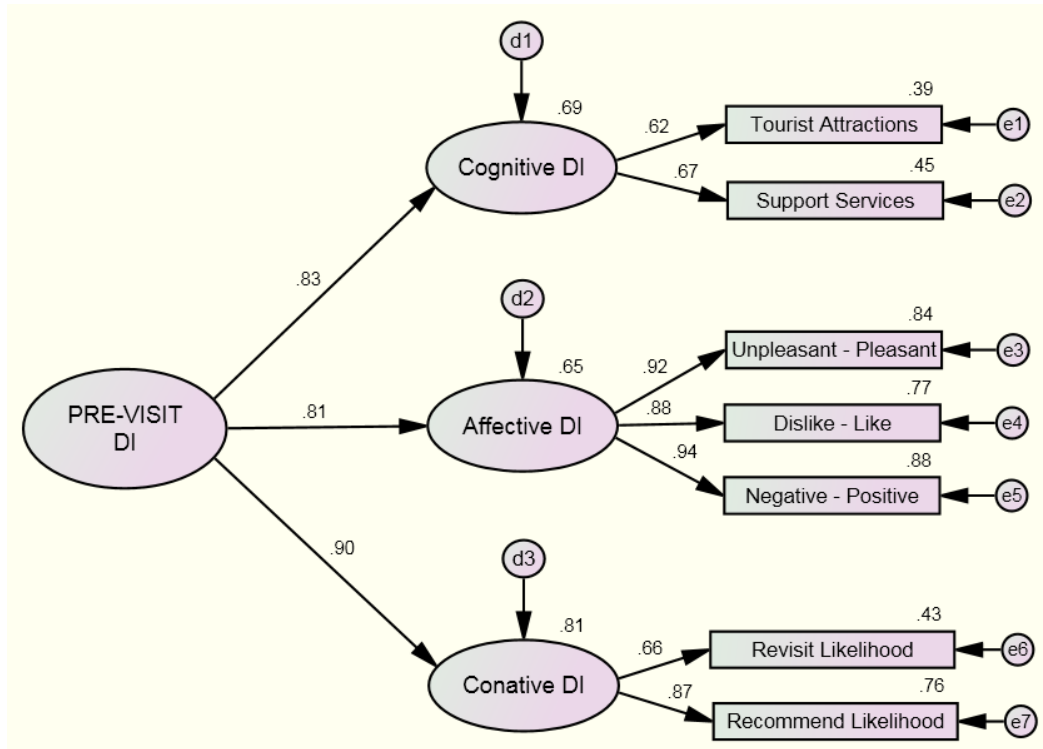


Figure 4.3 Standardised Estimates for Second-order Factorial Structure of DI

Table 4.8 reports the standardised factor loadings for the seven observed indicators and three latent first-order factors; the individual item reliabilities (SMCs) and corresponding t -values; as well as the composite reliabilities and correlations. Inspection of the SMCs revealed *Tourist Attractions* (TA, $SMC = .39$), and *Support Services* (SS, $SMC = .45$) were weak, but adequate, contributors to the CDI. Furthermore, three bipolar attitudinal measurements, *Unpleasant – Pleasant* ($SMC = .84$), *Dislike – Like* ($SMC = .77$), and *Negative – Positive* ($SMC = .88$) were good predictors of the ADI; and intentions to revisit ($SMC = .43$) and recommend (WOM, $SMC = .76$) were predictive of the Conative DI. Comprehensively, CDI ($SMC = .69$), ADI ($SMC = .65$), and Conative DI ($SMC = .81$) were strongly predictive of the overall DI. In other words, the higher-order DI construct explained 69%, 65%, and 81% of the variances in its three components respectively. The composite reliability

coefficients of the three first-order latent variables were all above the lowest acceptance level of 0.6.

Table 4.8

Factor Loadings for Second-order DI Model

Label	Factors & Indicators	Standardised Loadings ^a	SMC	C.R.	AVE ^b	Composite Reliability
DI		/	/	/	.72	.88
	Cognitive DI	.830	.689	11.79	.42	.60
CDI_1	<i>Tourist Attractions</i>	.621	.385			
CDI_2	<i>Support Services</i>	.671	.451			
	Affective DI	.808	.653	17.97	.83	.94
ADI_1	<i>Unpleasant – Pleasant</i>	.916	.839			
ADI_2	<i>Dislike – Like</i>	.876	.768			
ADI_3	<i>Negative - Positive</i>	.939	.882			
	Conative DI	.900	.810	12.93	.60	.74
Conation_1	<i>Revisit Likelihood</i>	.656	.430			
Conation_2	<i>Recommend Likelihood</i>	.874	.764			

	Cognitive DI	Affective DI	Conative DI
Cognitive DI	1.00	0.45 ^d	0.56
Affective DI	.670*** ^c	1.00	0.53
Conative DI	.747***	.727***	1.00

Note. $n = 580$.

^a All loadings are significantly above 0.5 ($p < .001$).

^b AVE values were shown as decimals for ease in comparison with the squared correlations.

^c Values shown below the diagonal are correlation estimates (at 2-tailed p level of .001).

^d Values shown above the diagonal are the squared correlations.

For the second-order construct, the standard structural coefficients of first-order factors upon higher-order constructs are estimates of the validity of the factors (Kim & Yoon, 2003). As shown in Figure 4.3 and Table 4.8, the standardised second-order factor loadings were 0.83 for CDI, 0.81 for ADI, and 0.90 for Conative DI, all above the 0.7 threshold. The factor of ADI obtained the lowest second-order factor loading, which implies the affective component of DI was least influenced by the second-order factor of DI. Contrastingly, the conative component was most influenced by DI. Hypothesis 1.5 supposing that CDI has more impact on developing the initial DI than either ADI or Conative DI was thus rejected.

Furthermore, all the loadings of the three first-order latent factors upon the second-order factor were statistically significant (t -values varied between 11.79 and 17.97, $p < .001$), providing evidence that the three latent variables significantly converge on a common underlying construct. The AVE scores were above 60% except for CDI. Netemeyer et al. (2003) indicated that for new scales, a low AVE value near the threshold of .45 could also be reasonable and acceptable. Thus, the two-component CDI was retained due to its exploratory nature. Alternatively, to assess the discriminant validity of the three-dimensional DI construct in the revised model (Model 5), the strength of the correlations between the three lower-order factors was examined (Clark-Carter, 2010). Since the correlations between the three DI components were all below the recommended criteria of less than 0.8 (Holmes-Smith, 2010), discriminant validity was achieved. In conclusion, these findings provided adequate support for Hypothesis 1.4 that the three correlated but distinctive components of cognition, affect and conation comprised the DI of sport tourists. In other words, DI held by a sport tourist can be reviewed from the tripartite attitudinal perspective.

In summary, Section 4.1.1.2 employed two CFAs: one focusing on the multi-dimensional CDI identified by an EFA, in order to confirm and refine the underlying components and measurement scales of CDI. The subsequent second-order CFA was focused on the tripartite structure of DI with the purpose of addressing Hypotheses 1.1, 1.4, and 1.5, which concerned compositions of the initial DI held by sport tourists. The next section involves the examination of how internal forces of individual sport tourists affect their initial DI formation.

4.1.1.3 SEM Results – The Influence of Motivations on Initial DI

To test Hypotheses 1.2 and 1.3 regarding the influence of sport and travel motivations on the initial DI formation, a SEM was conducted with the whole sample of pre-event survey respondents (N = 1,181). A two-step modeling approach (Anderson & Gerbing, 1988) was followed to examine the hypothesised relationships between the sport motivation (operationalised as running involvement, RI), the strength of travel motivation (STM) to participate in running events and the initial DI. The first step required the confirmed measurement models for all constructs.

The measurement model examined the relationships between the three latent variables (i.e., RI, STM, and DI) and their manifest indicators. Since RI has been confirmed by empirical sport studies (see Beaton et al., 2011), it was measured by the three composite dimensions of *pleasure*, *centrality*, and *sign*. Mean scores of the three items for each dimension were used as observed variables to represent the latent variable of RI. STM was represented by four indicators. As for the dependent variable of DI, it was represented by three composite indicators: *CDI*, *ADI*, and *Conative DI*, based on the previous second-order CFA results. The composite values for the CDI and Conative DI were obtained from the mean scores of their respective two indicators, because the one-factor congeneric model cannot be tested with fewer than three observed variables. While the composite score was calculated for ADI using the factor score weights derived from its congeneric model, which was re-assessed with the whole sample.

To achieve an acceptable fit, it was suggested that the second item of STM be dropped due to its low SMC value and high residual covariances; three indicators were then retained for the STM construct. In addition, MIs suggested that freeing the

error covariance between the third and the fourth item of STM, as well as the error covariance between the *pleasure* and *centrality* dimension of RI, would improve the model fit. This is substantially plausible because the two pairs shared a degree of commonality. As a result, the modified measurement model obtained a moderate fit ($\chi^2 = 114.11$, $df = 22$, bootstrap $p = .005$; $\chi^2/df = 5.19$; GFI = .979, AGFI = .958, NFI = .971, TLI = .962, CFI = .977, RMSEA = .06, SRMR = .038). Table 4.9 presents the CFA results for the measurement model with individual item loadings, reliability coefficients, as well as construct correlations.

Table 4.9***CFA Results for the Measurement Model of Prior Motivations and Initial DI***

Label	Factors & Indicators	Standardised Loadings ^a	C.R.	AVE ^b	Composite Reliability
	Running Involvement (RI)			.57	.79
RI_1	<i>Pleasure</i>	.599	20.32		
RI_2	<i>Centrality</i>	.755	27.23		
RI_3	<i>Sign</i>	.880	32.68		
	Strength of Travel Motivation (STM)			.50	.75
STM_1	<i>I am really interested in travelling to participate in running events.</i>	.725	25.10		
STM_3	<i>I feel that travelling to participate in running events is vitally important to me.</i>	.726	24.48		
STM_4	<i>I would regret if I could not travel to participate in running events.</i>	.654	21.30		
	DI			.55	.78
CDI	<i>Cognitive DI</i>	.646	22.02		
ADI	<i>Affective DI</i>	.821	27.88		
Conative DI	<i>Conative DI</i>	.745	25.33		

Correlations	RI	STM	DI
RI	1.00	.654 ^d	.007
STM	.809 *** ^c	1.00	.017
DI	.082 *	.132***	1.00

Note. $N = 1,181$.

^a All loadings are significantly above 0.5 ($p < .001$).

^b AVE values were shown as decimals for ease in comparison with the squared correlations.

^c Values shown below the diagonal are correlation estimates (***) at p level of .001; * at p level of .05).

^d Values shown above the diagonal are the squared correlations.

The composite reliability of all three latent constructs exceeded the recommended level of 0.70 and the t -values of each indicator exceeded the critical level of 1.96 ($p < .001$). Moreover, the AVEs show all latent constructs recorded values above the 0.5 benchmark, providing evidence of convergent validity. Discriminant validity between RI and STM was questionable because of the marginally high correlation between them (.81). However, when the more rigorous SEM-based alternative approach was employed to test the discriminant validity, the Chi-square difference test showed that RI was still significantly different from STM. Therefore, the accepted measurement model can be input into the following structural model test.

The second step after assessing the measurement model was to examine the hypothesised structural model which contained two gamma paths between the two predicting variables (i.e., RI & STM) and the dependent variable of DI. The path diagram for this structural model is illustrated in Figure 4.4. The path coefficients revealed sport motivation (RI) had a negative but not significant effect on the initial DI of sport tourists ($\gamma = -.072$, $t = -.850$, $p = .395$), thus Hypothesis 1.2 was rejected. At the same time, the strength of travel motivation had a significantly positive effect on the initial DI ($\gamma = .190$, $t = 2.15$, $p = .032$), supporting Hypothesis 1.3. However, this effect is very weak (≤ 0.2) and can be neglected (Holmes-Smith, 2010). Furthermore, the SMC (R^2) serves as a common indicator showing the integrated effect size for predicted endogenous variable. Only 1.9% of the variance in the pre-visit DI ($SMC = .019$) was explained by the preceding travel and sport motivations. In conclusion, the motivations of sport tourists had negligible influence on their pre-visit image of the event-host destination.

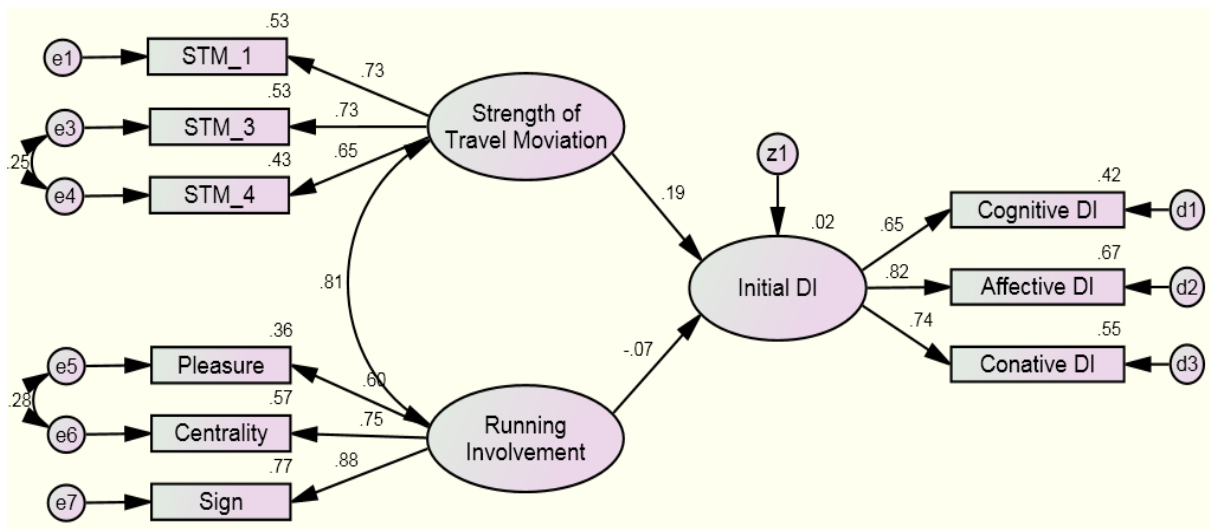


Figure 4.4 Structural Relations between Prior Motivations and Initial DI

4.1.1.4 Correlations between Initial DI & Psychological Connection Levels

In order to test the positive correlation between the initial DI and the psychological connection level of sport tourists with the event-host destination, an analysis of variance (ANOVA) was employed to examine whether the initial DI will be increasingly higher as the psychological connection level increases. Moreover, place attachment, as explained in Section 3.2.2.4, was also tested to validate whether the PCM staging algorithm works for the psychological connection to a destination. To allocate the respondents into the four PCM stages according to their corresponding degrees of psychological association with Miami, a three-step staging procedure was employed.

The PCM three-step staging procedure allocates sport tourists into four stages (i.e., *Destination Awareness*, *Destination Attraction*, *Destination Attachment*, and *Destination Allegiance*) based on their levels of psychological connection with the destination. As discussed in Chapter 3, the three-dimensional *destination*

involvement construct was adopted to measure sport tourists' psychological connection with the event-host destination. Each dimension is able to contribute to a uniquely integrative involvement profile for an individual. The different involvement profiles can be subsequently used to operationalise the staging procedure to organise participants into theoretically meaningful groups within a comprehensive, stage-based theoretical framework (i.e., PCM) (Beaton et al., 2009, 2011; Funk, Beaton, & Pritchard, 2011).

In brief, the three staging steps are: (1) Calculate the mean scores for each dimension of destination involvement – pleasure, centrality, and sign. (2) Rate the mean scores as being low (L, ≤ 4.49), medium (M, 4.50 - 5.64), or high (H, ≥ 5.65), to create involvement profiles for each respondent based upon cut-off points developed and tested for the PCM (Beaton et al., 2009; 2011). (3) Run an algorithm to allocate individuals into each of the four PCM stages to determine the psychological connection level. This procedure resulted in the following distribution of the respondents of the 2011 pre-event survey: 167 sport tourists were allocated into the destination awareness stage, 811 within destination attraction, 152 within destination attachment, and 51 within destination allegiance. Next, an ANOVA was used to determine whether the four groups differed in terms of place attachment, DI and its three components. This analysis addressed Hypotheses 1.6, testing the positive correlation between the initial DI and the psychological connection level with the destination of individual sport tourists. Table 4.10 presents the descriptive statistics of initial DI and place attachment by stages of PCM.

Table 4.10*ANOVA Results for Place Attachment & Initial DI by the PCM Stages*

Psychological Connection Levels (PCM Stages)	Place Attachment	DI			
		CDI	ADI	Conative DI	Overall
Stage 1 Destination Awareness (<i>n</i> = 167)	2.34* (1.08)	4.40* (.96)	4.63* (1.17)	4.07* (1.18)	4.44* (.91)
Stage 2 Destination Attraction (<i>n</i> = 811)	2.91* (1.12)	5.21* (.84)	5.96* (.88)	5.48* (1.09)	5.68* (.75)
Stage 3 Destination Attachment (<i>n</i> = 152)	4.50* (.88)	5.53* (.83)	6.32 (.86)	6.14* (.92)	6.10* (.71)
Stage 4 Destination Allegiance (<i>n</i> = 51)	5.79* (.73)	5.99* (.77)	6.58 (.72)	6.63* (.97)	6.46* (.57)
Overall Means	3.16 (1.35)	5.17 (.92)	5.85 (1.06)	5.42 (1.25)	5.59 (.92)

Note. *N* = 1,181. * *Post hoc* test revealed significant differences from all other stages at $p < 0.05$;

As shown in Table 4.10, the overall trend was that all means increased from awareness to attraction, to attachment, and on to allegiance. Individual analysis of DI and its three dimensions showed that all means scores significantly increased as the involvement stage increased: DI, $F(3, 1177) = 172.39, p < .001$; CDI, $F(3, 1177) = 70.43, p < .001$; ADI, $F(3, 1177) = 126.73, p < .001$; and Conative DI, $F(3, 1177) = 131.18, p < .001$. Additionally, significant differences for place attachment occurred across all DI levels: $F(3, 1177) = 229.27, p < .001$, verifying the feasibility of applying the PCM staging mechanism to segment sport tourists.

Furthermore, a *post hoc* test was conducted to determine if significant differences were actually present across all four PCM stages for the dependent variables. Given the variation in sample sizes across the four stages, homogeneity of variance was not assumed and Games-Howell *post hoc* procedure was utilised (Field, 2009). The *post hoc* results revealed significant differences across all four

PCM stages for place attachment and initial DI as well as its two components, CDI and Conative DI, but not for ADI. The sport tourists who developed allegiance to Miami held non-significantly stronger feelings compared to the people who had developed attachment to Miami. In spite of this non-significant difference, the findings still collectively support Hypothesis 1.6 which proposed a positive correlation between the initial DI of sport tourists and their psychological connection levels with the destination.

In conclusion, Sections 4.1.1.3 and 4.1.1.4 have employed SEM and ANOVA respectively, to examine the relationships between the sport tourists' initial DI and its antecedent motivations, as well as the correlation between the initial DI and the psychological connection levels with the destination. Combining with the multi-dimensional CDI and the tripartite structure of the DI which were refined and confirmed in the previous two sub-sections, the formation of sport tourists' initial DI has been systematically examined. Subsequently, the focus will be shifted to the modified-induced DI (i.e., post-visit DI) resulted from sport tourists' actual visits to the destination.

4.1.2 Cross-validating the Tripartite Structure of Post-visit DI

Based on the previous findings that travel experience could change touristic destination images (e.g., Baloglu & McCleary, 1999; Tasci, 2006) which are usually measured by a list of attributes or detectable features, that is the CDI in this study, it is reasonable to speculate that the overall DI might be changed by actual visitation. Most existing studies comparing pre- and post-visit DI have normally employed a simple *t*-test (e.g., Li & Vogelsong, 2006; Yilmaz et al., 2009) to examine how travellers change their perceptions/cognitions of each destination attribute, rather than examining the change of the overall DI or the DI structure. This study provided

opportunity to investigate whether the overall DI and its tripartite structure changes or not after visiting the place. The post-event survey was sent to all 2011 ING Miami Marathon participants and thus obtained a large sample of respondents ($N = 2,203$), which can be used as a cross-validation sample for DI structure.

A second-order CFA is required to re-verify the tripartite structure of a modified-induced DI, which was perceived by sport tourists after their personal visit to the host destination. As suggested by the second-order structure model for the pre-visit DI in Section 4.1.1.2, post-visit DI is examined as a higher-order factor generated on the basis of the relationships between three first-order factors of CDI, ADI, and Conative DI. The post-visit CDI was represented by two underlying components, *Tourist Attractions* (measured by four indicators) and *Support Services* (measured by three indicators). Composite scores were calculated for these two underlying CDI components to avoid a three-order measurement model for the DI construct. The factor score weights obtained from their respective one-factor congeneric models, which have been re-assessed with the post-event survey respondents, were utilised. Then the two newly computed composite variables (TA and SS) were input into a second-order CFA model for the overall DI as two indicators of the post-visit CDI.

Similarly, the post-visit ADI was represented by the three same bipolar attitudinal scales as confirmed by the CFA results of pre-visit ADI: “unpleasant – pleasant”, “dislike – like”, and “negative – positive”. The Conative DI was indicated by a composite variable of revisit intention and a recommend intention item, also following the operationalisation of the pre-visit conative DI. The resultant model, as shown in Figure 4.5, exhibited an adequate fit to the data ($\chi^2 = 60.81$, $df = 11$, $\chi^2/df =$

5.53, bootstrap $p = .005$; GFI = .992; AGFI = .980; NFI = .993; TLI = .990; CFI = .995; RMSEA = .045; SRMR = .015).

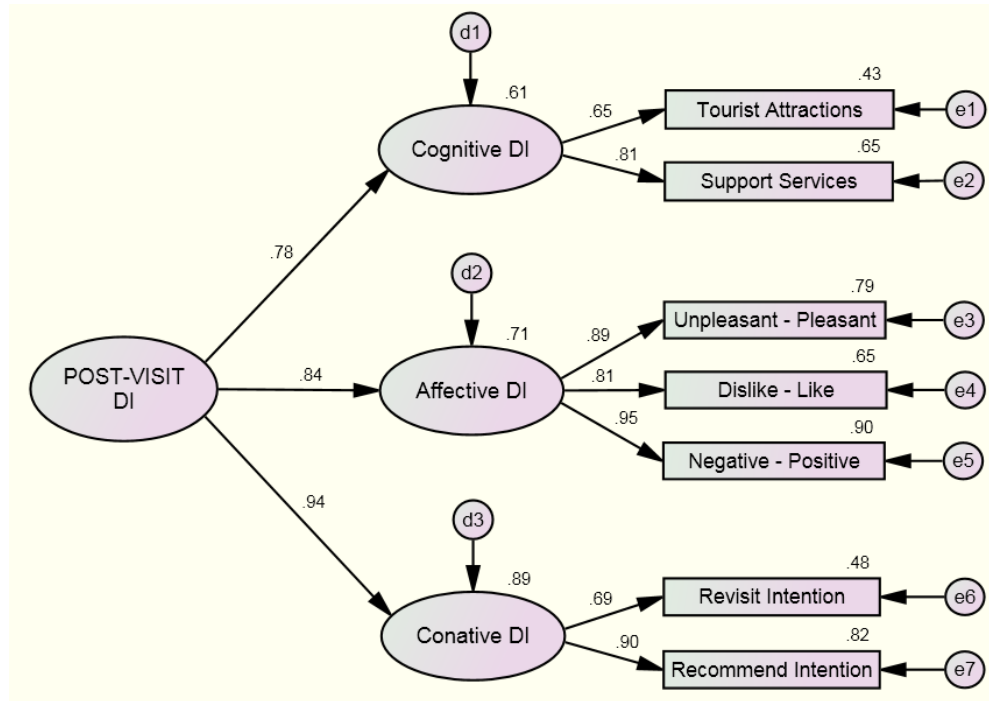


Figure 4.5 Standardised Estimates for Second-order Model of Post-visit DI

Table 4.11 represents the results of the second-order CFA model for the post-visit DI structure. Each of the three first-order factors has significant factor loadings ($p < .001$) on the second-order factor: .78 for CDI, .84 for ADI, and .95 for Conative DI, indicating that the three latent components significantly converge on a common underlying construct of DI. Specifically, the CDI component obtained the lowest factor loading and the Conative DI obtained the highest loading on the higher-order factor. This indicates that conative component of DI was most influenced by the overall post-visit DI, while the cognitive component was least influenced. Moreover, the high SMC values of the three DI components indicate that the higher-order

construct of DI can explain 61.2%, 70.9%, and 89.2% of the variances of its three components, respectively.

Additionally, all item loadings are significantly above .60 ($p < .001$), with t -values exceeding 24.00. These statistics suggest that the indicators are reliable and valid measurements for the first-order latent constructs. The composite reliability coefficients for the second-order construct and its three composite factors are higher than 0.70, indicating excellent convergent validities. Given that the relatively low AVE value of the CDI (which might be due to its exploratory nature) is not greater than the square of the correlations between CDI and Conative DI, the rigorous SEM-based approach was employed to test the discriminant validity. The Chi-square difference test indicated that all constrained models were significantly worse than the unconstrained models; discriminant validity of the tripartite DI construct was thus achieved.

Table 4.11

Second-order CFA Results for the Tripartite Post-visit DI Model

DI Components	Standardised Loadings ^a	SMC	C.R.	AVE ^b	Composite Reliability
Cognitive DI	.782	.612	23.68	.54	.70
Affective DI	.842	.709	37.51	.78	.91
Conative DI	.945	.892	29.63	.65	.78

	CDI	ADI	Conative DI
CDI	1.00	0.43 ^d	0.55
ADI	.659*** ^c	1.00	0.63
Conative DI	.739***	.795***	1.00

Note. $N = 2,203$

^a All loadings are significantly above 0.7 ($p < .001$).

^b AVE values were shown as decimals for ease in comparison with the squared correlations.

^c Values shown below the diagonal are correlation estimates (at 2-tailed p level of .001).

^d Values shown above the diagonal are the squared correlations.

From the above second-order CFA results, it can be concluded that the tripartite structure of DI was also supported by the post-visit investigation. In other

words, three components of CDI, ADI, and Conative DI are quite stable indicators for the overall DI, even though the weights of their contribution to the overall DI have changed. Moreover, all three first-order latent variables of post-visit DI were represented by the same indicators with the pre-visit DI, demonstrating a consistent structure of DI before and after sport tourists' personal visits to the destination. The consistent DI structure indicates a reasonable compatibility between the pre- and post-visit DI using repeated measures analysis.

4.1.3 Results of the Pre-Post Comparison Study

After confirming the structure of DI at both timings, the following analyses will focus on examining how the DI and its three components held by sport tourists were changed by their personal visit to the destination. Moreover, the influential factors on this change process were examined to reveal their different impacts. Since the DI change is the main interest in this section, all analyses were conducted with the panel sample ($n = 413$) who responded to both pre- and post-event surveys. Accordingly, four analysis stages were undertaken: first, the composite scores for multi-item variables (*CDI*, *ADI*, *conative DI*, and *overall DI*), which were necessary for the series of GLM repeated measures analysis, were re-computed by re-assessing the respective one-factor congeneric models with the panel sample, following the steps elaborated in Section 4.1.1.2.

Next, Hypothesis 2.5 and the associated three sub-hypotheses related to the pre- and post-visit DI change were tested by the GLM repeated measures analysis. The change of overall DI was assessed first of all. If changes were observed, then subsequent tests to assess the change of each individual component of *CDI*, *ADI*, and *Conative DI* were conducted. Third, any changes to CDI, ADI and Conative DI were examined again under the moderating effects of a) previous

experience/familiarity (addressing Hypothesis 2.1); b) length of stay (addressing Hypothesis 2.2); c) sightseeing participation during stay (addressing Hypothesis 2.3); d) the psychological connection levels developed after visitation (addressing Hypothesis 2.7); and e) the psychological connection changes (addressing Hypothesis 2.6). Finally, the mediation effect of destination satisfaction between the pre- and post-visit DI was examined by SEM, to address Hypothesis 2.4.

4.1.3.1 Composite Variables Computation

Composite variables required by the GLM repeated measures analysis in the current study were mostly computed from fitting maximally reliable one-factor congeneric measurement models (Brown, 1989; Jöreskog, 1971; Werts, Rock, Linn, & Jöreskog, 1978), as illustrated in Section 4.1.1.2. As suggested by previous second-order CFA results for the DI structure, one-factor congeneric models can be constructed for the two components of CDI (i.e., TA and SS), ADI and the overall DI, which contained three or more indicators. Composite scores were subsequently calculated for these variables, using the factor score weights obtained by fitting respective congeneric model with the panel sample at both timings (pre- and post-visit survey). While for the CDI and Conative DI, one-factor congeneric models cannot be tested because they were represented by less than three indicators. Therefore, the mean scores were adopted as the composite variables for cognitive and conative components of DI. The results are presented in Appendices 4-3 and 4-4, including factor score regressions, scale reliability coefficients (*Coefficient H* for composite scores, *Cronbach's alpha* for means), and descriptive statistics of the composite variables.

DI and its three components (CDI, ADI and Conative DI) all comprised the same indicators at both times. CDI was represented by *Tourist Attractions* and

Support Services (Means are 5.28 for pre-CDI, 5.57 for post-CDI, Cronbach's $\alpha > .60$). ADI was measured by three bipolar scales of attitude: *Unpleasant – Pleasant*, *Dislike – Like*, and *Negative – Positive* (Means are 5.89 for pre-ADI, 6.08 for post-ADI, Coefficient Hs $> .80$). Conative DI was measured by two behavioural intention items: *revisit Miami for a vacation* and *recommend Miami as a travel destination* (Means are 5.42 for pre-Conative DI and 5.74 for post-Conative DI, Cronbach's $\alpha > .70$). Finally, the overall DI was measured as a weighted composite from fitting a one-factor congeneric measurement model containing three computed variables of CDI, ADI, and Conative DI at each time with the panel sample (Means are 5.68 for pre-DI and 5.85 for post-DI, Coefficient Hs $> .80$).

4.1.3.2 GLM Repeated Measures Analysis Results

General linear models for repeated measures were used for all primary analyses to enable the direct comparison of the sport tourists' responses to pre- and post-event investigations of their destination attitudes, as well as the examination of interaction effects from the psychological connection and other travel-related factors. The outcome variables were DI and its three components. The main within-subjects factor was personal visit (pre-visit vs. post-visit). The between-subjects factors/moderators were **previous experiences with the destination** (first-time visitors, $n = 96$; repeat visitors, $n = 317$); **length of stay** (short-stay, $n = 199$; long-stay, $n = 214$); **sightseeing participation** (yes, $n = 250$; no, $n = 161$); **the psychological connection level after visit** (awareness, $n = 23$; attraction, $n = 277$; attachment, $n = 79$; allegiance, $n = 34$); as well as **the psychological connection level changes along the PCM-stage** (PCL lowered group, $n = 21$; PCL unchanged group, $n = 287$; PCL elevated group, $n = 105$). The significance of estimated mean

differences between the time points was adjusted for multiple comparisons using Bonferroni correction.

As illustrated in Table 4.12, the GLM repeated measures analysis revealed a main effect of personal visit on overall DI change. The overall DI mean score of 5.68 that was assessed before the event was significantly lower than the mean score of 5.85 assessed after the event, $F(1, 412) = 29.35, p < .001, \eta^2 = .067$. This result indicates the overall image held by sport tourists towards the host destination was significantly enhanced by their personal visit to the host location. Hypothesis 2.5 was, therefore, supported.

Furthermore, a significant enhancement was also observed on the three DI components before and after visiting the host destination. The mean score for CDI assessed after visitation ($M = 5.57$) was significantly higher than the mean score assessed before travelling ($M = 5.28$), $F(1, 412) = 74.13, p < .001, \eta^2 = .152$. Similarly, the mean score for the post-visit ADI ($M = 6.08$) was significantly higher than the pre-visit ADI ($M = 5.89$), $F(1, 412) = 17.76, p < .001, \eta^2 = .041$; and the mean score of the post-visit Conative DI ($M = 5.74$) was significantly higher than the pre-visit counterpart ($M = 5.42$), $F(1, 412) = 42.42, p < .001, \eta^2 = .093$. The associated three sub-hypotheses (H2.5a, b, and c) were supported. In addition, the effect sizes (η^2) suggest that the effect of the personal visit on CDI was very strong (≥ 0.10), the effect on Conative DI followed, while the effect on ADI was relatively weak (< 0.05) (Pierce, Block, & Aguinis, 2004).

Table 4.12*Descriptive Statistics for Main Within-subjects Variable*

DI & Components	Time 1 (Pre-event)		Time 2 (Post-event)	
	Mean	SD	Mean	SD
CDI	5.28*	.90	5.57*	.77
ADI	5.89*	1.00	6.08*	1.01
Conative DI	5.42*	1.26	5.74*	1.23
Overall DI	5.68*	.90	5.85*	.86

Note. $n = 413$. * Means significantly differ at $p < .05$

The moderating effects of previous destination experience, length of stay, sightseeing participation, psychological connection levels, and the PCL change on the enhancement of DI components after visitation revealed mixed results. First, a significant interaction between previous experience with Miami and experience during this visit for the event was observed on both CDI and ADI, as illustrated by Figure 4.6 and Figure 4.7. This interaction occurred as the first-time visitors showed more enhancements in both cognitions, $F(1, 411) = 4.23, p < .05, \eta^2 = .01$; and feelings, $F(1, 411) = 5.78, p < .05, \eta^2 = .014$, after the personal visitation than the repeat visitors. No significant interaction effect was observed on Conative DI, thus, Hypothesis 2.1 was only partially supported.

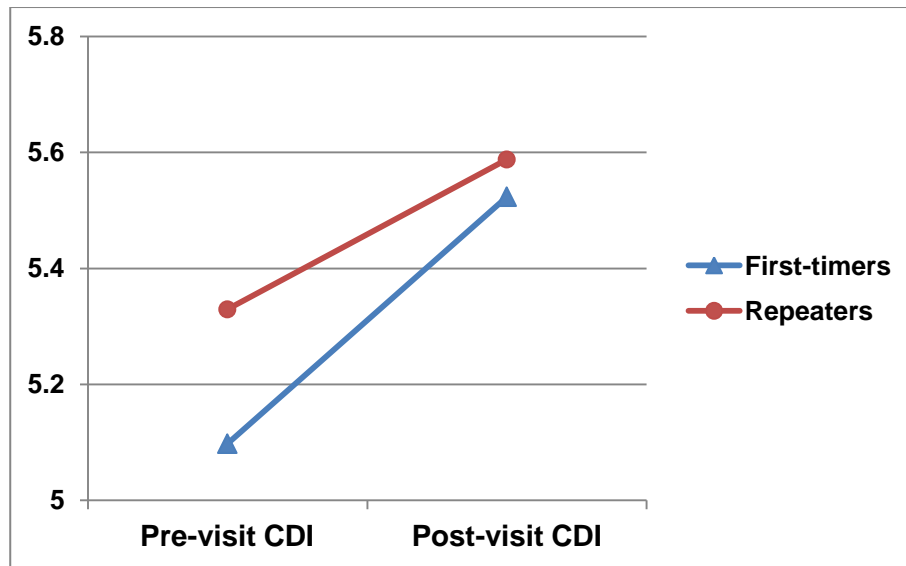


Figure 4.6 CDI Enhancement before- and after- Visit for First-time & Repeat Visitors

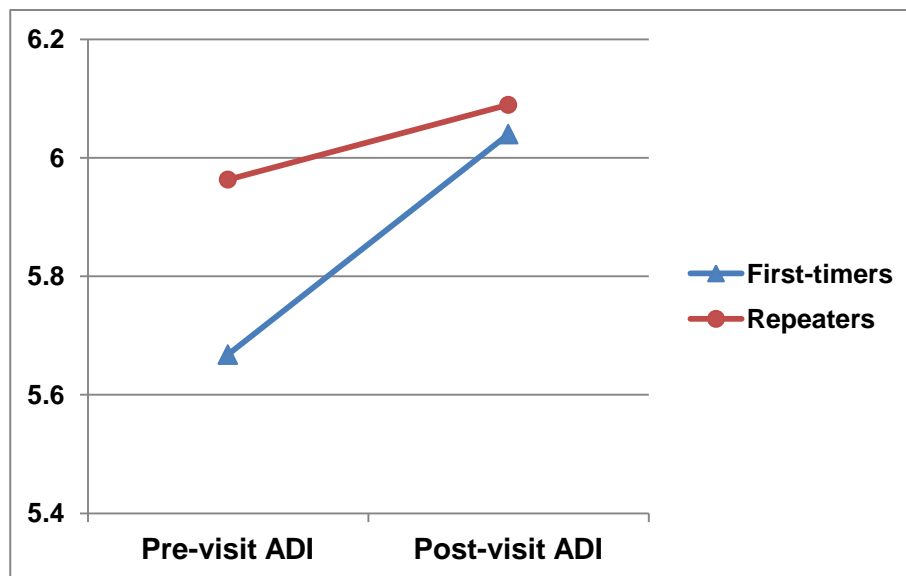


Figure 4.7 ADI Enhancement before- and after- Visit for First-time & Repeat Visitors

Secondly, no significant interaction effects were observed on any DI component enhancement from the length of stay ($p > .05$), or from sightseeing participation ($p > .05$), Hypotheses 2.2 and 2.3 were thus rejected. Third, the significant moderation effects of post-visit PCM Stage were observed on both ADI,

$F(3, 409) = 5.04, p < .01, \eta^2 = .036$, and Conative DI, $F(3, 409) = 6.61, p < .001, \eta^2 = .046$, as illustrated by Figure 4.8 and Figure 4.9. Furthermore, a *post hoc* test was employed to determine if significant differences were present across all four PCM stages in the ADI and Conative DI enhancement. Given the unequal sample sizes of the four PCM-staged groups, the Games-Howell *post hoc* procedure was employed.

The results revealed significantly different ADI and Conative DI enhancements were present across all four PCM stages. Sport tourists who still stayed in the lowest awareness stage after visiting Miami showed a significant decline, rather than an enhancement, in both feelings and behavioural intentions. On the contrary, the allegiant sport tourists kept stable feelings and behavioural intentions towards Miami after this participatory trip, as no significant changes were discovered. The feelings and behavioural intentions of the sport tourists who stayed in both the attraction and attachment stages after visiting Miami had been enhanced significantly.

Further examination of the pairwise comparisons results for the moderation effect of PCM stages demonstrated that the sport tourists who developed attachment to Miami after visitation demonstrated more enhancement in ADI and Conative DI than those in the attraction stage. In summary, the psychological connection level that sport tourists developed after visitation towards the event-host destination demonstrated a significant moderation effect on their DI enhancement but not on the cognitive DI component. Hypothesis 2.7 was thus partially supported.

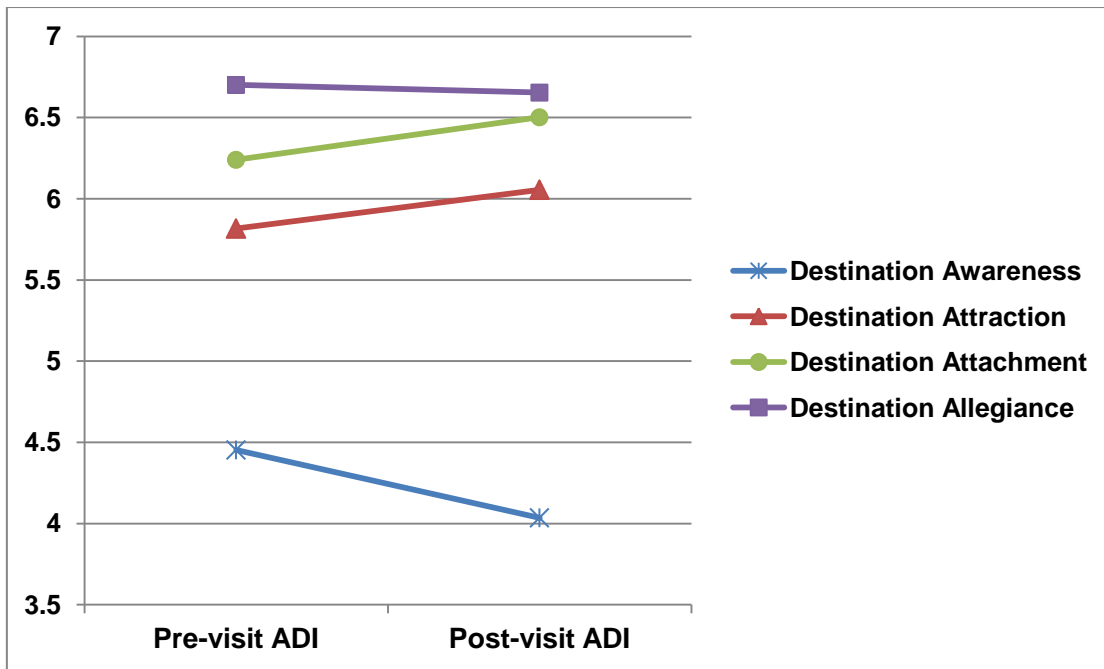


Figure 4.8 ADI Change before- and after- Visit for Four Post-visit PCM Groups

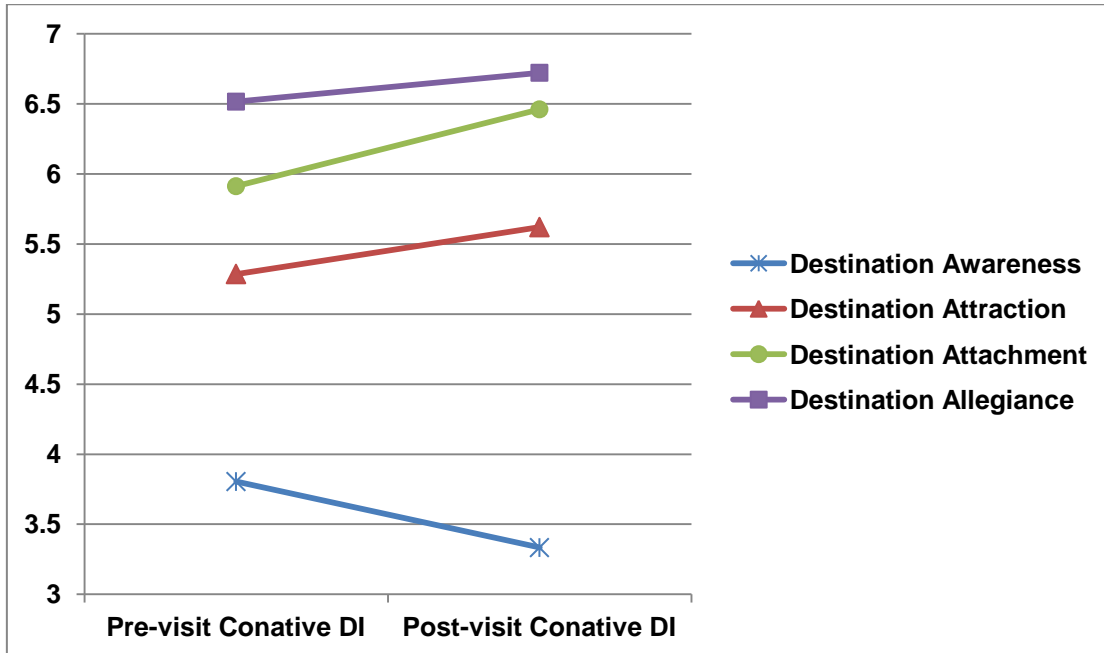


Figure 4.9 Conative DI Change before- and after- Visit for Four Post-visit PCM Groups

Finally, a significant moderating effect of the psychological connection level change (i.e., movement along the PCM stages) was observed for all three DI components: CDI ($F(2, 410) = 10.75, p < .001, \eta^2 = .05$), ADI ($F(2, 410) = 15.63, p < .001, \eta^2 = .071$), and Conative DI ($F(2, 410) = 4.97, p < .01, \eta^2 = .024$). Hypothesis 2.6 was thus supported. Figures 4.10 – 4.12 illustrate the change in the three DI components before and after visiting Miami, respectively for the three psychological connection change groups.

Post hoc tests results revealed that significant differences existed between the PCL lowered group and the other two groups. A decline in all three DI components was observed for the sport tourists who moved down along the PCM stages (i.e., lowered PCLs), which is apparently different from the significant DI enhancements that occurred for the other two groups who sustained or elevated their PCLs after visiting the destination. Moreover, the people who moved up along the PCM stages (i.e., elevated PCLs) showed greater enhancements in all three DI components than the people who stayed at the same PCM stage after visitation (i.e., unchanged PCLs).

Further examination of the pairwise comparisons results revealed that for the PCL lowered group, the significant decline was only observed in their feelings after actual visitation. Declines in their cognitions and behavioural intentions are not significant, indicating a close relationship between the affective DI change and the PCL change. As for the PCL unchanged and elevated groups, significant enhancements were observed in all three DI components.

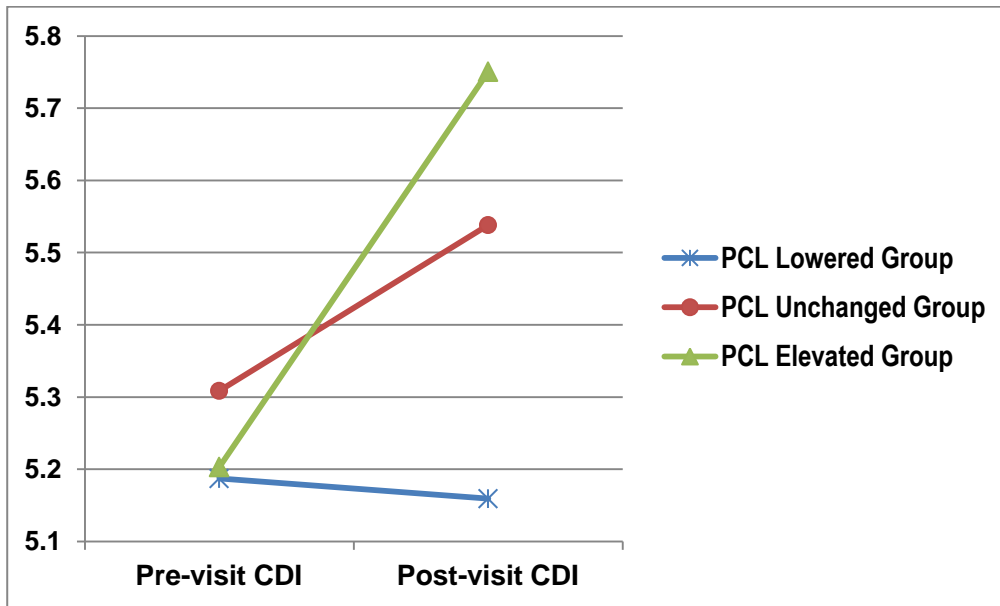


Figure 4.10 CDI Change before- and after- Visit for Three PCL Change Groups

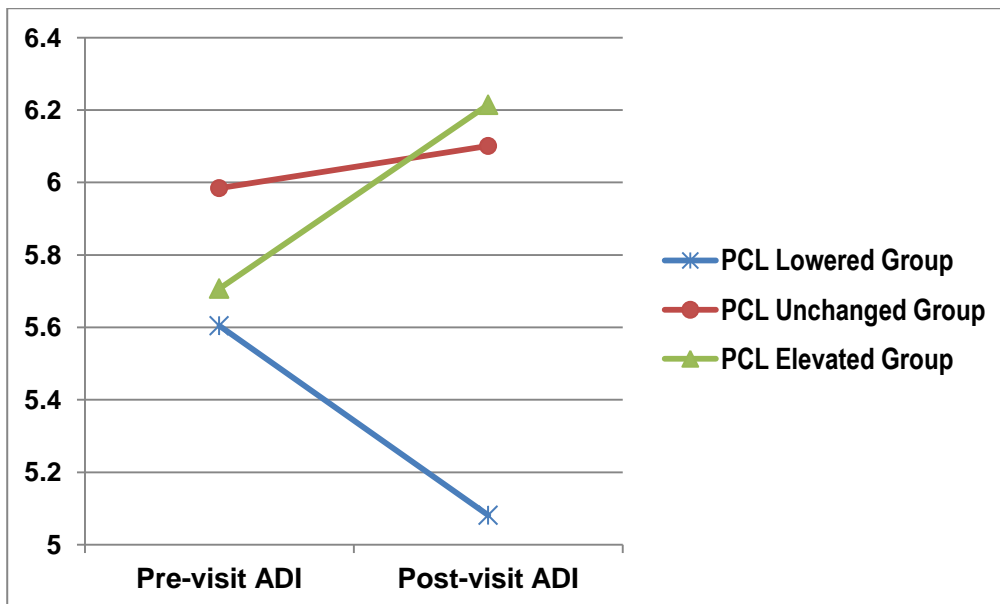


Figure 4.11 ADI Change before- and after- Visit for Three PCL Change Groups

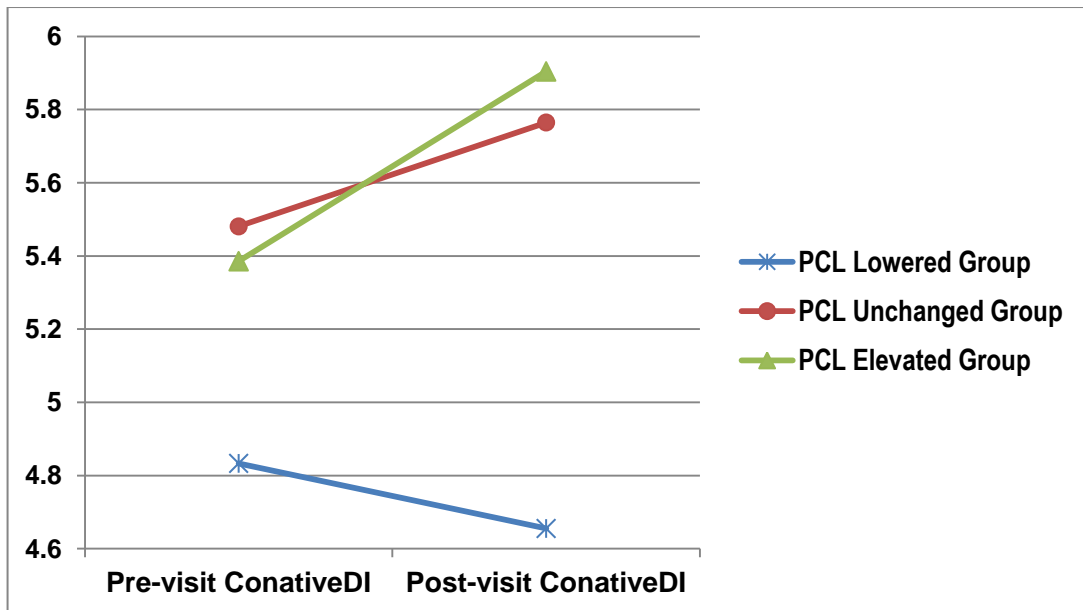


Figure 4.12 Conative DI Change before- and after- Visit for Three PCL Change Groups

4.1.3.3 Mediation Effect of Destination Satisfaction on Pre-Post DI Change

The SEM approach was adopted to test the mediating role of sport tourists' satisfaction with the destination in their pre- and post-visit DI change, as proposed by Hypothesis 2.4, because SEM considers explicitly the possible bias of measurement error on path estimates (Luo & Bhattacharya, 2006). According to Baron and Kenny (1986), to establish the existence of a mediation effect, four conditions have to be met: first, the independent variable (Pre-visit DI) must directly affect the mediator (DS); second, the mediator must directly impact the dependent variable (Post-visit DI); third, the independent variable must significantly impact the dependent variable; finally, when the mediator variable is controlled, the effect of the independent variable on the dependent variable must be significantly reduced (for partial mediations), or become nonsignificant or zero (for full mediations).

As Table 4.13 shows, Model 1, a full-mediation model, meets the first two conditions. That is, pre-visit DI affects sport tourists' satisfaction with the destination and this satisfaction further affects post-visit DI. Goodness-of-fit indices demonstrated that Model 1 fit to the data moderately. Model 2 qualifies the third condition; that is, the pre-visit DI directly impacts the post-visit DI, without the mediator of destination satisfaction. This model fits the data well, showing a significantly strong effect of the pre-visit DI on the post-visit DI.

To further test the full mediation effect, two alternative models (Model 3 and Model 4) were examined and compared to Model 1. Based on the full-mediation model, Model 3 (no-mediation model) removed the path between DS and the post-visit DI but added the path between the pre-visit DI and the post-visit DI, respecifying the mediator of DS as an additional dependent variable and thus eliminating any indirect effects on the dependent variable. By comparing Model 3 to Model 1, a Chi-square difference test was conducted to show which model provided the best fit. In this study, Model 3 failed to fit the data, thus was significantly worse than the full-mediation model ($\Delta\chi^2 = 70.21$); as a result, the no-mediation was rejected.

Finally, Model 4, a partial-mediation model containing both direct and indirect paths on the dependent variable (see Figure 4.13) was tested and resulted in a good fit to the data. In comparing Model 4 to Model 1, the Chi-square difference results indicate that the partial mediation model is significantly better than the full mediation model ($\Delta\chi^2 = 31.72$, $\Delta df = 2$, $p < .001$), providing evidence of partial-mediation in support of Hypothesis 2.4. In addition, the effect of pre-visit DI on post-visit DI in the finally accepted partial mediation model showed a significant reduction; the last condition of establishing a mediation effect was thus met.

As the lower half of the Table 4.13 displays, the paths in the partial mediation model were all significant at p -level of .001; and the dependent variables exhibited high R-squared values (.50 for *destination satisfaction* and .94 for *post-visit DI*). This result indicates that 94% of the variance of the post-visit DI can be explained by the pre-visit DI and the destination satisfaction of sport tourists. Moreover, the path analysis of Model 4 revealed that initial DI affected destination satisfaction directly ($\beta = .70, t = 10.34$), and that destination satisfaction affected the post-visit DI directly ($\beta = .64, t = 8.44$), which resulted in a significant indirect effect of pre-visit DI on post-visit DI ($\beta = .41, t = 6.32$), supported by the Sobel (1982) test result.

Table 4.13

SEM Results for Mediation Effect

Fit Estimates	χ^2	df	CMIN/df	Bootstrap p	$\Delta\chi^2$	Δdf	GFI	AGFI	NFI	TLI	CFI	RMSEA	SRMR
Model 1	76.29	23	3.317	.005	Base Comparison		.958	.919	.963	.959	.974	.075	.041
Model 2	6.96	5	1.391	.378	/	/	.995	.977	.994	.995	.998	.031	.013
Model 3	146.50	22	6.659	.005	70.21	1	.918	.831	.928	.899	.938	.117	.052
Model 4	44.57	21	2.122	.060	31.72	2	.975	.947	.978	.980	.988	.052	.033

Standardised path coefficients (<i>p</i> -levels)				
	Model 1 Full Mediated	Model 2 PV affects DV	Model 3 No Mediation	Model 4 Partial Mediation
Pre-DI → Satisfaction	.814***	/	.845***	.704***
Pre-DI → Post-DI	/	.861***	.960***	.412***
Satisfaction → Post-DI	.990***	/	/	.636***
R²				
<i>Satisfaction</i>	.66	/	.72	.50
<i>Post-DI</i>	.98	.74	.92	.94

Note. *n* = 413. *** Significant *p* < .001; 2-tailed significance testing.

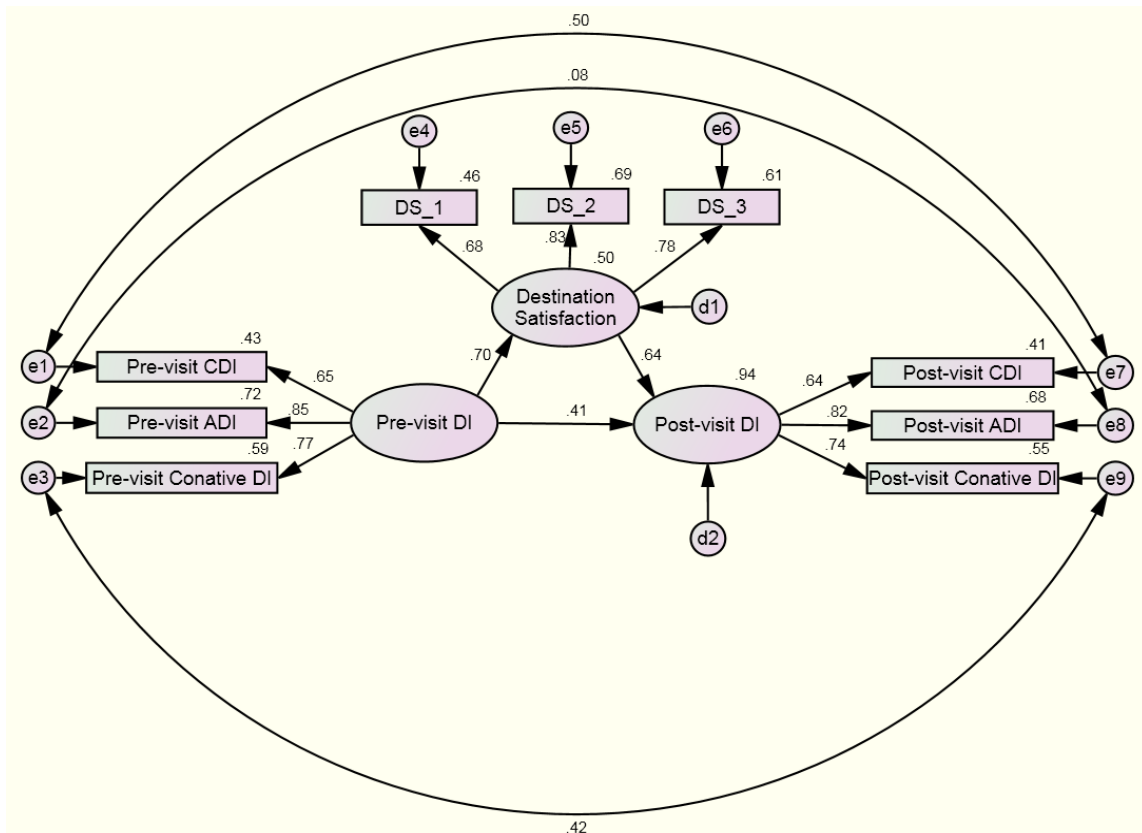


Figure 4.13 Partial Mediation Model for Destination Satisfaction on Pre-Post DI Change

The results of Study 1 have revealed the formation of the initial DI of sport tourists, which consisted of cognitive, affective and conative components, before travelling to participate in a sport event, under the interaction effect of external (i.e., destination and event attributes) and internal factors (i.e., sport and travel motivations). Furthermore, the initial DI was found to be enhanced by the sport tourists' personal visits to the destination due to the satisfactory experiences they obtained at the host location. However, the enhanced DI discovered soon after the trip might be attributed to the exaggerated evaluations made by those sport tourists who were still in a state of excitement at having had a pleasant event-participation and travelling experience; therefore, it may not be constant over time. In other words, the DI change may continue with the passage of time – even some time after the completion of the trip. As discussed in Chapter 2, the post-visit DI is still changeable over time, under the intervention of both external (e.g., new environmental stimuli) and internal (e.g., memory) factors. Therefore, this research conducted another longitudinal panel study to monitor the continuing change of the post-visit DI of sport tourists over a longer time period.

4.2 Results of Study 2: 2009 Post-event & Follow-up Study

Study 2 primarily focused on the stability of the post-visit DI held by sport tourists over a period of time (10 months), as well as on the factors influencing the DI change over time. The hypotheses from 3.1 to 3.6 regarding the post-visit DI change pattern over time and the potential influential factors were tested with the GLM repeated measure analysis. The composite scores of overall DI and its three components were utilised, which were computed by the weighted factor-score

approach. Therefore, the multi-dimensional CDI and the tripartite DI needs to be re-confirmed with the 2009 ING Miami Marathon participants.

It is believed that once the modified-induced DI has formed on the basis of visitors' personal experiences, the composition/factorial structure of post-visit CDI will not easily change over time (e.g., Fakeye & Crompton, 1991). For that reason, an EFA was conducted on the CDI attributes measured at both timings, with a combined sample (N = 2,223) from both post-event survey respondents (N = 1,989) and follow-up survey respondents (N = 234). The obtained factor structure of CDI was then input into a cross-validation process by CFA, in which two CFAs were conducted with the panel members (N = 234) who responded to both surveys: one with the CDI attributes measured two weeks after the event (Time 1), and the other with the same CDI attributes measured 10 months later (Time 2). After confirming the CDI components, a second-order CFA was used to confirm the tripartite structure of DI. Then, the composite variables for DI and its three components were calculated based on respective one-factor congeneric models, which were then used in subsequent GLM repeated measure analyses.

4.2.1 Descriptive Statistics

Since the surveys of Study 2 were conducted before Study 1 with the 2009 ING Miami marathon participants, all main constructs of this research were tested in these two surveys for the first time. Therefore, the descriptive statistics were produced for all main constructs (i.e., DI scales and psychological connection constructs). The means, standard deviations, and internal consistency coefficients are presented in Appendix 4-2. Cronbach's coefficient alpha, the most common measure for scale reliability (Field, 2009; Netemeyer et al., 2003; Schutt, 2006), was examined. Moreover, a simple *t*-test had to be conducted on the CDI attributes to

discover a generic list of destination attributes, all of which were perceived as being really important by sport tourists, and can be used in the following data collection waves. Finally, 2,223 responses obtained from both surveys were input into a simple *t*-test within SPSS 18.

The CDI of a sport tourist destination was operationalised by a 22-item instrument including both destination and sport event related attributes/features. The Alpha coefficient for these 22 CDI measurement items is 0.94, exceeding the threshold of 0.7. However, Boyle (1991) argues that scales exhibiting very high alpha coefficient (i.e., $\geq .90$) should be avoided, because they might just imply a high level of item redundancy, rather than scale reliability. Field (2009) agrees that the overall α is affected by the number of items being analysed. Therefore, the Corrected Item-Total Correlations between each item and the total score of the scale were further inspected to see whether all the items correlate well with the total. The item-total correlations of all 22 DI attributes have above 0.5, indicating adequate correlations with the scale overall and can be retained for further analysis (Field, 2009).

A one-sample *t*-test using a test value of “4.0” was used to examine which DI attributes were perceived as being important by sport tourists. The mean importance ratings ranged from 4.08 (*shopping facilities*) to 5.81 (*good climate*). The *t*-test results revealed that all 22 DI attributes were perceived as being significantly important by sport tourists, as the means were significantly higher than the scale’s midpoint – “4.0” (medium importance) ($p < .05$). As a result, all 22 CDI attributes were retained for further analyses. In addition, the reliability coefficients of all main constructs presented a satisfactory score of above 0.75.

4.2.2 Dimensions of Cognitive DI

Since the exact same CDI attribute list was adopted by these two surveys conducted after the event and no structural change was assumed in post-visit CDI, the EFA on the CDI attributes was conducted using the combined dataset of the post-event and the follow-up surveys. The combined dataset was obtained from merging the two SPSS data files by the 22 CDI variables and thus contained 2,223 cases. Subsequently, the general EFA results obtained from the CDI measures at two times (Time 1 and Time 2) were input into two separate CFAs, both with the panel sample ($n = 234$), one was to confirm the CDI structure held by sport tourists soon after the event and the other was to cross-validate the CDI structure 10 months later.

4.2.2.1 Exploring the Latent Structure of CDI

As the previous descriptive statistics have shown, the CDI held by sport tourists attending the 2009 ING Miami event was measured by the importance of 22 attributes related to both the event and its host destination, Miami. In order to reduce this list of 22 attributes into a few correlated and meaningful dimensions, the EFA was employed. First of all, by checking the absolute value of skewness (all < 1.35) and kurtosis (all < 2.84), as well as the histograms of each indicator, none of the 22 variables was found to violate the assumption of multivariate normality requested by the Maximum Likelihood extraction method. Next, the KMO value of the 22 CDI indicators is 0.94 (“superb” according to Field, 2009), indicating a factor structure underlying the data. Moreover, all KMO values for individual items were above 0.87, much higher than the acceptable limit of 0.5. The Bartlett’s test for sphericity $\chi^2(231) = 33537.13, p < .001$, indicated that correlations between items were sufficiently large for factor analysis.

The 22 items were then subjected to the EFA, using Maximum Likelihood extraction with oblimin rotation to examine the underlying component structure for CDI. The same four criteria adopted before were used (see Section 4.1.1.1) and thus five items were removed from the scale. *Shopping facilities* and *Registration fee* were dropped because of their low communalities; *Entertainment value of the event* and *Tourist information and supports* were dropped because of cross-loadings; and *Event organisation and facilities* was dropped due to its low loadings. Finally, 17 items were retained, resulting in three factors with eigenvalues greater than one.

Examination of the scree plot further indicated that this three-factor solution was the most appropriate. The three factors can explain 63% of the total variance of cognitive DI, which is a satisfactory solution in the social sciences. Table 4.14 provides the factor loadings after rotation, eigenvalues and percentages of extracted variance explained by each factor. It was found that most of the factor loadings were greater than 0.6, indicating a good correlation between the attribute items and the factor they belonged to. The reliability coefficient (Cronbach's α) values for the three factors ranged from .83 to .93, much higher than the benchmark of 0.7, indicating all the attributes retained are satisfactory measures for the factor to which they belonged. Following the identification of this final factor solution, the items within each of the three factors were reviewed and then named.

As shown in Table 4.14, the first factor represented the touristic attractions, with five items accounting for 43.6% of the extracted variance; and was thus labelled "Tourist Attractions" (TA, $\alpha = .92$). Factor 2 contained 10 items that reflected basic demands and facilities required by travellers, accounting for 13.9% of the extracted variance; it was thus labelled "Basic Facilities & Services" (BFS, $\alpha = .93$). The third factor concerned the event-related features, with two items

accounting for 5.6% of the total variance; and was thus labelled “Event Image” (EI, $\alpha = .83$). These results show that the CDI held by 2009 sport tourists could be represented by three components: *Tourist Attractions, Basic Facilities & Services*, and *Event Image*. Therefore, a total of 17 attributes loading on the three components were input into the CFA to refine and confirm the measurements of CDI.

Table 4.14

EFA Results & Internal Consistency of Multi-dimensional CDI

CDI Measurements	CDI Components		
	FACTOR 1	FACTOR 2	FACTOR 3
<i>Chance of experiencing different cultures/customs</i>	.783	-.005	.039
<i>Sightseeing opportunities</i>	.916	.002	-.036
<i>Cultural, arts & historic attractions</i>	.929	-.021	.007
<i>Natural/ scenic attractions</i>	.809	.056	-.044
<i>Local sport facilities & activities</i>	.626	.041	.193
<i>Ease of travel</i>	-.109	.732	.033
<i>Personal safety</i>	-.079	.768	.010
<i>Accommodation quality</i>	.012	.777	-.009
<i>Food quality</i>	.074	.744	-.022
<i>Pleasant atmosphere</i>	.021	.819	-.027
<i>Friendliness of the locals</i>	.079	.753	.041
<i>Local infrastructure & transportation</i>	.033	.721	.056
<i>Good weather</i>	-.061	.709	-.041
<i>Green & clean environment</i>	.084	.682	.048
<i>Entertainments & recreation facilities</i>	.246	.604	-.013
<i>Level of competition</i>	-.016	-.042	.952
<i>Status of event</i>	.040	.071	.726
Initial Eigenvalues	8.06	2.43	1.20
% of Extracted Variance Explained	43.64	13.86	5.63
Cronbach's Alpha	.92	.93	.83

Note. EFA of CDI attributes measured by both surveys, using combined data-file ($N = 2,223$). Factor loadings $> .50$ are in boldface.

Extraction method – Maximum Likelihood;

Rotation method – Direct Oblimin with Kaiser Normalization;

Cumulative % of Variance Explained by Three Factors = 63.12%;

KMO Measure of Sampling Adequacy = .926.

4.2.2.2 Refining the CDI Components

The three-component CDI structure obtained from the EFA results was first tested by a second-order CFA on the retained 17 indicators measured at Time 1 as a calibration test. Next, the second-order CFA was repeated with the same 17 CDI indicators measured at Time 2 as a validation test. To facilitate computing composite scores for CDI and its multiple components, which can be used directly in subsequent GLM repeated measures analyses, the two CFAs were conducted with the panel sample only ($n = 234$).

In order to confirm the underlying multidimensional structure of CDI, a second-order CFA was employed. As the initial step of testing a second-order model, a first-order group-factor model of CDI (Model 1) comprising three latent factors (i.e., TA, BFS, & EI) with 17 manifest variables was examined. In this model, each pair of latent factors was permitted to co-vary and all error terms were constrained to be uncorrelated. Moreover, every latent factor was given a scale by fixing its variance to “1”. In addition, to support the existence of a higher-order factor, a more restricted model was tested: the one-factor model of CDI in which the 17 observable attributes were loaded on a single latent construct (Model 2). The goodness-of-fit indices are displayed in Table 4.15.

Table 4.15

Fit Indices for CFA Models of CDI

CDI Structure		χ^2	df	CMIN /df	Boot strap p	GFI	AGFI	NFI	TLI	CFI	RMSEA	SRMR
Model 1	First-order Model (Correlated 3-factor model)	415.96	116	3.586	.005	.819	.761	.855	.871	.890	.105	.061
Model 2	One-factor Model	1168.50	119	9.819	.005	.531	.398	.593	.561	.616	.195	.128
Model 3	Respecified First-order Model	116.14	59	1.968	.075	.932	.895	.948	.965	.973	.064	.042
Model 4	Second-order Model	143.64	61	2.355	.025	.920	.881	.936	.951	.962	.076	.077
Model 5	Revised Second-order Model	80.50	41	1.963	.139	.944	.910	.958	.972	.979	.064	.044

Note. $n = 234$.

As shown in Table 4.15, the unidimensional CDI model (Model 2) had a very bad fit to the data, indicating the 17 attributes assessed more than one single factor. Model 2 was thus unacceptable and Model 1 was preferred. However, the baseline group-factor model of CDI (Model 1) just had a marginal fit to the data, even though it showed substantial improvement compared to Model 2. For that reason, modifications are required to respecify the model to achieve a good fit and parsimony.

By checking the SMCs, SRCs, and MIs, the following modifications were made step by step: (1) Three items were removed from the model due to their low SMC values: *Good weather* ($SMC = .35$), *Ease of travel* ($SMC = .39$), and *Personal safety* ($SMC = .42$). (2) The MIs for this model suggested that freeing the error covariances between *Clean & green environment*, *Friendliness of the locals*, and *Pleasant atmosphere* would improve the model fit. This is substantially plausible since these three items were not essential but desirable attributes for travellers. The error correlations between the three items suggest that although they may be indicators of BFS, they are also measuring another different construct, which may be

labelled “Amenity”. (3) Large SRC values (“2.12” and “2.35”) between *Local infrastructure and transportation* and the two EI indicators as well as one TA indicator (2.13) suggested misspecification in the association between these variables. Thus, the problematic item of “local infrastructure and transportation” was deleted from the model. As a result, the respecified CDI measurement model (Model 3) consisted of four latent first-order factors with 13 indicators. The adequacy of the respecified model was supported not only by its GOF indices, as shown in Table 4.15, but also by its statistically significant improvement in fit ($\Delta\chi^2 = 299.82$, $\Delta df = 57$, $p < .001$) compared to the original model.

In the next step, a second-order CFA model of CDI (Model 4) was analysed. The CDI was operationalised as a higher-order construct with the four aforementioned first-order factors (i.e., TA, BFS, EI, & AmenitY) as sub-dimensions, as Figure 4.14 depicts. The results, which are shown in Table 4.15, revealed that the second-order model has an adequate fit, but it is worse than the refined first-order model. However, the value of target coefficient (TC = .809) indicated that the second-order CDI could explain 81% of the covariance among the four first-order factors, which provided evidence of a higher-order CDI construct and its nomological validity.

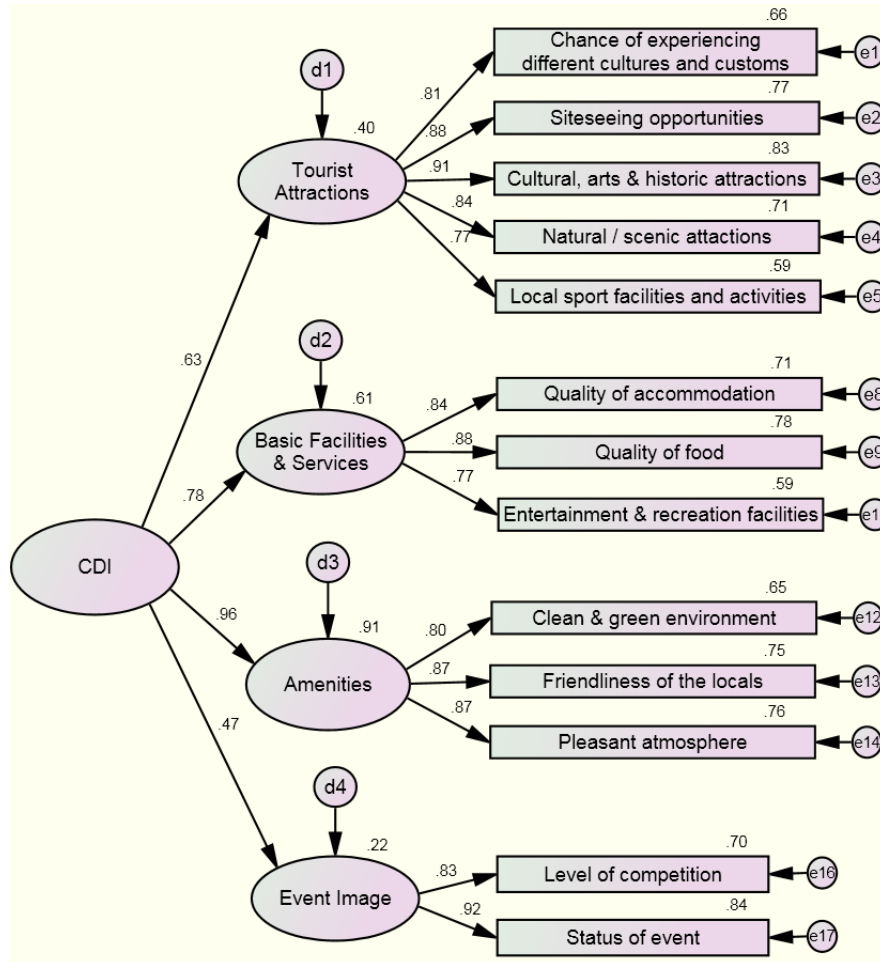


Figure 4.14 The Refined Second-order Measurement Model of CDI

Furthermore, modifications were found to be possible and necessary when checking other statistic indices. For example, the *event image* component had a very low SMC value (.22), indicating that EI was a very poor measure of CDI and should be dropped from the model. This decision can also be supported by the extremely large SRC values (> 2.58) of the two EI indicators and the modification indices. After deleting the EI component, the revised second-order CDI model demonstrated a significantly better fit to the data ($\Delta\chi^2 = 35.64$, $\Delta df = 18$, $p < .01$) than the revised first-order model. Thus, the second-order CDI measurement model consisting of three latent components and 11 indicators was regarded as the best representation for the CDI held by sport tourists participating in the event. The standardised factor

loadings, AVEs and the statistics supporting the construct reliability and validity are presented in Table 4.16.

Table 4.16

Second-order CFA Results for CDI at Time 1

Label	Factors & Indicators	Standardised Loadings ^a	AVE ^b	C.R.	Composite Reliability
Amenity		.982	.72	11.51	0.88
Amen1	<i>Clean & green environment</i>	.800		14.25	
Amen2	<i>Friendliness of the locals</i>	.864		16.00	
Amen3	<i>Pleasant atmosphere</i>	.876		16.34	
Tourist Attractions		.595	.71	8.08	0.93
TA1	<i>Chance of experiencing different cultures/customs</i>	.815		14.89	
TA2	<i>Sightseeing opportunities</i>	.879		16.80	
TA3	<i>Cultural, arts & historical attractions</i>	.910		17.80	
TA4	<i>Natural/scenery attractions</i>	.844		15.73	
TA5	<i>Local sport facilities & activities</i>	.768		13.65	
Basic Facilities & Services		.775	.70	10.01	0.87
BFS_1	<i>Quality of accommodation</i>	.842		15.23	
BFS_2	<i>Quality of food</i>	.885		16.40	
BFS_3	<i>Entertainment & recreation facilities</i>	.771		13.41	

	Amenity	Tourist Attractions	Basic Facilities & Services
Amenity	1.00	0.34^d	0.58
Tourist Attractions	.584 ^c	1.00	0.21
Basic Facilities & Services	.761	.461	1.00

Note. CFA modification on CDI measurements at Time 1, with the panel sample ($n = 234$).

^a All loadings are significantly above 0.5 ($p < .001$).

^b AVE values were shown as decimals for ease in comparison with the squared correlations.

^c Values shown below the diagonal are correlation estimates (at 2-tailed p level of .01).

^d Values above the diagonal are the squared correlations.

4.2.2.3 Cross-validating the CDI Structure

The CDI measurement model with three latent factors and 11 manifest variables refined with the Time 1 data was tested again with the Time 2 responses – in order to cross-validate the tripartite structure of CDI. To achieve a satisfactory fit to the data, the error terms of *Accommodation quality* and *Food quality* were permitted to covary, as suggested by the MIs. The model fit was thus significantly

improved ($\Delta\chi^2 = 43.81$, $\Delta df = 1$, $p < .001$). The GOF indices ($\chi^2 = 60.17$, $df = 40$, bootstrap $p = .313$, $\chi^2/df = 1.50$, GFI = .956, AGFI = .927, NFI = .955, TLI = .978, CFI = .984, RMSEA = .047, SRMR = .039) indicated this CDI model could fit to the data collected ten months later. In other words, the CDI perceived by sport tourists ten months after the event contained the exact same components with the CDI perceived soon after attending the event, indicating that the structure of CDI held by sport tourists did not change over the 10-month interval.

4.2.2.4 Composite Scores Calculation

After the CDI structure was validated by both data sets, it could be concluded that the CDI perceived by sport tourists at two time-points (i.e., two weeks after the event and ten months later) contained the same three components – *Tourist Attractions* with five indicators; *Basic Facilities & Services* with three indicators; and *Amenity* with three indicators. However, since only the CDI components, not their specific indicators were of interest in this study, composite variables are required to be calculated by weighing each indicator's unique contribution to the common factors to which they belonged. As elaborated in section 4.1.1.2.1, one-factor congeneric models for each of the three CDI components were first examined to produce the factor score weights. After that, the composite score for each CDI component was computed by using the weighted factor score weights. The reliability of each newly-computed composite variable (i.e., Coefficient H) was then tested, along with the respective mean scores and standard deviations, and are all presented in the two appending tables (see Appendices 4-5 and 4-6).

4.2.3 Confirming Tripartite DI Structure & Composite Variables Computation

Two second-order CFAs were conducted to verify the tripartite structure of the DI perceived by the sport tourists attending the 2009 ING Miami Marathon, both soon after the event and ten months later. As shown in the Study 1 results, DI was examined as a higher-order factor accounting for the covariance between the three first-order latent factors of CDI, ADI, and Conative DI, and each was predicted by three observable indicators. Based on the refined CDI structure in Section 4.2.2, CDI held by the 2009 respondents with regard to Miami at both timings was represented by the same three composite variables of *Tourist Attractions*, *Basic Facilities & Services*, and *Amenity*. The ADI was measured by three bipolar attitudinal scales in both surveys, among which one item is slightly different: “bad – good” was used in the post-event survey but the follow-up survey utilised “negative – positive”. The Conative DI was indicated by three revisit intention items (i.e., short-, medium-, and long-term) and one recommendation intention item.

In testing the second-order model of DI with either dataset, the medium-term of revisit intention (i.e., “*I will revisit Miami for a vacation within the next 3 years*”) showed a negative error variance, which is a nonsensical value and has been noted as Heywood Cases (Hair et al., 1995). This problem might be caused by sampling fluctuations (Dillon, Kumar, & Mulani, 1987) and can be remedied either by eliminating the problematic indicator or by fixing the offending error variance to a very small positive value (e.g., .005). The former solution was adopted by this study because the latter one cannot produce factor score weights which are necessary for computing composite variables. The medium-term revisit intention was thus removed from the Conative DI measurement scales in both datasets.

Accordingly, the second-order CFA model of the DI measured at Time 1 exhibited an adequate fit to the data ($\chi^2 = 37.76$, $df = 24$, $\chi^2/df = 1.57$, bootstrap $p = .08$; GFI = .967; AGFI = .938; NFI = .952; TLI = .973; CFI = .982; RMSEA = .05; SRMR = .048), while the second-order CFA model of the DI measured at Time 2 only displayed a marginal fit to the data ($\chi^2/df = 2.69$, bootstrap $p = .015$; RMSEA = .085). Further investigation of the MIs suggested that if allowing covariation between the error terms associated with the short-term (1-year) and long-term (5-year) revisit intentions, the model fit can be improved significantly ($\Delta\chi^2 = 39.15$, $\Delta df = 1$, $p < .001$). This substantially reasonable modification was accepted and thus the model achieved an excellent fit to the data ($\chi^2 = 25.51$, $df = 23$, $\chi^2/df = 1.11$, bootstrap $p = .612$; GFI = .977; AGFI = .954; NFI = .974; TLI = .996; CFI = .997; RMSEA = .022; SRMR = .038). The results for the two second-order CFA models of DI measured at both timings are presented in Table 4.17.

Table 4.17

Second-order CFA Results for the Tripartite DI at Both Timings

DI Components & Indicators	Standardised Loadings ^a	SMC	C.R.	AVE ^b	Composite Reliability
DI_Time1	/	/	/	.37	.62
Cognitive DI	.458	.210	4.04	.57	.79
<i>Tourist Attractions</i>	.594	.353	9.09		
<i>Basic Facilities & Services</i>	.738	.545	11.48		
<i>Amenity</i>	.895	.802	14.13		
Affective DI	.437	.191	3.86	.66	.84
<i>Dislike – Like</i>	.924	.854	16.61		
<i>Unpleasant – Pleasant</i>	.948	.899	17.21		
<i>Bad – Good</i>	.466	.217	7.31		
Conative DI	.847	.717	3.85	.41	.65
<i>Revisit intention within 1 year</i>	.478	.228	6.49		
<i>Revisit intention within 5 years</i>	.422	.178	5.80		
<i>Recommend intention</i>	.912	.831	10.36		
DI_Time2	/	/	/	.47	.71
Cognitive DI	.393	.155	4.15	.51	.75
<i>Tourist Attractions</i>	.544	.296	7.95		
<i>Basic Facilities & Services</i>	.707	.499	10.29		
<i>Amenity</i>	.856	.734	12.29		
Affective DI	.872	.760	6.73	.73	.88
<i>Dislike – Like</i>	.634	.401	10.57		
<i>Unpleasant – Pleasant</i>	.939	.882	18.44		
<i>Negative – Positive</i>	.946	.895	18.66		
Conative DI	.707	.499	4.74	.50	.73
<i>Revisit intention within 1 year</i>	.513	.263	7.44		
<i>Revisit intention within 5 years</i>	.538	.290	7.78		
<i>Recommend intention</i>	.977	.954	12.79		
Components Correlations					
DI_Time1	CDI	ADI	Conative DI		
	CDI	0.04 ^d	0.15		
	ADI	1.00	0.14		
	Conative DI	.388***	1.00		
DI_Time2	CDI	ADI	Conative DI		
	CDI	0.12	0.08		
	ADI	1.00	0.38		
	Conative DI	.616***	1.00		

Note. $n = 234$.

^a All loadings are significantly above 0.4 ($p < .001$).

^b AVE values were shown as decimals for ease in comparison with the squared correlations.

^c Values shown below the diagonal are correlation estimates (** at 2-tailed p level of .01; *** at 2-tailed p level of .001).

^d Values shown above the diagonal are the squared correlations.

From an inspection of Table 4.17, each of the three first-order factors showed significant factor loadings ($p < .001$) on the second-order factor in both DI models, indicating that the three latent components of CDI, ADI, and Conative DI significantly converge on a common underlying construct of DI. The composite reliabilities (all greater than 0.60) reflect the internal consistency of items in each construct. Moreover, the *C.R.* values (*t*-values) and AVEs lend additional evidence of convergent validity for the DI and its components. Discriminant validity of the higher-order DI was also established, because the AVE scores for any pair of components were greater than the squared correlations between the two factors.

Further investigations showed that the ADI component obtained the lowest factor loading in the DI structure at Time 1 (.44) but achieved the highest loading in the DI structure at Time 2 (.87). This indicates that ADI was least influenced by the post-visit DI perceived soon after the event, but became the most influenced component with the passage of time. On the other hand, Conative DI obtained the highest loading (.85) in the post-event DI model and CDI obtained the lowest loading in the DI structure examined ten months later. This indicates that the impact of the overall DI on its cognitive and conative components was weakening with the passage of time. As for the item loadings on the first-order factors, most of them were significantly above 0.5 ($p < .001$), with the *t*-values exceeding 5.50. These statistics suggest the indicators are reliable and valid measurements for the first-order latent constructs to which they belonged. In summary, all statistics support the second-order measurement model for the DI construct which contains three distinct but correlated components.

After confirming the higher-order tripartite structure of DI, composite variables were calculated for DI and its three components by fitting their respective

one-factor congeneric measurement models. The results were reported in Appendices 4-5 and 4-6. For each case, the fit statistics of the accepted models lend support to the notion that the indicator variables validly contributed to the underlying construct being estimated (Holmes-Smith & Rowe, 1994). On the other hand, Coefficient H values, the maximised measures of scale reliability, were mostly higher than 0.7, suggesting that all four sets of indicator variables were reliable measures of the underlying variables to which they belonged. Subsequently, the factor score weights were extracted to compute the composite scores.

4.2.4 GLM Repeated Measures Analysis Results

GLM repeated measures analysis was employed to identify the change in DI and its three components, which were held by sport tourists after attending the 2009 event, over a long period of ten months. The moderation factors influencing the change of post-visit DI components over time were further examined if the main effect of time on the overall DI was identified. Accordingly, the main within-subjects factor is time (Time 1 vs. Time 2), and the between-subjects factors were: **actual revisitation** during the study interval (revisitors, n = 118; non-revisitors, n = 116); **previous experiences** with the destination (visited once, n = 25; visited multiple times, n = 209); **residency** (domestic visitors, n = 169; international visitors, n = 65); **satisfaction** (very satisfied visitors, n = 173; less satisfied visitors, n = 61); and **the psychological connection levels** ten months after the event (awareness, n = 18; attraction, n = 141; attachment, n = 45; allegiance, n = 30). The mean scores, standard deviations and the main effects of time on DI change revealed by GLM repeated measure analysis are all displayed in Table 4.18.

Table 4.18*Descriptive Statistics for Main Within-subjects Variable*

DI & Its Components	Time 1 (post-event)		Time 2 (10 months later)	
	Mean	SD	Mean	SD
Cognitive DI	5.40	0.92	5.36	1.08
Affective DI	6.40*	0.95	5.98*	1.06
Conative DI	6.17*	0.73	5.86*	1.37
Overall DI	6.07*	0.62	5.87*	0.91

Note. $n = 234$. * Means significantly differ at $p < .05$

As illustrated in Table 4.18, the repeated measure analysis discovered a main effect of time on overall DI change. The overall DI mean score of 5.87 assessed ten months after the event was significantly lower than the mean score of 6.07 assessed two weeks after the event, $F(1, 233) = 15.26, p < .001, \eta^2 = .061$. The results indicate the overall image held by sport tourists of the host destination significantly decayed within the 10-month period. Hypothesis 3.1 was thus supported.

The significant main effects of time on ADI and Conative DI components were observed but no significant change for CDI was observed. Accordingly, the sub-hypotheses of 3.1b and 3.1c were supported but Hypothesis 3.1a was rejected. The changes occurred as the mean score for ADI assessed ten months after the event ($M = 5.98$) was significantly lower than the mean score assessed soon after the event ($M = 6.40$), $F(1, 233) = 35.43, p < .001, \eta^2 = .132$. This significant decline was also observed for Conative DI as its mean score assessed ten months after the event ($M = 5.86$) was significantly lower than soon after the event ($M = 6.17$), $F(1, 233) = 15.98, p < .001, \eta^2 = .064$. The effect sizes suggest that the effect of time on ADI change was strong, while only moderate for Conative DI.

The moderating effects from aforementioned several between-subjects variables revealed mixed results. Firstly, no significant interaction effects were observed on either ADI or Conative DI decay from the actual revisitation during the 10-month study interval ($p > .05$), or from the previous experience with Miami (i.e., familiarity, $p > .05$), Hypotheses 3.2 and 3.3 were thus rejected. Secondly, a significant “Time \times Residency” interaction was observed on the Conative DI, as illustrated by Figure 4.15. However, this interaction occurred as United States residents showed more, rather than less, decay in their revisit and recommend intentions over the 10-month period than the international visitors, $F(1, 232) = 4.06$, $p < .05$, $\eta^2 = .017$. Moreover, no significant difference was observed between these two groups in the ADI decay. Therefore, Hypothesis 3.4 was rejected.

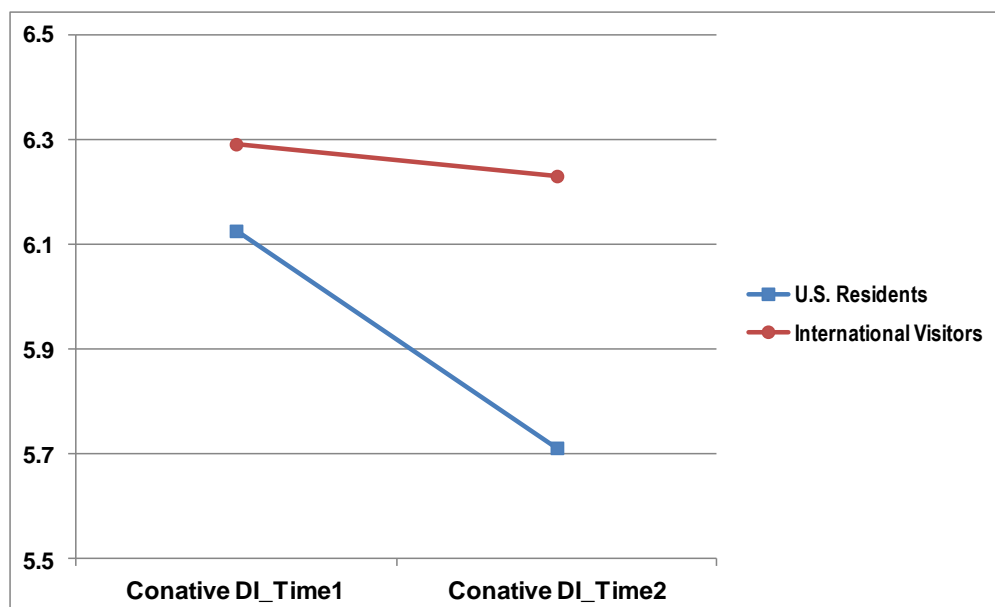


Figure 4.15 Conative DI Decay over Time for U.S. Residents & International Visitors

Third, a significant “Time × Destination Satisfaction” interaction was observed on both ADI and Conative DI, and is illustrated in **Figure 4.16** and **Figure 4.17**. This interaction occurred as the sport tourists with higher satisfaction with Miami had significantly less decay in both feelings ($F(1, 232) = 15.41, p < .001, \eta^2 = .062$) and behavioural intentions ($F(1, 232) = 23.49, p < .001, \eta^2 = .092$) over the ten months than their less satisfied counterpart. Hypothesis 3.5 was thus supported.

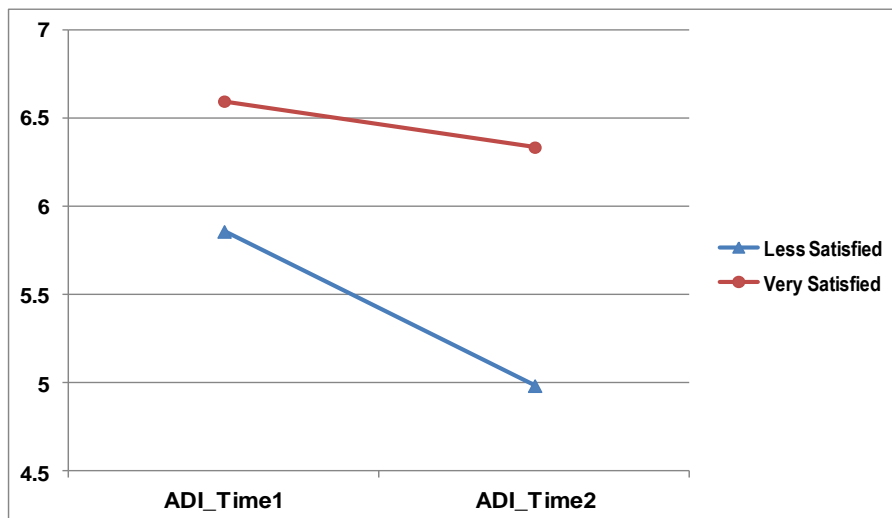


Figure 4.16 ADI Decay over Time for Satisfied & Unsatisfied Sport Tourists

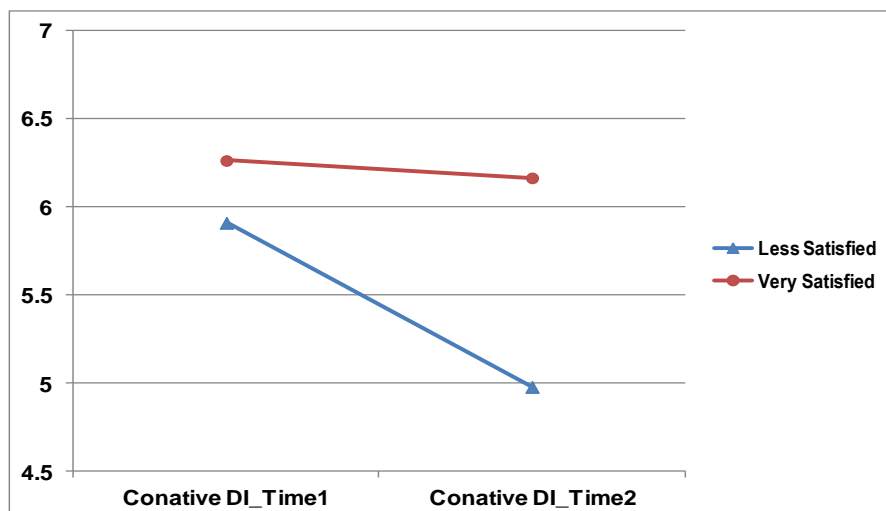


Figure 4.17 Conative DI Decay over Time for Satisfied & Unsatisfied Sport Tourists

Finally, a significant Time \times PCM Stage interaction was also observed for both ADI ($F(1, 230) = 18.54, p < .001, \eta^2 = .195$) and Conative DI ($F(1, 230) = 8.43, p < .001, \eta^2 = .099$), as illustrated in **Figure 4.18** and **Figure 4.19**.

Furthermore, a Games-Howell *post hoc* test was conducted to check whether significant differences were present across all four PCM stages in the decay of ADI and Conative DI. The results revealed significantly different ADI decays were present between *awareness* and the other three levels, as well as between the *attraction* and *allegiance* levels; but not between the *attraction* and *attachment* levels, nor between the *attachment* and *allegiance* levels. On the other hand, significantly different Conative DI decays were present between *awareness* and the other three levels, as well as between *attraction* and the other three levels; but not between the *attachment* and *allegiance* levels.

In summary, the sport tourists holding the lowest psychological connection with Miami, rated at an awareness level, demonstrated significantly more decay in both feelings and behavioural intentions after ten months than the other three groups with higher psychological connection levels. Sport tourists in the second psychological connection level of attraction also decayed significantly more in behavioural intentions than the other two higher connected groups (i.e., those at the attachment and allegiance stages), but did not display a decline in feelings greater than the people in attachment. Additionally, no significant differences were present between the third and fourth stages of PCM (i.e., between *attachment* and *allegiance*) in both feelings' and behavioural intentions' decay. Further investigation of the pairwise comparisons discovered the individuals at these two levels of high psychological connection with the host destination did not show significant decline

over time, either in feelings or in behavioural intentions. Hence Hypothesis 3.6 was supported.

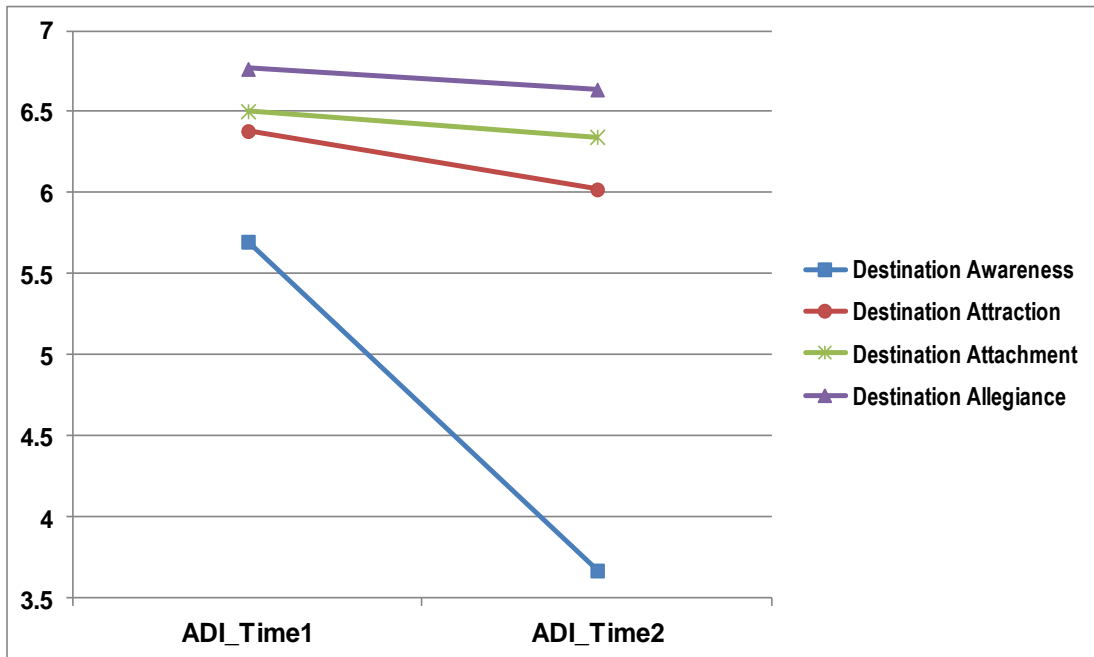


Figure 4.18 ADI Change over Time for Four PCM Groups

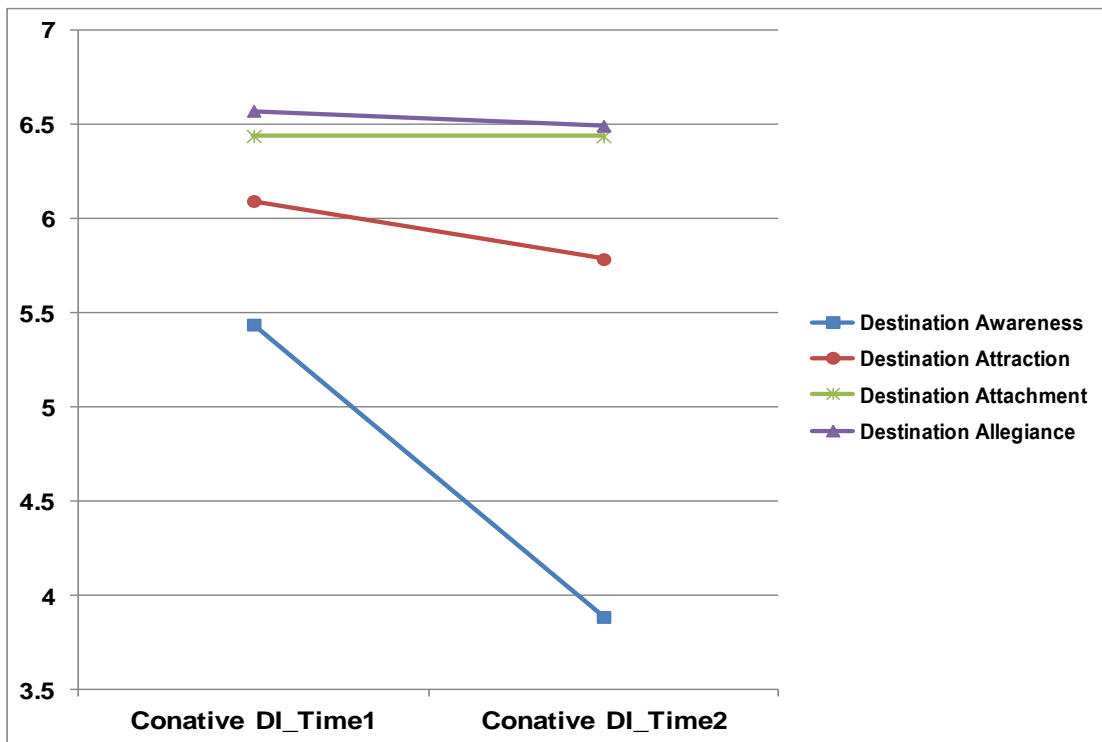


Figure 4.19 Conative DI Change over Time for Four PCM Groups

4.3 Summary

The results of two longitudinal panel studies have been reported in this chapter. Generally, the results have confirmed the tripartite structure of DI which was proposed in Chapter 2; and have revealed a significant enhancement between the pre- and post-visit DI as well as a significant decline of the post-visit DI over a 10-month interval. Whether the sport tourists' DI enhanced or declined, their psychological connection with the destination has been demonstrated as a key factor determining the stability of their DI as well as the change magnitude of DI. Generally speaking, the sport tourists who held a strong psychological connection with the host destination (i.e., those in *attachment* and *allegiance*) demonstrated much less change in their DI than the individuals who had relatively weak psychological connections (i.e., those in *awareness* and *attraction*). Specific results were reviewed as follows.

Study 1 employed a pre- and post-event panel investigation to discover how the initial DI of sport tourists formed before travelling to attend the event, and then how this DI changed after travelling to the host destination. First, the pre-event survey results explored the multi-dimensional structure of CDI and discovered event related attributes contributed little to the initial DI formation of sport tourists. Second, the tripartite structure of DI was supported by both pre- and post-event datasets, with the cognitive component not showing more impact on overall DI than the other two components. Third, sport motivations did not influence initial DI but the strength of travel motivation had a significantly positive impact on initial DI, even if the effect was weak. Fourth, sport tourists could develop a certain degree of psychological connection with the event-host destination even before visiting the

place; and this psychological connection was positively related to their DI. These results addressed all hypotheses under RQ1.

Subsequently, the pre- and post-event comparison results revealed that the initial DI of sport tourists was enhanced significantly by their personal visit experiences because all respondents had a high level of satisfaction with the destination. Moreover, this DI enhancement was moderated by the psychological connection level the sport tourists held after visitation. The change in psychological connections before and after visitation was also examined, indicating a positive correlation with the DI change. These results addressed all hypotheses associated with RQ2.

Study 2 utilised a longitudinal panel study with a 10-month interval to monitor how the post-visit DI of sport tourists continued to change over time and which factors moderated this change. Results demonstrated that the DI held by sport tourists after participating in the event declined significantly over the 10-month period. Both affective and conative components of DI declined substantially over time, while the cognitive component was relatively stable since no significant decay was observed in sport tourists' knowledge, beliefs and cognitions of Miami. Moreover, the residency of sport tourists was found to moderate their conative DI decay in that U.S. citizens declined more significantly in revisit and recommend intentions than the international visitors. Moderating effects were also found from the satisfaction and the psychological connection levels of sport tourists with Miami on the ADI and Conative DI decay over time. These results provide support for all six hypotheses under RQ3. Table 4.19 provides a summary of the hypotheses testing results from the data analyses for the two longitudinal panel studies. The next chapter will further interpret and discuss the results reported in the current chapter.

Table 4.19

Summary of Hypotheses Testing Results

	HYPOTHESES	RESULTS
Initial DI Formation before Visitation	Hypothesis 1.1: Event attributes will positively contribute to the initial DI formation of sport tourists.	Supported
	Hypothesis 1.2: The prior sport involvement of sport tourists will positively influence their initial DI.	Rejected
	Hypothesis 1.3: The strength of travel motivation will positively influence sport tourists' initial DI.	Supported
	Hypothesis 1.4: The initial DI held by sport tourists is jointly formed by cognitive, affective, and conative evaluations of the event-host destination.	Supported
	Hypothesis 1.5: The cognitive component has more impact on the initial DI than does the affective and conative component.	Rejected
	Hypothesis 1.6: The initial DI held by sport tourists is positively related to their psychological connection levels with the destination.	Supported
DI Change after Visitation	Hypothesis 2.1: The sport tourists who have previously visited the destination prior to the event will incur less DI change after this participatory trip.	Partially Supported
	Hypothesis 2.2: The sport tourists who stay longer at the destination will incur greater DI change.	Rejected
	Hypothesis 2.3: The sport tourists who participate in sightseeing activities during their stay will incur greater DI change.	Rejected
	Hypothesis 2.4: The experience satisfaction of sport tourists with the host destination will mediate the DI change before and after visitation.	Supported
	Hypothesis 2.5: The DI held by sport tourists will be enhanced by their actual visitation.	Supported
	Hypothesis 2.5a: <i>The cognitive DI held by sport tourists will be enhanced by their actual visitation.</i>	Supported
	Hypothesis 2.5b: <i>The affective DI held by sport tourists will be enhanced by their actual visitation.</i>	Supported
	Hypothesis 2.5c: <i>The conative DI held by sport tourists will be enhanced by their actual visitation.</i>	Supported
	Hypothesis 2.6: The change of sport tourists' psychological connections with the destination is positively related to their DI change.	Supported
Hypothesis 2.7: The sport tourists holding a weak psychological connection with the destination after actual visitation must incur less DI enhancement.	Partially Supported	

Table 4.19 Continued

	HYPOTHESES	RESULTS
Post-visit DI Change over Time	Hypothesis 3.1: The DI held by sport tourists after attending the event will decay over time.	Supported
	Hypothesis 3.1a: <i>The cognitive DI held by sport tourists after attending the event will decay over time.</i>	Rejected
	Hypothesis 3.1b: <i>The affective DI held by sport tourists after attending the event will decay over time.</i>	Supported
	Hypothesis 3.1c: <i>The conative DI held by sport tourists after attending the event will decay over time.</i>	Supported
	Hypothesis 3.2: The sport tourists who have revisited the destination after attending the event will incur less DI decay over time.	Rejected
	Hypothesis 3.3: The sport tourists who had previously visited the destination prior to the event will incur less DI decay over time.	Rejected
	Hypothesis 3.4: Domestic sport tourists will incur less DI decay over time than the international sport tourists.	Rejected
	Hypothesis 3.5: The sport tourists satisfied with the destination will incur less DI decay over time than the unsatisfied sport tourists.	Supported
	Hypothesis 3.6: The sport tourists with a stronger psychological connection to the destination will incur less DI decay over time.	Supported

CHAPTER 5 DISCUSSION AND CONCLUSION

Chapter 4 centred on examining the research questions and hypotheses put forward in Chapter 2, which were focused on the DI formation and change of sport tourists at three periods of time: before visitation, actual visitation and 10-month after visitation. Five analysis methods have been used: EFA, first-order and second-order CFA, SEM, ANOVA, and GLM repeated measures analysis. The analysis explored the multidimensional structure of the cognitive component of DI, validated the tripartite structure of the overall DI, and revealed the two changes sport tourists' DI had undergone.

The first change of DI is that an enhancement occurred after personal visits to the destination for participating in the event, demonstrating the impact of experience satisfaction with the destination. The second change of DI is that a decline occurred over a 10-month period after returning from the event participation. To explain the diverse DI change results – whether there was an increase, a decrease or no change, the psychological connection of sport tourists with the event-host destination was examined. A common conclusion emerged thereby that if sport tourists can sustain a strong psychological connection with the destination, their DI will be more consistent and stable.

The current chapter will focus on the discussion of the main findings revealed in Chapter 4, and further extend the discussion by referring back to the conceptual framework described in Chapter 2. Specifically, this chapter consists of the following five subsections. First, the hypotheses and research questions are addressed for each stage of DI formation and change process respectively, and the results are compared or contrasted against the existing literature. Furthermore, a common conclusion is made for the present longitudinal research, based on the

findings of the two panel studies and related to the conceptual framework established in Chapter 2. Third, the theoretical and practical implications are described, in which contributions made by this research will be highlighted. This section is then followed by an acknowledgement of the study's limitations and future research directions arising from the current study results. Finally, this chapter concludes with an overview of the entire longitudinal research and its contributions to both academia and practice.

Three research questions proposed in Chapter 2 to frame this study will be addressed in this chapter using the research findings:

RQ1: How do external and internal factors influence the initial travel decision-making of sport tourists to attend a specific sport event?

RQ2: How do external and internal factors contribute to sport tourists' attitude change towards the host destination after actual visitation?

RQ3: How do external and internal factors influence the future revisit decision-making of sport tourists?

To answer the research questions in sequence, the first three sub-sections of this chapter are structured as follows: the initial DI formation and initial travel decisions; the pre- and post-visit DI change caused by actual visitation experience; and the change of the post-visit DI over time and future revisit decisions.

5.1 Initial DI Formation and Initial Travel Decisions

The first research question and the associated three sub-research questions concerned the formation of an initial image held by sport tourists towards the event-host destination before travelling to attend the event. The initial DI, also known as "primary image" (Lubbe, 1998) or pre-trip/travel/visit image, comes into existence when a destination is considered as a possible choice based on the potential

traveller's needs and motivations (Lubbe, 1998). The importance of the pre-visit DI on tourists' destination choice has been broadly acknowledged; however, the formation of this initial DI has been scarcely explored in the tourism context with a few exceptions (Li et al., 2009; Nyaupane, Paris, & Teye, 2011).

The limited studies on pre-visit DI formation are mostly focused on information sources (e.g., Frías et al., 2008; McCartney et al., 2008) because it has been viewed as a mental process of evaluating information obtained from various information sources where the main context is a destination (Sancho Esper & Álvarez Rateike, 2010; Stepchenkova & Morrison, 2006). Even in the more specific sport tourism context, DI is also frequently studied from the perspective of media exposure (e.g., Chalip, Green, & Hill, 2003; Smith, 2005), rather than comprehensively examining all potential influential factors such as actual destination features, motivations, and other psychological factors.

Seeing this paucity, the current study adopted the chain of "inputs – processing – outputs" to examine how the mental processing of external (i.e., event and destination attributes) and internal (i.e., motivations) inputs leads to the initial DI formation, which includes three types of outputs – cognitive, affective and conative evaluations. The pre-event survey in Study 1 with the 1,181 sport tourists who were going to attend the 2011 ING Miami marathon revealed four main findings. First, the initial DI of sport tourists is jointly formed by their cognitive, affective, and conative evaluations of the event-host destination. Second, the cognitive component of initial DI is multi-dimensional, and the event related attributes contribute significantly to the initial DI formation of sport tourists but the contribution is small. Furthermore, the conative component has more impact on the initial DI than the other two components. Third, the prior sport motivation of sport

tourists has no impact on their initial DI formation while the strength of their travel motivation demonstrates a weak positive impact on the initial DI. Lastly, the initial DI is positively related to the psychological connection level of sport tourists with the destination, which underlies their initial travel decisions to attend the sport event. Specific discussion of the hypotheses testing results and the conclusions for the corresponding research questions are provided as follows.

5.1.1 Hypotheses Testing Results

5.1.1.1 Multidimensional CDI

The EFA results of the measurement scales for all three DI components revealed the multidimensional nature of the cognitive DI. The CFA results further clarified and validated that the initial CDI of sport tourists is comprised of three correlated but distinct components – *Event Image*, *Tourist Attractions*, and *Supporting Factors*. These three distinct dimensions represent three types of tangible and intangible attractions/offerings provided by the event-host destination. This result provides additional evidence for the assertion of Cai et al. (2003) that the cognitive dimension of a destination is multifaceted. Actually, the multiplicity of CDI has been widely recognised in tourism studies because the majority of tourism DI studies have only been concerned with the cognitive component (Prayag & Ryan, 2011b). However, the multiple dimensions of CDI have always been uncovered by the EFA technique due to its attributes-based nature (Gallarza et al., 2002). Fewer tourism DI studies have utilised CFA to validate the multi-component structure of CDI; even fewer have tried to identify a generic CDI structure that can be applied to a broad range of travel destinations, or at least to one type of destination (e.g., sport tourism destination). In brief, the validity and reliability of CDI measurement scales

have not been well-established, casting doubt on their psychometric properties (Prayag & Ryan, 2011b).

As a result, the current study adopted the same list of destination and event attributes to measure the cognition/perceptions of sport tourists towards an event-host destination at different time points, with the purpose of discovering a relative constant CDI structure and a generic attribute list for sport tourism destinations. As shown in the results of both Study 1 and Study 2, three common components emerged from the list of destination and event attributes measured in both studies: *Event Image* (event-related attributes), *Tourist Attractions* (touristic resources and facilities) and *Support Services* (in Study 1)/*Basic Facilities and Services* (in Study 2) (food, accommodation, and shopping/entertainment facilities). In addition, a different dimension emerged from Study 2 – *Amenity*, including three environmental factors. This inconsistency indicates that the different dimensions of CDI can be more or less salient at different times and for different people (Tasci, 2007). This finding is also supported by Wang and Davidson (2010), who pointed out that the factorial structure of CDI can be modified by personal travel experiences with the destination. Therefore, developing a generic list of DI attributes that can be applied into all travel destinations is impracticable. However, the three common factors emerged from this research suggest that developing a generic or constant structure for CDI that can be applied into sport tourism destinations is not impossible, although more investigations are still needed.

Furthermore, among the three common components of CDI discovered by both studies, the *Event Image* dimension was found to contribute the least to the DI of sport tourists. Hypothesis 1.1 is still supported even though the event image only provided a small contribution to the initial DI. This can be seen in that sport events

have long been used as strategic marketing tools to promote tourist destinations (Sealy & Wickens, 2008), and have also been regarded as part of a destination's attractions for the sport tourist niche market (Chalip & Costa, 2005). However, the real contribution of perceptions/evaluations of a sport event on its host-destination's image has yet to be addressed (Mendes, Do Valle, & Guerreiro, 2011; Moon et al., 2011).

The image of a sport event, according to Kaplanidou and Vogt (2007), can be conceptualised as featuring attitudinal components, consisting of attitudes, attributes, benefits and costs towards a sport event, as measured in the current study. The weak significant contribution of event image to the DI discovered by this study is slightly different from the findings of a few previous studies. For example, Kaplanidou and Vogt (2007) found a strong positive impact of event image on the DI that active sport tourists perceived shortly after participating in the event. Mendes et al. (2011) also found a positive and reasonably strong influence from the image of a program of events on tourists' post-visit DI. However, these studies operationalise the event image and the DI differently to this study. Moreover, they examined the influence of event images on DI in the post-consumption stage, rather than the pre-consumption stage. The results of the pre-event study filled this gap by indicating that before participating in the event, the perceived event image plays a role in the pre-visit DI formation for sport tourists; but not as strong as previous sport event researchers assumed (e.g., Xing & Chalip, 2006). In other words, events can be one of the pre-visit DI formation agents, but are not as important and effective as previous studies presumed (Hallmann & Breuer, 2010). Furthermore, Study 2 provided more evidence for the negligible impact of event image on the DI, even in the post-consumption/trip evaluation stage of sport tourists. This may be attributed to the

current research context – a marathon event. Marathon running is not an activity that has high environmental demands, and the popularisation of marathon events in the world may reduce the concern of people of their host destinations. In other words, the impact of images of a marathon event on its host destination might need to be considered differently from those sport events that are heavily reliant on the host environment, such as skiing.

5.1.1.2 Tripartite DI Structure

Finally, the results supported the proposed tripartite structure of DI in the sport tourism context as promoted in H1.4, as evidence by the second-order CFA with both the pre- and post-event survey results. Images held by sport tourists towards the event-host destination before and after visiting are both reflected in three highly correlated but distinctive dimensions – cognitive, affective, and conative components. The triple components of DI have been advocated by many tourism destination researchers, but have never been empirically tested (White, 2004), especially using a higher-order factorial structure.

Almost all existing empirical studies considering the multi-dimensional nature of DI have accepted a second-order bi-dimensional DI construct, which perceives that an overall DI is formed by two components of cognition and affect (Lin, Morais, Kerstetter, & Hou, 2007). For example, Kim and Yoon (2003) employed a second-order factor analysis to confirm that DI can be operationalised as a second-order factor model that includes CDI and ADI. Moreover, their study results suggested the affective component has more impact on building DI than the cognitive component. Similarly, San Martín and Rodríguez del Bosque (2008) also confirmed the cognitive-affective structure of a pre-visit DI by utilising a second-order factor analysis approach. However, in contrast with the findings of Kim and

Yoon (2003), they found the cognitive DI has a stronger impact on the overall DI than affective DI.

Seeing the gaps and inconsistent results in the literature, the current research made a comprehensive investigation into the entire tripartite structure of DI by employing the second-order CFA technique. The support of H1.4 demonstrated that potential travellers have not only the knowledge/beliefs of tangible attributes that a leisure destination counts on, but also the emotional elements and the behavioural intentions when they try to develop a global image of a destination. This integral tripartite structure effectively illustrates the conceptualisation of the DI as an overall impression that is greater than the sum of its components (Bigné Alcañiz, Sánchez García, & Sanz Blas, 2009).

Additionally, unlike the findings of previous studies that either CDI or ADI exerts the most influence on the overall DI, the current study discovered a different result. Hypothesis 1.5 was rejected because it was the conative, not the cognitive or affective component of DI, which was found to have the strongest impact on the overall initial DI of sport tourists. Moreover, the contribution of ADI to the overall DI followed; and the CDI had the least impact on the overall DI. This result may be due to the sport tourism context in which all respondents were registered marathon runners who had already made the travel decision, regardless of their feelings or perceptions of Miami. After all, to take part in the sport event was their primary travel purpose.

5.1.1.3 Impact of Sport Tourist Motivations on Initial DI

The SEM analysis results lent evidence for a negative, but non-significant impact on the initial DI from prior sport involvement (H1.2), indicating the sport tourists' involvement in running has no influence on their initial image of Miami. In

other words, regardless of their involvement degrees in the sport – running in this case, sport tourists might engage in a similar destination selection procedure and input similar efforts in information-search with regard to the potential destination. Thus, the initial DI is generated through either external information sources or previous personal experiences for all sport tourists, whether they are high- or low-involved in running. This may be due to the fact that travel destination choice has been recognised as a high-involvement decision (Oppermann, 2000). Therefore, when a potential sport tourist selects a specific event held outside of his/her normal residence to take part in, he/she has started an extended mental processing of the information related to the event and its host destination. The non-significant impact of sport involvement on the initial DI provides preliminary evidence to suggest that the initial attitude formation of sport tourists towards the event-host destination is an independent mental process which is unrelated to their desires or evaluations of the sport itself.

On the other hand, the SEM results offered support for the significant impact of the strength of travel motivation on the sport tourists' pre-visit DI (H1.3), albeit the effect being very weak. This result indicated sport tourists with stronger travel motivation would hold a better attitude towards the destination. This may be due to the idea that a strong travel motivation is able to stimulate a higher interest and desire for potential travellers to know more about the potential destination in order to make a better choice (e.g., Fodness & Murray, 1999). Only when tourists have more knowledge or perceptions of a destination, it becomes possible to develop more definite feelings and stronger behavioural intentions. In brief, this result provides new evidence, from a sport tourism context, for the impact of the strength of travel motivation on tourists' initial DI formation (Baloglu & McCleary, 1999).

5.1.1.4 Positive Correlation between Initial DI & Psychological Connections

Hypothesis 1.6 was supported, showing that initial DI and its three components held by sport tourists are positively correlated to their psychological connection levels with the event-host destination. In other words, sport tourists' DI incrementally increased along with their involvement levels with the destination. The sport tourists with higher psychological connection levels with the destination must hold better attitudes towards this place than the individuals with lower psychological connections: they demonstrated a better knowledge of the destination, more positive feelings towards the destination, and much stronger revisiting and recommendation intentions to the destination.

The people-place relationship has been investigated in environmental psychology and in the resource-based recreation context, in terms of place attachment (e.g., Gross & Brown, 2008; Kyle et al., 2003; Williams & Vaske, 2003), place bonding (e.g., Hammitt et al., 2006), and place loyalty (e.g., Dawson, Havitz, & Scott, 2011). This is the first time that the construct of involvement was utilised to depict a psychological continuum that leisure tourists can develop with a travel destination, which contains four progressive psychological connection stages. The positive correlations between the destination involvement levels and the initial DI revealed by the pre-event survey suggest that destination attitudes can be regarded as reliable predictors of the unobservable psychological connection of a sport tourist with an event-host destination. In other words, the initial DI of sport tourists is underpinning the prior psychological connection formation with the event-host destinations before travelling.

5.1.2 Research Questions Conclusions

As re-stated in the beginning of this chapter, RQ1 explores how external and internal factors contribute to sport tourists' initial DI formation and affect their initial travel decision-making (i.e., destination choice). Destination choice is a complex process involving the consideration of a bundle of tangible and intangible attributes, with many contextual influences (Decrop & Snelders, 2005). Therefore, RQ1 was addressed using three sub-questions exploring how external (i.e., event and destination attributes) and internal (i.e., sports and travel motivations) inputs contribute to the formation of an initial tripartite DI before visiting the destination. Moreover, how this pre-visit DI of sport tourists contributes to the establishment of a psychological connection with the destination, and further affects the initial travel decision were also examined. Each sub-research question is concluded in the following section.

5.1.2.1 External Attributes Contributing to Initial DI Formation

As shown in the conceptual framework in Chapter 2 (see Figure 2.2), the external factors contributing to the initial DI formation process are event and destination attributes and the information sources. Past research has established that the various information sources potential tourists are exposed to influence the formation of perceptions of a destination prior to the visit (Frías, Rodríguez, Castañeda, Sabiote, & Buhalis, 2011). Therefore, the current study only tested how the attributes/features related to the event and its host destination contribute to the initial DI formation under the function of internal forces such as motivations and personal travel characteristics.

As examined in most tourism DI studies, the cognitive component of DI is always related to the evaluation of known attributes, thus corresponding to a set of

external stimuli or facts (Mendes et al., 2011). In other words, the formation of CDI is a mental process in which environmental attributes/features are evaluated by internal forces such as motivation and personalities. The differences between sport event tourists and normal tourists may mainly lie in their sport motivations and sport participation when staying at the destination. Therefore, the sport event-related attributes are assumed to have significant influence on sport tourists' perceptions of the host destination.

Events, especially mega-events, are normally planned with an explicit aim of contributing to the image building or enhancement for the host destination (Mendes et al., 2011). Furthermore, based on the discovery that image transfer occurs between an event sponsor's image and the image of the brand that is sponsored, Chalip et al. (2003) contended that an event host destination's image will be affected by the image of the events it hosts. In such cases, events are believed to be an important stimulus or attractive factor in the DI formation process for a potential sport tourist. However, the current study only found a weak contribution from event-related attributes to the initial DI of sport tourists. The cognitive DIs held by sport tourists before travelling mainly consisted of perceived tourist attractions and supporting factors such as facilities/services and amenities. This indicates that the initial DI formation is a mental process isolated from the event perceptions of the sport tourists in this study.

5.1.2.2 Internal Motivations Influence Initial DI Formation

The motivations of a tourist can be interpreted as an interior force originating from a necessity that drives the individuals to behave in a certain way to be able to satisfy their needs. Motivation has been recognised as an important factor in the tourist DI formation and decision-making process of a potential tourist (Hsu, Cai, &

Li, 2010; Moutinho, 1987; San Martín & Rodríguez del Bosque, 2008; Sancho Esper & Álvarez Rateike, 2010). As demonstrated in the conceptual framework in Chapter 2, the representation of a tourist destination in a sport tourist's mind is generally carried out on the basis of external stimuli processing, which may be significantly influenced by the psychological factors of the individual, such as motivations. For sport tourists it is believed that their two types of motivations, the sporting and travelling motivations coexisting in their minds, will work together during the mental process of evaluating external stimuli. This is consistent with Mannell's (1980) view that intrinsic motivation (i.e., push motives) is more dominant within leisure consumer behaviour than extrinsic motivation (i.e., pull motives).

However, most tourism motivation studies focus on the interaction between the push and the pull factors (You, O'Leary, Morrison, & Hong, 2000), which is regarded as the antecedent of the DI formation. However, limited research has examined the influence of tourists' intrinsic push motivations on their pre-visit DI as a pull motivation, which is the perceived beliefs and likelihood of accomplishing their expectations. Also, while the influence of psychological motivations on the affective DI has been uncovered in some tourism destination image studies (e.g., Baloglu, 1997), most recently only a weak relationship between motivations and DI was found in the following studies (e.g., Baloglu & McCleary, 1999; Beerli & Martín, 2004). Similarly, the current study did not find significant impact of sports motivation on the initial DI of sport tourists, and found only a weak impact from the strength of travel motivation. This may be due to the fact that the majority of the study sample was repeat visitors who had formed a relatively stable impression of

Miami through their previous visit experiences. Therefore, this result cannot be generalised across populations.

5.1.2.3 Initial DI & Initial Travel Decisions of Sport Tourists

As conceptualised from the tripartite attitudinal perspective, the DI in this study was considered as an attitudinal construct consisting of an individual's mental representation of knowledge, feelings, and behavioural intentions about a travel destination. These three attitudinal outcomes (i.e., cognition, affect, and conation) are produced by attitudinal evaluations which are conducted in mental processing (Funk & James, 2006). Furthermore, the positive relationship between the tripartite DI and the psychological connection levels held by sport tourists towards the destination revealed by the pre-event survey has provided evidence for the formation of a more in-depth psychological outcome even in a pre-consumption stage.

As shown by the ANOVA results on the initial DI differences across the four psychological connection stages, even the sport tourists holding the lowest psychological connection level of awareness with Miami demonstrated a mean destination attitude above the scale midpoint (4.0). In other words, even the sport tourists who had just become aware of Miami as a potential sport tourism destination were holding a comparatively positive initial image of Miami, presented by a certain degree of knowledge/beliefs, positive feelings and a relatively strong visit intention. Therefore, it can be reasoned that for the sport tourists with higher psychological connection levels with the potential event-host destination – attraction, attachment, or allegiance – they must have stronger intentions to travel to Miami. The pre-trip DI has been acknowledged as paramount for a potential tourist since it represents reality before an individual visits a destination (Fakeye & Crompton, 1991). A potential tourist will select a destination from a broad range of

options and make the final decision to visit it only when the positive image components exceeds the negative components (Milman & Pizam, 1995). Likewise, a sport event host destination with a more positive image has a higher probability to be considered and chosen in the initial travel decision process of potential sport tourists.

In conclusion, as illustrated in the conceptual framework (Figure 2.2), sport tourists' initial travel decision may be stimulated by the internal push forces (i.e., sport and travel motivations). But then the pull factor – initial perceptions of the event and destination attributes/features (i.e., initial DI), which is produced by the mental processing of external stimuli (information sources and the characteristics of event and its host destination) takes over and becomes the dominant variable in the subsequent experience evaluation and future revisit decisions (Hallmann & Breuer, 2010). Sport tourism scholars agree that the travel decision to attend a non-local sport event is derived from both sport and travel motivations (e.g., Deery et al., 2004; Funk & Brunn, 2007). However, as for the sequence and weights of these two motives in an individual sport tourist's travel decision, controversy continues due to the complexity (Robinson & Gammon, 2004). The findings of this research provide a new insight that sport and travel motivations should be considered sequentially, rather than simultaneously. Because both the image of the sport event (pull factor) and the sport motivation (push factor) demonstrated weak influence on sport tourists' initial DI which includes the behavioural intention component (i.e., Conative DI). In brief, a sport tourist's initial travel decision may start from sporting motives but is directed by more travel-related factors in the subsequent stages.

5.2 Experience Evaluation and DI Change

The second research question and the associated three sub-research questions focused on how sport tourists' actual visitation to the destination affects their DI change. Although the effect of travel experience in modifying/changing a tourist's DI has been broadly recognised (Tasci, 2006; Vogt & Andereck, 2003), limited research has been conducted to empirically examine the image variations of pre- and post-trip experiences (Li & Vogelsong, 2006; Yilmaz et al., 2009). Particularly, the lack of access to prospective leisure travellers in practice has restrained the adoption of the most effective pre-and-post travel/trip test. Instead, a considerable number of tourism studies have examined the impact of visitation on DI change through comparing visitors and non-visitors (e.g., Fakeye & Crompton, 1991; Tasci, 2006).

The pre- and post-visit comparison study with the same sample group (i.e., the sport tourists attended the 2011 ING Miami marathon) realised by the current research revealed four valuable findings on sport tourist DI change after personal visitation. First, the image of Miami held by sport tourists before travelling to attend the event was significantly enhanced by their visiting experience. Moreover, this enhancement was observed on every DI component. In other words, all three components of DI, cognition, affect, and conation, were significantly enhanced by sport tourists' personal visit to the destination. Second, the enhancement of all three DI components after visiting the event-host destination was not moderated by the length of stay or the sightseeing participation of sport tourists. However, their previous experiences with the destination moderated the ADI enhancement. Third, a significant moderation effect was observed on both ADI and Conative DI enhancement from the psychological connection level that sport tourists developed with the destination after the personal visit. Finally, the movement of psychological

connection levels was also found to exert significant moderation effects on the enhancement of all three DI components. Specific discussions on the results of all the hypotheses testing under RQ2 and the conclusions for the corresponding research questions are elaborated as follows.

5.2.1 Hypotheses Testing Results

5.2.1.1 Enhanced DI of Sport Tourists after Visitation

The hypothesised DI enhancement through personal visitation (H2.5) was supported by the data collected from the sport tourists who attended the 2011 ING Miami Marathon (Study 1). Moreover, all three sub-hypotheses (H2.5a, H2.5b, & H2.5c) regarding the three DI components' enhancement were supported. Specifically, the images of Miami held by the 2011 sport tourists before travelling to attend the event were significantly lower than the images measured after their travel experience, indicating a significant enhancement in sport tourists' destination attitudes after personal visitation. Moreover, all three DI components demonstrated significant enhancement after the actual visitation. Not just cognitions of sport tourists, but also their feelings and revisit/recommend intentions were enhanced by their actual experiences with the destination. This result supports the assertion of previous tourist DI researchers that the actual visiting/travelling experience could be the most effective image modifier (Sussman & Ünel, 1999), since personal experience has been recognised as the most credible information source. On the other hand, these results reflect the fact that the sport event participants in this case have received a positive experience from the event-host destination contributed in part through various facilities, services, or other offerings/events encountered.

The overall enhancement of sport tourists' destination attitudes after visiting the host location can be supported by Fakeye and Crompton's (1991) statement that

a more complex and differentiated DI will be developed when visitors spend some time in that place. In turn, the DI enhancement after visitation provides support for the following two conclusions in the existing literature. First, Gartner and Shen (1992) indicated that when individuals hold only limited or vague knowledge of a destination (initial DI), then image change may occur easily and rapidly. This implies that the change of an initial DI through travel experience is completely different from the difficult and time-consuming change process of an existing DI. With regard to this case, the initial image of sport tourists towards Miami was easily enhanced/ modified by a positive visiting experience. Second, events, especially sporting events, can indeed serve as an effective tool to enhance the image and awareness of a travel destination (Sealy & Wickens, 2008) – not only through the media exposure, but also by providing a valuable opportunity to personally experience that place.

5.2.1.2 Mediation Effect of Destination Satisfaction on Pre- & Post-visit DI Change

Testing a structured model on the mediation effect of sport tourists' satisfaction with the event-host destination on their DI change before and after visitation, as proposed by Hypothesis 2.4, has provided sufficient evidence for a partial mediation effect. This partial mediation effect reflects three relationships: first, the pre-visit DI of sport tourists contributed to their experience evaluation of the destination (i.e., satisfaction); and subsequently, the experience satisfaction contributed to the post-visit DI. In addition, the post-visit DI also received a direct influence from the pre-visit DI. In summary, the pre-visit DI of sport tourists exerts both direct and indirect impacts on their post-visit DI which has been modified by the actual visiting experience. This finding provides new evidence for the agreement

that tourism experience should be used as a mediating variable (Ritchie, Tung, & Ritchie, 2011).

Pre-travel DI has been considered to be related to tourist satisfaction (Jenkins, 1999; Sussman & Ünel, 1999), as it is the expectation prior to the actual experience. If tourists attain desired benefits from their visit to a destination – the obtained benefits met with their prior needs/wants (i.e., expectations), their evaluations about this place would increase, which would likely assist predictions about their revisit intention (Kil, Holland, Stein, & Ko, 2011). Therefore, it can be concluded that the pre-existing DI has significant effects on customer satisfaction (Bigné et al., 2001; Lai, Griffin, & Babin, 2009). On the other hand, experience satisfaction has also been found to exert a positive influence on post-visit DI (Pearce, 1982). However, few researchers have made a comprehensive examination of the interactions between the pre-visit DI, experience satisfaction, and the post-visit DI even though the functional relationships among three of them have been quite apparent. This study filled this gap by presenting a partial mediation effect of experience satisfaction between the pre- and post-visit DI.

Additionally, the most vital significance of the partial mediation effect of destination satisfaction between the pre- and post-visit DI is that it provides additional evidence for a belief in attitude change studies, which argues that the attitude change does not only depend on the actual experience, but also relies on the original attitudes (Krech et al., 1962). In this case, the initial DI of sport tourists provided a basis/foundation for later changes in DI that could have been induced by the visit experience. Moreover, the initial DI influenced the modified DI after visitation indirectly, through the experience satisfaction of sport tourists with the destination.

5.2.1.3 Factors Moderating Pre- & Post-visit DI Enhancement

With respect to the enhancement of all three DI components by personal visit, the moderation effects proposed by the five hypotheses, each of which tested one potential moderator, obtained mixed results: two hypotheses were rejected (H2.2 & H2.3), two were partially supported (H2.1 & H2.7) and one was fully accepted (H2.6). Specifically, H2.2 and H2.3 were rejected since no moderation effect was observed from either “length of stay” or “sightseeing participation during stay” of sport tourists on any DI components’ enhancement after visitation. In other words, no matter how long the sport event participants stayed in the destination or whether they participated in the touristic activities or not, their personal visits to the event-host destination resulted in an increase in their overall attitudes towards this place.

However, a significant moderation effect from sport tourists’ previous experiences with the destination (i.e., familiarity) was observed on both CDI and ADI enhancement, which partially confirmed H2.1. Specifically, the perceptions and feelings of repeat visitors towards Miami showed less improvement than the first-time visitors; while no significant difference was observed in Conative DI enhancement between the two groups. Borrowing the law of diminishing marginal utility from economics (Kauder, 1953), this result can be interpreted as the new knowledge/perceptions, or excitement and freshness aroused by a repeat visit is most likely less than that brought by the initial visit. This is similar to the argument of Fakeye and Crompton (1991) that most DI change occurs during the initial visit; later repeat visits tend to either only reconfirm the held images or induce small incremental changes.

Similarly, as the partially supported H2.7 indicated, the moderation effect of psychological connection levels of sport tourists with the destination was not

observed on all three DI components. Only the ADI and Conative DI enhancement were moderated by the post-visit psychological connection level. The sport tourists who still held minimal or no psychological connection (i.e., awareness stage of the PCM) with Miami after a personal visit demonstrated a decline, rather than an improvement, in feelings and behavioural intentions. This decline is totally opposite to the enhanced ADI and Conative DI of the individuals with stronger connection levels. In contrast, sport tourists who developed an allegiance towards Miami after travelling showed consistent feelings and behavioural intentions compared to that of the pre-visit. Additionally, the sport tourists who developed an attachment to the destination showed more significant enhancement in both feelings and behavioural intentions than the people who still stayed in the attraction stage.

In addition to the aforementioned moderators, the current study further examined the relationship between DI enhancement and the psychological connection change. Based on the change of sport tourists' psychological connection levels along the four-staged continuum (i.e., PCM stages) from pre-visit to post-visit, respondents were categorised into three movement groups: the first group moved down from a higher PCM stage after the personal visit; the second group retained the same psychological connection level with that of pre-visit; and the last group moved up from a lower PCM stage after visiting the destination. The full support for H2.6 presented a significant moderation effect on all three DI components' enhancement from the PCL change patterns of sport tourists. More specifically, for the PCL lowered group, their ADI decreased significantly after personal visitation, regardless of the main effect of visit experience on DI is enhancement. However, the cognitions and behavioural intentions held by this group only showed a slight decline which was not significant. This suggests that the

affective component of DI is the most closely associated with the psychological connection that an individual has with a destination. As for the PCL unchanged group, their DI was enhanced by the actual visiting experience; but the enhancement was less significant than the PCL elevated group. A significant enhancement in all three DI components observed for the PCL elevated group indicated a positive correlation between the DI enhancement and the psychological connection development.

5.2.2 Research Questions Conclusions

RQ2 explores how external and internal factors affect sport tourists' DI change induced by their actual visitation to the event-host destination. This research question was addressed using three sub-questions which examined external, personal and psychological factors contributing to the pre-post DI change respectively. The first one focuses on external factors – experience/encounters that sport tourists received from various stakeholders at the destination, such as accommodation, food and beverage, retail shopping, and sightseeing. The second focuses on personal travel-related features and the last one focuses on the psychological connection of sport tourists with the destination. Each sub-research question is concluded in this section.

5.2.2.1 Contribution of Destination Experience to DI Enhancement

It has been acknowledged that non-local event participants would have been given a direct experience opportunity or at least a glimpse of the destination's tourism resources during their stay. This may facilitate a favourable DI formation in the mind of event tourists and previous studies have shown that a favourable DI is linked to visit/revisit decisions (Pike & Ryan, 2004). Seeing that the post-visit DI derives from personal visit experiences with the destination whereas the pre-visit DI

of first-time visitors emanates from second-hand information sources, it is easy to infer that the difference between the pre- and post-visit image is due to the actual visitation to the destination. The personal exposure to various features/attractions of a destination has been recognised as the most efficient approach to building up a distinctive image for a travel destination, which is superior to traditional communication approaches, especially those commercial advertising (Sealy & Wickens, 2008). Moreover, it is these favourable images formed through positive experiences that destination marketers expect to be converted into the motivation to revisit.

As reviewed in section 2.4.2.1, several tourism DI studies have examined the influence of actual travelling/visiting experience on tourists' image of the destination but mixed findings were obtained. Most studies observed a more accurate and positive DI after travelling (Tasci, 2006); some found a worse and negative DI after visiting (e.g., Anastasopoulos, 1992); yet others did not discover significant differences between the pre- and post-travel image (e.g., Milman, Reichel, & Pizam, 1990; Pizam, Jafari, & Milman, 1991). In addition, there are scattered findings in sport tourism literature regarding image enhancement and intention to travel after a mega-event albeit only a few studies in this area exist (Papadimitriou & Gibson, 2008; Sealy & Wickens, 2008).

The current study, similar to the majority of previous studies on impact of visitation on DI change, found a positive influence from actual destination experience on the sport tourists' post-visit DI resulted from their experience satisfaction with the place. Moreover, seeing that very limited research has sought to examine the causal relationship between the experience satisfaction and the pre-/post-trip DI change, this study tested and confirmed the mediating role of

experience satisfaction on the causal path from initial DI to the post-visit DI using the SEM technique. Therefore, it can be concluded that sport tourists' DI enhancement after travelling to the destination is attributed to both experience satisfaction and the initial DI. This provides an empirical support for the visit experience evaluation occurs in the second processing stage as illustrated by the conceptual framework (see Figure 2.2). The initial DI, as an output of the pre-visitation processing, was input into the following actual experience evaluation stage and interacted with new external factors – environmental stimuli derived from the event participation and destination experience. As a result of the interaction between these inputs and internal forces (e.g., personality, value), a modified-induced DI (an enhanced DI in this case) and a developed/changed psychological connection were produced.

5.2.2.2 Internal Factors Moderating DI Enhancement after Visitation

Numerous studies have suggested past behaviour can be used as a valid predictor of attitudes, intentions, and behaviours implying that as the number of past experiences (i.e., past visits to the destination in this case) increase, so do the attitudes and behavioural intentions, and eventually future behaviours (e.g., Aarts, Verplanken, & van Knippenberg, 1998; Bamberg, Ajzen, & Schmidt, 2003). Within the leisure tourism context, past experience has been broadly examined. For example, Kaplanidou and Vogt (2007) found that event participants' previous experience with the destination positively influenced the latent construct of destination image within the active event sport tourist market.

In this study, sport tourists' previous experiences with Miami was found to moderate their cognitive and affective DI enhancements after visiting Miami for the event, but not on the conative DI enhancement. In other words, the cognitions and

feelings of first-time visitors were enhanced significantly greater than that of repeat visitors. The findings of previous studies focusing on the comparison between first-time and repeat travellers (e.g., Anwar & Sohail, 2004; Lau & McKercher, 2004) may provide a reasonable explanation: first-time visitors are more likely to seek variety and new experiences while repeat visitors tend to choose familiar places (Oppermann, 1997). As a result, first-time visitors can obtain more novel experiences and excitement than the repeat visitors. However, no enhancement difference was observed between the first-timers and repeat visitors in their behavioural intentions. This may be due to the fact that Miami is a well-known, mature, and attractive tourism destination, so even the people who had visited Miami before this event for multiple times could demonstrate the same high level of revisit and WOM intentions with the first-time visitors.

Similarly, the psychological connection level sport tourists developed after personally visiting the destination was also found to moderate the affective and conative DI enhancement, but not on cognition dimension. This result implies that CDI change is less influenced by psychological connections compared to the change in the other two DI dimensions. In addition, only the individuals who still stayed at the awareness level after personal visitation showed an opposite change pattern to that of the other three higher connection levels. Their feelings declined significantly after travelling – largely because of an unpleasant experience with the destination or an experience much lower than expectation, which can explain why their psychological connection was so low even after personal visit.

Finally, further examination of the psychological connection change and the DI change revealed additional significant implications. As illustrated by the different DI change patterns among the three groups of sport tourists that have elevated,

lowered, or unchanged their psychological connection levels after the personal visit, a preliminary conclusion can be made: psychological connection movement of sport tourists is positively related to their DI change, especially with the change of affective and conative DI dimensions. Additionally, the DI change can be reviewed as a quantitative change, while the psychological connection change is a qualitative change/transmutation. Qualitative change has long been recognised by philosophers as resulting from quantitative change (Galatzer-Levy, 1978). As the results demonstrated for this study, quantitative change (DI change) is the necessary preparation for qualitative change (psychological connection change); however, the quantitative changes (DI change) will only turn into incremental qualitative changes (psychological connection development) through a certain accumulation process.

In conclusion, the actual visit experience evaluation of sport tourists has been confirmed to be the mediator between the pre- and post-visit DI change, supporting the “inputs – processing – outputs” chain which operates at the second stage of the conceptual framework (see Figure 2.2). Specifically, it was the experience evaluation process led to a transformation from inputs (i.e., initial / pre-visit DI) to outputs (i.e., modified-induced / post-visit DI). As for the influential factors of this evaluation process, not all proposed personal factor demonstrated a statistically significant influence on DI change: previous experiences showed a significant effect on the change of CDI and ADI, while length of stay and sightseeing participation did not show significant impact on the change of any DI component. Additionally, the movement of psychological connections showed three patterns: elevated, lowered, and unchanged, supporting the loopback of outputs to the processing suggested by the PCM. While the positive correlation between the DI change and the PCL change

provides further evidence for the utilisation of psychological connection to explain the attitude change.

5.3 Post-visit DI Change over Time & Future Revisit Decisions

The third research question and the associated three sub-research questions focused on the continuing change of a post-visit DI over time. As reviewed in Chapter 2, even if most tourism destination researchers have recognised the changeability of DI, very little research has been directed at examining how and why a post-visit/trip DI changes over time. Study 2 examining the post-visit DI changes of sport tourists over a 10-month interval revealed three main findings.

First, the DI that sport tourists hold towards the event-host destination decayed over time. However, this image decay was dimensionally specific. Of the three DI components, affective and conative DI appeared to be more susceptible to change and weakened more with the passage of time. In contrast, the cognitive DI appeared to be more stable over time. Second, the change of affective and conative DI over time was not moderated by the actual revisitation of sport tourists during the study interval, nor by their previous experiences with Miami. However, the residence of sport tourists moderated their conative DI decay over time; and the satisfaction of sport tourists with the destination moderated both affective and conative DI decay over time. Third, the sport tourists who had minimal or no psychological connection (i.e., those at the awareness stage of the PCM) with the destination were less likely to retain a consistent feeling or revisit intention towards the destination compared to those with stronger connection levels. Specific discussions on the results of all hypotheses testing under RQ3 and the conclusions for corresponding research questions are provided as follows.

5.3.1 Hypotheses Testing Results

5.3.1.1 Post-visit DI Decays over Time

The hypothesised decay of post-visit DI over time (H3.1) was supported by the data collected from the sport tourists who attended the 2009 ING Miami Marathon (Study 2). However, not all of the three sub-hypotheses on the three DI components' decay were supported: H3.1b and H3.1c were supported but H3.1a was rejected. More specifically, the images of Miami held by 2009 participants just returning from the event were significantly higher than the images measured ten months later, indicating a significant decline in sport tourists' overall DI over a long period of time. Nevertheless, not all three components of DI showed decay over the 10-month interval. Two components of DI related to affect and conation did decline significantly over time, while the cognitive DI remained stable.

These results indicate that the observed overall DI change over time does not necessarily equate with the change of all components within the DI structure. The affective and conative dimensions of DI appeared to be relatively less stable over time than the cognitive dimension. These findings imply that the post-visit DI change over time is dimensionally specific, and the components' change can lead to the overall DI's change. In addition, this result supports the triadic inconsistency which has been recognised in previous attitude research (e.g., Insko & Schopler, 1967; Millar & Tesser, 1989) from a specific context of sport tourism destination.

Ritchie and Smith (1991) have argued that for certain well-known destinations there may in fact be very little increase in awareness or change in their images due to the high degree of exposure they enjoy on a regular basis. Therefore, for the case destination – Miami, being a famous city with an exotic atmosphere and a widespread image of sunny beaches, tourists, immigrants, and crime (Tilson &

Stacks, 1997), cognitions held by its visitors are more likely to be stable over time after travel. On the other hand, the decay of ADI over time is consistent with previous literature on the impact of time on affect decay (e.g. Holmes, 1970). Similarly, the temporal decay of conative DI also matches with the findings of some consumer behaviour studies in satisfaction-purchase intention. For example, Baloglu and Erickson (1998) reported a temporal decline of revisit intention implied by the recency-frequency-monetary value (RFM) paradigm. Bendall-Lyon and Powers (2002) also found a similar lapse pattern in consumers' overall satisfaction and behavioural intentions between the initial time of the service encounter and the time of the follow-up survey. They attributed this erosion to the passage of time.

Furthermore, the same decline pattern of affective and conative DI suggests a strong relationship between ADI and Conative DI component. The revisit and recommend intentions of sport tourists, which is of particular significance for event and destination practitioners, was impacted more by their feelings rather than cognitions and beliefs of that destination. In conclusion, the differential change of the three DI components over time further suggested the necessity and benefits of conceptualising DI as a triple-dimensional construct represented by cognitive, affective and conative components. This attitudinal perspective enables a more comprehensive understanding of sport tourists' DI change.

5.3.1.2 Factors Moderating Post-visit DI Decay over Time

With respect to the affective and conative components of DI decay over time, the moderation effects proposed by the five hypotheses, each of which tested one potential moderator, obtained mixed results: three hypotheses were rejected (H3.2, H3.3, & H3.4) and two were accepted (H3.5 & H3.6). Specifically, the moderation effect on both ADI and Conative DI decay was only observed from the sport

tourists' satisfaction with the destination and their psychological connection level, but not from actual revisitation during the interval and previous experience with the destination. In addition, a significant moderation effect from the residency of sport tourists was observed only on the conative DI component decay.

These results indicated that no matter if the sport tourists revisited Miami or not during the 10-month interval between the two surveys, or how many times they had visited Miami, no difference was shown in their DI decay. However, the highly-satisfied sport tourists declined significantly less than the unsatisfied group over the ten months, in both feelings and behavioural intentions towards Miami. Moreover, foreign sport tourists declined much less in their revisit and recommend intentions after ten months than the domestic sport tourists.

Finally, as suggested by the significant moderation effect of the psychological connection level on both ADI and Conative DI decay, the decline of sport tourists' feelings and behavioural intentions over time tends to diminish with the increasingly higher level of the psychological connection between sport tourists and the destination. In other words, the higher psychological connection levels that sport tourists hold with the destination, the less likely their feelings and revisit intentions will decline over time. In particular, the individuals who held an awareness of the destination declined much more than those with higher psychological connection levels. Similarly, the sport tourists with attraction level declined more than those with attachment and allegiance levels, which represent more meaningful, symbolic and enduring psychological connections that individual sport tourists hold with a destination object (Funk & James, 2001).

5.3.2 Research Questions Conclusions

RQ3 explores how external and internal factors affect sport tourists' revisit decision occurs at a future time point after event participation. This research question was addressed by three sub-questions examining the influence of external (i.e., time and actual revisitation experience), personal (i.e., the travel-related features) and psychological (i.e., satisfaction and psychological connection) factors on the post-visit DI change over time. Each sub-research question is concluded in this section.

5.3.2.1 Time's Effect on Post-visit DI & Revisit Decisions

As the supported hypothesis 3.1 indicated, the overall DI of sport tourists after participating in the event had significantly weakened over the 10-month interval. Both its affective and conative components showed significant decline, but the cognitive component did not. Seeing that the overall DI decayed in a similar manner with its two components, Carlson's (1956) argument regarding attitude change obtained new evidence from the leisure destination attitude context; in which he believes that changing an attitude can be realised by changing the attitude structure or any component of that attitude.

The decline of affective and conative DI of sport tourists might be attributed to the following reasons. First, the affect/emotion of sport tourists may have been inflated by the excitement of personal participation experience. The second explanation is the natural decay of memory. Sport tourists might report a higher level of satisfaction with the destination soon after their visitation, prompted by a "halo effect" (Bendall-Lyon & Powers, 2002, p.18) of being excited, fulfilled, or just simply refreshed by event participation; or by a "recency effect" that has been recognised in performance appraisal (Steiner & Rain, 1989), impression or attitude

change (e.g., Anderson & Farkas, 1973), and memory studies (e.g., Greene, 1986). The recency effect indicates that “recent customers tend to repurchase and that the strength of their repurchasing intention will decrease over time” (Jang & Feng, 2007, p.581). After being at a higher level of emotional state for some time, sport tourists might experience a lower level of satisfaction based on their calm assessment of the destination once they have had time to reflect or recall all events related to their visit experiences (e.g., Bendall-Lyon & Powers, 2002).

Environmental psychology theory suggests that tangible environmental cues can serve as an incentive influencing the emotions that individuals experience with the environment (Lee, Lee, Lee, & Babin, 2008). These environmental emotions, in turn, will determine subsequent information processing, and subsequent attitudinal and behavioural outcomes. Specifically, in the sport tourism context, the relaxation, excitement or thrill created by event participation has been recognised as one of the main favourable outcomes desired by participants (Lee, Lee, & Wicks, 2004; Ritchie, 1984). In brief, a vital motivation for sport and event participants is looking for fun and play. According to Huizinga (1950), a play mood is always related to rapture and enthusiasm, and is sacred or festive in accordance with the occasion. The state of exaltation is characterised by the arousal of all senses and the accumulation of strong emotions (Gyimóthy & Mykletun, 2004). Therefore, it can be reasonably speculated that strong emotions, especially positive ones, will exert an impact on subsequent evaluations of the destination by sport tourists.

According to Schwarz (2000), individuals are more likely to recall information from memory that is congruent rather than incongruent with their current feelings. Therefore, a sport tourist full of positive emotions such as excitement, fulfilment and gratification immediately after event participation will be

more inclined to recall those positive and encouraging events or experiences stored in his/her memory (e.g., Isen, Shalcker, Clark, & Karp, 1978). This emotion-congruent memory might lead to an overestimation of the event-host destination (e.g., Miniard, Bhatla, & Sirdeshmukh, 1992; Natale & Hantas, 1982). More support can be found in a broad range of studies on the effects of affect/emotion/mood in various domains like psychology, consumer behaviour and marketing.

A considerable amount of research has focused on how emotional state (e.g., affect, mood) influences individual's information processing (e.g., Bagozzi, Gopinath, & Nyer, 1999), evaluations and judgments (e.g., Forgas, 1995), attitudes (e.g., Holbrook & Batra, 1987), decision-making (e.g., Schwarz, 2000), purchase behaviour (e.g., Spies, Hesse, & Loesch, 1997), and post-purchase evaluation (e.g., Dube & Menon, 2000). For example, a good mood has been found to improve subjects' evaluations of the performance (Isen et al., 1978), enhance consumers' brand attitudes (Erevelles, 1998), or improve shoppers' image of the store (Sherman & Smith, 1987). Generally, these phenomena can be explained by the level of emotional intensity. As Erevelles (1998) indicated, the level of emotional intensity can narrow attention to the stimulus, while decreasing recall for non emotion-inducing stimuli.

However, Woodruff, Cadotte and Jenkins (1983, p.300) indicated that for most consumers, perceived performance outside the "zone of indifference" (i.e., intervals around a performance norm) is probably the exception rather than the common occurrence; otherwise, consumers would be in a frequent state of excitement or frustration. This indicates that a tranquil emotion better reflects the consumer's psychological normality. On the contrary, any intense emotions will inevitably subside over time (Dias & Paiva, 2005). Therefore, when the strong

positive emotions (e.g., excitement or thrill) of sport tourists subside with the passage of time, their appraisals or impressions towards the event-host location will also decline.

5.3.2.2 Internal Factors Moderating Post-visit DI Decay over Time

As the rejection of the two hypotheses H3.2 and H3.3 indicated, sport tourists' actual revisitation during the survey interval had no effect on their DI decay over time. Moreover, no significant differences were observed between the first-time and the repeat visitors in their DI decay over time. These findings are contrary to the assumptions based on existing literature. As proposed in the continuing change of post-visit DI at the post-visitation stage in the conceptual framework (refer to Figure 2.2), the actual revisitation after participating in the event will bring new stimuli, such as new information or new encounters/ experiences, which might induce the change of DI. Thus, the sport tourists who revisited the event-host destination should have a different DI change trajectory from the people who did not return after the race. However, this study did not find the expected differences between revisitors and non-revisitors.

On the other hand, tourism researchers have reported differences between first-time and repeat visitors in terms of their demographics, trip features, destination perceptions, perceived value, and travel motivations (Li, Cheng, Kim, & Petrick, 2008). While it is agreed that differences do exist between these two tourist groups (Fakeye & Crompton, 1991; Fuchs & Reichel, 2011), this study, again, did not yield similar results. Both first-time and repeat visitors demonstrated decay in their feelings and behavioural intentions towards a destination over a long time period.

Caution should be exercised when generalising these findings because of the case study approach adopted by this study and consideration regarding the profile of

the sample is thus emphasised. A significant proportion of the sample (87%) were not first time visitors to Miami when they travelled to attend the 2009 race. Among this large group of repeat visitors, 72% had already visited Miami more than three times in the past. Therefore, in interpreting the null hypothesis for both hypotheses H3.2 and H3.3, it could be considered a valid result based on the significant regular visitor profile that the majority of the sample had. As such, it would be reasonable to infer that these regular visitors had already formed a stable DI towards Miami before participating in the 2009 Miami marathon event, which would not be easily changed through another visitation.

With regard to the different conative DI decays discovered between domestic and foreign sport tourists, related support can be attained from previous studies which have suggested that individuals from various geographic regions interpret imagery and experiences differently (Bonn et al., 2005). This study, for the first time, offers findings that illustrate the differences in DI change over time between domestic and international visitors. The results suggest that international sport tourists coming to Miami to attend the marathon event have more stable revisit and recommend intentions over time compared to the domestic participants.

This difference is somewhat understandable since international visitors may have fewer chances to visit Miami due to various constraints, like accessibility or money; however, these constraints may stimulate a stronger revisit intention if they have had a very satisfactory experience with Miami. On the contrary, domestic tourists believe they have numerous opportunities to travel to Miami; they may thus prefer to choose a new destination to visit in the future, driven by a novelty-seeking nature. Finally, the satisfaction level of sport tourists with the event-host destination was found moderating both their ADI and Conative DI decay over time. This result

is understandable based on the confirmed causal relationship between consumption satisfaction and post-consumption attitude / future behavioural intentions (e.g., Chen & Tsai, 2007).

5.3.2.3 Psychological Connections and Future Revisit Decisions

This study demonstrated a four-stage developmental process of sport tourists' psychological connection with an event-host destination, developing from the lowest level of awareness to the highest level of allegiance. Individuals at the awareness stage showed significantly more decay in both affective and conative DI than the people in the other three higher stages. This is understandable given that at the lowest level, the sport tourists are only remotely aware of the destination with very basic knowledge or perceptions and have not yet established any explicit attitudes towards the place. Their undeveloped destination attitude thus declines more easily with the passage of time.

Furthermore, sport tourists staged at the higher level of attraction did not show significantly different decays in feelings compared with the people at the attachment level. However, their behavioural intentions declined significantly more than the individuals with the other two higher psychological connections – attachment and allegiance. This indicates that the behavioural outcome may be a more effective indicator than emotions to differentiate the psychological connection levels between a sport tourist and an event-host destination. Because greater differences were found in behavioural intentions' decay, rather than in feelings' decay between the individuals who stayed in *destination attraction* and those who held the two higher psychological connection levels. The strength of behavioural intention over time, thus, can be used to differentiate the sport tourists who have developed a meaningful psychological connection from those who have not.

On the other hand, the revisit and recommend intentions of tourists attached to a destination did not decay over the 10-month interval because a meaningful individual-destination connection had been formed at the attachment stage. Such a meaningful personal connection represents the formation of attitude strength, and leads to more frequent and expressive behaviours (Funk, 2008). The current findings extend this statement by establishing evidence that a higher connection not only strengthens the attitudinal variables, but also stabilises the behavioural intentions. Within this case, destination attachment introduces the concept of continuance and an element of stability to the individual-destination connection in terms of behaviour. This result reflects that when a sport tourist starts to assign a more personalised and symbolic meaning to a specific destination, a more stable and predictable behaviour can be expected.

Finally, the affective and conative DI of the sport tourists who had developed an allegiance to the destination was the most stable and resistant to change over time. Destination allegiance, therefore, represents the strongest persistence and continuance of an individual sport tourist's psychological commitment and behavioural loyalty towards the event-host destination (Beaton et al., 2009). Collectively, these results indicated that sport tourists' psychological connection levels with the visited destination performed well in terms of interpreting their different attitude change patterns. As a result, the PCM was substantiated as being an appropriate theoretical framework to examine sport tourists' post-visit DI change over time.

In conclusion, the findings have confirmed that psychological connection is a critical determinant for the temporal persistence of a post-visit destination attitude (Flay, 1978; Sengupta, Goodstein, & Boninger, 1997). In other words, the

psychological connection shows stronger and more reliable predictive power than DI for decision-making and behaviours of sport tourists since it considers the durability of the association between a person and a place over time. From an empirical viewpoint, it is impracticable to expect a tourist to maintain a strongly positive emotion or revisit intention towards a specific destination over time if that tourist does not possess a strong psychological connection with that place, especially in an increasingly competitive global tourism market (Baloglu, 2001b). The visitor with low psychological connection is more likely to switch to other travel destinations. Therefore, the ultimate goal of destination marketing should be set as cultivating potential/actual visitors' loyalty to the destination if they want to keep a sustainable positive image and retain repeat visitors. To further discuss the findings of this research, the theoretical and managerial implications are highlighted next.

5.4 Implications

The previous sections of this chapter focused on discussing the results of the two longitudinal panel studies by integrating the findings with existing literature. Conclusions about sport tourists' DI formation and change were drawn by referring back to the conceptual framework proposed in Chapter 2. This section centres on theoretical and practical implications of this research. Theoretical implications are discussed from three aspects – the contributions to literature, methodology and theory development. Practical implications are then followed by highlighting the managerial applications of the findings of this study.

5.4.1 Theoretical Implications

This research makes three main substantial theoretical contributions. Firstly, this study overcomes the unilateralism of most tourism DI studies (i.e. focusing on

either attribute-based impression/perceptions or feelings/overall imagery) by adopting the tripartite attitudinal perspective to examine the DI change of sport tourists. Furthermore, the results imply that sport tourists' DI change, whether it increased because of personal visit experience or declined over a long period of time, is dimensionally specific and may be structurally inconsistent. Moderation factors influencing the DI change at both stages were also uncovered. Among them, the psychological connection between a sport tourist and the destination was believed to be the common factor underlying the whole DI formation and change process. All these findings have added to the existing literature of tourism destination image as well as the tourist decision-making process.

Secondly, this study examined DI change over a three-stage decision-making process using a longitudinal approach. The pre- and post-visit DI change was examined by a pre- and post-event study with the same sample of sport tourists; and the post-visit DI change over time was investigated by a longitudinal panel study containing two data-collection waves. The longitudinal panel research was realised by assessing the same group of samples each year and contributed valuable findings of DI change to the limited existing literature. Finally, this study applied the four-stage PCM framework to examine the psychological connection of individual sport tourists with an event-host destination. This application not only contributes to the theorisation of tourism DI studies, but also to the development of the theoretical framework itself. Details are presented in the following sections.

5.4.1.1 Tripartite DI Structure & Its Stability

The body of tourism destination image literature has been criticised as atheoretical because the results were mostly obtained from the exploratory analysis of destination attributes (Lin et al., 2007), which failed to account for the complexity

of the DI construct. This study, adopting a tripartite attitudinal perspective, conceptualised sport tourists' DI as a higher-order construct consisting of three components of cognition, affect, and conation. Moreover, this tripartite DI structure has been confirmed with data collected at different times, before travelling, after travelling and over a long time period. Therefore, the DI perceived by sport tourists can be explained by three types of evaluations – cognitive, affective, and conative.

Furthermore, the stability of sport tourists' DI was examined under two situations: after personal visitation and over a longer period of time. The results demonstrated that DI change can be dimensionally consistent – as shown in all three DI components' enhancement after personal visitation; but also can be dimensionally inconsistent – as shown in the post-visit ADI and Conative DI decay over time. CDI was found to be enhanced after sport tourists travelled to the host destination and remained stable over time. This result lends support for previous findings that many perceptual changes occur during the first direct experience, rather than multiple experiences or visits (Baloglu, 2001a). On the contrary, ADI and Conative DI were also enhanced by sport tourists' personal visit experiences, but they showed decline over time. This result suggests that affective and conative DI is less stable than the cognitive DI; and the covariation of ADI and Conative DI is stronger than the influence of CDI on conations. Destination image is a complex construct and is multidimensional. Therefore, it is necessary to clarify which dimensions of DI may be more decisive in tourists' decision-making.

5.4.1.2 DI Change Process Uncovered by a Longitudinal Approach

Longitudinal research has been suggested as a preferable approach by numerous tourism destination researchers, especially when dealing with the image formation and/or change process (Chi & Qu, 2008; Li & Vogelsong, 2006).

However, limited tourism studies have adopted longitudinal research because of the difficulties in implementation in reality. Previous DI change studies were conducted either by comparing visitors and non-visitors or monitoring a specific destination's image change over time by collecting data from different samples. None of these studies examined how and why the DI held by the same group of tourists changes over their different travel stages. Thus, the present study is important for at least two reasons: first, it is methodologically stronger than previous DI change studies; second, it is one of the few studies aiming to provide evidence and identify reasons for a continual DI change across tourists' multi-staged decision-making processes.

For the modification of DI through personal visiting experiences, a pre- and post-trip test is the most ideal (Li & Vogelsong, 2006) approach. Moreover, a longitudinal approach is optimal for examining the temporal effect of post-visit DI change. For the leisure consumer studies, longitudinal study is extremely necessary since the immediate evaluation/feelings/attitudes of leisure consumers may be artificially inflated by the leisure experience. Therefore, a certain period of time is required to allow the respondents to resettle to a normal emotion state. Only under a stable and normal emotion/mood state can leisure consumers make more "objective", impartial and thus credible evaluations. However, due to the lack of longitudinal studies covering all four timings – pre-visit, during-visit, post-visit and over time, the continual change process of DI revealed in the current research using different sample groups should be interpreted with caution.

5.4.1.3 Psychological Connections with the Destination

This research informs the PCM framework in four aspects. First, The PCM was developed for application to both sporting and leisure objects (Beaton & Funk, 2008; Funk et al., 2007), but has only received preliminary examination in the

leisure tourism domain (Chen & Funk, 2010). This research extends the application of the PCM framework into a sport tourism context and examined the psychological connection between an individual and a destination object. In doing so, the current research has established that sport tourists can develop a certain psychological connection with an event-host destination along a four-staged progressive psychological continuum (see Figure 2.1).

Accordingly, four psychological connection levels between an individual sport tourist and the event-host destination have emerged: *destination awareness*, *destination attraction*, *destination attachment*, and *destination allegiance*. Each level represents an upgraded stage of psychological connection that a sport tourist may have with the destination (Filo et al., 2011), which is indicated by certain attitudinal and behavioural variables. Specifically, destination awareness implies a basic knowledge/ recognition of a destination and an uncertain visit intention. A vague initial DI may be developed but lacking special interest or preference. Destination attraction signifies the formation of a positive DI, special interests or preference which are not yet enduring (Funk & James, 2001), and an assured visit intention, or even includes actual visit behaviours.

Destination attachment represents the formation of a functional, emotional, and symbolic connection between the sport tourist and the host destination. The individuals at this stage have assimilated the destination into the self-concept and achieved a certain degree of self-identification from the travel to a specific destination. The attachment level represents not only preference stability towards a destination, but also a motivation to resist alternative choices (Funk & James, 2001). Stronger DI and visit/revisit behavioural intentions or actual behaviours are associated with this attachment level, along with the decreased likelihood of

replacing this destination with other available options. Destination allegiance indicates the psychological connection becomes resistant, persistent, biased cognition and leads to behavioural loyalty (Funk & James, 2006). This level introduces the concept of durability to the connection between the individual and the destination, resulting in an internally stable DI and repeat visitations over time.

In addition to the differences in attitudinal and behavioural intention/behaviours addressed above, the findings of this research further revealed these four psychological connection levels between the sport tourists and the destination also differ in their DI change patterns. In particular, the lowest level of destination awareness demonstrated a significantly different DI change pattern compared with the other three levels. The sport tourists that held an awareness level with the destination showed significantly more DI change than any other psychological connection levels; on the contrary, the allegiant sport tourists presented as the most stable group in DI change, both after personal visitation and over a longer time period. These findings are consistent with the assumptions of PCM. For example, Funk and James (2001) argued that attachment's distinctiveness from attraction is represented by the extent to which the psychological connection becomes intrinsically important; and the allegiance differs from attachment in terms of durability of the psychological connection over time.

Furthermore, this research provides empirical evidence that the three-dimensional involvement construct and the three-step staging mechanism can perform very well in a sport tourism destination context. The main benefit of using a three-dimensional involvement (pleasure, centrality, and sigh) to profile sport tourists is it provides a new approach to understand tourists' evaluations of a destination. Sport tourists can make judgments about a destination on the basis of

the extent to which their experiences enable them to attain specific goals related to their hedonic needs, centrality to lifestyle, and self-congruity. Additionally, the significance of the PCM-staged stratification is supported by the significantly different change patterns (directions and magnitude) of DI among the four stages. Thereby, the four psychological connection levels serve as a new segmentation criterion derived from a solid theoretical foundation for sport tourism marketing.

Second, adopting the PCM to DI change studies allows for a closer exploration into different attitude changes of leisure consumers who possess different psychological connection levels. Prior to this study, the PCM lacked empirical examination of the attitude change process occurring at each stage. This research, for the first time, revealed that individuals at each of the four PCM stages had different attitude change patterns through examining the moderation effect of psychological connections on sport tourists' DI change. Generally speaking, when the individual's destination psychological connection level progresses, the magnitude of DI change diminishes.

Moreover, existing empirical studies have given limited consideration to the stability of the attitudinal and behavioural outputs in the PCM, especially over time. On one hand, Study 1 uncovered that the sport tourists' initial attitudes towards an event-host destination (i.e., DI, including the behavioural intentions) were changeable when the subjects entered a new situation/environment (i.e., actual visitation) and received new stimuli. Study 2, on the other hand, provided initial findings that the affective attitude and behavioural intentions of sport tourists towards a destination were not constant over time. The change of these attitudinal and behavioural outcomes is the function of the psychological processing of

dynamic external and internal factors, indicating the in-depth psychological connection changes.

Third, this research developed the PCM framework by investigating the chain of “inputs – processing - outputs” from a decision-making perspective. According to the conceptual framework proposed in Chapter 2 and relevant study results, the chain of “inputs – processing – outputs” operating at each of the three travel stages has actually depicted a decision-making process, which can be viewed as a transformation between inputs and outputs (Abelson & Levi, 1985). As illustrated in Figure 2.2, the first “inputs – processing – outputs” chain operating at the pre-visit stage accounts for the initial DI formation and initial travel decisions; the second one operating at the visit experience stage accounts for the experience evaluation and subsequent DI change; and the third one operating at the post-visit stage accounts for the continuing change of DI and future revisit decisions. Therefore, examining the “inputs – processing – outputs” operating among the three decision-making stages helps to explain the continuous attitude formation and change process of sport tourists. Generally speaking, this dynamic chain performs as a driving force for destination attitude formation and change, which in turn determine sport tourists’ decision-making related to visiting/revisiting the destination. Accordingly, the conceptual framework constructed on the basis of the PCM is able to elucidate what happens inside the “black box” of sport tourists’ mind when they facing an event-host destination choice and/or a revisit decision.

In general, adopting the PCM for the theoretical framework by this study not only facilitates an in-depth investigation into the sport tourists attitude formation and change process, but also promotes the theorisation of leisure tourism DI studies as well as sport tourism studies (Weed, 2005). As Mohsin (2005) argues, tourism

consumer behaviour theory is burdened with unproven assumptions, ambiguous terminology, and contradictory evidence. Similarly, Weed (2005; 2006; 2009) has made comments on sport tourism studies through several systematic reviews and meta-evaluations of existing sports tourism research. The major problem he revealed is: sports tourism research “lacks methodological diversity, rarely tends to answer ‘why’ questions, and in around half of cases, does not employ any clear theoretical perspective to underpin what is largely descriptive research” (Weed, 2005, p.231). For example, to date, studies have only acknowledged that sport event participants who enjoy their sport tourism experience would like to repeat the experience in the future. Most research on sport experience was descriptive and there lacking exploratory studies focused on why the experience is enjoyable and why event participants would like to repeat the experience.

The adoption of the PCM framework in examining sport tourism DI formation and change has opened up a new avenue for tourism DI study since no previous studies have considered to explore the in-depth psychological states behind the DI change. Moreover, by introducing a progressive psychological connection between an individual tourist and a destination, this study injected a breath of fresh vitality into the traditional understanding of the tourist-destination relationship. The most important is, by utilizing the progressive PCM; this study adopted a constructive approach to explore why sport tourists’ decide to travel to attend a sport event and why they decide to revisit the host destination as leisure vacationers. This is a good attempt to promote the theorisation of sport consumer behaviour studies.

Finally, when examining various external and internal factors contributing to the DI formation and change process, this study takes into account all three types of influential factors put forward by the PCM framework: environmental, personal, and

psychological. As illustrated in the conceptual framework (Figure 2.2), a set of intervening factors structuring the relationship between input factors and attitudinal and behavioural outputs were examined. The external influential factors of sport tourists' DI change are the environmental stimuli arising from the event and the destination-related attributes – being either projected by various information sources (at pre-visit stage) or actually experienced (at consumption experience stage). Moreover, time, new information and new personal experience obtained after the trip of event participation serve as new external factors affecting post-visit DI change. Travel-related characteristics including previous experiences with the destination, length of stay, geographic origin, and sightseeing participation are examined in this study as personal factors affecting sport tourists' DI change. In addition, prior travel motivations, experience satisfaction and psychological connections are the main psychological factors highlighted to explain the DI formation and change in this thesis.

Even if some influential factors proposed in this conceptual model were not supported by this research finding (e.g., sport motivation, length of stay, actual revisitation), this model, by integrating the DI formation and change literature with the PCM, still enhanced the chance of understanding the unobservable formation and change process of sport tourists' DI and the deeper psychological connection. Moreover, this PhD research is just an initial step of exploring sport tourists' DI formation and change, as well as the influential factors; therefore, future studies are still expected to re-test these factors and include more potential intervening variables. In summary, the simultaneous investigation of all three types of influential factors is a new contribution given that most empirical studies of the PCM have only focused on psychological factors (e.g., Filo et al., 2008; Filo, Funk, & Hornby,

2009). On the other hand, the highlight of psychological factors (e.g., destination involvement) on DI change contributes to the DI literature which lacks investigation of psychological influential factors.

In conclusion, this is the first research applying the theoretical framework of PCM into a tourism destination context and exploring the attitudinal and behavioural outcomes change process along the four progressive psychological connection stages. This is also the first research standing on the decision-making perspective, making an in-depth investigation into the chain of “inputs – processing – outputs” that operates within each PCM stage, in order to clarify how sport tourists’ destination attitudes form and change. At the same time, this examination helps to probe into the psychological connection change which underpins the attitude change across different travel stages of sport tourists. Finally, this is the first research taking into account all three types of influential factors of attitude formation and change, as illustrated by the PCM framework. Overall, the findings obtained from this study are expected to make a significant contribution in advancing the knowledge with respect to sport tourist destination attitude formation and change and broadening the application of the PCM theoretical framework with a destination object. Moreover, the results from this study will help sport tourism practitioners realise the significance of monitoring change in their consumers’ attitudes and adjusting image-promotion strategies in a timely manner.

5.4.2 Practical Implications

In this section, practical implications of this study are discussed from the perspective of destination management and marketing. The major findings of this study have important managerial implications for tourism managers and marketers. Firstly, the multiple components discovered for CDI provide destination marketers

and local stakeholders constructive guidelines to deliver appropriate products and services that accommodate tourists' needs and wants (Chi & Qu, 2008). Secondly, the mediation effect of experience satisfaction on the pre- and post-visit DI enhancement highlights the significance of creating and providing a positive and enjoyable experience for sport tourists. Thirdly, the DI decay observed over time after sport tourists returning home provides important advice for cultivating sport tourists' high psychological connections with the destination with the ultimate goal of developing an allegiance/loyalty, as well as developing appropriate marketing strategies for different segment markets. Strategies related to the main findings are discussed in more detail below.

5.4.2.1 Creating a Positive Destination Experience

There is an agreement among tourism researchers and practitioners that the fundamental product in tourism is a positive and memorable experience (McDowall, 2010; Ritchie et al., 2011). Findings from Study 1 revealed DI enhancement and identified the mediation effect of destination satisfaction between the initial DI and modified-induced DI, thus providing evidence that an enhanced post-visit DI is substantially determined by a positive experience with the destination. In other words, in order to build up/ maintain a positive post-trip DI in the minds of visitors, a travel destination has to concentrate on improving various offerings (e.g., facilities, services) and creating a comprehensively pleasant/satisfactory consuming experience for its target visitors.

According to Shirazi and Som (2011), tourists normally consider all their sensory encounters during the round trip to be part of the overall tourism product: accessibility of the destination, local transportation/infrastructures, tourist attractions, hospitality, local residents, and numerous similar kinds of contacts - all

contribute to the formation of the tourists' impressions of their experiences with this destination. Therefore, it is not only the destination management organisations (DMOs), but all relevant stakeholders, including local hospitality businesses, infrastructure department, retail sellers, and even local residents, who should cooperate to create a memorable and pleasant experience for visitors. In addition, as indicated by the results of Study 2, the affective and the conative DI were more closely correlated and more fluctuating over time. This finding suggests that when promoting a tourism destination, it is not only necessary to concentrate on the physical and tangible attributes, but also incorporate intangible and affective elements, such as atmosphere, exciting events and experiences that a tourist may expect when visiting a destination (Sancho Esper & Álvarez Rateike, 2010).

5.4.2.2 Regular Monitoring of the Stability of DI

Given that the changeability of tourist DI revealed by this research, as well as the increasingly intensive global competition among tourism destinations in this rapid changing era, it is imperative for DMOs to identify the direction and pattern of their visitors' attitude change. Only a clear and updated understanding of the potential/actual visitors' attitude change can ensure DMO's deliver an appropriate DI using the most effective promotion and communication means, which is a necessity for achieving a competitive advantage. Yilmaz et al. (2009) suggested that for destination marketers, it is vital to identify the initial DI in the mind of potential visitors, and it is also sequentially important to discern whether these images differ when the visitors depart. Study 1 in this thesis found that the initial DI of sport tourists was significantly enhanced by their actual visitation to the event-host destination, reflecting a good performance of the destination in meeting visitors' needs and wants.

However, even a positive DI may not be able to last over a long time. The impact of time on tourists' satisfaction, future behavioural intentions and perceptions has been recognised in previous literature. For example, Bendall-Lyon and Powers (2002) found that tourists may report different feelings and revisit intentions at different time points. Ritchie and Smith (1991) also identified a significant rate of awareness and image decay regarding a mega-event host city after the staging of the event. In the current research, Study 2 revealed that sport tourists' post-visit DI showed a significant decline over the 10-month interval. Therefore, marketers must make the greatest attempt to project and maintain a highly positive DI in order to retain their visitors over a relatively long time period after the first revisit. Accordingly, it is necessary for DMOs to measure tourist DI at repeated times. Only regular image studies and analyses can provide DMOs with the most accurate and updated information that can be used in developing promotion strategies (Ahmed, 1996).

5.4.2.3 Emotion Marketing & Relationship Management

Emotion/affect marketing and relationship management/marketing have generated considerable attention in the area of broad business and marketing since the 1990s (e.g., Bagozzi et al., 1999; Erevelles, 1998), but is still in its infancy in leisure or tourism studies (Pike, Murdy, & Lings, 2011). Existing leisure studies concerning consumers' emotion/ affect mainly focus on creating an emotional touristic experience (e.g., Kim & Yoon, 2003; Pike & Ryan, 2004) or enhancing behavioural prediction by measuring affect (e.g., Smith, Haugtvedt, & Petty, 2006). As the results of this study have suggested, the affective DI is more vulnerable to change than the cognitive component under the influence of both external (e.g., travel experience and time) and internal factors (e.g., previous experience and

satisfaction) after sport tourists' personal visit to the destination and over time. Moreover, affective DI change often leads to conation change because of the strong correlation between these two components.

Therefore, future destination marketing strategies should focus more on dealing with image alteration, redesign and re-launching the updated tourism product through emotional/affect communications and advertising approaches, rather than cognitive/factual communication ways (Morgan & Pritchard, 1998); especially for the repeat tourist market. For instance, instead of reminding the sport tourists who have visited Miami that Miami has beautiful beaches, nice shopping facilities, and a culturally and ethnically diverse population; destination marketers would be better emphasising the relaxing, fun, energetic, and exotic atmosphere of Miami as a leisure vacation destination. In order to effectively convey emotionally interesting information to potential visitors with an aim of stimulating their senses or exciting their imaginations, a mental imagery evoking process has to be understood (Miller & Stocia, 2004).

Mental imagery, has been recognised to moderate both attitudinal and memory responses to advertising (Burns, Biswas, & Babin, 1993). For this reason, identifying the effectiveness of various imagery-evoking stimuli/strategies in influencing leisure travellers' visionary responses is of great importance to tourism destination marketers (Walters, Sparks, & Herington, 2007). Previous research examining the effectiveness of different forms of advertising stimuli in evoking mental imagery is mainly based on general marketing communications, rarely devoted to the field of tourism. However, based on existing research findings, photographic images of touristic scenes/sites, concrete imagery eliciting words with visual content, and instructions to imagine can be identified as three main forms of

advertising stimuli to evoke tourists' emotional responses or recall of a travel destination (e.g., Babin & Burns, 1997; Miller & Marks, 1997). More specifically, Walters et al. (2007) conducted an investigation of the effectiveness of these stimuli in evoking the tourists' imagery by examining their combined usage within a tourism context. They found a concrete-style picture combined with textual content consisting of instructions to imagine is the most effective means for destination advertisement to evoke an elaborate and quality consumption vision. This finding provides an inspiration and a guideline for those destinations committed to emotion marketing/promotion. Furthermore, seeing that some event organisations may send reminders about purchasing pictures taken during the competition, the pictures displaying local touristic attractiveness can be sent along in the future. In brief, future marketing efforts for sport tourism should give more considerations to the overall travel experiences of sport tourists, not just the event participation experience.

On the other hand, relationship management/marketing, as defined by Shani and Chalasani (1992, p.44), is "an integrated effort to identify, maintain, and build up a network with individual consumers and to continuously strengthen the network for the mutual benefit of both sides, through interactive, individualised, and value added contacts over a long period of time". Therefore, by definition, relationship marketing involves establishing and maintaining a long lasting relationship where product/service suppliers (destinations) and consumers (tourists) can work as partners to produce satisfactory consumption experiences (Fyall, Callod, & Edwards, 2003). There is evidence that the two most essential cruxes in relationship marketing are satisfaction and loyalty (Vogt, 2011), which have been revealed by this study as two crucial factors in the sport tourists' DI change.

The findings reported in this thesis suggest that the first change of sport tourists' DI was caused by their satisfaction with the destination induced by a positive travel experience; and the second change of their DI over time was moderated by their psychological connection levels with the destination. As demonstrated by both Study 1 and Study 2, the sport tourists who stayed at the highest PCM stage of destination allegiance showed the smallest DI change, both enhancement and decline. These results indicated the importance of allegiance/loyalty in the persistence of DI (e.g., Bosnjak, Sirgy, Hellriegel, & Maurer, 2011). However, these two attitudinal and psychological traits of satisfaction and loyalty may erode with the passage of time (Bendall-Lyon & Powers, 2002). Therefore, the most ideal relationship marketing practice should last throughout the lifetime of a customer rather than focusing on one or multiple one-time transactions (Shani & Chalasani, 1992), in order to sustain high consumer satisfaction over time and retain allegiant visitors.

The desire of travellers for novelty and variety of destinations has been reviewed as the main impediment to the success of relationship marketing implemented in tourism marketing (Fyall et al., 2003). Thus, selecting the right tourists becomes crucial. Given the uniqueness of tourism destination products, visitors' behavioural frequency may not be sufficient measures of loyalty (Fyall et al., 2003); attitudinal and psychological loyalty rather than behavioural loyalty are more realistic indicators of tourists' destination loyalty. In other words, when applying relationship marketing in the sport tourism destination context, attitudinal and psychological connections should be the focus. As for this study, the sport tourists that held attachment and allegiance connections with the event-host destination should be the target market for a relationship marketing strategy.

Although the difficulty of implementing relationship marketing in the tourism industry has been recognised, the internet has created opportunities for building and managing customer relationships in modern tourism development. Managing an official online forum or social networking spaces has been suggested by some arts event organisers as a means to employ relationship marketing (Kerr & May, 2011). Moreover, it is believed that online communications with customers can be more effective by introducing segmentation. For example, loyalty-based segmentation can aid in targeting communications with the consumer and strengthening relationships (Kozinets, 1999). With regard to the current sport event tourism destination marketing context, the psychological connection level measured between sport tourists and the host destination provides a suitable loyalty-based segmentation approach. Building up and managing online communications with all the sport tourists possessing attachment and allegiance connection with Miami is feasible and promising. However, this is a huge project which requires high financial and human investment; therefore, sophisticated computerised VRM (i.e., visitor relationship management) systems become essential (Pike et al., 2011). A digital media based VRM will allow for a record on each individual visitor to be captured and constructed, analysed in terms of needs/wants or past behaviours, and prioritised with respect to value or potential sale, thus facilitating mutual communications and customisation so that an individual can feel special and have his/her needs met (Vogt, 2011).

5.4.2.4 Market Segmentation

According to Mohsin (2005), the need for market segmentation in the tourism context is long apparent from the strategic plan compiled by the Netherlands National Tourist Office in the 1980's:

The tourist demand is very diverse and there are innumerable alternatives for segmentation: age, social class, spending patterns, phase of family development, preference for – rest or the reverse, for culture or nature, for bustle or quietness, for travelling alone or in groups, for water, beaches, woods, moors, towns, for special interests or a bit of everything. (p.724)

Furthermore, Mohsin (2005) pointed out that three deficiencies existing in the large amount of segmentation literature: lacking common motivational or benefit segment variables; lacking longitudinal or comparative studies; and lacking essential theoretical concepts or modeling. The findings of this study promote a new segmenting approach using the psychological connection levels between a sport tourist and an event-host destination, which addresses the above deficits.

First of all, this research justified the usefulness of applying the involvement scale to profile sport tourists' psychological connection with an event-host destination. The nine involvement items adapted from Beaton et al.'s (2009) study produced the same three dimensions which were labelled "pleasure", "centrality", and "sign" with high internal reliability and validity. By profiling the sport tourists with each of the three *destination involvement* facets, this study presented the characteristics of sport tourists that ascribed different hedonic, central, and symbolic values to the event-host destination they visited. Subsequently, a three-step PCM staging procedure has been verified as an effective tool in allocating sport tourists into four distinct psychological connections with the destination. This staging method based on the conceptual differences of each destination involvement facet successfully overcome the shortcomings of previous segmentation studies using bipolar involvement scale in comparing research findings (Antil, 1984). Following this theoretically confirmed segmenting procedures, destination marketers can come

to understand the differences between the four tourist segments in both attitudes and behaviours, which will facilitate the development of targeted strategies.

By segmenting the sport tourists into the four PCM stages, this study revealed dissimilar DI change patterns for the sport tourists at each stage. As the results show, the psychological connection level of sport tourists with an event-host destination moderates their destination attitude change, both after visitation and over a 10-month period. The low psychologically connected sport tourists (i.e., at *awareness* and *attraction* stages) possess less positive and more fluctuating attitudes towards the destination. Therefore, future marketing efforts should be focused on this underperforming segment to identify their specific requirements, needs and wants to improve their satisfaction and psychological connection levels. On the contrary, the highly connected individuals with more positive and stable attitudes comprised the most important target market for a destination wishing to establish long-term relationships with its visitors through a loyalty program due to their meaningful and enduring connections (e.g., Pike et al., 2011).

Generally speaking, identifying the image change variations based on psychological connection levels can be very helpful for destination marketers in terms of targeting different psychologically-connected visitor groups for delivering appropriate projected images and promotional messages; improving or correcting/modifying particular tourist groups' DI by offering customised experiences; and tailoring position and communication strategies to specific groups with a certain degree of psychological connection with the destination. Although consumer attitudes have been regarded as useful segmentation variables, a more in-depth psychological variable promoted in this study – the psychological connection, is believed to perform as a better segmentation criterion. It can not only delineate

personal differences between customers, but also allow marketers to probe into the psychological state of their customers and further promote, adjust, and maintain core features perceived to be important by consumers themselves (Bendall-Lyon & Powers, 2002). The most important aspect is this new psychological segmentation variable has a solid theoretical foundation (i.e., the PCM theoretical framework) as well as sufficient empirical support provided by previous studies examining the PCM theoretical framework (e.g., Funk et al., 2011).

5.5 Limitations & Future Research Directions

This section points out the general limitations of this longitudinal study and outlines directions for further research. The first limitation is the generalisability of the findings presented by a case study. This study is based on samples attending a specific marathon event, so caution should be used before generalising these findings to different types of sport events and a broader population of sport tourists. Second, this research failed to carry out a longitudinal panel study examining the DI change of the same sample group over all four critical time points (i.e., pre-visit, during-visit, post-visit, and over time). Moreover, even if all the desirable characteristics of an ideal longitudinal panel study were present, causal inferences that are based on correlational data must be viewed with discretion (Freedman, 1987; Rogosa, 1987). Third, the lack of qualitative data in this study constrains the comprehensive understanding of relevant results. Fourth, the convenience sampling technique and online data collection might cause sampling bias and affect the representativeness of the studied samples.

5.5.1 Research Limitations

The limitations of the current study are mainly located in the overall research design, including study approaches, sampling techniques, and questionnaire design, as well as the defects which emerged from the execution of research design. First of all, the generalisability problem of the study results is acknowledged as the most salient limitation because the current case study approach only permits the results to be generalised for the sample population and the case destination. This research was limited to a single annual marathon event held by a mature tourism destination – Miami, FL in the United States. The event attracted more domestic than international participants, and the foreign participants were mainly from countries geographically close to Miami and most of them were repeat visitors. This resulted in a high percentage of respondents being fairly familiar with Miami, whose attitudes/images towards Miami had been formed previously and were more difficult to change at any decision-making stage compared with the first-time visitors. Therefore, this study cannot guarantee the same results would be produced with different samples or different sport events. Accordingly, replicating this study in other sport event settings and with broader samples would strengthen confidence in generalising the results. Further studies conducting similar assessments are expected for comparative purposes before any definite conclusions can be drawn.

Secondly, although a longitudinal study approach has been adopted by the current study to monitor sport tourists' DI change; one deficiency must be acknowledged. This study failed to examine the same sample group's (i.e., one panel) DI continual change throughout all the four time points: pre-visit, during-visit, post-visit and 10-month later. Therefore, a general conclusion cannot be drawn as to the continuous DI change pattern.

Thirdly, this study adopted a purely quantitative research method, and therefore lacked qualitative data. Researchers involved in tourism consumer behaviour studies have noted that qualitative methods can provide meaningful and pragmatic tools for the investigation of tourists' behaviour (Sealy & Wickens, 2008). Since qualitative research enables the researcher to learn more about unobservable constructs, such as thoughts, feelings, attitudes, intentions, it is particularly useful in understanding how purchase decisions are made (DeCrop, 1999). Despite this, previous meta-reviews have found that there are few studies in tourism DI that employed qualitative approaches as the main technique (Riley & Love, 2000; Stepchenkova & Mills, 2010).

In addition, according to Rudd and Johnson (2010), pure quantitative data and analysis methods may fail to capture additional important influential factors due to the specification error, which refers to misidentifying or omitting important variables that are involved in a causal relationship (Shadish, Cook, & Campbell, 2002). Normally, all variables tested in a quantitative study are proposed by researchers based on previous studies or expert panels, rather than obtaining from the real study subjects. In this case, the addition of qualitative data obtained from sampled study subjects may expand the understanding of various potential influential factors and strengthen the causal explanations, thereby probing into the underlying reasons of unexplained phenomena or special cases. Therefore, in order to extend and advance the investigation of sport tourists' DI change process in the future, qualitative techniques, such as in-depth interviews or a focus group should be added to complement the deficiency of a pure quantitative study. For instance, respondents' free descriptions and discussions related to their personal experience with an event-host destination and the process of their destination attitude change

would facilitate understanding of the inter-relationship between attitude change and psychological connections.

Fourthly, the sampling approach and data collection techniques may generate potential bias and affect the representativeness of samples (Hair et al., 2006a). An online survey approach was adopted by this study as the single means to collect data, which restricted the sample frame to those providing email addresses when registering for the event and having internet access and skills. Future research should use multiple survey methods for cross-validation purposes. In addition, data from non-respondents were not collected and compared to the respondents because the access to event participants was controlled by the event organisation, as well as the ethical issues related to respondents' voluntariness. The examination of non-respondents should be helpful in improving the response rate.

Moreover, the non-probability convenience sampling technique was employed. The samples in this study were obtained based on the voluntary participation of target subjects, which may have introduced a potential bias towards the event or its host destination. However, through comparing to the whole populations attending the 2009 and 2011 ING Miami marathon events, the demographic breakdown of the two longitudinal study panels in this research was very similar to the whole population. This indicates that the samples are closely representative of the population and thus deemed appropriate.

Fifth, due to the timing constraint of an annual sport event and the accessibility of the event participants, this research did not conduct a formal pilot study. As a result, some measurement scales and survey questions were modified in subsequent surveys according to the results of the preceding studies, which resulted in a few inconsistent measurements between the two longitudinal panel studies (e.g.,

one indicator of ADI). In addition, to shorten the length of the questionnaires to promote higher response rates, some measurement items were excluded from the ensuing surveys based on the results obtained from the preceding surveys. For example, the event-related attributes were dropped from the 2011 post-event survey because of its weak contribution to the DI revealed in both the 2011 pre-event survey and the 2009 panel study (Study 2). Therefore, if future studies are planning to incorporate constructs and scales to be the same as the current research, it is advisable to choose a similar format for all measures, particularly paying attention to anchors used for individual items.

Since there are few studies on tourist DI change that have adopted the optimal methodological approach of a longitudinal panel study (see Aziz & Zainol, 2011; Oppermann, 2000), there is little empirical basis for understanding how and why a sport tourist forms an initial attitude towards an event-host destination and how this attitude will change after the personal visitation and over a longer period of time. Therefore, the current study performs as the first step to examine the continual DI change over different travel stages. Future research can provide additional tests of the generalisability of the findings in this investigation and hopefully overcome the limitations of this study.

5.5.2 Recommendations for Future Study

The present longitudinal study provides empirical evidence for the tripartite structure of the DI construct in a sport tourism context. Moreover, it reveals the DI formation and change process of sport tourists from the pre-visit stage to post-visit stage. In addition, this study empirically examines the effectiveness of adopting the PCM to explain sport tourists' destination attitude formation and change. However,

several gaps and questions uncovered by this longitudinal study are needed to be addressed by future research.

First of all, extending the generalisability of the findings of this study is the most essential task. There are many other types of sport events (e.g., mega/hallmark/small-scale events; professional vs. amateur events; spectator vs. participant events) and different types of sport tourists (e.g., spectators/participants). The significance of expanding the DI change investigation to different types of sport events and a broader sample of sport tourists is twofold. First, any research findings from one unique context cannot be generalised to other contexts before replicating this case study in other contexts. Second, any attempts to excluding or omitting any population groups are limited and unimaginative – unless warranted on a case by case basis – and can stifle the growth and development of sport tourism.

The greatest optimism emerging from the current research is that the longitudinal study approach used to monitor the whole formation and change process of sport tourists' DI from a tripartite attitudinal perspective. The results are significant for both scholars and practitioners and lead to a deeper understanding of the psychological connection development between an individual tourist and a leisure destination. However, much has been learned, and much is still to be learned – this study is just the first step in the direction of longitudinal research focused on DI change process. More longitudinal studies monitoring leisure travellers' DI change are expected, especially using the most ideal design that covers multiple waves of data collection with the same group of people crossing their different travel consumption stages.

Future researchers are encouraged to test the applicability of the destination involvement construct in a broader tourism destination context such as general

leisure travels. In addition, future use of the cognitive DI instrument in a sport tourism context may involve shorter versions based on the relatively general dimensions of CDI obtained by this study which have been cross-validated. In particular, future studies may wish to exclude some attitudinal indicators and highlight the psychological connection measurements between the leisure travellers and their visited destinations. This is because the positive relationship between a static destination attitude measured at any decision-making stage and the respective psychological connection levels, as well as the positive correlation between destination attitude change and psychological connection movement have been demonstrated throughout all analyses of the current study.

Furthermore, future researchers are advised to investigate additional influential factors of DI change, especially on the continual change of post-visit DI over time. As shown in the conceptual framework, some of the proposed factors were not examined in this study, such as information sources, personality, and demographic characteristics. They deserve further investigations from the sport tourist perspective. Moreover, the potential influences on a post-visit DI change may come from the new information that sport tourists search or obtain after the event participation (e.g., the newsletter sent by the sport event organisation). In addition, future studies should aim to establish a clear causal relationship between the destination attitude/DI and the formation and development of psychological connections that sport tourists hold with the destination at different decision-making stages. As suggested by the preliminary results of this study, there may be a bi-directional relationship between the DI and the psychological connection. This may lead to further clarify the moderating effect from psychological connection on

destination attitude change that has been tested in this study and to advance conceptual refinement and extension.

With respect to the population of this study, the percentage of first-time visitors was relatively low. Tourism scholars have contended that first-time travellers may demonstrate more changes in their DI either after visitation or over time (e.g., Kaplanidou & Gibson, 2011). In this regard, future studies may incorporate more sport tourists travelling to a specific destination for the first time in order to attend a sport event, and keep monitoring their attitude formation and change towards the host destination over different consumption stages. This will benefit destination marketers in better understanding the first-time visitors whose DIs are more malleable than repeat visitors, thereby more effective strategies and additional efforts can be implemented in the long run.

In addition, testing different time intervals is necessary to identify the temporal effect on DI change. The current study adopted 10-month as the study interval, which was chosen on pragmatic grounds, rather than on the basis of any theoretical rationale. The change of DI may be very quick or may take a long time. Previous tourist DI studies have not taken into account the effect of the interval length on DI change, so longer or shorter study intervals need to be considered further (see Keller et al., 1987; Taris & Kompier, 2003). For example, for the 2009 respondents, their DI decay over time may not keep going indefinitely (see Allen, Freeman, Reizenstein, & Rentz, 1995); so future studies can repeat the DI investigation after another period of time, for example, 3 months or 6 months (Gartner, 1986), to clarify when the post-visit DI of sport tourists will stop declining.

Finally, the influence of other non-travel-related factors, such as the personality, values, cultural background, should be considered in future studies. For

example, culture, the variable that has been regarded as imperative in explaining various tourist preferences and behaviours (Frías et al., 2011), should be incorporated in future studies given the different development levels and scales of sport tourism in different countries. This will help promote cross-cultural studies in the field of sport tourism. To conclude, these suggestions for future research will build on the findings of this research on sport tourists' destination attitude formation and change. In addition, researching the topics suggested would enrich knowledge in the general tourist destination attitude (DI) change and its underlying psychological states.

5.6 Summary

In this chapter, an explicit discussion of the findings related to sport tourists' DI formation and change across their travel stages was presented to establish the contributions that this research makes to the resolution of the research problems, and to the current body of knowledge. In addition, conclusions about the research questions and implications for theory and managerial practice were presented, followed by the limitations of this research. Future research directions were also suggested based on the current findings and limitations.

In conclusion, this longitudinal research provides an entire picture to understanding the sport tourists' DI formation and change process over three continuous decision-making stages / travel stages, as illustrated in the conceptual framework (Figure 2.2). Firstly, in the initial travel decision-making stage before visitation, a destination-choice task emerges for potential sport tourists from the joint effect of push (i.e., intrinsic needs and desires for travelling to participate in a sport event) and pull motives (i.e., the attractiveness offered by alternative sport

events and their host destinations to fulfil the needs and desires). Subsequently, through information searching and mental processing, sport tourists are able to form an initial attitude towards the potential destination (i.e., initial DI). The produced initial DI helps in determining sport tourists' expectations of the destination performance.

In the next stage of destination-visit experience evaluation, the sport tourists might experience various travel related activities and events throughout their stay except for the event participation, which was the main attraction pulling participants originally. New images start to accumulate about the overall destination environment and various offerings through the entire trip. All the experiences they obtained will be reflected and evaluated against their previous expectations (i.e., initial DI), with the final results being congruity or incongruity states. The initial DI held by sport tourists was thus reconditioned at the recollection stage after returning home, based on the congruity or incongruity between perceived benefits and prior expectations. Subsequently, an enhanced DI obtained from a satisfactory visiting experience would contribute directly to the development of the psychological connection levels between the sport tourists and the host destination; which in turn, moderated the DI enhancement and further underpinned the stability of post-visit DI over time.

Finally, in the future revisit decision-making stage which normally occurs some time after sport tourists' event participatory trip, the stability of DI over time was examined because a constantly positive DI plays a key role in future revisit decisions. In the absence of new external stimuli such as new information received about the destination or new experiences obtained from an actual revisitation, the post-visit DI of sport tourists might just naturally decline with the passage of time

due to memory decay or the subsidence of inflated emotional evaluations. The decline magnitude is determined by the strength of psychological connection that the individual sport tourist has developed with the destination. In the other situation that involves an intervention of new external stimuli, the DI change and re-formation over time might just follow the same process of the initial DI formation and change. From this perspective, it can be concluded that DI formation and change is an incessant cyclic process. This cycle starts its operation from the creation of a vague general awareness of an optional destination, which is the early stage of the first impression formation. Subsequently, the development, change, or modification of DI is just a recurring incident in an individual's long-lasting attitude towards a specific travel destination.

REFERENCE LIST

- Aarts, H., Verplanken, B., & van Knippenberg, A. (1998). Predicting behavior from actions in the past: Repeated decision making or a matter of habit? *Journal of Applied Social Psychology, 28*(15), 1355-1374.
- Abelson, R. P., & Levi, A. (1985). Decision making and decision theory. In G. Lindzey & E. Aronson (Eds.), *Handbook of Social Psychology: Theory and Method* (4th ed., Vol. 1, pp. 231–309). New York, NY: Random House.
- Agapito, D., Mendes, J. d. C., & Valle, P. O. d. (2010). Destination image: Perspectives of tourists versus residents. *European Journal of Tourism, Hospitality and Recreation, 1*(1), 99-109.
- Ahmed, Z. U. (1991). Marketing your community: Correcting a negative image. *Cornell Hotel and Restaurant Administration Quarterly, 31*(4), 24-27.
- Ahmed, Z. U. (1996). The need for the identification of the constituents of a destination's tourist image: A promotion segmentation perspective. *Journal of Professional Services Marketing, 14*(1), 37-60.
- Aho, S. K. (2001). Towards a general theory of touristic experiences: Modelling experience process in tourism. *Tourism Review, 56*(3-4), 33-37.
- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In Kuhl, J. and Beckmann, J. (Eds.), *Action Control: From Cognition to Behavior*. Berlin: Springer-Verlag.
- Albarracín, D., & McNatt, P. S. (2005). Maintenance and decay of past behavior influences: Anchoring attitudes on beliefs following inconsistent actions. *Personality and Social Psychology Bulletin, 31*(6), 719-733.
- Alegre, J., & Pou, L. (2006). The length of stay in the demand for tourism. *Tourism Management, 27*(6), 1343-1355.
- Alexandris, K., Kouthouris, C., Funk, D., & Chatzigianni, E. (2008). Examining the relationships between leisure constraints, involvement and attitudinal loyalty among Greek recreational skiers. *European Sport Management Quarterly, 8*(3), 247-264.

- Alexandris, K., Kouthouris, C., & Meligdis, A. (2006). Increasing customers' loyalty in a skiing resort. *International Journal of Contemporary Hospitality Management*, 18(5), 414-425.
- Allen, T. D., Freeman, D. M., Reizenstein, R. C., & Rentz, J. O. (1995). Just another transition? Examining survivors' attitudes over time. *Academy of Management Journal*, 38, 78-82.
- Anastasopoulos, P. G. (1992). Tourism and attitude change: Greek tourists visiting Turkey. *Annals of Tourism Research*, 19(4), 629-642.
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411-423.
- Anderson, N. H. (1971). Integration theory and attitude change. *Psychological Review*, 78(3), 171-206.
- Anderson, N. H., & Farkas, A. J., (1973). New light on order effects in attitude change. *Journal of Personality and Social Psychology*, 28(1), 88-93.
- Andersson, T. D. (2007). The tourist in the experience economy. *Scandinavian Journal of Hospitality and Tourism*, 7(1), 46-58.
- Andreu, L., Bigné, J. E., & Cooper, C. (2001). Projected and perceived image of Spain as a tourist destination for British travellers. *Journal of Travel & Tourism Marketing*, 9(4), 47-67.
- Antil, J. (1984). Conceptualization and operationalization of involvement. *Advances in Consumer Research*, 11(1), 203-209.
- Anwar, S. A., & Sohail, M. S. (2004). Festival tourism in the United Arab Emirates: First-time versus repeat visitor perceptions. *Journal of Vacation Marketing*, 10(2), 161-170.
- Arbuckle, J. (2009). *Amos 18 User's Guide*. Chicago, IL: SPSS Inc.
- Argyriou, E., & Melewar, T. C. (2011). Consumer attitudes revisited: A review of attitude theory in marketing research. *International Journal of Management Reviews*, 13(4), 431-451.

- Arnould, E., Price, L., & Zinkhan, G. (2004). *Consumers* (2nd ed.). Boston, MA: McGraw-Hill/Irwin.
- Assaker, G., Vinzi, V. E., & O'Connor, P. (2011). Examining the effect of novelty seeking, satisfaction, and destination image on tourists' return pattern: A two factor, non-linear latent growth model. *Tourism Management*, 32(4), 890-901.
- Aziz, A., & Zainol, N. A. (2011). Destination image: an overview and summary of selected research (1974-2008). *International Journal of Leisure and Tourism Marketing*, 2(1), 39-55.
- Babbie, E. R. (2010). *The Practice of Social Research* (12th ed.). Belmont, CA: Thomson Wadsworth.
- Babin, L. A., & Burns, A. C. (1997). Effects of print ad pictures and copy containing instructions to imagine on mental imagery that mediates attitudes. *Journal of Advertising*, 26(3), 33-44.
- Bagozzi, R. P., Gopinath, M., & Nyer, P. U. (1999). The role of emotions in marketing. *Journal of the Academy of Marketing Science*, 27(2), 184-206.
- Bagozzi, R. P., Tybout, A. M., Craig, C. S., & Sternthal, B. (1979). The construct validity of the tripartite classification of attitudes. *Journal of Marketing Research*, 16(1), 88-95.
- Bagozzi, R. P., & Yi, Y. (1988). On the evaluation of structural equation models. *Journal of the Academy of Marketing Science*, 16(1), 74-94.
- Baloglu, S. (1997). The relationship between destination images and sociodemographic and trip characteristics of international travellers. *Journal of Vacation Marketing*, 3(3), 221-233.
- Baloglu, S. (1998). An empirical investigation of attitude theory for tourist destinations: A comparison of visitors and nonvisitors. *Journal of Hospitality & Tourism Research*, 22(3), 211-224.
- Baloglu, S. (2000). A path analytic model of visitation intention involving information sources, socio-psychological motivations, and destination image. *Journal of Travel & Tourism Marketing*, 8(3), 81-90.

- Baloglu, S. (2001a). Image variations of Turkey by familiarity index: informational and experiential dimensions. *Tourism Management*, 22(2), 127-133.
- Baloglu, S. (2001b). An investigation of a loyalty typology and the multidestination loyalty of international travelers. *Tourism Analysis*, 6(1), 41-52.
- Baloglu, S., & Brinberg, D. (1997). Affective images of tourism destinations. *Journal of Travel Research*, 35(4), 11-15.
- Baloglu, S., & Erickson, R. (1998). Destination loyalty and switching behavior of travelers: A Markov analysis. *Tourism Analysis*, 2(2), 119-127.
- Baloglu, S., & McCleary, K. W. (1999). A model of destination image formation. *Annals of Tourism Research*, 26(4), 868-897.
- Baloglu, S., & Uysal, M. (1996). Market segments of push and pull motivations: A canonical correlation approach. *International Journal of Contemporary Hospitality Management*, 8(3), 32-38.
- Bamberg, S., Ajzen, I., & Schmidt, P. (2003). Choice of travel mode in the theory of planned behavior: The roles of past behavior, habit, and reasoned action. *Basic and Applied Social Psychology*, 25(3), 175-187.
- Bargeman, B., & van der Poel, H. (2006). The role of routines in the vacation decision-making process of Dutch vacationers. *Tourism Management*, 27(4), 707-720.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173-1182.
- Bass, F. M., & Talarzyk, W. W. (1972). An attitude model for the study of brand preference. *Journal of Marketing Research*, 9(1), 93-96.
- Batra, R., & Ahtola, O. T. (1991). Measuring the hedonic and utilitarian sources of consumer attitudes. *Marketing Letters*, 2(2), 159-170.
- Bauer, H. H., Sauer, N. E., & Becker, C. (2006). Investigating the relationship between product involvement and consumer decision-making styles. *Journal of Consumer Behaviour*, 5(4), 342-354.

- Beard, J. G., & Ragheb, M. G. (1983). Measuring leisure motivation. *Journal of Leisure Research, 15*(3), 219-228.
- Beaton, A. A., & Funk, D. C. (2008). An evaluation of theoretical frameworks for studying physically active leisure. *Leisure Sciences, 30*(1), 53-70.
- Beaton, A. A., Funk, D. C., & Alexandris, K. (2009). Operationalising a theory of participation in physically active leisure. *Journal of Leisure Research, 41*(2), 177-203.
- Beaton, A. A., Funk, D. C., Ridinger, L., & Jordan, J. (2011). Sport involvement: A conceptual and empirical analysis. *Sport Management Review, 14*(2), 126-140.
- Beerli, A., & Martín, J. D. (2004). Factors influencing destination image. *Annals of Tourism Research, 31*(3), 657-681.
- Bendall-Lyon, D., & Powers, T. L. (2002). The impact of gender differences on change in satisfaction over time. *The Journal of Consumer Marketing, 19*(1), 12-21.
- Bentler, P. (2006). *EQS 6.1 Structural Equations Program Manual*. Encino, CA: Multivariate Software.
- Bentler, P. M., & Chou, C.-P. (1987). Practical issues in structural modeling. *Sociological Methods & Research, 16*(1), 78-117.
- Bienstock, C. C., & Stafford, M. R. (2006). Measuring involvement with the service: A further investigation of scale validity and dimensionality. *The Journal of Marketing Theory and Practice, 14*(3), 209-221.
- Bigné Alcañiz, E., Sánchez García, I., & Sanz Blas, S. (2009). The functional-psychological continuum in the cognitive image of a destination: A confirmatory analysis. *Tourism Management, 30*(5), 715-723.
- Bigné, J. E., Sánchez, M. I., & Sánchez, J. (2001). Tourism image, evaluation variables and after purchase behaviour: Inter-relationship. *Tourism Management, 22*(6), 607-616.
- Birkett, N. J. (1986). Selecting the number of response categories for a Likert-type scale. In *Proceedings of the American Statistical Association* (Section on

- survey Research Methods). Washington, DC: American Statistical Association.
- Black, T. R. (1999). *Doing quantitative research in the social sciences: An integrated approach to research design, measurement and statistics*. London: Sage Publications.
- Blackwell, R. D., Miniard, P. W., & Engel, J. F. (2001). *Consumer Behavior* (9th ed.). Fort Worth, TX: Harcourt College Publishers.
- Bogari, N. B., Crowther, G., & Marr, N. (2003). Motivation for domestic tourism: A case study of the Kingdom of Saudi Arabia. *Tourism Analysis*, 8(2), 137-141.
- Bonn, M. A., Joseph, S. M., & Dai, M. (2005). International versus domestic visitors: An examination of destination image perceptions. *Journal of Travel Research*, 43(3), 294-301.
- Boo, S., & Busser, J. A. (2005). The hierarchical influence of visitor characteristics on tourism destination images. *Journal of Travel & Tourism Marketing*, 19(4), 55-67.
- Boo, S., Kim, M., & Jones, D. L. (2009). Comparative analysis of travel-related characteristics between special event attendees and non-attendees in a metropolitan city. *Journal of Convention & Event Tourism*, 10(1), 50-71.
- Bosnjak, M., Sirgy, M. J., Hellriegel, S., & Maurer, O. (2011). Postvisit Destination Loyalty Judgments. *Journal of Travel Research*, 50(5), 496-508.
- Boyle, G. J. (1991). Does item homogeneity indicate internal consistency or item redundancy in psychometric scales? *Personality and Individual Differences*, 12(3), 291-294.
- Brady, M. K., Cronin, J. J., & Brand, R. R. (2002). Performance-only measurement of service quality: A replication and extension. *Journal of Business Research*, 55(1), 17-31.
- Breckler, S. J. (1984). Empirical validation of affect, behaviour, and cognition as distinct components of attitude. *Journal of Personality and Social Psychology*, 47(6), 1191-1205.

- Brey, E. T., & Lehto, X. Y. (2007). The relationship between daily and vacation activities. *Annals of Tourism Research*, 34(1), 160-180.
- Brokaw, S. C. (1990). *An investigation of jewelry store image structure* (Doctoral dissertation). Retrieved from ProQuest Dissertations and Theses database. (UMI No. 9112089)
- Bronner, F., & de Hoog, R. (2008). Agreement and disagreement in family vacation decision-making. *Tourism Management*, 29(5), 967-979.
- Brown, G. P., Havitz, M. E., & Getz, D. (2007). Relationship between wine involvement and wine-related travel. *Journal of Travel & Tourism Marketing*, 21(1), 31-46.
- Brown, R. L. (1989). Using covariance modeling for estimating reliability on scales with ordered polytomous variables. *Educational and Psychological Measurement*, 49(2), 385-398.
- Browne, M. W., & Cudeck, R. (1992). Alternative ways of assessing model fit. *Sociological Methods & Research*, 21(2), 230-258.
- Buhalis, D. (2000). Marketing the competitive destination of the future. *Tourism Management*, 21(1), 97-116.
- Burnham, K. P., & Anderson, D. R. (2002). *Model selection and multimodel inference: a practical information-theoretic approach* (2nd ed.). New York, NY: Springer.
- Burns, A. C., Biswas, A., & Babin, L. A. (1993). The operation of visual imagery as a mediator of advertising effects. *Journal of Advertising*, 22(2), 71-85.
- Byrne, B. M. (2001). *Structural equation modeling with AMOS: Basic concepts, applications, and programming*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Byrne, B. M. (2001). Structural equation modeling with AMOS, EQS, and LISREL: Comparative approaches to testing for the factorial validity of a measuring instrument. *International Journal of Testing*, 1(1), 55-86.
- Byrne, B. M. (2010). *Structural equation modeling with AMOS: Basic concepts, applications, and programming* (2nd ed.). New York, NY: Routledge.

- Cai, L. A., Feng, R., & Breiter, D. (2004). Tourist purchase decision involvement and information preferences. *Journal of Vacation Marketing, 10*(2), 138-148.
- Cai, L. A., Wu, B. T., & Bai, B. (2003). Destination image and loyalty. *Tourism Review International, 7*(3-4), 153-162.
- Campo-Martínez, S., Garau-Vadell, J. B., & Martínez-Ruiz, M. P. (2010). Factors influencing repeat visits to a destination: The influence of group composition. *Tourism Management, 31*(6), 862-870.
- Carlson, E. R. (1956). Attitude change through modification of attitude structure. *The Journal of Abnormal and Social Psychology, 52*(2), 256-261.
- Carmichael, B., Smith, W., & Canally, C. (2006). Playing, watching, and participating: Identifying the role of sport in Canadian domestic travel. *Tourism Review International, 10*(4), 217-226.
- Carroll, B., & Alexandris, K. (1997). Perception of constraints and strength of motivation: Their relationship to recreational sport participation in Greece. *Journal of Leisure Research, 29*(3), 279-299.
- Carr, N. (2002). The tourism-leisure behavioural continuum *Annals of Tourism Research, 29*(4), 972-986.
- Chaiken, S., & Stangor, C. (1987). Attitudes and attitude change. *Annual Review of Psychology, 38*(1), 575-630.
- Chajewski, M. (2009, April). An example of an APA-style write-up for the Repeated Measures Analysis of Variance and Multivariate Analysis of Variance lab example [Archived course materials]. Retrieved August 3, 2010, from <http://www.chajewski.com>
- Chalip, L., & Costa, C. A. (2005). Sport event tourism and the destination brand: Towards a general theory. *Sport in Society, 8*(2), 218-237.
- Chalip, L., Green, B. C., & Hill, B. (2003). Effects of sport event media on destination image and intention to visit. *Journal of Sport Management, 17*(3), 214-234.
- Chalip, L., & McGuirly, J. (2004). Bundling sport events with the host destination. *Journal of Sport & Tourism, 9*(3), 267-282.

- Chang, S., & Gibson, H. J. (2011). Physically active leisure and tourism connection: Leisure involvement and choice of tourism activities among paddlers. *Leisure Sciences: An Interdisciplinary Journal*, 33(2), 162-181.
- Chen, C.-F., & Tsai, D. (2007). How destination image and evaluative factors affect behavioural intentions? *Tourism Management*, 28(4), 1115-1122.
- Chen, F. F., Sousa, K. H., & West, S. G. (2005). Teacher's corner: Testing measurement invariance of second-order factor models. *Structural Equation Modeling: A Multidisciplinary Journal*, 12(3), 471-492.
- Chen, F. F., West, S. G., & Sousa, K. H. (2006). A comparison of bifactor and second-order models of quality of life. *Multivariate Behavioral Research*, 41(2), 189-225.
- Chen, J. S. (2001). A case study of Korean outbound travellers' destination images by using correspondence analysis. *Tourism Management*, 22(4), 345-350.
- Chen, N., & Funk, D. (2010). Exploring destination image, experience and revisit intention: A comparison of sport and non-sport tourist perceptions. *Journal of Sport & Tourism*, 15(3), 239-259.
- Chen, P.-J., & Kerstetter, D. L. (1999). International students' image of rural Pennsylvania as a travel destination. *Journal of Travel Research*, 37(3), 256-266.
- Cheung, D. (2000). Evidence of a single second-order factor in student ratings of teaching effectiveness. *Structural Equation Modeling: A Multidisciplinary Journal*, 7(3), 442-460.
- Chi, C. G.-Q., & Qu, H. (2008). Examining the structural relationships of destination image, tourist satisfaction and destination loyalty: An integrated approach. *Tourism Management*, 29(4), 624-636.
- Choi, S., Lehto, X. Y., & Morrison, A. M. (2007). Destination image representation on the web: Content analysis of Macau travel related websites. *Tourism Management*, 28(1), 118-129.
- Chon, K. S. (1989). Understanding recreational traveler's motivation, attitude and satisfaction. *Tourism Review*, 44(1), 3-7.

- Chon, K. S. (1990). The role of destination image in tourism: A review and discussion. *Tourism Review*, 45(2), 2-9.
- Chon, K. S. (1991). Tourism destination image modification process: Marketing implications. *Tourism Management*, 12(1), 68-72.
- Chon, K. S., Weaver, P. A., and Kim, C. Y. (1991). Marketing your community: Image analysis in Norfolk. *Cornell Hotel and Restaurant Administration Quarterly*, 31(4), 31-37.
- Chu, K. H.-L. (2008). A factorial validation of work value structure: Second-order confirmatory factor analysis and its implications. *Tourism Management*, 29(2), 320-330.
- Churchill, G. A., Jr. (1979). A paradigm for developing better measures of marketing constructs. *Journal of Marketing Research*, 16(1), 64-73.
- Cialdini, R. B., Petty, R. E., & Cacioppo, J. T. (1981). Attitude and attitude change. *Annual Review of Psychology*, 32(1), 357-404.
- Cicchetti, D. V., Shoinralter, D., & Tyrer, P. J. (1985). The effect of number of rating scale categories on levels of interrater reliability: A Monte Carlo investigation. *Applied Psychological Measurement*, 9(1), 31-36.
- Clark-Carter, D. (2010). *Quantitative psychological research: The complete student's companion* (3rd ed.). New York, NY: Psychology Press.
- Cole, S. T., & Scott, D. (2004). Examining the mediating role of experience quality in a model of tourism experiences. *Journal of Travel & Tourism Marketing*, 16(1), 79-90.
- Cook, N. R., & Ware, J. H. (1983). Design and analysis methods for longitudinal research. *Annual Review of Public Health*, 4(1), 1-23.
- Correia, A., & Pimpão, A. (2008). Decision-making processes of Portuguese tourist travelling to South America and Africa. *International Journal of Culture, Tourism and Hospitality Research*, 2(4), 330-373.
- Costello, A. B., & Osborne, J. W. (2005). Best practices in exploratory factor analysis: four recommendations for getting the most from your analysis. *Practical Assessment Research & Evaluation*, 10(7), 1-9.

- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Crompton, J. L. (1979a). An assessment of the image of Mexico as a vacation destination and the influence of geographical location upon that image. *Journal of Travel Research, 17*(4), 18-23.
- Crompton, J., L. (1979b). Motivations for pleasure vacation. *Annals of Tourism Research, 6*(4), 408-424.
- Crompton, J. (1992). Structure of vacation destination choice sets. *Annals of Tourism Research, 19*(3), 420-434.
- Crompton, J., L., & McKay, S., L. (1997). Motives of visitors attending festival events. *Annals of Tourism Research, 24*(2), 425-439.
- Currie, R. R. (1997). A pleasure-tourism behaviors framework. *Annals of Tourism Research, 24*(4), 884-897.
- Dann, G. M. S. (1977). Anomie, ego-enhancement and tourism. *Annals of Tourism Research, 4*(4), 184-194.
- Dann, G. M. S. (1981). Tourist motivation an appraisal. *Annals of Tourism Research, 8*(2), 187-219.
- Dann, G. M. S. (1996). Tourists' images of a destination - An alternative analysis. *Journal of Travel & Tourism Marketing, 5*(1-2), 41-55.
- Davies, J., & Williment, J. (2008). Sport tourism - Grey sport tourists, all black and red experiences. *Journal of Sport & Tourism, 13*(3), 221-242.
- Dawson, J., Havitz, M., & Scott, D. (2011). Behavioral adaptation of alpine skiers to climate change: Examining activity involvement and place loyalty. *Journal of Travel & Tourism Marketing, 28*(4), 388-404.
- Decrop, A. (1999). Triangulation in qualitative tourism research. *Tourism Management, 20*(1), 157-161.
- Decrop, A., & Snelders, D. (2004). Planning the summer vacation: An adaptable process. *Annals of Tourism Research, 31*(4), 1008-1030.
- Deery, M., Jago, L., & Fredline, L. (2004). Sport tourism or event tourism: Are they one and the same? *Journal of Sport & Tourism, 9*(3), 235-245.

- Deutskens, E., de Ruyter, K., Wetzels, M., & Oosterveld, P. (2004). Response rate and response quality of internet-based surveys: An experimental study. *Marketing Letters*, *15*(1), 21-36.
- DeVellis, R. F. (2003). *Scale development: Theory and applications* (2nd ed.). Thousand Oaks, CA; London: Sage Publications.
- Dias, J., & Paiva, A. (2005). Feeling and reasoning: A computational model for emotional characters. In C. Bento, A. Cardoso & G. Dias (Eds.), *Progress in Artificial Intelligence* (Vol. 3808, pp. 127-140). Berlin / Heidelberg: Springer.
- Dillman, D. A. (2007). *Mail and internet surveys: The tailored design method* (2nd ed.). Hoboken, NJ: John Wiley & Sons.
- Dillon, W. R., Kumar, A., & Mulani, N. (1987). Offending estimates in covariance structure analysis: Comments on the causes of and solutions to Heywood cases. *Psychological Bulletin*, *101*(1), 126-135.
- Dimanche, F., Havitz, M. E., & Howard, D. R. (1993). Consumer involvement profiles as a tourism segmentation tool. *Journal of Travel & Tourism Marketing*, *1*(4), 33-52.
- Douglas, A., & Mills, J. E. (2004). Staying afloat in the tropics: Applying a structural equation model approach to evaluating national tourism organization websites in the Caribbean. *Journal of Travel & Tourism Marketing*, *17*(2/3), 269-293.
- Downey, R. G., & King, C. V. (1998). Missing data in Likert Ratings: A comparison of replacement methods. *The Journal of General Psychology*, *125*(2), 175-191.
- Dube, L., & Menon, K., (2000). Multiple roles of consumption emotions in post-purchase satisfaction with extended service transactions. *Journal of Service Management*, *11*(3), 287-304.
- Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes*. Fort Worth, TX: Harcourt Brace Jovanovich College Publishers.
- Echtner, C. M., & Jamal, T. B. (1997). The disciplinary dilemma of tourism studies. *Annals of Tourism Research*, *24*(4), 868-883.

- Echtner, C. M., & Ritchie, J. R. B. (1991). The meaning and measurement of destination image. *The Journal of Tourism Studies*, 2(2), 2-12.
- Edwards, K. (1990). The interplay of affect and cognition in attitude formation and change. *Journal of Personality and Social Psychology*, 59(2), 202-216.
- Ellis, M. V. (1999). Repeated measures designs. *The Counseling Psychologist*, 27(4), 552-578.
- Enders, C. K., & Bandalos, D. L. (2001). The relative performance of full information maximum likelihood estimation for missing data in Structural Equation Models. *Structural Equation Modeling: A Multidisciplinary Journal*, 8(3), 430-457.
- Erevelles, S. (1998). The role of affect in marketing. *Journal of Business Research*, 42(3), 199-215.
- Fairley, S. (2003). In search of relived social experience: Group-based nostalgia sport tourism. *Journal of Sport Management*, 17(3), 284-304.
- Fakeye, P. C., & Crompton, J. L. (1991). Image differences between prospective, first-time, and repeat visitors to the lower Rio Grande Valley. *Journal of Travel Research*, 30(2), 10-16.
- Fazio, R. H. (1990). Multiple processes by which attitudes guide behavior: The MODE model as an integrative framework. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 23, pp. 75-109). San Diego, CA: Academic Press.
- Feather, N. (1964). A structural balance model of communication effect. *Psychological Review*, 71(4), 291-313.
- Ferguson, E., & Cox, T. (1993). Exploratory factor analysis: A users' guide. *International Journal of Selection and Assessment*, 1(2), 84-94.
- Field, A. P. (2009). *Discovering statistics using SPSS* (3rd ed.). Los Angeles; London: Sage Publications.
- Filo, K., Chen, N., King, C., & Funk, D. C. (2011). Sport tourists' involvement with a destination: A stage-based examination. *Journal of Hospitality & Tourism Research*. doi: 10.1177/1096348011425496

- Filo, K., Funk, D. C., & Alexandris, K. (2008). Exploring the role of brand trust in the relationship between brand associations and brand loyalty in sport and fitness. *International Journal of Sport Management and Marketing*, 3(1), 39-57.
- Filo, K., Funk, D. C., & Hornby, G. (2009). The role of web site content on motive and attitude change for sport events. *Journal of Sport Management*, 23(1), 21-40.
- Finkel, S. E. (2008) Linear panel analysis. In Menard, S. (Ed.), *Handbook of longitudinal research: design, measurement, and analysis* (pp. 475-504). Burlington, MA: Elsevier.
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention and behaviour: An introduction to theory and research*. Reading, MA: Addison-Wesley.
- Fishbein, M., & Hunter, R. (1964). Summation versus balance in attitude organization and change. *The Journal of Abnormal and Social Psychology*, 69(5), 505-510.
- Flay, B. (1978). Catastrophe theory in social psychology: Some applications to attitudes and social behaviour. *Behavioural Science*, 23(4), 335-350.
- Fodness, D. (1994). Measuring tourist motivation. *Annals of Tourism Research*, 21(3), 555-581.
- Fodness, D., & Murray, B. (1999). A model of tourist information search behavior. *Journal of Travel Research*, 37(3), 220-230.
- Forgas, J. P. (1995). Mood and judgment: The affect infusion model (AIM). *Psychological Bulletin*, 117(1), 39-66.
- Forgas, J. P. (2008). The role of affect in attitudes and attitude change. In W. D. Crano, W. D. & Prislun, R. (Eds.), *Attitudes and attitude change* (pp. 131-158). New York; London: Psychology Press.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.

- Freedman, D. A. (1987). As others see us: A case study in path analysis. *Journal of Educational and Behavioral Statistics*, 12(2), 101-128.
- Frías, D. M., Rodríguez, M. A., & Castañeda, J. A. (2008). Internet vs. travel agencies on pre-visit destination image formation: An information processing view. *Tourism Management*, 29(1), 163-179.
- Frías, D. M., Rodríguez, M. A., Castañeda, J. A., Sabiote, C. M., & Buhalis, D. (2011). The formation of a tourist destination's image via information sources: The moderating effect of culture. *International Journal of Tourism Research*, *In Press, Corrected Proof*.
- Fuchs, G., & Reichel, A. (2011). An exploratory inquiry into destination risk perceptions and risk reduction strategies of first time vs. repeat visitors to a highly volatile destination. *Tourism Management*, 32(2), 266-276.
- Funk, D. C. (2008). *Consumer behaviour in sport and events: marketing action*. Amsterdam; Boston, MA: Butterworth-Heinemann/Elsevier.
- Funk, D. C., Alexandris, K., & Ping, Y. (2009). To go or stay home and watch: Exploring the balance between motives and perceived constraints for major events: a case study of the 2008 Beijing Olympic Games. *International Journal of Tourism Research*, 11(1), 41-53.
- Funk, D. C., Beaton, A., & Pritchard, M. (2011). The stage-based development of physically active leisure: A recreational golf context. *Journal of Leisure Research*, 43(2), 268-289.
- Funk, D. C., & Bruun, T. J. (2007). The role of socio-psychological and culture-education motives in marketing international sport tourism: A cross-cultural perspective. *Tourism Management*, 28(3), 806-819.
- Funk, D. C., & James, J. (2001). The Psychological Continuum Model: A conceptual framework for understanding an individual's psychological connection to sport. *Sport Management Review*, 4(2), 119-150.
- Funk, D. C., & James, J. (2006). Consumer loyalty: The meaning of attachment in the development of sport team allegiance. *Journal of Sport Management*, 20(2), 189-217.

- Funk, D. C., Toohey, K., & Bruun, T. (2007). International sport event participation: Prior sport involvement; destination image; and travel motives. *European Sport Management Quarterly*, 7(3), 227-248.
- Fyall, A., Callod, C., & Edwards, B. (2003). Relationship marketing: The challenge for destinations. *Annals of Tourism Research*, 30(3), 644-659.
- Galatzer-Levy, R. M. (1978). Qualitative change from quantitative change: Mathematical catastrophe theory in relation to psychoanalysis. *Journal of the American Psychoanalytic Association*, 26(4), 921-935.
- Gallarza, M. G., Saura, I. G., & García, H. C. (2002). Destination image: Towards a conceptual framework. *Annals of Tourism Research*, 29(1), 56-78.
- Gardner, D. G., Cummings, L. L., Dunham, R. B., & Pierce, J. L. (1998). Single-item versus multiple-item measurement scales: An empirical comparison. *Educational and Psychological Measurement*, 58(6), 898-915.
- Garson, G. D. (2006). Quantitative research in public administration: Structural Equation Modeling. Retrieved on March 25, 2011 from: <http://www2.chass.ncsu.edu/garson/pa765/structur.htm>
- Gartner, W. C. (1986). Temporal influences on image change. *Annals of Tourism Research*, 13(4), 635-644.
- Gartner, W. C. (1994). Image formation process. *Journal of Travel & Tourism Marketing*, 2(2-3), 191-216.
- Gartner, W. C., & Hunt, J. D. (1987). An analysis of state image change over a twelve-year period (1971-1983). *Journal of Travel Research*, 26(2), 15-19.
- Gartner, W. C., & Shen, J. (1992). The impact of Tiananmen Square on China's tourism image. *Journal of Travel Research*, 30(4), 47-52.
- George, B. P., & George, B. P. (2004). Past visits and the intention to revisit a destination: Place attachment as the mediator and novelty seeking as the moderator. *Journal of Tourism Studies*, 15(2), 51-66.
- George, P. S. (1981). Passage to the new Eden: Tourism in Miami from Flagler through Everest G. Sewell. *The Florida Historical Quarterly*, 59(4), 440-463.

- Georgel, J. M., & Jones, G. R. (1997). Experiencing work: Values, attitudes, and moods. *Human Relations, 50*(4), 393-416.
- Gerbing, D. W., & Anderson, J. C. (1988). An updated paradigm for scale development incorporating unidimensionality and its assessment. *Journal of Marketing Research, 25*(2), 186-192.
- Gerring, J. (2007). *Case study research: principles and practices*. New York, NY: Cambridge University Press.
- Getz, D. (1998). Trends, strategies, and issues in sport-event tourism. *Sport Marketing Quarterly, 7*(2), 8-13.
- Getz, D. (2002). Sport tourism: Planning, development, and marketing. In Hudson, S. (Ed.), *Sport and Adventure Tourism* (pp. 49-88). New York: Haworth Press.
- Getz, D. (2003). Sport event tourism: planning, development and marketing. In S. Hudson (Ed.), *Sport and adventure tourism* (pp. 49-88). Binghamton, NY: The Haworth Press.
- Gibson, H., J. (1998). Sport tourism: A critical analysis of research. *Sport Management Review, 1*(1), 45-76.
- Gibson, H. J., Willming, C., & Holdnak, A. (2003). Small-scale event sport tourism: Fans as tourists. *Tourism Management, 24*(2), 181-190.
- Gillett, P., & Kelly, S. (2006). "Non-local" Masters Games participants: An investigation of competitive active sport tourist motives. *Journal of Sport & Tourism, 11*(3), 239-257.
- Gitelson, R. J., & Crompton, J. L. (1984). Insights into the repeat vacation phenomenon. *Annals of Tourism Research, 11*(2), 199-217.
- Gokovali, U., Bahar, O., & Kozak, M. (2007). Determinants of length of stay: A practical use of survival analysis. *Tourism Management, 28*(3), 736-746.
- Golob, T. F. (2003). Structural equation modeling for travel behavior research. *Transportation Research Part B: Methodological, 37*(1), 1-25.
- Goossens, C. (2000). Tourism information and pleasure motivation. *Annals of Tourism Research, 27*(2), 301-321.

- Gorsuch, R. L. (1983). *Factor Analysis* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Green, P. E., & Rao, V. R. (1970). Rating scales and information recovery - How many scales and response categories to use? *The Journal of Marketing*, 34(3), 33-39.
- Greene, R. L., (1986). Sources of recency effects in free recall. *Psychological Bulletin*, 99(2), 221-228.
- Greenwald, A. (1968). Cognitive learning, cognitive response to persuasion, and attitude change. *Psychological foundations of attitudes* (pp. 147-170).
- Gross, M. J., and Brown, G. (2006). Tourism experience in a lifestyle destination setting: The roles of involvement and place attachment. *Journal of Business Research*, 59(6), 696-700.
- Gross, M. J., & Brown, G. (2008). An empirical structural model of tourists and places: Progressing involvement and place attachment into tourism. *Tourism Management*, 29(6), 1141-1151.
- Gunn, C. A. (1972). *Vacationscape: Designing tourist regions*. Austin: University of Texas Press.
- Gursoy, D. (2001). *Development of a travelers' information search behavior model* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses database. (UMI No. 3031435)
- Gursoy, D., & McCleary, K. W. (2004a). An integrative model of tourists' information search behaviour. *Annals of Tourism Research*, 31(2), 353-373.
- Gursoy, D., & McCleary, K. W. (2004b). Travelers' prior knowledge and its impact on their information search behavior. *Journal of Hospitality & Tourism Research*, 28(1), 66-94.
- Gustafsson, J.-E., & Balke, G. (1993). General and specific abilities as predictors of school achievement. *Multivariate Behavioral Research*, 28(4), 407-434.
- Gyimóthy, S., & Mykletun, R. J. (2004). Play in adventure tourism: The case of Arctic trekking. *Annals of Tourism Research*, 31(4), 855-878.

- Haahti, A. J. (1986). Finland's competitive position as a destination. *Annals of Tourism Research*, 13(1), 11-35.
- Hagger, M. S., & Chatzisarantis, N. L. D. (2005). First- and higher-order models of attitudes, normative influence, and perceived behavioural control in the theory of planned behaviour. *British Journal of Social Psychology*, 44(4), 513-535.
- Haines, G. H., Jr. (1974). Process models of consumer decision making. In G. D. Hughes & M. L. Ray (Eds.), *Buyer/consumer information processing* (pp. 89-107). Chapel Hill: University of North Carolina Press.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1995). *Multivariate data analysis: With readings* (4th ed.). Englewood Cliffs, NJ: Pearson Prentice Hall.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006b). *Multivariate Data Analysis* (6th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Hair, J. F., Bush, R. P., & Ortinau, D. J. (2006a). *Marketing Research: Within a changing information environment* (3rd ed.). Boston, MA: McGraw-Hill/Irwin.
- Hair, J. F., Lukas, B. A., Miller, K. E., Bush, R. P., & Ortinau, D. J. (2008). *Marketing Research* (2nd ed.). North Ryde, NSW: McGraw-Hill Australia.
- Hallmann, K., & Breuer, C. (2010). Image fit between sport events and their hosting destinations from an active sport tourist perspective and its impact on future behaviour. *Journal of Sport & Tourism*, 15(3), 215-237.
- Halloran, J. D. (1970). *Attitude formation and change* (2nd ed.). Leicester: Leicester University Press.
- Hammit, W. E., Backlund, E. A., & Bixler, R. D. (2006). Place bonding for recreation places: Conceptual and empirical development. *Leisure Studies*, 25(1), 17-41.
- Han, H., & Ryu, K. (2011). The theory of repurchase decision-making (TRD): Identifying the critical factors in the post-purchase decision-making process.

International Journal of Hospitality Management, In Press, Corrected Proof.
doi:10.1016/j.ijhm.2011.09.015

- Hancock, G. R., & Mueller, R. O. (2001). Rethinking construct reliability within latent variable systems. In R. Cudeck, S. Du Toit & D. Sorbom (Eds.), *Structural equation modeling: Present and future* (pp. 195-216). Lincolnwood, IL: Scientific Software International, Inc.
- Hansen, T. (2005). Perspectives on consumer decision making: An integrated approach. *Journal of Consumer Behaviour, 4*(6), 420-437.
- Hartley, J. (1994). Case studies in organizational research. In C. Cassell, & G. Symon (Eds.), *Qualitative methods in organizational research: A practical guide* (pp. 208-229). London: Sage Publications.
- Hatcher, L. (1994). *A step-by-step approach to using the SAS system for factor analysis and structural equation modeling*. Cary, NC: SAS Institute Inc.
- Haugtvedt, C. P., & Petty, R. E. (1992). Personality and persuasion: Need for cognition moderates the persistence and resistance of attitude changes. *Journal of Personality & Social Psychology 63*(2), 308-319.
- Haugtvedt, C. P., Petty, R. E., & Cacioppo, J. T. (1992). Need for cognition and advertising: Understanding the role of personality variables in consumer behaviour. *Journal of Consumer Psychology 1*(3), 239-260.
- Havitz, M. E., & Dimache, F. (1997). Leisure involvement revisited: Conceptual conundrums and. *Journal of Leisure Research, 29*(3), 245-278.
- Havitz, M. E., & Dimanche, F. (1999). Leisure involvement revisited: Drive properties and paradoxes. *Journal of Leisure Research, 31*(2), 122-149.
- Hawkins, S. A., & Hoch, S. J. (1992). Low-involvement learning: Memory without evaluation. *Journal of Consumer Research, 19*(2), 212-225.
- Henson, R. K., & Roberts, J. K. (2006). Use of exploratory factor analysis in published research. *Educational and Psychological Measurement, 66*(3), 393-416.
- Heung, V. C. S., & Qu, H. (2000). Hong Kong as a travel destination: An analysis of Japanese tourists' satisfaction levels, and the likelihood of them

- recommending Hong Kong to others. *Journal of Travel & Tourism Marketing*, 9(1), 57-80.
- Heung, V. C. S., Qu, H., & Chu, R. (2001). The relationship between vacation factors and socio-demographic and travelling characteristics: the case of Japanese leisure travellers. *Tourism Management*, 22(3), 259-269.
- Hidalgo, M. C., & Hernández, B. (2001). Place attachment: Conceptual and empirical questions. *Journal of Environmental Psychology*, 21(3), 273-281.
- Higham, J., & Hinch, T. (2006). Sport and tourism research: A geographic approach. *Journal of Sport & Tourism*, 11(1), 31-49.
- Holbrook, M. B. (1978). Beyond attitude structure: Toward the informational determinants of attitude. *Journal of Marketing Research*, 15(4), 545-556.
- Holbrook, M. B., & Batra, R. (1987). Assessing the role of emotions as mediators of consumer responses to advertising. *Journal of Consumer Research*, 14(3), 404-420.
- Holloway, J. C. (2002). *The business of tourism*. Harlow, England; New York, NY: Financial Times/Prentice Hall.
- Holmes, D. (1970). Differential change in affective intensity and the forgetting of unpleasant personal experiences. *Journal of Personality and Social Psychology*, 15(3), 234-239.
- Holmes-Smith, P. (2010). Structural Equation Modeling: From the fundamentals to advanced topics. Course proceedings from the TSSI 2010 Programme. School Research, Evaluation, and Measurement Services, Melbourne.
- Holmes-Smith, P., & Rowe, K. (1994). *The development and use of congeneric measurement models in school effectiveness research: Improving the reliability and validity of composite and latent variables for fitting multilevel and structural equation models*. Paper presented at the International Congress for School Effectiveness and Improvement, Melbourne.
- Homburg, C., Koschate, N., & Hoyer, W. D. (2005). Do satisfied customers really pay more? A study of the relationship between customer satisfaction and willingness to Pay. *Journal of Marketing*, 69(2), 84-96.

- Hong, S.-k., Kim, J.-h., Jang, H., & Lee, S. (2006). The roles of categorization, affective image and constraints on destination choice: An application of the NMNL model. *Tourism Management, 27*(5), 750-761.
- Hou, J.-S., Lin, C.-H., & Morais, D. B. (2005). Antecedents of attachment to a cultural tourism destination: The case of Hakka and Non-Hakka Taiwanese visitors to Pei-Pu, Taiwan. *Journal of Travel Research, 44*(2), 221-233.
- Hovland, C. I. (1957). *The order of presentation in persuasion*. New Haven, CT: Yale University Press.
- Hsu, C. H. C., Cai, L. A., & Li, M. (2010). Expectation, motivation, and attitude: A tourist behavioral model. *Journal of Travel Research, 49*(3), 282-296.
- Hsu, C. H. C., Wolfe, K., & Kang, S. K. (2004). Image assessment for a destination with limited comparative advantages. *Tourism Management, 25*(1), 121-126.
- Hsu, T.-K., Tsai, Y.-F., & Wu, H.-H. (2009). The preference analysis for tourist choice of destination: A case study of Taiwan. *Tourism Management, 30*(2), 288-297.
- Hu, L.-t., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal, 6*(1), 1-55.
- Hu, Y., & Ritchie, J. R. B. (1993). Measuring destination attractiveness: A contextual approach. *Journal of Travel Research, 32*(2), 25-34.
- Huang, S., & Hsu, C. H. C. (2009). Effects of travel motivation, past experience, perceived constraint, and attitude on revisit intention. *Journal of Travel Research, 48*(1), 29-44.
- Hui, T. K., Wan, D., & Ho, A. (2007). Tourists' satisfaction, recommendation and revisiting Singapore. *Tourism Management, 28*(4), 965-975.
- Huizinga, J., (1950). *Homo ludens: A study of the play-element in culture*. Boston, MA: Beacon Press.
- Hutchinson, J., Lai, F., & Wang, Y. (2009). Understanding the relationships of quality, value, equity, satisfaction, and behavioral intentions among golf travelers. *Tourism Management, 30*(2), 298-308.

- Hwang, S.-N., Lee, C., & Chen, H.-J. (2005). The relationship among tourists' involvement, place attachment and interpretation satisfaction in Taiwan's national parks. *Tourism Management*, 26(2), 143-156.
- Ibrahim, E., & Gill, J. (2005). A positioning strategy for a tourist destination, based on analysis of customers' perceptions and satisfactions. *Marketing Intelligence & Planning*, 23(2), 172-188.
- Ilieva, J., Baron, S., & Healey, N. M. (2002). Online surveys in marketing research: pros and cons. *International Journal of Market Research*, 44(3), 361-376.
- Insko, C., & Schopler, J. (1967). Triadic consistency: A statement of affective-cognitive-conative consistency. *Psychological Review*, 74(5), 361-376.
- Isen, A. M., Shalcker, T. E., Clark, M., & Karp, L., (1978). Affect, accessibility of material in memory, and behavior: A cognitive loop? *Journal of Personality and Social Psychology*, 36(1), 1-12.
- Iwasaki, Y., & Havitz, M. E. (2004). Examining relationships between leisure involvement, psychological commitment and loyalty to a recreation agency. *Journal of Leisure Research*, 36(1), 45-72.
- Jaccard, J., & Wan, C. K. (1996). *LISREL approaches to interaction effects in multiple regression*. Thousand Oaks, CA; London: Sage Publications.
- Jackson, D. L. (2001). Sample size and number of parameter estimates in Maximum Likelihood Confirmatory Factor Analysis: A Monte Carlo investigation. *Structural Equation Modeling: A Multidisciplinary Journal*, 8(2), 205-223.
- Jang, S., & Feng, R. (2007). Temporal destination revisit intention: The effects of novelty seeking and satisfaction. *Tourism Management*, 28(2), 580-590.
- Jang, S., & Wu, C.-M. E. (2006). Seniors' travel motivation and the influential factors: An examination of Taiwanese seniors. *Tourism Management*, 27(2), 306-316.
- Jenkins, O. H. (1999). Understanding and measuring tourist destination images. *International Journal of Tourism Research*, 1(1), 1-15.

- Jenkins, P., Earle-Richardson, G., Slingerland, D., & May, J. (2002). Time dependent memory decay. *American Journal of Industrial Medicine*, 41(2), 98-101.
- Jenkins, R. L. (1978). Family vacation decision-making. *Journal of Travel Research*, 16(4), 2-7.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7), 14-26.
- Jones, T. O., & Sasser Jr, W. E. (1995). Why satisfied customers defect. *Harvard Business Review*, 73(6), 88-91.
- Joppe, M., Martin, D. W., & Waalen, J. (2001). Toronto's image as a destination: A comparative Importance-Satisfaction Analysis by origin of visitor. *Journal of Travel Research*, 39(3), 252-260.
- Josiam, B. M., Smeaton, G., & Clements, C. J. (1999). Involvement: Travel motivation and destination selection. *Journal of Vacation Marketing*, 5(2), 167-175.
- Jöreskog, K. (1971). Statistical analysis of sets of congeneric tests. *Psychometrika*, 36(2), 109-133.
- Jöreskog, K. G., & Sörbom, D. (1989). *LISREL 7: User's reference guide*. Mooresville, IN: Scientific Software.
- Kaiser, H. F. (1960). The application of electronic computers to factor analysis. *Educational and Psychological Measurement*, 20(1), 141-151.
- Kamins, M. A., & Assael, H. (1987). Two-sided versus one-sided appeals: A cognitive perspective on argumentation, source derogation, and the effect of disconfirming trial on belief change. *Journal of Marketing Research*, 24(1), 29-39.
- Kane, M. J., & Zink, R. (2004). Package adventure tours: markers in serious leisure careers. *Leisure Studies*, 23(4), 329-345.
- Kaplanidou, K. (2009). Relationships among behavioral intentions, cognitive event and destination images among different geographic regions of Olympic Games spectators. *Journal of Sport & Tourism*, 14(4), 249-272.

- Kaplanidou, K., & Gibson, H. (2011). Differences between first time and repeat spectator tourists of a youth soccer event: Intentions and image approaches. *Current Issues in Tourism*, 1-11. Advance online publication. doi:10.1080/13683500.2011.607924
- Kaplanidou, K., & Vogt, C. (2007). The interrelationship between sport event and destination image and sport tourists' behaviours. *Journal of Sport & Tourism*, 12(3/4), 183-206.
- Kauder, E. (1953). Genesis of the marginal utility theory: From Aristotle to the end of the eighteenth century. *The Economic Journal*, 63(251), 638-650.
- Keller, M. B., Lavori, P. W., Friedman, B., Nielsen, E., Endicott, J., McDonald-Scott, P., & Andreasen, N. C. (1987). The longitudinal interval follow-up evaluation: A comprehensive method for assessing outcome in prospective longitudinal studies. *Archives of General Psychiatry*, 44(6), 540-548.
- Kenyon, S. (2009). The impacts of internet use upon activity participation and travel: Results from a longitudinal diary-based panel study. *Transportation Research Part C: Emerging Technologies*, 18 (1), 21-35.
- Kerr, A., & May, D. (2011). An exploratory study looking at the relationship marketing techniques used in the music festival industry. *Journal of Retail & Leisure Property*, 9(5), 451-464.
- Kil, N., Holland, S. M., Stein, T. V., & Ko, Y. J. (2011). Place attachment as a mediator of the relationship between nature-based recreation benefits and future visit intentions. *Journal of Sustainable Tourism*, 1-24. Advance online publication. doi: 10.1080/09669582.2011.610508
- Kim, H., & Richardson, S. L. (2003). Motion picture impacts on destination images. *Annals of Tourism Research*, 30(1), 216-237.
- Kim, N.-S., & Chalip, L. (2004). Why travel to the FIFA World Cup? Effects of motives, background, interest, and constraints. *Tourism Management*, 25(6), 695-707.
- Kim, S., & Yoon, Y. (2003). The hierarchical effects of affective and cognitive components on tourism destination image. *Journal of Travel & Tourism Marketing*, 14(2), 1-22.

- Kim, S. S., & Morrision, A. M. (2005). Change of images of South Korea among foreign tourists after the 2002 FIFA World Cup. *Tourism Management*, 26(2), 233-247.
- Kim, S. S., & Prideaux, B. (2005). Marketing implications arising from a comparative study of international pleasure tourist motivations and other travel-related characteristics of visitors to Korea. *Tourism Management*, 26(3), 347-357.
- Klenosky, D. B. (2002). The "pull" of tourism destinations: A means-end investigation. *Journal of Travel Research*, 40(4), 396-403
- Kline, R. B. (2010). *Principles and practice of structural equation modeling* (3rd ed.). New York, NY: The Guilford Press.
- Kneesel, E., Baloglu, S., & Millar, M. (2010). Gaming destination images: Implications for branding. *Journal of Travel Research*, 49(1), 68-78.
- Ko, D.-W., & Stewart, W. P. (2002). A structural equation model of residents' attitudes for tourism development. *Tourism Management*, 23(5), 521-530.
- Kompier, M. A. J., Cooper, C. L., & Geurts, S. A. E. (2000). A multiple case study approach to work stress prevention in Europe. *European Journal of Work & Organizational Psychology*, 9(3), 371-400.
- Konečnik, M., & Ruzzier, M. (2006). The influence of previous visitation on customer's evaluation of a tourism destination. *Managing Global Transitions*, 4(2), 145-165.
- Konu, H., Laukkanen, T., & Komppula, R. (2011). Using ski destination choice criteria to segment Finnish ski resort customers. *Tourism Management*, 32(5), 1096-1105.
- Kozak, M. (2010). Holiday taking decisions - The role of spouses. *Tourism Management*, 31(4), 489-494.
- Kozak, M., & Martin, D. (2012). Tourism life cycle and sustainability analysis: Profit-focused strategies for mature destinations. *Tourism Management*, 33(1), 188-194.

- Kozinets, R. V. (1999). E-tribalized marketing?: the strategic implications of virtual communities of consumption. *European Management Journal*, 17(3), 252-264.
- Krech, D., Crutchfield, R. S., & Ballachey, E. L. (1962). *Individual in society: A textbook of social psychology*. New York, NY: McGraw-Hill.
- Krosnick, J. A. (1988). Attitude importance and attitude change. *Journal of Experimental Social Psychology*, 24(3), 240-255.
- Krueger, C., & Tian, L. (2004). A comparison of the General Linear Mixed Model and Repeated Measures ANOVA using a dataset with multiple missing data points. *Biological Research For Nursing*, 6(2), 151-157.
- Kyle, G., & Chick, G. (2004). Enduring leisure involvement: The importance of personal relationships. *Leisure Studies*, 23(3), 243-266.
- Kyle, G., Graefe, A., Manning, R., & Bacon, J. (2003). An examination of the relationship between leisure activity involvement and place attachment among hikers along the Appalachian Trail. *Journal of Leisure Research*, 35(3), 249-273.
- Kyle, G. T., & Mowen, A. J. (2005). An examination of the leisure involvement - Agency commitment relationship. *Journal of Leisure Research*, 37(3), 342-363.
- Kyle, G. T., Mowen, A. J., & Tarrant, M. (2004). Linking place preferences with place meaning: An examination of the relationship between place motivation and place attachment. *Journal of Environmental Psychology*, 24(4), 439-454.
- Kurtzman, J., & Zauhar, J. (2005). Sports tourism consumer motivation. *Journal of Sport & Tourism*, 10(1), 21-31.
- Lai, F., Griffin, M., & Babin, B. J. (2009). How quality, value, image, and satisfaction create loyalty at a Chinese telecom. *Journal of Business Research*, 62(10), 980-986.
- Lancaster, K. J. (1966). A new approach to consumer theory. *Journal of Political Economy*, 74(2), 132-157.

- Lau, A. L. S., & McKercher, B. (2004). Exploration Versus Acquisition: A Comparison of First-Time and Repeat Visitors. *Journal of Travel Research*, 42(3), 279-285.
- Laurent, G., & Kapferer, J.-N. I. (1985). Measuring consumer involvement profiles. *Journal of Marketing Research* 22(1), 41-53.
- Lawson, F., & Bond-Bovy, M. (1977). *Tourism and recreational development*. London: Architectural Press.
- Lee, C.-K., Lee, Y.-K., & Lee, B. (2005). Korea's destination image formed by the 2002 World Cup. *Annals of Tourism Research*, 32(4), 839-858.
- Lee, C.-K., Lee, Y.-K., & Wicks, B. E. (2004). Segmentation of festival motivation by nationality and satisfaction. *Tourism Management*, 25(1), 61-70.
- Lee, S., Scott, D., & Kim, H. (2008). Celebrity fan involvement and destination perceptions. *Annals of Tourism Research*, 35(3), 809-832.
- Lee, T. H. (2009). A structural model to examine how destination image, attitude, and motivation affect the future behavior of tourists. *Leisure Sciences: An Interdisciplinary Journal*, 31(3), 215-236.
- Lee, Y.-K., Lee, C.-K., Lee, S.-K., & Babin, B. J. (2008). Festivalscapes and patrons' emotions, satisfaction, and loyalty. *Journal of Business Research*, 61(1), 56-64.
- Leonard-Barton, D. (1990). A dual methodology for case studies: Synergistic use of a longitudinal single site with replicated multiple sites. *Organization Science*, 1(3), 248-266.
- Leung, S.-O. (2008). A three-dimensional latent variable model for attitude scales. *Sociological Methods & Research*, 37(1), 135-154.
- Levin, I. P., & Jasper, J. D. (1995). Phased narrowing: A new process tracing method for decision making. *Organizational Behaviour and Human Decision Processes*, 64(1), 1-8.
- Li, X. (2006). *Examining the antecedents and structure of customer loyalty in a tourism* (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses database. (UMI No. 3280480)

- Li, X., Cheng, C.-K., Kim, H., & Petrick, J. F. (2008). A systematic comparison of first-time and repeat visitors via a two-phase online survey. *Tourism Management, 29*(2), 278-293.
- Li, X., & Kaplanidou, K. (2011). The impact of the 2008 Beijing Olympic Games on China's destination brand: A U.S.-based examination. *Journal of Hospitality & Tourism Research*. First published on November 21, 2011.
doi:10.1177/1096348011425499
- Li, X., Pan, B., Zhang, L., & Smith, W. W. (2009). The effect of online information search on image development: Insights from a mixed-methods study. *Journal of Travel Research, 48*(1), 45-57.
- Li, X., & Vogelsong, H. (2006). Comparing methods of measuring image change: A case study of a small-scale community festival. *Tourism Analysis, 10*(4), 349-360.
- Lin, C.-H., Morais, D. B., Kerstetter, D. L., & Hou, J.-S. (2007). Examining the role of cognitive and affective image in predicting choice across natural, developed, and theme-park destinations. *Journal of Travel Research, 46*(2), 183-194.
- Litvin, S. W., & Ng, S. L. S. (2001). The destination attribute management model: An empirical application to Bintan, Indonesia. *Tourism Management, 22*(5), 481-492.
- Litvin, S. W., Xu, G., & Kang, S. K. (2004). Spousal vacation-buying decision making revisited across time and place. *Journal of Travel Research, 43*(2), 193-198.
- Lubbe, B. (1998). Primary image as a dimension of destination image: An empirical assessment. *Journal of Travel & Tourism Marketing, 7*(4), 21-43.
- Luo, X., & Bhattacharya, C. B. (2006). Corporate social responsibility, customer satisfaction, and market value. *Journal of Marketing, 70*(4), 1-18.
- Lutz, R. J. (1977). An experimental investigation of causal relations among cognitions, affect, and behavioral intention. *Journal of Consumer Research, 3*(4), 197-208.

- Lysonski, S., Durvasula, S., & Zotos, Y. (1996). Consumer decision-making styles: A multi-country investigation. *European Journal of Marketing*, 30(12), 10-21.
- MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods*, 1(2), 130-149.
- MacKay, K. J., & Fesenmaier, D. R. (1997). Pictorial element of destination in image formation. *Annals of Tourism Research*, 24(3), 537-565.
- Madrigal, R. (1995). Cognitive and affective determinants of fan satisfaction with sporting event attendance. *Journal of Leisure Research*, 27(3), 205-227.
- Mannell, R. C. (1980). Social psychological techniques and strategies for studying leisure experiences. In S. E. Iso-Ahola (Ed.), *Social psychological perspectives on leisure and recreation* (p. 62-68), Springfield, IL: Charles C Thomas.
- Mano, H., & Oliver, R. L. (1993). Assessing the dimensionality and structure of the consumption experience: Evaluation, feeling, and satisfaction. *Journal of Consumer Research*, 20(3), 451-466.
- Mansfeld, Y. (1992). From motivation to actual travel. *Annals of Tourism Research*, 19(3), 399-419.
- Marsh, H. W., Hau, K.-T., & Wen, Z. (2004). In search of golden rules: Comment on hypothesis-testing approaches to setting cutoff values for fit indexes and dangers in overgeneralizing Hu and Bentler's (1999) findings. *Structural Equation Modeling: A Multidisciplinary Journal*, 11(3), 320-341.
- Marsh, H. W., & Hocevar, D. (1985). Application of confirmatory factor analysis to the study of self-concept: First-and higher order factor models and their invariance across groups. *Psychological Bulletin*, 97(3), 562-582.
- Martin, D. (2007). Management learning exercise and trainer's note for building grounded theory in tourism behavior. *Journal of Business Research*, 60(7), 742-748.

- Maser, B., & Weiermair, K. (1998). Travel decision-making: From the vantage point of perceived risk and information preferences. *Journal of Travel & Tourism Marketing*, 7(4), 107-121.
- Maton, K. I., & Salem, D. A. (1995). Organizational characteristics of empowering community settings: A multiple case study approach. *American Journal of Community Psychology*, 23(5), 631-656.
- Mazursky, D. (1989). Past experience and future tourism decisions. *Annals of Tourism Research*, 16(3), 333-344.
- Mazursky, D., & Geva, A. (1989). Temporal decay in satisfaction-purchase intention relationship. *Psychology & Marketing*, 6(3), 211-227.
- McCartney, G., Butler, R., & Bennett, M. (2008). A strategic use of the communication mix in the destination image-formation process. *Journal of Travel Research*, 47(2), 183-196.
- McDowall, S. (2010). International tourist satisfaction and destination loyalty: Bangkok, Thailand. *Asia Pacific Journal of Tourism Research*, 15(1), 21-42.
- McGehee, N. G., Yoon, Y., & Cárdenas, D. (2003). Involvement and travel for recreational runners in North Carolina. *Journal of Sport Management*, 17(3), 305-324.
- Menard, S. W. (2002). *Longitudinal research* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Menard, S. (Ed.). (2008). *Handbook of longitudinal research: Design, measurement, and analysis*. Burlington, MA: Elsevier.
- Mendes, J., Do Valle, P. O., & Guerreiro, M. (2011). Destination image and events: A structural model for the Algarve case. *Journal of Hospitality Marketing & Management*, 20(3-4), 366-384.
- Meyers, L. S., Gamst, G., & Guarino, A. J. (2006). *Applied multivariate research: Design and interpretation*. Thousand Oaks, CA: Sage Publications.
- Miami Marathon. In *Wikipedia: The free encyclopedia*. (2011, October 13). FL: Wikimedia Foundation. Retrieved November 2, 2011, from http://en.wikipedia.org/wiki/Miami_Marathon

- Millar, M. G., & Millar, K. U. (1990). Attitude change as a function of attitude type and argument type. *Journal of Personality and Social Psychology*, 59(2), 217-228.
- Millar, M. G., & Tesser, A. (1989). The effects of affective-cognitive consistency and thought on the attitude-behaviour relation. *Journal of Experimental Social Psychology*, 25(2), 189-202.
- Miller, D. W., & Marks, L. J. (1997). The effects of imagery-evoking radio advertising strategies on affective responses. *Psychology & Marketing*, 14(4), 337-360.
- Miller, D. W., & Stoica, M. (2004). Comparing the effects of a photograph versus artistic renditions of a beach scene in a direct-response print ad for a Caribbean resort island: A mental imagery perspective. *Journal of Vacation Marketing*, 10(1), 11-21.
- Milman, A., & Pizam, A. (1995). The role of awareness and familiarity with a destination: The Central Florida case. *Journal of Travel Research*, 33(3), 21-27.
- Milman, A., Reichel, A., & Pizam, A. (1990). The impact of tourism on ethnic attitudes: The Israeli-Egyptian case. *Journal of Travel Research*, 29(2), 45-49.
- Miniard, P. W., Bhatla, S., & Sirdeshmukh, D. (1992). Mood as a determinant of postconsumption product evaluations: Mood effects and their dependency on the affective intensity of the consumption experience. *Journal of Consumer Psychology*, 1(2), 173-195.
- Mohsin, A. (2005). Tourist attitudes and destination marketing - the case of Australia's Northern Territory and Malaysia. *Tourism Management*, 26(5), 723-732.
- Mok, C., & Armstrong, R. W. (1996). Sources of information used by Hong Kong and Taiwanese leisure travellers. *Australian Journal of Hospitality Management*, 3(1), 331-335.

- Moon, K. S., Kim, M., Ko, Y. J., Connaughton, D. P., & Lee, J. H. (2011). The influence of consumer's event quality perception on destination image. *Managing Service Quality, 21*(3), 287-303.
- Morgan, M. (2007). "We're not the Barmy Army!": Reflections on the sports tourist experience. *International Journal of Tourism Research, 9*(5), 361-372.
- Morgan, M. (2009). What makes a good festival? Understanding the event experience. *Event Management, 12*(2), 81-93.
- Morgan, N., & Pritchard, A. (1998). *Tourism promotion and power: Creating images, creating identities*. Chichester, England; New York: John Wiley & Sons Ltd.
- Mossberg, L. (2007). A marketing approach to the tourist experience. *Scandinavian Journal of Hospitality and Tourism, 7*(1), 59-74.
- Moutinho, L. (1987). Consumer behaviour in tourism. *European Journal of Marketing, 21*(10), 5-44.
- Moutinho, L., & Trimble, J. (1991). A probability of revisitation model: The case of winter visits to the Grand Canyon. *The Service Industries Journal, 11*(4), 439-457.
- Mulaik, S. A., James, L. R., Van Alstine, J., Bennett, N., Lind, S., & Stilwell, C. D. (1989). Evaluation of goodness-of-fit indices for structural equation models. *Psychological Bulletin, 105*(3), 430-445.
- Muthén, L. K., & Muthén, B. O. (2007). *Mplus: Statistical analysis with latent variables: User's guide*. Los Angeles, CA: Muthén & Muthén.
- Natale, M., & Hantas, M. (1982). Effect of temporary mood states on selective memory about the self. *Journal of Personality and Social Psychology, 42*(5), 927-934.
- Netemeyer, R. G., Bearden, W. O., & Sharma, S. (2003). *Scaling procedures: Issues and applications*. Thousand Oaks, CA; London: Sage Publications.
- Neuman, G. A., Bolin, A. U., & Briggs, T. E. (2000). Identifying general factors of intelligence: A confirmatory factor analysis of the Ball Aptitude Battery. *Educational and Psychological Measurement, 60*(5), 697-712.

- Nicholson, R. E., & Pearce, D. G. (2001). Why do people attend events: A comparative analysis of visitor motivations at four South Island events. *Journal of Travel Research, 39*(4), 449-460.
- Niininen, O., Szivas, E., & Riley, M. (2004). Destination loyalty and repeat behaviour: An application of optimum stimulation measurement. *The International Journal of Tourism Research, 6*(6), 439-447.
- Nogawa, H., Yamaguchi, Y., & Hagi, Y. (1996). An empirical research study on Japanese sport tourism in sport-for-all events: Case studies of a single-night event and a multiple-night event. *Journal of Travel Research, 35*(2), 46-54.
- Nunnally, J. C., & Bernstein, I. H. (1994). *Psychometric Theory* (3rd ed.). New York; Sydney: McGraw-Hill.
- Nyaupane, G. P., Paris, C. M., & Teye, V. (2011). Study abroad motivations, destination selection and pre-trip attitude formation. *International Journal of Tourism Research, 13*(3), 205-217.
- Oh, H. C., Uysal, M., & Weaver, P. A. (1995). Product bundles and market segments based on travel motivations: A canonical correlation approach. *International Journal of Hospitality Management, 14*(2), 123-137.
- O'Leary-Kelly, S. W., & Vokurka, R. J. (1998). The empirical assessment of construct validity. *Journal of Operations Management, 16*(4), 387-405.
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research, 17*(4), 460-469.
- Olson, J. M., & Zanna, M. P. (1993). Attitudes and attitude change. *Annual Review of Psychology, 44*(1), 117-154.
- Onwuegbuzie, A. J., & Leech, N. L. (2005). On becoming a pragmatic researcher: The importance of combining quantitative and qualitative research methodologies. *International Journal of Social Research Methodology, 8*(5), 375-387.
- Oppermann, M. (1997). First-time and repeat visitors to New Zealand. *Tourism Management, 18*(3), 177-181.

- Oppermann, M. (2000). Tourism destination loyalty. *Journal of Travel Research*, 39(1), 78-84.
- Osborne, J. W. (Ed.). (2008). *Best practices in quantitative methods*. Thousand Oaks, CA: Sage Publications.
- Osgood, C. E., & Tannenbaum, P. H. (1955). The principle of congruity in the prediction of attitude change. *Psychological Review*, 62(1), 42-55.
- Papadimitriou, D., & Gibson, H. (2008). Benefits sought and realized by active mountain sport tourists in Epirus, Greece: Pre- and post-trip analysis. *Journal of Sport & Tourism*, 13(1), 37-60.
- Payne, J. W. (1976). Task complexity and contingent processing in decision making: An information search and protocol analysis. *Organizational Behaviour and Human Performance*, 16(2), 366-387.
- Pearce, P. L. (1982). Perceived changes in holiday destinations. *Annals of Tourism Research*, 9(2), 145-164.
- Pearce, P. L., & Kang, M.-h. (2009). The effects of prior and recent experience on continuing interest in tourist settings. *Annals of Tourism Research*, 36(2), 172-190.
- Perry, M., Izraeli, D., & Perry, A. (1976). Image change as a result of advertising. *Journal of Advertising Research*, 16(1), 45-50.
- Perugini, M., & Bagozzi, R. P. (2001). The role of desires and anticipated emotions in goal-directed behaviours: Broadening and deepening the theory of planned behaviour. *British Journal of Social Psychology*, 40(1), 79-98.
- Peter, J. P., & Olson, J. C. (2008). *Consumer behaviour and marketing strategy* (8th ed.). Boston, MA: McGraw-Hill/Irwin.
- Peterson, R. A. (1994). A meta-analysis of Cronbach's coefficient alpha. *The Journal of Consumer Research*, 21(2), 381-391.
- Petrick, J. F., Morais, D. D., & Norman, W. C. (2001). An examination of the determinants of entertainment vacationers' intentions to revisit. *Journal of Travel Research*, 40(1), 41-48.

- Petty, R., & Cacioppo, J. (1986). The elaboration likelihood model of persuasion. *Advances in Experimental Social Psychology, 19*, 123-205.
- Petty, R., Wegener, D., & Fabrigar, L. (1997). Attitudes and attitude change. *Annual Review of Psychology, 48*(1), 609-647.
- Phelps, A. (1986). Holiday destination image - the problem of assessment: An example developed in Menorca. *Tourism Management, 7*(3), 168-180.
- Pierce, C. A., Block, R. A., & Aguinis, H. (2004). Cautionary note on reporting eta-squared values from multifactor ANOVA designs. *Educational and Psychological Measurement, 64*(6), 916-924.
- Pigeassou, C. (2004). Contribution to the definition of sport tourism. *Journal of Sport & Tourism, 9*(3), 287-289.
- Pike, S. (2002). Destination image analysis - a review of 142 papers from 1973 to 2000. *Tourism Management, 23*(5), 541-549.
- Pike, S. (2003). The use of repertory grid analysis to elicit salient short-break holiday destination attributes in New Zealand. *Journal of Travel Research, 41*(3), 315-319.
- Pike, S., Murdy, S., & Lings, I. (2011). Visitor relationship orientation of destination marketing organizations. *Journal of Travel Research, 50*(4), 443-453.
- Pike, S., & Ryan, C. (2004). Destination positioning analysis through a comparison of cognitive, affective, and conative Perceptions. *Journal of Travel Research, 42*(4), 333-342.
- Pizam, A., Jafari, J., & Milman, A. (1991). Influence of tourism on attitudes: US students visiting USSR. *Tourism Management, 12*(1), 47-54.
- Pizam, A., & Milman, A. (1993). Predicting satisfaction among first time visitors to a destination by using the expectancy disconfirmation theory. *International Journal of Hospitality Management, 12*(2), 197-209.
- Pizam, A., Neumann, Y., & Reichel, A. (1978). Dimensions of tourist satisfaction with a destination area. *Annals of Tourism Research, 5*(3), 314-322.
- Ployhart, R. E., & Vandenberg, R. J. (2010). Longitudinal research: The theory, design, and analysis of change. *Journal of Management, 36*(1), 94-120.

- Poels, K., & Dewitte, S. (2008). Hope and self-regulatory goals applied to an advertising context: Promoting prevention stimulates goal-directed behavior. *Journal of Business Research*, *61*(10), 1030-1040.
- Prayag, G., & Ryan, C. (2011a). The relationship between the 'push' and 'pull' factors of a tourist destination: the role of nationality – an analytical qualitative research approach. *Current Issues in Tourism*, *14*(2), 121-143.
- Prayag, G., & Ryan, C. (2011b). Antecedents of tourists' loyalty to Mauritius: The role and influence of destination image, place attachment, personal involvement, and satisfaction. *Journal of Travel Research*. doi: 10.1177/0047287511410321
- Preston, C. C., & Colman, A. M. (2000). Optimal number of response categories in rating scales: Reliability, validity, discriminating power, and respondent preferences. *Acta Psychologica*, *104*(1), 1-15.
- Preuss, H. (2005). The economic impact of visitors at major multi-sport events. *European Sport Management Quarterly*, *5*(3), 281-301.
- Pyo, S., Mihalik, B. J., & Uysal, M. (1989). Attraction attributes and motivations: A canonical correlation analysis. *Annals of Tourism Research*, *16*(2), 277-282.
- Quan, S., & Wang, N. (2004). Towards a structural model of the tourist experience: An illustration from food experiences in tourism. *Tourism Management*, *25*(3), 297-305.
- Quester, P., & Farrelly, F. (1998). Brand association and memory decay effects of sponsorship: The case of the Australian Formula One Grand Prix. *Journal of Product & Brand Management*, *7*(6), 539-556.
- Ragheb, M. G., & Tate, R. L. (1993). A behavioural model of leisure participation, based on leisure attitude, motivation and satisfaction. *Leisure Studies*, *12*(1), 61-70.
- Raymond, M. R., & Roberts, D. M. (1987). A comparison of methods for treating incomplete data in selection research. *Educational and Psychological Measurement*, *47*(1), 13-26.

- Regan, D. T., & Fazio, R. (1977). On the consistency between attitudes and behaviour: Look to the method of attitude formation. *Journal of Experimental Social Psychology*, 13(1), 28-45.
- Reid, I. S., & Crompton, J. L. (1993). A taxonomy of leisure purchase decision paradigms based on level of involvement. *Journal of Leisure Research*, 25(2), 182-202.
- Reise, S., Morizot, J., & Hays, R. (2007). The role of the bifactor model in resolving dimensionality issues in health outcomes measures. *Quality of Life Research*, 16(Supplement 1), 19-31.
- Reisinger, Y., & Mavondo, F. (2007). Structural equation modeling: Critical issues and new developments. *Journal of Travel & Tourism Marketing*, 21(4), 41-71.
- Reisinger, Y., & Turner, L. (1999). Structural equation modeling with Lisrel: Application in tourism. *Tourism Management*, 20(1), 71-88.
- Reynolds, W. H. (1965). The role of the consumer in image building. *California Management Review*, 7(3), 69-76.
- Rezende-Parker, A. M., Morrison, A. M., & Ismail, J. A. (2003). Dazed and confused? An exploratory study of the image of Brazil as a travel destination. *Journal of Vacation Marketing*, 9(3), 243-259.
- Riege, A., M., & Perry, C. (2000). National marketing strategies in international travel and tourism. *European Journal of Marketing*, 34(11/12), 1290-1305.
- Riley, R. W., & Love, L. L. (2000). The state of qualitative tourism research. *Annals of Tourism Research*, 27(1), 164-187.
- Rindskopf, D., & Rose, T. (1988). Some theory and applications of confirmatory second-order factor analysis. *Multivariate Behavioral Research*, 23(1), 51-67.
- Ritchie, J. R. B. (1984). Assessing the impact of hallmark events: Conceptual and research issues. *Journal of Travel Research*, 23(1), 2-11.
- Ritchie, J. R. B. (2004). Longitudinal research methods. In B. W. Ritchie, P. Burns & C. Palmer (Eds.), *Tourism research methods: Integrating theory with*

- practice* (pp. 131-148). Cambridge, MA: CABI Publishing.
- Ritchie, J. R. B., & Smith, B. H. (1991). The impact of a mega-event on host region awareness: A longitudinal study. *Journal of Travel Research, 30*(1), 3-10.
- Ritchie, J. R. B., Tung, V. W. S., & Ritchie, R. J. B. (2011). Tourism experience management research: Emergence, evolution and future directions. *International Journal of Contemporary Hospitality Management, 23*(4), 419-438.
- Robinson, T., & Gammon, S. (2004). A question of primary and secondary motives: Revisiting and applying the sport tourism framework. *Journal of Sport & Tourism, 9*(3), 221-233.
- Rogosa, D. (1987). Casual models do not support scientific conclusions: A comment in support of Freedman. *Journal of Educational Statistics, 12*(2), 185-195.
- Rosenberg, M. J. (1960). A structural theory of attitude dynamics. *Public Opinion Quarterly, 24*(2), 319-340.
- Ross, G. F. (1993). Destination evaluation and vacation preferences. *Annals of Tourism Research, 20*(3), 477-489.
- Roth, K. P., & Diamantopoulos, A. (2009). Advancing the country image construct. *Journal of Business Research, 62*(7), 726-740.
- Rowe, K. (2002). The measurement of latent and composite variables from multiple items or indicators: Applications in performance indicator systems. *Student Learning Processes*. http://research.acer.edu.au/learning_processes/12
- Rubin, D. B. (1976). Inference and missing data. *Biometrika, 63*(3), 581-592.
- Rudd, A., & Johnson, R. B. (2010). A call for more mixed methods in sport management research. *Sport Management Review, 13*(1), 14-24.
- Russell, J. A. (1980). A circumplex model of affect. *Journal of Personality and Social Psychology, 39*(6), 1161-1178.
- Russel, J. A., & Snodgrass, J. (1987). Emotion and environment. In Stockols, D. & Altman, I. (Eds.), *Handbook of Environmental Psychology* (Vol. 1, pp. 245-280). New York, NY: John Wiley and Sons.

- Russell, J. A., Ward, L. M., & Pratt, G. (1981). Affective quality attributed to environments: A factor analytic study. *Environment and Behavior, 13*(3), 259-288.
- Ryan, C., & Cave, J. (2005). Structuring destination image: A qualitative approach. *Journal of Travel Research, 44*(2), 143-150.
- Sanbonmatsu, D. M., & Fazio, R. H. (1990). The role of attitudes in memory-based decision making. *Journal of Personality and Social Psychology, 59*(4), 614-622.
- Sancho Esper, F., & Álvarez Rateike, J. (2010). Tourism destination image and motivations: The Spanish perspective of Mexico. *Journal of Travel & Tourism Marketing, 27*(4), 349-360.
- San Martín, H., & Rodríguez del Bosque, I. A. (2008). Exploring the cognitive-affective nature of destination image and the role of psychological factors in its formation. *Tourism Management, 29*(2), 263-277.
- Schermelleh-Engel, K., Moosbrugger, H., & Müller, H. (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *Methods of Psychological Research Online, 8*(2), 23-74.
- Schumacker, R. E., & Lomax, R. G. (2004). *A beginner's guide to structural equation modeling*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Schutt, R. K. (2006). *Investigating the social world: The process and practice of research* (5th ed.). Thousand Oaks, CA: Sage Publications.
- Schwarz, N. (2000). Emotion, cognition, and decision making. *Cognition & Emotion, 14*(4), 433-440.
- Sealy, W., & Wickens, E. (2008). The potential impact of mega sport media on the travel decision-making process and destination choice - The case of Portugal and Euro 2004. *Journal of Travel & Tourism Marketing, 24*(2-3), 127-137.
- Selby, M., & Morgan, N. J. (1996). Reconstructing place image: A case study of its role in destination market research. *Tourism Management, 17*(4), 287-294.

- Sengupta, J., Goodstein, R. C., & Boninger, D. S. (1997). All cues are not created equal: Obtaining attitude persistence under low-involvement conditions. *Journal of Consumer Research*, 23(4), 351-361.
- Shadish, W. R., Cook, T. D., & Campbell, D. T. (2002). *Experimental and quasi-experimental designs for generalized causal inference* (2nd ed.). Boston, MA: Houghton Mifflin.
- Shani, A., & Wang, Y. (2011). Destination image development and communication. In Y. Wang & A. Pizam (Eds.), *Destination marketing and management: theories and applications* (pp. 130-148). Wallingford, Oxfordshire, UK: CABI International.
- Shani, D., & Chalasani, S. (1992). Exploiting niches using relationship marketing. *The Journal of Consumer Marketing*, 9(3), 33-42.
- Sherif, M., & Hovland, C. I. (1961). *Social judgment: Assimilation and contrast effects in communication and attitude change*. New Haven, CT: Yale University Press.
- Sherman, E., & Smith, R. B. (1987). Mood states of shoppers and store image: Promising interactions and possible behavioral effects. *Advances in Consumer Research*, 14(1), 251-254.
- Shilbury, D. (2011). A bibliometric analysis of four sport management journals. *Sport Management Review*, 14(4), 434-452.
- Shipway, R., & Jones, I. (2007). Running away from home: Understanding visitor experiences and behaviour at sport tourism events. *International Journal of Tourism Research*, 9(5), 373-383.
- Shirazi, S. F. M., & Som, A. P. M. (2011). Destination Management and Relationship Marketing: Two Major Factors to Achieve Competitive Advantage. *Journal of Relationship Marketing*, 10(2), 76-87.
- Shiv, B., & Fedorikhin, A. (1999). Heart and mind in conflict: The interplay of affect and cognition in consumer decision making. *Journal of Consumer Research*, 26(3), 278-292.
- Shonk, D. J., & Chelladurai, P. (2008). Service quality, satisfaction, and intent to return in event sport tourism. *Journal of Sport Management*, 22(5), 587-602.

- Simpson, P. M., & Siguaw, J. A. (2008). Destination word of mouth. *Journal of Travel Research*, 47(2), 167-182.
- Sirakaya, E., McLellan, R. W., & Uysal, M. (1996). Modelling vacation destination decisions: A behavioural approach. *Journal of Travel & Tourism Marketing*, 5(1-2), 57-75.
- Sirakaya, E., Sonmez, S. F., & Choi, H.-S. (2001). Do destination images really matter? Predicting destination choices of student travellers. *Journal of Vacation Marketing*, 7(2), 125-142.
- Sirakaya, E., & Woodside, A. G. (2005). Building and testing theories of decision making by travellers. *Tourism Management*, 26(6), 815-832.
- Smith, A. (2005). Reimagining the city: The value of sport initiatives. *Annals of Tourism Research*, 32(1), 217-236.
- Smith, A. C. T., & Stewart, B. (2007). The travelling fan: Understanding the mechanisms of sport fan consumption in a sport tourism setting. *Journal of Sport & Tourism*, 12(3-4), 155-181.
- Smith, S., Haugtvedt, C., & Petty, R. (2006). Attitudes and recycling: Does the measurement of affect enhance behavioral prediction? *Psychology and Marketing*, 11(4), 359-374.
- Smith, S. L. J. (1994). The tourism product. *Annals of Tourism Research*, 21(3), 582-595.
- Sobel, M. E. (1982). Asymptotic confidence intervals for indirect effects in structural equation models. *Sociological Methodology*, 13, 290-312.
- Solomon, M. R. (2002). *Consumer behaviour: buying, having, and being* (5th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Son, A., & Pearce, P. (2005). Multi-faceted image assessment - International students' views of Australia as a tourist destination. *Journal of Travel & Tourism Marketing*, 18(4), 21-35.
- Sonmez, S. F., & Graefe, A. R. (1998). Determining future travel behaviour from past travel experience and perceptions of risk and safety. *Journal of Travel Research*, 37(2), 171-177.

- Sorte, M. A. L. (1972). Replication as a verification technique in survey research: A paradigm. *The Sociological Quarterly, 13*(2), 218-227.
- Spence, S. H. (1998). A measure of anxiety symptoms among children. *Behaviour Research and Therapy, 36*(5), 545-566.
- Spies, K., Hesse, F., & Loesch, K. (1997). Store atmosphere, mood and purchasing behavior. *International Journal of Research in Marketing, 14*(1), 1-17.
- Steiner, D. D., & Rain, J. S. (1989). Immediate and delayed primacy and recency effects in performance evaluation. *Journal of Applied Psychology, 74*(1), 136-142.
- Stepchenkova, S., & Mills, J. E. (2010). Destination image: A meta-analysis of 2000–2007 research. *Journal of Hospitality Marketing & Management, 19*(6), 575-609.
- Stepchenkova, S., & Morrison, A. M. (2006). The destination image of Russia: From the online induced perspective. *Tourism Management, 27*(5), 943-956.
- Stern, E., & Krakover, S. (1993). The formation of a composite urban image. *Geographical Analysis, 25*(2), 130-146.
- Sun, J. (2005). Assessing goodness of fit in confirmatory factor analysis. *Measurement and Evaluation in Counseling and Development, 37*(4), 240-256.
- Sussmann, S., & Ünel, A. (1999). Destination image and its modification after travel: An empirical study on Turkey. In A. Pizam & Y. Mansfeld (Eds.), *Consumer behavior in travel and tourism* (pp. 207-226). New York, NY: The Haworth Hospitality Press.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics* (5th ed.). Boston, MA: Pearson/Allyn & Bacon.
- Tapachai, N., & Waryszak, R. (2000). An examination of the role of beneficial image in tourist destination selection. *Journal of Travel Research, 39*(1), 37-44.
- Taplin, R. H. (2012). The value of self-stated attribute importance to overall satisfaction. *Tourism Management, 33*(2), 295-304.

- Taris, T. W. (2008). Reliability issues in longitudinal research. In Menard, S. (Ed.), *Handbook of longitudinal research: Design, measurement, and analysis* (pp. 139 -151). Burlington, MA: Elsevier.
- Taris, T. W., & Kompier, M. (2003). Challenges in longitudinal designs in occupational health psychology. *Scandinavian Journal of Work Environment and Health, 29*(1), 1-4.
- Tasci, A. D. A. (2006). Visit impact on destination image. *Tourism Analysis, 11*(5), 297-309.
- Tasci, A. D. A. (2007). Methodology influences on destination image: The case of Michigan. *Current Issues in Tourism, 10*(5), 480-501.
- Tasci, A. D. A. (2009). Social distance: The missing link in the loop of movies, destination image, and tourist behavior? *Journal of Travel Research, 47*(4), 494-507.
- Tasci, A. D. A., & Gartner, W. C. (2007). Destination image and its functional relationships. *Journal of Travel Research, 45*(4), 413-425.
- Tasci, A. D. A., Gartner, W. C., & Cavusgil, S. T. (2007). Conceptualization and operationalization of destination image. *Journal of Hospitality & Tourism Research, 31*(2), 194-223.
- Tasci, A. D. A., & Holecek, D. F. (2007). Assessment of image change over time: The case of Michigan. *Journal of Vacation Marketing, 13*(4), 359-369.
- Tashakkori, A., & Teddlie, C. (Eds.). (2003). *Handbook of mixed methods in social & behavioral research*. Thousand Oaks, CA: Sage Publications.
- Taylor, G. R. (Ed.). (2005). *Integrating quantitative and qualitative methods in research* (2nd ed.). Lanham, MD: University Press of America.
- Thomsen, C., Borgida, E., & Lavine, H. (1995). The causes and consequences of personal involvement. In R. E. Petty & J. A. Krosnick (Eds.), *Attitude strength: Antecedents and consequences* (Vol. 4, pp. 191-214). Mahwah, NJ: Lawrence Erlbaum Associates.

- Thornton, P. R., Shaw, G., & Williams, A. M. (1997). Tourist group holiday decision-making and behaviour: The influence of children. *Tourism Management, 18*(5), 287-297.
- Tierney, P. T. (1993). The influence of state traveller information centres on tourist length of stay and expenditures. *Journal of Travel Research, 31*(3), 28-32.
- Tilson, D. J., & Stacks, D. W. (1997). To know us is to love us: The public relations campaign to sell a 'business-tourist-friendly' Miami. *Public Relations Review, 23*(2), 95-115.
- Todd, P., & Benbasat, I. (1987). Process tracing methods in decision support systems research: Exploring the black box. *MIS Quarterly, 11*(4), 493-512.
- Um, S., Chon, K., & Ro, Y. (2006). Antecedents of revisit intention. *Annals of Tourism Research, 33*(4), 1141-1158.
- Um, S., & Crompton, J. L. (1990). Attitude determinants in tourism destination choice. *Annals of Tourism Research, 17*(3), 432-448.
- Uysal, M., & Jurowski, C. (1994). Testing the push and pull factors. *Annals of Tourism Research, 21*(4), 844-846.
- Vallerand, R. J. (1983). Attention and decision making: A test of the predictive validity of the test of attention and interpersonal style (TAIS) in a sport setting. *Journal of Sport Psychology, 5*(4), 449-459.
- Van Selm, M., & Jankowski, N. (2006). Conducting online surveys. *Quality and Quantity, 40*(3), 435-456.
- Van Raaij, W. F., & Francken, D. A. (1984). Vacation decisions, activities, and satisfactions. *Annals of Tourism Research, 11*(1), 101-112.
- Veal, A. J. (2006). *Research methods for leisure and tourism: A practical guide* (3rd ed.). Harlow, England: Financial Times/Prentice Hall.
- Vogt, C. A. (2011). Customer relationship management in tourism: Management needs and research applications. *Journal of Travel Research, 50*(4), 356-364.
- Vogt, C. A., & Andereck, K. L. (2003). Destination perceptions across a vacation. *Journal of Travel Research, 41*(4), 348-354.

- Vogt, W. P. (2005). *Dictionary of statistics & methodology: A nontechnical guide for the social sciences* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Walmsley, D. J., & Jenkins, J. M. (1993). Appraisive images of tourist areas: Application of personal constructs. *Australian Geographer*, 24(2), 1-13.
- Walmsley, D. J., & Young, M. (1998). Evaluative images and tourism: The use of personal constructs to describe the structure of destination images. *Journal of Travel Research*, 36(3), 65-69.
- Walters, G., Sparks, B., & Herington, C. (2007). The effectiveness of print advertising stimuli in evoking elaborate consumption visions for potential travelers. *Journal of Travel Research*, 46(1), 24-34.
- Wang, C.-y., & Hsu, M. K. (2010). The relationships of destination image, satisfaction, and behavioral intentions: An integrated model. *Journal of Travel & Tourism Marketing*, 27(8), 829-843.
- Wang, Y., & Davidson, M. C. (2010). Pre- and post-trip perceptions: An insight into Chinese package holiday market to Australia. *Journal of Vacation Marketing*, 16(2), 111-123.
- Weber, K. (1997). The assessment of tourist satisfaction using the expectancy disconfirmation theory: A study of the German travel market in Australia. *Pacific Tourism Review*, 1(1), 35-45.
- Weed, M. (2005). Sports tourism theory and method - Concepts, issues and epistemologies. *European Sport Management Quarterly*, 5(3), 229-242.
- Weed, M. (2006). Sports tourism research 2000 - 2004: A systematic review of knowledge and a meta-evaluation of methods. *Journal of Sport Tourism*, 11(1), 5-30.
- Weed, M. (2009). Progress in sports tourism research? A meta-review and exploration of futures. *Tourism Management*, 30(5), 615-628.
- Weed, M., & Bull, C. J. (2004). *Sports tourism: participants, policy and providers*. Boston, MA: Elsevier/ Butterworth-Heinemann.
- Wells, W. D., & Prensky, D. (1996). *Consumer behaviour*. New York, NY: J. Wiley.

- Werts, C. E., Rock, D. R., Linn, R. L., & Jöreskog, K. G. (1978). A general method of estimating the reliability of a composite. *Educational and Psychological Measurement, 38*(4), 933-938.
- Westbrook, R. A., & Oliver, R. L. (1991). The dimensionality of consumption emotion patterns and consumer satisfaction. *Journal of Consumer Research, 18*(1), 84-91.
- White, C., J. (2004). Destination image: To see or not to see? *International Journal of Contemporary Hospitality Management, 16*(5), 309-314.
- White, C., J. (2005). Destination image: To see or not to see? Part II. *International Journal of Contemporary Hospitality Management, 17*(2), 191-196.
- Widing, R. (2003). *Customer behaviour: Consumer behaviour and beyond*. Melbourne: Thomson Learning.
- Williams, D. R., & Vaske, J. J. (2003). The measurement of place attachment: Validity and generalizability of a psychometric approach. *Forest Science, 49*(6), 830-840.
- Woodruff, R. B., Cadotte, E. R., & Jenkins, R. L. (1983). Modeling consumer satisfaction processes using experience-based norms. *Journal of Marketing Research, 20*(3), 296-304.
- Woodside, A., G., & Lysonski, S. (1989). A general model of traveller destination choice. *Journal of Travel Research, 27*(4), 8-14.
- Woodside, A. G., & Sherrell, D. (1977). Traveller evoked, inept, and inert sets of vacation destinations. *Journal of Travel Research, 16*(1), 14-18.
- Xiao, H., & Smith, S. L. J. (2006). Case studies in tourism research: A state-of-the-art analysis. *Tourism Management, 27*(5), 738-749.
- Xing, X., & Chalip, L. (2006). Effects of hosting a sport event on destination brand: A test of co-branding and match-up models. *Sport Management Review, 9*(1), 49-78.
- Yilmaz, Y., Yilmaz, Y., İçigen, E. T., Ekin, Y., & Utku, B. D. (2009). Destination image: A comparative study on pre and post trip image variations. *Journal of Hospitality Marketing & Management, 18*(5), 461-479.

- Yin, R. K. (1994). *Case study research: Design and Methods* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Yoo, J., & Chon, K. (2010). Temporal changes in factors affecting convention participation decision. *International Journal of Contemporary Hospitality Management*, 22(1), 103-120.
- You, X., O'Leary, J., Morrison, A., & Hong, G.-S. (2000). A cross-cultural comparison of travel push and pull factors. *International Journal of Hospitality & Tourism Administration*, 1(2), 1-26.
- Yuksel, A., & Yuksel, F. (2001). The expectancy-disconfirmation paradigm: A critique. *Journal of Hospitality & Tourism Research*, 25(2), 107-131.
- Yuksel, A., Yuksel, F., & Bilim, Y. (2010). Destination attachment: Effects on customer satisfaction and cognitive, affective and conative loyalty. *Tourism Management*, 31(2), 274-284.
- Yung, Y.-F., Thissen, D., & McLeod, L. (1999). On the relationship between the higher-order factor model and the hierarchical factor model. *Psychometrika*, 64(2), 113-128.
- Zaichowsky, J.L. (1985). Measuring the involvement construct. *Journal of Consumer Research*, 12 (3), 341-352.

***Appendix 3-1* 2011 Pre-event Questionnaire Survey Instrument**

This appendix provides a copy of the Pre-event survey instrument package that was used in Study 1 with the 2011 ING Miami Marathon participants. This appendix contains: a) a covering letter, b) information sheet, and c) questionnaire.



Dear 2011 ING Miami Marathon & Half Marathon Participant,

Thank you for your registration for the 2011 ING Miami Marathon, Half Marathon & Tropical 5K!

You are now invited to complete a pre-event questionnaire concerning your attitudes and behaviours related to travelling to Miami to attend the 2011 ING Miami Marathon event. This survey is part of a longitudinal PhD research project conducted through Griffith University, Australia and Temple University, U.S.; it is being distributed to all non-local 2011 ING Miami Marathon, Half Marathon & Tropical 5K entrants. The following questionnaire will take approximately 15 minutes to complete. Please read each question carefully before answering. Do not rush. Some of the statements may seem similar, but this is necessary for reliability purposes. Your patience and time are highly appreciated!

To begin the questionnaire, please click on the "Next" icon in the bottom left corner. If you require more information, please click on the button of "Review Ethics Information" below and then click "Next".

Thank you very much for your kind support!

Yours Sincerely,

Nan Chen

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○ Review Ethics Information



Dear Participants,

You are being invited to complete a pre-event on-line questionnaire concerning your attitudes and behavior related to travelling to Miami to attend the 2011 ING Miami Marathon event. This questionnaire is being distributed to all non-local registered runners who will participate in the 2011 ING Miami Marathon, Half Marathon or Tropical 5K. The questionnaire will take approximately 15 minutes to complete.

What is the survey about? This survey is part of a longitudinal PhD research project conducted through Griffith University, Australia and Temple University, U.S. It aims to examine sport event tourists' attitude change towards the event-host destination and how the dynamic attitude affects their decisions of revisiting the destination. The information learned in this study will assist the organizers of sport events and the marketers of the host destinations to understand what stimulates individual to travel to an event, and how to attract sport tourists to revisit as typical tourists.

Participant Involvement: Please remember that your participation in this study is voluntary. You can withdraw from the study at any time without any comment or penalty. There are no risks to you by participating in this study. No personal identifiable details will be collected on this questionnaire and personal details will not be linked to your responses.

Confidentiality: This is an anonymous survey and at no point will respondents be identifiable by the data collected. Any personal information collected will not be disclosed to third parties without your consent, except to meet government, legal or other regulatory authority requirements. However, your anonymity at all times will be safe guarded. For further information consult the University's Privacy Plan at www.gu.edu.au/ua/aa/vc/pp or telephone +61(07) 3735 5585.

Consent Expression: A completed questionnaire will indicate your consent to participate in this survey. Therefore, if you are willing to participate, please proceed to the questionnaire over the page.

If you have any queries regarding this study please feel free to contact the researchers on the contact details provided below.

Griffith University conducts research in accordance with the National Statement on Ethical Conduct in Research Involving Humans. If you have any concerns or complaints about the ethical conduct of the project, please contact the Manager, Research Ethics on +61 07 3735 5585 or research-ethics@griffith.edu.au.

Thank you very much for your kind support! Please start with the survey now by clicking on the "Next" button below.

Yours Sincerely,

Griffith Research Team
Senior Investigator: Professor Daniel C. Funk; Dr. Ceridwyn King
Student Investigator: Ms Nan Chen
Griffith Business School
Griffith University, Australia

Q1. Have you ever visited Miami prior to your trip for the 2011 ING Miami Marathon?

- Yes
 No

Answer If Yes Is Selected for Q1

Q2. How many times have you travelled to Miami before?

- 1
 2
 3
 4
 5 times or more

Q3. In addition to participating in the 2011 ING Miami Marathon, Half Marathon & Tropical 5K, do you have another purpose for visiting Miami?

- Yes
 No

Answer If Yes Is Selected for Q3

Q4. Please drag all the travelling purpose you have to respective boxes according to their importance (leave the box blank if you do not have that amount of purpose):

	The Primary Purpose	The Secondary Purpose	The Third Purpose	The Fourth Purpose	The Fifth Purpose	The Sixth Purpose
Attending ING Miami Marathon event						
Vacation						
Business						
Attending other events/festivals						
Visiting friends/relatives						
Take a Cruise before or after the event						
Other _____						

Q15. Please indicate your CURRENT IMPRESSION of Miami as a travel destination by grading its attributes/ features as listed below:

	Offers Very Little 1	2	3	4	5	6	Offers Very Much 7
Friendliness of the local residents	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Pleasant atmosphere	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Entertainment facilities & nightlife	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Tourist information & supports	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Chance of experiencing different cultures/customs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sightseeing opportunities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Cultural, arts & historic attractions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Natural/ scenery attractions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Local sport facilities & activities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q16. Please rate on the scale between each set of words that most closely represents your feelings about Miami:

	1	2	3	4	5	6	7	
Unpleasant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Pleasant
Like	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Dislike
Negative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Positive

Q17. Are you a United States resident?

- Yes
 No

Answer If No Is Selected for Q17.

Q18. What is your country of residence? _____

Q19. Please indicate your AGREEMENT level with the following statements about Miami:

	Strongly Disagree 1	Disagree 2	Somewhat Disagree 3	Neither Agree nor Disagree 4	Somewhat Agree 5	Agree 6	Strongly Agree 7
Visiting Miami is very interesting.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Lots of my time is organized around Miami.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I visit Miami, others can see me the way I want them to see me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Miami is the best sport tourism destination.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel like Miami is part of me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel no connection to Miami.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q20. Please indicate your CURRENT IMPRESSION of the ING MIAMI MARATHON EVENT by grading its attributes listed below:

	Offers Very Little 1	2	3	4	5	6	Offers Very Much 7
Good event organization & facilities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Acceptable registration fee	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High level of competition	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
High status of the event	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Entertainment value of the event	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q21. Please indicate your gender:

- Male
 Female

Q22. Which age group do you belong to?

- Under 20
- 20 - 24
- 25 - 29
- 30 - 34
- 35 - 39
- 40 - 44
- 45 - 49
- 50 - 54
- 55 - 59
- 60 - 64
- 65 - 69
- 70 or older

Q23. Which of the following best describes your ethnic background? (Select all that apply):

- Native American or Alaskan native
- African American
- Hispanic or Latino
- Caucasian/ White
- Asian
- Pacific Islander
- Middle Eastern
- Decline to state
- Other (Please specify): _____

Q24. Please indicate the highest level of education that you have completed:

- Less than secondary school
- Secondary or high School diploma
- College/vocational school
- Undergraduate degree
- Postgraduate degree
- Other (Please specify): _____

Q25. Which of the following best describes your employment status? (Choose all that apply):

- Employed full-time
- Employed part-time
- Self-employed
- Unemployed
- Homemaker
- Retired
- Full-time student
- Part-time student
- Other (Please specify): _____

Q28. Based on your projection of the upcoming trip to Miami, please choose a scale that best indicates the LIKELIHOOD that you might undertake each of the following actions:

	Very Unlikely 1	Unlikely 2	Somewhat Unlikely 3	Undecided 4	Somewhat Likely 5	Likely 6	Very Likely 7
I will recommend Miami to others as a leisure travel destination.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will only recommend Miami to others as a sporting destination.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will have a stronger interest to know more about Miami, especially its tourist attractions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I won't return to Miami again.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Thank you very much!! You have completed the survey!

This pre-event survey is the first step of a longitudinal PhD study on sport tourists' attitude change toward the host destination. A post-event survey is going to be conducted within two weeks after the event. We really need your kind support and valuable opinions. You will have opportunities to win exciting prizes if you can participate in both pre- and post-event studies.

If you would like to involve yourself in this longitudinal research and be contacted by the researchers again, please check "YES" below.

YES

Appendix 4-1 Descriptive Statistics for Study 1 (Pre- & Post- Comparison Study in 2011)

Constructs	Measurement Items	2011 Pre-event Survey (N = 1,181)		2011 Post-event Survey (N = 2,203)	
		Mean	SD	Mean	SD
Cognitive DI	<i>Ease of travel</i>	5.26	1.30	5.12	1.45
	<i>Personal safety</i>	4.70	1.27	4.97	1.30
	<i>Good climate</i>	5.99	.98	6.30	.89
	<i>Acceptable price level</i>	4.60	1.29	4.59	1.40
	<i>High quality of accommodation</i>	5.33	1.17	5.39	1.27
	<i>High quality of food</i>	5.36	1.20	5.67	1.15
	<i>Good local infrastructure & transportation</i>	4.73	1.36	4.93	1.45
	<i>Clean & green environment</i>	4.74	1.28	5.25	1.26
	<i>Shopping facilities</i>	5.46	1.27	5.61	1.15
	<i>Friendliness of the local residents</i>	4.42	1.26	5.06	1.39
	<i>Pleasant atmosphere</i>	5.20	1.09	5.58	1.12
	<i>Entertainment facilities & nightlife</i>	5.63	1.14	5.78	1.15
	<i>Tourist information & supports</i>	5.11	1.19	5.07	1.20
	<i>Chance of experiencing different cultures/customs</i>	5.08	1.37	5.49	1.20
	<i>Sightseeing opportunities</i>	5.04	1.29	5.38	1.16
	<i>Cultural, arts & historic attractions</i>	4.60	1.39	5.15	1.22
	<i>Natural/ scenery attractions</i>	5.19	1.30	5.53	1.19
	<i>Local sport facilities & activities</i>	5.01	1.20	5.38	1.14
	<i>Good event organisation & facilities</i>	5.50	1.10	/	/
	<i>Acceptable registration fee</i>	5.19	1.28	/	/
	<i>High level of competition</i>	5.04	1.22	/	/
<i>High status of event</i>	5.16	1.25	/	/	
<i>Entertainment value of the event</i>	5.33	1.21	/	/	
	Cronbach's α	.93		.93	

Appendix 4-1 Continued.

Constructs	Measurement Items	2011 Pre-event Survey (N = 1,181)		2011 Post-event Survey (N = 2,203)		
		Mean	SD	Mean	SD	
Affective DI	<i>Unpleasant – Pleasant</i>	5.88	1.08	5.77	1.33	
	<i>Dislike - Like</i>	5.89	1.12	5.77	1.43	
	<i>Negative - Positive</i>	5.79	1.15	5.84	1.31	
	Cronbach's α	.93		.91		
Conative DI	<i>Revisit Intention</i>	<i>Short-term</i>	/	/	4.72	1.97
		<i>Mid-term</i>	/	/	5.19	1.93
		<i>Long-term</i>	/	/	5.33	1.91
		<i>General</i>	5.26	1.57	/	/
	<i>Recommend Intention</i>	5.57	1.21	5.87	1.25	
	Cronbach's α	.75		.92		
Destination Involvement	<i>Pleasure</i>	5.60	.96	5.84	1.07	
	<i>Centrality</i>	2.63	1.44	3.02	1.66	
	<i>Sign</i>	2.96	1.40	3.48	1.55	
	Cronbach's α	.89		.91		
Place Attachment	<i>Place Dependency</i>	3.23	1.32	3.77	1.43	
	<i>Place Identity</i>	3.08	1.62	3.57	1.65	
	Cronbach's α	.91		.92		
Running Involvement ($\alpha = .91$)	<i>Pleasure</i>	6.27	.99	/	/	
	<i>Centrality</i>	5.14	1.32			
	<i>Sign</i>	5.00	1.12			
Strength of Travel Motivation ($\alpha = .81$)		4.68	1.24	/	/	
Destination Satisfaction ($\alpha = .86$)		/	/	5.70	1.07	

Appendix 4-2 Descriptive Statistics for Study 2 (Post- & Follow-up Comparison Study in 2009)

Constructs	Measurement Items	2009 Post-event Survey (N = 1,989)		2009 Follow-up Survey (N = 234)	
		Mean	SD	Mean	SD
Cognitive DI	<i>Ease of travel</i>	5.45	1.12	5.61	1.56
	<i>Personal safety</i>	5.34	1.21	5.54	1.57
	<i>Good climate</i>	5.79	1.13	6.02	1.34
	<i>Acceptable price level</i>	/	/	5.23	1.44
	<i>Quality of accommodation</i>	5.07	1.24	5.32	1.59
	<i>Quality of food</i>	4.93	1.27	5.51	1.43
	<i>Local infrastructure & transportation</i>	4.96	1.24	4.68	1.82
	<i>Clean & green environment</i>	4.95	1.26	5.08	1.63
	<i>Retail shopping</i>	4.00	1.42	4.79	1.82
	<i>Friendliness of the local residents</i>	4.98	1.23	5.32	1.42
	<i>Pleasant atmosphere</i>	5.39	1.11	5.87	1.22
	<i>Entertainment & recreation facilities</i>	4.77	1.29	5.57	1.34
	<i>Tourist information & supports</i>	4.56	1.38	4.54	1.82
	<i>Chance of experiencing different cultures & customs</i>	4.25	1.42	4.59	1.87
	<i>Sightseeing opportunities</i>	4.37	1.41	4.90	1.61
	<i>Cultural, arts & historic attractions</i>	4.18	1.39	4.62	1.68
	<i>Natural/ scenic attractions</i>	4.64	1.40	5.38	1.45
	<i>Local sport facilities & activities</i>	4.30	1.39	5.06	1.62
	<i>Event organisation & facilities</i>	5.05	1.26	6.00	1.30
	<i>Registration fee</i>	4.81	1.29	5.23	1.71
	<i>Level of competition</i>	4.30	1.32	4.09	1.82
	<i>Status of event</i>	4.63	1.29	4.71	1.75
	<i>Entertainment value of the event</i>	4.90	1.28	5.37	1.48
	Cronbach's α	.94		.93	

Appendix 4-2 Continued.

Constructs	Measurement Items		2009 Post-event Survey (N = 1,989)		2009 Follow-up Survey (N = 234)	
			Mean	SD	Mean	SD
Affective DI	<i>Bad – Good</i>		5.95	1.54	5.87	1.45
	<i>Dislike - Like</i>		6.09	1.26	5.90	1.54
	<i>Unpleasant - Pleasant</i>		6.10	1.21	6.00	1.06
	Cronbach's α		.83		.87	
Conative DI	<i>Revisit Intention</i>	<i>Short-term</i>	4.48	1.74	5.55	1.87
		<i>Mid-term</i>	4.93	1.71	5.97	1.56
		<i>Long-term</i>	5.07	1.73	6.10	1.51
		<i>General</i>	/	/	/	/
	<i>Recommend Intention</i>		5.50	1.33	5.92	1.41
Cronbach's α		.92		.88		
Destination Involvement ($\alpha = .76$)	<i>Pleasure</i>		/	/	5.97	1.08
	<i>Centrality</i>				2.90	1.71
	<i>Sign</i>				3.69	1.61
Place Attachment	<i>Place Dependency</i>		4.59	1.26	4.08	1.51
	<i>Place Identity</i>		4.33	1.50	3.81	1.76
	Cronbach's α		.80		.76	
Destination Satisfaction ($\alpha = .93$)			/	/	6.15	1.02

Appendix 4-3 2011 Composite Scale Parameters for Pre-event DI (N = 413)

DI & Components	TD ^a	Item Weights ^b				Coefficient H	Mean	SD
ξ_{c1} - Tourist Attractions		TA_1 Sightseeing opportunities	TA_2 Cultural attractions	TA_3 Natural attractions	TA_4 Chance of experiencing different cultures/customs	.88	5.13	1.08
	/	.381	.186	.161	.140			
		.439	.214	.186	.161			
ξ_{c2} - Support Services		SS_1 High quality of accommodation	SS_2 High quality of food	SS_3 Shopping facilities		.80	5.42	1.01
	1, 2	.335	.375	.181				
		.376	.421	.203				
ξ_{c4} - Cognitive DI		CDI_1 Tourist Attractions	CDI_2 Support Services			.64 (a)	5.28	.90
ξ_{c5} - Affective DI		Attitude_1 Unpleasant – Pleasant	Attitude_2 Dislike – Like	Attitude_3 Negative – Positive		.95	5.89	1.00
	1, 2	.296	.232	.445				
		.304	.238	.458				
ξ_{c6} - Conative DI	/	Conation_1 Revisit-likelihood	Conation_2 Recommend-likelihood			.76 (a)	5.42	1.26
ξ_{c7} - Overall DI		DI_1 CDI	DI_2 ADI	DI_3 Conative DI		.84	5.68	.90
	2,3	.209	.611	.195				
		.206	.602	.192				

Note. ^a TD indicates correlated error variance estimates

^b The third row for each scale is the proportionally-weighted factor scores

Appendix 4-4 2011 Composite Scale Parameters for Post-event DI (N = 413)

Scale	TD ^a	Item Weights ^b				Coefficient H	Mean	SD
ξ_{c1} - <i>Tourist Attractions</i>	/	TA_1 Sightseeing opportunities	TA_2 Cultural attractions	TA_3 Natural attractions	TA_4 Chance of experiencing different cultures/customs	.89	5.40	.97
		.397	.248	.149	.175			
		.410	.256	.154	.181			
ξ_{c2} - <i>Support Services</i>	2, 3	SS_1 High quality of accommodation	SS_2 High quality of food	SS_3 Shopping facilities		.65	5.75	.84
		.174	.402	.391				
		.180	.416	.404				
ξ_{c4} - <i>Cognitive DI</i>		CDI_1 Tourist Attractions	CDI_2 Support Services			.63 (α)	5.57	.77
ξ_{c5} - <i>Affective DI</i>	1, 2	Attitude_1 Unpleasant - Pleasant	Attitude_2 Dislike-Like	Attitude_3 Negative-Positive		.89	6.08	1.01
		.273	.184	.479				
		.292	.196	.512				
ξ_{c6} - <i>Conative DI</i>	/	Conation_1 Revisit intention	Conation_2 Recommend intention			.75 (α)	5.74	1.23
ξ_{c7} - <i>Overall DI</i>	1, 2	DI_1 CDI	DI_2 ADI	DI_3 Conative DI		.80	5.85	.86
		.281	.468	.297				
		.269	.447	.284				

Note. ^a TD indicates correlated error variance estimates.

^b The third row for each scale is the proportionally-weighted factor scores.

Appendix 4-5 2009 First Post-event Survey: Composite Variables for DI & Components (N = 234)

Scale	TD ^a	Item Weights ^b					Coefficient H	Mean	SD
ξ_{c1} - Tourist Attractions		TA_1 Local sport facilities & activities	TA_2 Natural attractions	TA_3 Cultural attractions	TA_4 Sightseeing opportunities	TA_5 Chance of experiencing different cultures/customs	.93	4.76	1.22
	/	.100	.157	.280	.205	.133			
		.114	.179	.321	.234	.152			
ξ_{c2} - Amenity		Amenity_1 Clean & green environment	Amenity_2 Friendliness of the locals	Amenity_3 Pleasant atmosphere			.89	5.50	.98
	1, 3	.196	.367	.406					
		.202	.379	.419					
ξ_{c3} - Basic Facilities & Services		BFS_1 Quality of accommodation	BFS_2 Quality of food	BFS_3 Entertainment & recreation facilities			.89	5.26	1.07
	1, 2	.330	.399	.153					
		.374	.452	.174					
ξ_{c4} - Cognitive DI		CDI_1 Amenity	CDI_2 Basic Facilities & Services	CDI_3 Tourist Attractions			.89	5.40	.92
	2, 3	.788	.149	.084					
		.772	.146	.082					
ξ_{c5} - Affective DI		Attitude_1 Dislike-Like	Attitude_2 Unpleasant - Pleasant	Attitude_3 Bad - Good			.94	6.40	.95
	1, 2	.359	.637	.024					
		.352	.625	.023					
ξ_{c6} - Conative DI		Conation_1 Revisit within 1-year	Conation_2 Revisit within 5-year	Conation_3 Recommend-likelihood			.67	6.17	.73
	1, 2	.363	.198	.560					
		.324	.176	.500					
ξ_{c7} - Overall DI		CDI	ADI	Conative DI			.58	6.07	.62
	1, 2	.232	.212	.799					
		.187	.170	.643					

Note. ^a TD indicates correlated error variance estimates.

^b The third row for each scale is the proportionally-weighted factor scores.

Appendix 4-6 2009 Follow-up Survey: Composite Variables for DI & Components (N = 234)

Scale	TD ^a	Item Weights ^b					Coefficient H	Mean	SD
ξ_{c1} - Tourist Attractions		TA_1 Local sport facilities & activities	TA_2 Natural attractions	TA_3 Cultural attractions	TA_4 Sightseeing opportunities	TA_5 Chance of experiencing different cultures/customs	0.88	4.87	1.35
	/	.091	.164	.306	.224	.110			
		.102	.183	.342	.250	.123			
ξ_{c2} - Amenity		Amenity_1 Clean & green environment	Amenity_2 Friendliness of the locals	Amenity_3 Pleasant atmosphere			0.90	5.43	1.27
	1, 2	.116	.428	.200					
		.156	.575	.269					
ξ_{c3} - Basic Facilities & Services		SS_1 Accommodation quality	SS_2 Food quality	SS_3 Entertainment & recreation facilities			0.83	5.47	1.28
	1, 2	.196	.416	.105					
		.273	.581	.146					
ξ_{c4} - Cognitive DI		CDI_1 Amenity	CDI_2 Basic Facilities & Services	CDI_3 Tourist Attractions			0.78	5.36	1.08
	1, 2	.378	.319	.121					
		.462	.390	.148					
ξ_{c5} - Affective DI		Attitude_1 Dislike-Like	Attitude_2 Unpleasant - Pleasant	Attitude_3 Negative - Positive			0.95	5.98	1.06
	1, 2	.038	.382	.501					
		.041	.415	.544					
ξ_{c6} - Conative DI		Conation_1 Revisit within 1-year	Conation_2 Revisit within 5-year	Conation_3 Recommend-likelihood			0.80	5.86	1.37
	1, 3	.242	.264	.147					
		.371	.404	.225					
ξ_{c7} - Overall DI		CDI	ADI	Conative DI			0.67	5.87	.91
	2, 3	.129	.566	.208					
		.143	.627	.230					

Note. ^aTD indicates correlated error variance estimates.

^bThe third row for each scale is the proportionally-weighted factor scores.