

美和科技大學

106 年度教師專題研究計畫 結案報告

總計畫名稱：台灣路跑賽事品質、賽事意象、知覺價值、賽事滿意及

參與意圖之研究

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題目：

中文：台灣路跑賽事品質、賽事意象、知覺價值、賽事滿意及參與意圖之研究

英文：A Study of Event Quality, Event Image, Perceived Value, Satisfaction, and Behavioral Intention for Road Race Events in Taiwan

中文摘要：

本研究主要目的為：(一)發展台灣路跑賽事品質、賽事意象、知覺價值、賽事滿意及參與意圖之衡量工具；(二)調查台灣路跑賽事品質、賽事意象、知覺價值、賽事滿意及參與意圖之現況；(三)比較不同背景參與者之路跑賽事品質、賽事意象、知覺價值、賽事滿意及參與意圖之差異；(四)建構台灣路跑賽事品質、賽事意象、知覺價值、賽事滿意及參與意圖模式。本研究計畫綜合影響路跑賽事之滿意因素及參與意圖相關文獻，編製「台灣路跑賽事品質、知覺價值、賽事意象、賽事滿意及參與意圖量表」為工具，選擇9項臺灣具代表性路跑賽事參與者為對象，採合目標取樣方法共發放800份問卷，共獲得有效問卷641份，所得資料進行分析，結果如下：(一)本研究發展本土化路跑行為之衡量工具，可有效衡量路跑賽事品質、賽事意象、知覺價值、賽事滿意及參與意圖；(二)路跑參加者包含不同的群體，且較喜歡參與半程馬拉松、10公里及馬拉松賽事；(三)不同背景路跑參加者對於賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖之影響並不明顯，除性別、教育程度及職業別部分有顯著差異外；(四)路跑賽事滿意度與知覺價值顯著正向影響再參加意圖，賽事品質、賽事意象和知覺價值顯著直接影響賽事滿意度；賽事品質與賽事意象直接影響知覺價值；賽事品質直接影響賽事意象，而賽事品質與賽事意象透過知覺價值與滿意度間接影響再參加意圖，上述變數收對賽事意象、知覺價值、滿意度及再參加意圖的解釋力分別為63%、72%、70%及59%。綜合結論，台灣路跑賽事品質、賽事意象、知覺價值及滿意度對預測路跑者再參加意圖扮演關鍵角色，本研究結果對路跑賽事行銷與主辦者俱有重要的管理意義，例如活動主辦者與運營者應該考慮參與者的需求並加強賽事品質，以提升參與者的滿意度及再參加的意願。

關鍵詞：賽事品質、賽事意象、知覺價值、賽事滿意、參與意圖

Abstract:

The objectives of this research was as follows: (1) development of the *Scales for Road Race Events* in Taiwan to examine event quality, perceived value, event image, satisfaction, and behavioral intention; (2) to survey the status of the event quality, perceived value, event image, and satisfaction, and behavioral intention *for road race events in Taiwan*; (3) to compare the variables of interest for participants with different backgrounds; and (4) to develop an integrated model for the variables of interest for road race events in Taiwan. This project will integrate the current literature on the behavior, satisfaction, and intention of road race events to develop a scale on the variables of interest, and select representative road race events participants in Taiwan as targets. Purposive sampling is used to gather 800 valid questionnaires. The following results: (1) the development localizing of the *Scales for Road Race Events* demonstrated sound discriminant, validity, and reliability, the scales are well suited to the measurement of participant opinion regarding the event quality, perceived value, event image, satisfaction, and behavioral intention for road race events in Taiwan.; (2) the road runners contains a diverse population who prefer to participate in half marathon, 10 km and marathon on road race event in the past year; (3) There are non-significant differences between different background runners on the event quality, perceived value, event image impact on satisfaction, and the behavioral intention of road race events, except for gender, education and occupation; (4) Event satisfaction and its perceived value had a significant positive effect on revisit intentions, moreover, event quality, event image, and perceived value exerted a direct positive influence on event satisfaction; event quality and event image directly influenced perceived value; and event quality directly influenced event image, event quality and event image through perceived value and satisfaction, indirectly and positively influenced revisit intentions, the explanatory power of each variable for event image, perceived value, satisfaction, and revisit intention was 63%, 72%, 70%, and 59%. In conclusion, the results showed that event quality, event image, perceived value, satisfaction play key roles in predicting road race runners' revisit intentions in Taiwan. The findings of this study have significant managerial implications for event marketing managers and organizers. For example, organizers and operators of events should consider participants' demands and strengthen an event's quality accordingly. They should also improve participants' satisfaction, to enhance their willingness to revisit.

Keywords: event quality, event image, perceived value, satisfaction, behavioral intention

壹、前言

一、研究背景

近年來全球的馬拉松或路跑賽事蓬勃發展，其成長趨勢已逐漸超越利基運動賽事（niche sports events），成為吸引觀光客的主要賽事(Research and Markets, 2011-2012)。以美國為例，2014 年完成馬拉松跑者女性有 1070 萬人，男性有 800 萬人，合計有 18,700,000 人完成馬拉松路跑，完成人數比 1990 年成長 300%（如圖 1）。而馬拉松與半程馬拉松賽事也持續在成長，2014 年半程馬拉松有 2,046,000 場，全程馬拉松有 550,600 場，合計 2014 年所有路跑賽事共有 2,596,600 場（Running USA, 2015），顯示路跑已成為廣受歡迎的運動項目，也是具有成長性的運動產業。反觀臺灣，近年路跑運動儼然成為臺灣最夯的運動項目，根據教育部體育署（2014）之「中華民國 103 年運動城市調查」報告，慢跑已成為臺灣民眾從事的第二名運動項目，參與比例達 25.7%，成為臺灣最受歡迎的運動項目之一。臺灣路跑快速發展，讓臺灣已躋身為世界四大馬拉松國度，若加總 42.195 公里正規馬拉松與超級馬拉松，2013 年總場次有 97 場，僅次於美國、德國、日本，若以面積和人口做比率基礎，臺灣已是世界上「馬拉松數密度最高的國家」（曾文祺，2013）。由上述顯示，台灣地區的馬拉松或路跑賽事，對觀光旅遊活動之影響，已超越過去其他主要的運動賽事。

(一)臺灣路跑賽事蓬勃發展之關注

從近 10 年臺灣地區路跑場次變化，可知路跑賽事在臺灣受歡迎之程度。2005 年全台只有 40 場馬拉松賽事，至 2015 年馬拉松賽事為 637 場，11 年間賽事成長 15.93 倍（跑者廣場，2015）。而臺灣路跑參與人口成長，在政治力與商業力結合下成長十分可觀（張烽益，2014），參與人數超過萬人以上之路跑，十分尋常，例如 2014 年台北富邦馬拉松吸引 40 個國家、地區的選手來台比賽，將近 10 萬參賽者，其中競賽組就有 4 萬 3 千多人報名，國際馬拉松總會已將這項台北年度運動盛事，列入全球 13 大馬拉松的專案拍攝計畫中，對台北國際行銷有莫大之助益（張宏億，2014）。若以每場路跑活動平均 4000 參賽人數估計，2015 年全台參與路跑賽事人次將有 220 萬人次（4000 人次*550 場）。根據中華民國路跑協會祕書長陳華恆觀察，推估目前已養成路跑運動習慣至少有 40 萬人，而廣義的路跑人口應有 200 萬人口（林洧楨，2012）。因此，從近年臺灣路跑賽事蓬勃發展之各種現象，值我們投入更多的關注，以瞭解臺灣路跑賽事背後因素，並將其導入社會期待之發展方向。

(二)路跑賽事品質所延伸之研究議題

目前有關運動觀光客特質之實證或理論研究仍處於起步階段。因此，部分研究者（Ko & Pastore, 2004; Ko, Zhang, Cattani, & Pastore, 2011; Moon, Kim, Ko, Connaughton, & Lee, 2011）應用修正服務品質概念以定義並建構「賽事品質」之理論架構，如此比使用未經修改一般性之服務品質量表，更能了解一般遊客與運動賽事觀光客之變化（Lee & Taylor, 2005; Moon et al., 2011）。雖然服務品質量表模型—「SERVQUAL」，已廣被使用為運動賽事服務監督與評判之

重要標準，然而，此測量並不能完全解決運動產業的特質 (specific characteristics)。

(三) 路跑賽事參與意圖研究之重要性

過去研究顯示有三個主要因素：服務品質、知覺價值及滿意度會影響參與者的行為意圖 (Chen & Chen, 2010; Petrick, 2004; Petrick & Backman, 2002)。Shipway and Jones (2008) 研究有關馬拉松參與者經驗，其結果顯示，馬拉松參與者強烈認同路跑活動，此種特別認同將強化其持續旅行或停留參與馬拉松的行為，且馬拉松參與者需要個人努力去完成賽事，透過參加活動無論在訓練與競爭方面可獲得實惠耐力，並獲得有關長跑「運動生涯」之建構，此外，跑者也會依循特殊路跑次文化規準而產生追隨行為，導致在服裝、行為與價值觀的群體同質性，因而發展出認真路跑運動觀光 (running as serious sport tourism)，也符合認真休閒 (serious leisure) 之追求模式 (Shipway & Jones, 2007; Stebbins, 1992, 2006, 2007)。綜合上述，探討影響路跑賽事品質、知覺價值、賽事意象與賽事滿意及參與意圖之間相互關係，其結果對推動路跑活動政策、規劃與行銷路跑賽事活動是很重要之參考。

二、 研究動機

過去路跑賽事僅是政府或民間團體提倡全民運動之一項手段，然而因為民眾熱烈參與，其運動人口大幅提昇，民眾直間與間接之消費已衍生成為一種產業型態。其次，從每年估計有數佰萬人參與各類型路跑賽，其賽事舉辦之品質如何？路跑賽事參與者之關注為何？參與者對路跑賽事知覺價值為何？參與者對路跑賽事意象為何？此關鍵要素對其滿意度與參與意圖有何影響？上述之議題都是值得深入去探討。

(一) 路跑賽事品質是路跑賽事之核心

運動賽事品質是複雜的概念，包含提供服務之各種程序和流程 (Ko et al., 2011)。賽事品質內涵包含觀眾與遊客在賽會期間接受服務的反應與感受，亦即賽事品質會影響消費者的評價與後續的行為 (Kaplanidou & Vogt, 2007a; Moon et al., 2011)。然而，部分實證研究驗證大型運動賽事 (mega-sporting events) 品質，包括不同的心理與生理方面，例如互動品質與物理環境品質及其他關鍵要素 (如知覺價值、賽事意象及行為意圖等)。因此，本研究以現有「賽事品質」文獻為基礎 (Brady & Cronin, 2001; Ko & Pastore, 2005)，以衡量路跑賽事「品質」為焦點，期望本項研究結果可提供國內路跑賽事之研究與實用價值。

(二) 路跑賽事意象是影響行為意向的指標

近年來有些運動觀光文獻，探討賽事意象對行為意圖的影響 (Kaplanidou, 2007a; Kaplanidou & Vogt, 2007a)。從主動運動觀光客的觀點而言，賽事意象形成主要受情感、生理 (即健康)、社會、組織、環境及獨特特質與賽事關聯之影響 (Kaplanidou, 2010)。換言之，運動觀光客觀念主要來自賽事之經驗，若運動賽事被作為觀光吸引力，則賽事意象可與目的地意象成為平行的概念，即可視為整體來處理 (Baloglu & McCleary, 1999)。由目的地意象與賽事意象文獻中，賽事意象可以概念化為認知與情感，而認知結構與賽事意象整體概念有高

度相關 (Baloglu & McCleary, 1999)，此種觀點與 Kaplanidou (2010) 研究結果相似，包含情感元素 (如情緒與社會層面) 及認知元素 (如活動組織與目的地特色)。此外，賽事意象可間接影響運動觀光客 (包括主動與被動型) 再次參與意圖 (Kaplanidou & Vogt, 2009)，或者重訪目的地 (Kaplanidou & Vogt, 2007a, 2007b)，顯示意象是影響行為意向的非常重要指標 (Baloglu, 1999; Bigne, Sanchez, & Sanjez, 2001; Chalip, Green, Hill, 2003)。因此，在國內如此興盛的路跑風氣中，探討路跑活動參與者賽事意象有其必要性，除可充分瞭解路跑者賽事意象對參與意圖影響模式外，亦可探討其與一般觀光行為或運動觀光行為模式是否相同？相關研究結果亦可作為規劃路跑活動與行銷策略之重要參考。

(三) 路跑賽事知覺價值是影響消費者滿意度重要因素

知覺價值 (perceived value) 變量受服務品質與價格之影響，此變項被認為是服務品質與消費者滿意度間重要之因素，亦是消費者未來意圖的決定因素 (Calabuig, Burillo, Crespo, Mundina, & Gallardo, 2010; McDougall & Levesque, 2000; Murray & Howat, 2002)。相關研究已證明知覺價值正向影響三個結構 (品質、滿意度及價值)，並影響對消費者行為與服務的忠誠度 (Brady et al., 2005)。在這些早期品質的研究，運動活動群體中有關分析消費者滿意度及知覺服務價值研究並不多。因此，有關路跑賽事知覺價值對路跑者參與意圖影響效果，是否如同一般觀光行為或運動觀光行為模式？此確實有必要加以深入探討，以瞭解路跑賽事知覺價值對路跑賽事參與意圖之影響機轉。

(四) 路跑賽事滿意度對參與意圖有重要影響

在觀光研究中，目的地意象 (Chen & Tsai, 2007)、滿意度、重遊意願 (Bigne et al., 2001) 均有密切相關。Funk, Toohey, & Bruun (2007) 發現正向的目的地意象與跑者參與國際運動賽事有高度關聯。而滿意度是影響運動賽參與意圖之主要因素，相關研究皆指出運動賽事滿意度對參與意圖的重要影響 (呂謙, 2005; Fry, Stoner, & Hattwick, 2001)，尤其對於活動主辦單位而言，滿意度才能吸引更多參與者，企業才會有更高的意願贊助運動賽事 (邱榮基、畢璐鑾, 2008)。其次，對參與者個人而言，滿意度代表休閒活動執行符合個人主觀預期與評價 (Petrick, Morais, & Norman, 2001)；從服務品質的觀點，運動賽事的經驗品質感知會導致參與未來活動持積極態度 (Tian-Cole, Crompton, & Willson, 2002; Wilson & Rodgers, 2004)，顯示滿意度與運動賽事經驗對休閒體能活動發展是重要之角色，賽事滿意度，可作為預測活動的承諾與未來參與活動意圖 (Funk, Jordan, Ridinger, & Kaplanidou, 2011)。因此，探討路跑賽事的參與意圖，有必要從路跑參與者滿意度觀點，探討影響路跑賽事滿意度之相關因素，並進一步探討滿意度對參與意圖的影響。

(五) 建構完整臺灣路跑賽事參與意圖模式之必要性

綜合前述之分析，面對臺灣路跑賽事之蓬勃發展，有關路跑賽事品質為何？路跑賽事參與者知覺價值為何？路跑賽事意象為何？路跑賽事參與者滿意度為何？上述之因素對路跑賽事參與意圖影響為何？這些因素彼此之間相互間影響關係如何？可否建構出完整臺灣路跑賽

事參與意圖模式？早期雖有服務品質、知覺價值及滿意度會影響參與者的行為意圖之相關研究（Chen & Chen, 2010; Petrick, 2004; Petrick & Backman, 2002; Jin, Lee, & Lee, 2013; Yang, Gu, Cen, 2011; Nuviala1, Grao-Cruces, Pérez-Turpin, and Nuviala1, 2011），不過臺灣相關研究大都屬路跑賽事個案之分析，並無較全面、整合性之分析，尤其尚無完整建構出臺灣路跑賽事品質、賽事意象、知覺價值、賽事滿意及參與意圖之模式。因此，本研究計畫擬從臺灣路跑賽事參與者為對象，探討路跑賽事品質、賽事意象、知覺價值、賽事滿意及參與意圖之現況、差異及關係，並進一步建構臺灣路跑賽事品質、知覺價值及參與意圖之模式，其研究結果可提供政府推動路跑運動政策，以及主辦單位辦理路跑賽事策略、規劃活動、服務品質及行銷策略之參考。

三、 研究目的

本研究計畫以臺灣路跑賽事參與者為對象，探討路跑賽事品質、賽事意象、知覺價值、賽事滿意及參與意圖之現況，比較不同背景路跑賽事參與者之賽事品質、賽事意象、知覺價值、賽事滿意及參與意圖差異，並進一步建構路跑賽事品質、賽事意象、知覺價值、賽事滿意及參與意圖之影響模式。具體研究目的如下：

- 發展台灣路跑賽事品質、賽事意象、知覺價值、賽事滿意及參與意圖之研究工具。
- 探討台灣路跑賽事品質、賽事意象、知覺價值、賽事滿意及參與意圖之現況。
- 比較不同背景參與者之路跑賽事品質、賽事意象、知覺價值、賽事滿意及參與意圖之差異。
- 建構台灣路跑賽事品質、賽事意象、知覺價值、賽事滿意及參與意圖模式。

四、 重要參考文獻與評述

(一) 賽事品質理論與相關研究

運動與休閒行銷經常使用修正後的服務品質衡量以反映產業特色（Ko & Pastore, 2004; Theodorakis, Kambitsis, Laios, & Koustelios, 2001; Westerbeek & Shilbury, 2003）。過去的研究者驗證有關「服務品質」與消費者的行為意圖（behavioral intention）及忠誠度（loyalty）各種議題時，顯示服務質量是最重要的因素（Brady & Cronin, 2001; Theodorakis et al., 2001; Westerbeek & Shilbury, 2003），尤其在有關運動管理與行銷採用服務品質為關鍵概念（significant concept）來解釋遊客與觀眾的看法。

1. 賽事品質之定義與概念

「服務品質(Service quality)」是「一個全球性對相關服務的監督性的判斷或態度（Parasuraman, Zeithaml, & Berry, 1985: 16）。客戶感受服務品質的水準主要取決於客戶比較消費前對服務期望與體驗服務後的差異結果（Zeithaml, Berry, & Parasuraman, 1993）。服務品質分為有形性（如環境、設備及設計）與無形性（如安全性、保險及溝通）（劉照金、董燊、蔡

永川、劉一慧，2013；Howat, Murray, & Crilley, 1999; Ko & Pastore, 2004; Wakefield & Blodgett, 1999)。瞭解消費者對服務品質認知是探討服務品質之前很重要的問題，通常消費者對服務品質的認知包含結果構面 (outcome dimension) 與過程構面 (process dimension) (Lehtinen & Lehtinen, 1991；Grönroos, 2000, 2006)。Lehtinen and Lehtinen 更進一步提出互補的三向度品質理論模式：實體品質 (physical quality)、互動品質 (interactive quality)及組織品質 (corporate quality)。其次，Grönroos (1982) 根據經驗法則、概念的研究及實際經驗，認為運動觀光服務品質有七個重要的標準：專業化與技巧、名聲與信用、態度與行為、易取性與彈性度、可信度與信賴度、服務互補及服務基架 (servicescape)。前二項與結果品質有關，後五項則與過程品質有關。

2. 賽事品質之衡量構面

有關國內外各期刊發表運動「服務品質」與消費者的行為研究，例如 Theodorakis et al. (2001)驗證職業籃球賽事服務品質對滿意度的影響，使用五個服務品質構面指標（如易取性、回應性、可靠性、安全性及有形性），顯示可靠性與有形性影響整體滿意度較強。Moon et al. (2011)針對國際自行車道路階段賽之觀眾/遊客，基於過去服務質量研究衡量指標，採用有形性與無形的因素探討消費者服務品質認知對地方意象的影響，顯示觀眾賽事品質觀點對地方意象有正向影響。近年來研究者針對運動的情境日益增加，例如以賽事品質來了解消費者有關比賽的整體印象 (Hansen & Gauthier, 1989; Ko & Pastore, 2004)、互動 (Brady & Cronin, 2001; Ko & Pastore, 2004)、結果 (Deighton, 1992; Grönroos, 1982, 1984) 及物理環境 (Bitner, 1992; Westerbeek, 2000)。比賽品質涉及觀眾對本場比賽表現品質的觀感；互動品質是指場地管理人員與志工回應角色所提供服務的過程；結果品質乃是消費者從互動過程獲得服務者提供服務之認知；物理環境品質則是觀眾對硬體設施的評估。有關路跑或馬拉松的賽事品質構面衡量指標包括：活動品質、互動品質、成果品質、環境設施品質 (盧瑞山、陳弘慶，2007；盧瑞山、張家銘、黃芳銘，2008)；互動、環境設施、提供需求、競賽資訊 (邱榮基、畢璐鑾，2008)。過去大部分研究則使用「SERVQUAL」量表 (劉照金等，2013；Howat et al., 1999; Ko & Pastore, 2004; Wakefield & Blodgett, 1999)，其衡量方式為知覺服務減去期望服務的落差，亦有只針對顧客感受程度來衡量服務品質 (Cronin & Taylor, 1992)，作為服務品質測量之工具，然而，因為服務品質會隨著行業特色不同，服務品質之知覺構面有所差異 (盧瑞山等，2005)，且運動產業有著與其他產業不同之特性 (劉照金等，2013；鍾志強，2008; Jin et al., 2013)。因此，為了選擇符合本研究對象特色之量表，故參考盧瑞山等 (2005)、劉照金等 (2013) 及 Jin et al., (2013) 等研究有關賽事品質指標，建構「路跑賽事品質量表」為測量工具，進行路跑賽事品質調查。

3. 賽事品質與知覺價值、賽事意象、滿意度、參與意圖之關係

個人之賽事經驗對其活動休閒態度發展有所影響，大眾參與運動賽事 (MPSEs) 顯示通過其情緒反應出運動休閒環境之體驗消費形式 (Holbrook & Hirschman, 1982)。休閒體驗在本

質上若是強烈享受或感知高品質服務，則會產生高水準情感強度 (Arnould & Price, 1993)，此種正向運動賽事經驗知覺品質，可能會導致個人對功能、情感、象徵意義的強化賽事 (Filo, Funk, & O'Brien, 2009)，甚至提升賽事消費體驗的意義與重要性 (Addis & Holbrook, 2001)。因此，良好的服務品質將有助於提升顧客的知覺價值，而顧客所感受服務的知覺價值是企業成功的關鍵因素，亦是製造另一個競爭優勢之來源 (Woodruff, 1997; Gronholdt Martensen, & Kristensen, 2000)。部分實證研究證實服務品質對服務知覺價值有顯著影響，服務品質是形成服務知覺價值的前因，服務品質確實對服務知覺價值有顯著的影響，服務品質與服務知覺價值之間具有顯著的相關 (Bolton & Drew, 1991; Cronin et al., 2000)，且良好的服務品質可增加顧客知覺價值 (Bitner, 1990; Cronin et al., 2000)。在服務業有關意象實證研究中，發現消費者對公司意象會影響其價值觀點，且意象也成為服務品質與忠誠度間之中介變項 (Lai, Griffin, & Babin, 2009)。此外，Lee et al. (2005) 亦指出現場體驗 (賽事品質) 將會影響個人賽事意象。復原編輯從 Zeithaml (1988) 發展的品質-價值-行為意向模式 (Quality-Value-Behavior Intention; Q-V-B)，認為消費者的購買決策與該決策所帶來的服務品質和服務知覺價值有密切關連，服務品質的高低對於行為意圖有顯著影響，良好的服務品質對增加顧客知覺價值、滿意度及行為意圖有正面影響 (Bitner, 1990; Reichheld & Sasser, 1990; Sheth, Newman, & Gross, 1991; Cronin & Taylor, 1994)；Jin et al. (2013) 研究發現運動賽事品質會正向影響知覺價值、賽事意象及參與意圖。經由上述文獻討論本研究推論以下研究假設：

H1：「賽事品質」對「賽事意象」有顯著影響。

H2：「賽事品質」對「知覺價值」有顯著影響。

H3：「賽事品質」對「賽事滿意」有顯著影響。

(二) 賽事意象之理論與相關研究

意象 (image) 的觀念最早是由 Boulding (1956) 所提出，指人的行為除了是由知識和資訊所引導，更是個人所知覺之結果。意象一詞經常被廣泛使用在心理、行銷及觀光領域等研究 (張淑青, 2008)。在觀光行為研究，意象常被定義為「人們對於地區、目的地或標示物所持的信念、想法、感覺、印象與期望 (Crompton, 1979; Kotler, 1994)」。換言之，意象是對某特定地點經過一段時間整合不同資訊來源後的整體知覺 (Assael, 1984)，最後，經由所有感覺在心裡創造及再創造經驗 (Vealey & Greenleaf, 2010)。基於意象移轉的概念 (image transfer concept) 理論，活動與目的地會影響彼此的意象 (Gwinner, 1997; Gwinner & Eaton, 1999; Xing & Chalip, 2006)。

1. 賽事意象之定義與概念

有關賽事意象定義，Keller (1993) 基於其所提出理論架構，認為賽事意象是一種特殊的態度組成，包括態度、屬性、利益和成本所組成之實體 (entity)；Andreu, Bigne and Cooper (2000) 指出意象為消費者對真實或非真實的商品、公司、品牌的個人認知。Kaplanidou (2007b) 進一步利用 Keller 的積極參與者角度理論架構上的品牌形象，從旁觀者的角度來看，賽事意象可

被視為一個目的地的旅遊景點。基於此種假設，賽事意象可由類似目的地意象的組件來對應，而類似組件乃由認知、情感與整體觀點之三組件。換言之，舉辦運動賽事會受到目的地意象之影響，並與此賽事有相關聯之屬性 (Kaplanidou & Christine, 2007)。因此，賽事與目的地的行銷意象因而有其不同特點，例如賽事意象行銷趨於結合元素，包括次文化與參與者之間結合 (Green, 2001) 及身體活動的組成；目的地之意象行銷往往包括特別實體與文化環境。早期研究指出，只要賽事意象被認為合乎目的地意象，則運動賽事意象可影響目的地意象 (Jago et al., 2003; Chalip & McGuirly, 2004; Xing & Chalip, 2006)。因此，張書榮、張孝銘、陳秀榮 (2009) 將賽事意象定義為遊客在賽事舉辦前，對此賽會的認知程度及整體環境感受。

2. 賽事意象之衡量構面

Gwinner (1997) 提出賽會意象包含賽會功能 (如運動、節慶、藝術)，賽會特色 (如規模、專業化狀況、歷史、場地、宣傳、外觀) 與個別因素 (如賽會意義、實力及過去與賽會的歷史)。此三種賽會意象可能會影響個人對特定賽會的看法，而在觀賞性賽會中又以賽會規模、專業地位，參與者 (專業或業餘)、傳統/歷史活動、活動場地外觀和宣傳等五種因素，可能影響消費者對賽會整體形象的感知。Kaplanidou (2007a) 則將賽會意象的衡量方式分為情感成分與認知成分兩大構面，並將其理念發展成模型，而檢驗模型包含項目分別有陰鬱，令人興奮，愉快或不愉快，放鬆或令人不安，傳統的或現代國際區域，天然或人工，信譽、氣氛、有價值或無價值、滿足或不滿足、危險或不危險、激勵或不激勵、刺激或黯淡、貧乏、健康、無聊、合意等衡量項目。張書榮等 (2009) 將賽會意象分為賽會認知、賽會重要性及賽會資訊等類別來衡量。林宏恩、古志銘、李岳修 (2009) 及方怡潔、伍木成、王建興 (2012) 將賽會意象區分為「功能性因素」、「象徵性因素」、「經驗性因素」三個因素。

3. 路跑賽事意象、知覺價值、滿意度、參與意圖之關係

Kaplanidou and Christine (2007) 指出「目的地意象與賽會意象有相關連性」，兩者屬性在意象觀點是相類似的，而意象通常被觀光領域學者認為是預測旅客感覺重要指標，並且足以影響遊客決策過程 (Fakeye & Crompton, 1991; Echtner & Ritchie, 1993)。因此，賽會意象是指賽會給人的印象，可與觀光領域之意象概念通用。普遍的文獻皆指出目的地意象對旅遊行為有所影響，並認為目的地重遊與發展，可從旅遊行為來審視 (Bigne et al., 2001; Fakeye & Crompton, 1991; Lee et al., 2005)。而旅遊行為可分為前、中、後三階段，前是指目的地的選擇拜訪；中是指旅遊體驗及體驗評價，後者是拜訪後行為意圖等三階段 (Ryan, 2002; Williams & Buswell, 2003)。換言之，目的地意象可影響知覺價值與行為意圖。此外，Kaplanidou and Vogt (2007a) 研究顯示，目的地意象與參與者早期經驗顯著影響其再參加意圖。Chi and Qu (2008) 分析目的地意象與目的地滿意度及忠誠度之因果關係，發現目的地意象透過滿意度間接影響目的地之忠誠度。在服務業有關知覺意象實證研究中，發現消費者對公司意象會影響其價值觀點，而且意象也成為服務品質與忠誠度間之中介變項 (Lai et al., 2009)。Ryu, Han, & Kim (2008) 有關快速休閒餐廳的服務研究發現，意象對知覺價值有顯著影響，且對知覺意象可

作為消費者行為意向之預測指標。運動觀光客參加賽事在於目的地具有滿足其需求與目標的潛力，倘若目的地有正向之認知，則其會有再參加之意圖 (Kaplanidou & Vogt, 2009)，或因受目的地意象影響再次參加常態性運動賽事 (Bigne et al., 2001; Kaplanidou, 2007b; Kaplanidou & Vogt, 2007a)。Chalip et al. (2003) 探討美國與紐西蘭居民對汽車運動賽事的電視廣告、目的地廣告在塑造目的地形象與旅遊意向之關係，發現目的地意象與參訪意圖有顯著相關，甚至旅遊目的地形象可能是透過賽事意象來影響，此種影響是正面還是負面之性質，與賽事及目的地意象均有相關。Funk et al. (2007) 也發現正向的目的地意象與跑者參與國際馬拉松賽有高度關聯；Jin et al. (2013) 研究發現運動賽事意象會透過其知覺價值間接影響參與意圖。因此，賽事意象是了解滿意度及參與意圖重要的變項。基於文獻探討結果作下列假設：

H4：運動賽事意象對知覺價值有正向影響

H5：運動賽事意象對賽事滿意有正向影響

(三) 賽事知覺價值之理論與相關研究

知覺價值 (perceived value) 理念源自於 Thaler (1985) 所提出交易效用理論，認為每個人對價格皆有不一樣之價值，經過比價後，對於獲得價值、交易價值及犧牲價值，即產生知覺價值，並影響顧客購買意願。然而，亦有學者認為知覺價值可用於消費者在消費過程中，知覺產品利益與所付出之間的權衡關係，並做出整體效用之評估 (魏文欽、林怡君, 2010)。

1. 知覺價值之定義與概念

Zeithaml (1988: 10) 將知覺價值定義為「消費者以知覺所得到與付出為基礎，進行產品整體效用評估」，並將價值分為低價格之價值、商品是顧客想要的價值、價值是顧客所付出的價格品質，及價值是顧客付出後所得到的。另外，Monroe (1990) 認為價值是賣方需提供買方之所需，令買方知覺利益能大於知覺犧牲，才能使消費者感到價值之存在；而知覺利益是指實體與服務屬性的組合，知覺犧牲則是指貨幣犧牲 (價格) 與非貨幣犧牲 (時間)。此價值效力扮演對消費者與行銷者之重要角色，因為它是當今市場最強有力的要素。在行銷中，知覺價值主要反映消費者對產品或服務之表現、品質與價格之觀點 (Patterson & Spreng, 1997)。同樣，Vandermerwe (2003) 建議價值決定 (determination of values) 之定應，根據消費者接受服務之經驗滿意來驗證。因此，本研究有關知覺價值是「觀眾有關從運動賽事獲得 (從運動賽事得到效益) 或給予 (從運動賽事獲取與利用之成本或折扣) 淨價值 (the net worth) 之總體評價」 (Hellier, Geursen, Carr, & Rickard, 2003: 1765)。

2. 知覺價值之衡量構面

Sweeney and Soutar (2001) 提出的知覺價值模型，確定四種尺度，分別為情感價值、社會價值、價格/價值(金錢)功能性價值與表現/品質功能性價值等四種衡量尺度。Petrick (2004) 則提出多重構面尺度衡量 (SERV-PERVAL) 進行衡量顧客知覺價值，分別為品質 (quality)、貨幣價值 (monetary value)、行為價格 (behavioral price)、情感性反應 (emotional response) 與聲譽 (reputation) 等五種構面。Jin et al. (2013) 提出運動觀光之知覺價值構面包含競賽品

質 (game quality)、互動品質 (interaction quality)、結果品質 (outcome quality) 及實體環境品質 (physical environment quality) 等四個構面。此外，蘇瑞蓮、金詰 (2008) 在探討旅遊意象、知覺價值、服務品質、知覺風險對遊後行為意圖的相關研究中，亦是以品質、貨幣價值、行為價格、情感性反應及聲譽等五種構面進行衡量。

3. 知覺價值與滿意度、參與意圖之關係

有關知覺價值與滿意度之關係研究，陳勁甫、陳佩君、陳美惠、李佳玲 (2006) 針對參觀者對博物館服務品質、知覺價值、滿意度及行為意圖關係之研究，發現知覺價值會透過滿意度間接正向影響行為意圖，並不會直接影響行為意圖，且服務品質透過知覺價值對滿意度產生間接正向關係；張良漢 (2008) 針對高爾夫球場使用者之知覺服務品質對忠誠度之影響，發現服務品質、價值好，進而對球場具有滿意及產生忠誠度，服務價值對滿意度以及忠誠度有直接影響。康正男、胡林煥、周宇輝 (2009) 發現運動場館使用者如能知覺良好的服務品質，將會提昇對場館的使用滿意及產生忠誠之表現；蘇瑞蓮、金詰 (2009) 針對安親班有關知覺價格、服務品質、知覺價值、滿意度與忠誠度關係之探討，發現安親班之滿意度除中介服務品質與忠誠度的關係，也中介知覺價值對忠誠度的關係。

從過去有關顧客、消費者與運動產業的相關研究，Petrick and Beckman (2002) 研究中，證實知覺價值能有效影響再購意願或再參與意願的行為意向。而 Swait and Sweeney (2000) 研究也指出，知覺價值對行為意圖具有正向影響。以觀光行為研究結果，許多研究者都同意知覺價值會顯著影響觀光客之行為意圖 (Chen & Chen, 2010; Hutchinson, Lai, & Wang, 2009; Lee, Yoon, & Lee, 2007)。Lee et al. 開發韓國遊戰觀光 (war-related tourism) 遊客價值觀概念模型，發現遊客價值觀會影響遊客的滿意度與旅遊行為意向。此外，Hutchinson et al. 發現高爾夫正向知覺價值值會導致其正向行為意向 (如再遊意圖及口碑)；Chen and Chen 發現知覺價值顯著影響古蹟旅遊行為意向；Jin et al. (2013) 研究亦發現大邱國際田徑錦標賽事知覺價值會正向影響其參與意圖。林士彥、張良漢、蘇士博 (2007) 則在研究中指出，服務品質是職棒現場觀眾所感受到的服務價值，並做出觀感反映，而此反映將影響滿意度以及後續行為，同時服務品質也是運動產業需重視的面向。此外，莊茹倩、田麗、鍾志強 (2010) 遊客涉入程度、知覺價值與行為意圖關係之研究—以雲林縣音樂嘉年華會為結果發現，知覺價值與行為意圖呈現顯著正相關，並具有預測力；

H6：運動賽事知覺價值正向影響滿意度

H7：運動賽事知覺價值正向影響行為意圖

(四) 路跑賽事滿意度之理論與相關研究

滿意度 (satisfaction) 的觀念最早是由 Cardozo (1965) 所提出的顧客滿意度，認為顧客滿意度會影響重購行為，亦可能轉而購買其他產品。後來眾多學者紛紛運用顧客滿意度理論與觀念在相關領域，顯示滿意度在各項消費領域是一項重要變數。

1. 賽事滿意度之定義與概念

滿意度的定義與意涵相當多元，Oliver (2010)定義滿意度是一種愉悅的滿足感，乃消費者期待某些需求，而在目標被滿足後所帶來的愉快感受，亦是消費後感受到產品本身或其屬性所提供之愉悅程度的一種判斷與認知。而 Cronin et al. (2000)定義，滿意度是一種情感上的評估，此評估是反應出消費者自身對擁有或使用某項服務時，所獲得的一種正面情感的滿足。Kolter (2003)則認為滿意度是個人所感覺愉悅或失望的程度，係源自顧客對產品功能或結果的知覺與個人對產品的期望。劉照金、張家銘、劉一慧、黃靖淑 (2005)的觀點，滿意度被認為是事前的期望和體驗後所獲得的整體感覺，會受到社會因素、心理狀態、現場體驗氣氛、及群體互動等內外因素的影響，亦反應個人的真實體驗，並與期望做其比較，若期望大於實際感受則不滿意，反之，小於則滿意。林聰哲 (2008)認為所謂滿意，是指消費者在購買產品或享受服務後，對產品或服務表現的好壞與其原先的期望所做的綜合性判斷。林東興、楊子孟、涂鵬斐 (2010)則認為滿意度與個人特質、過去的不同經驗有關，是一種複雜心理狀態，因個體不同對同樣的事物會產生差異性的認知，在滿意度上的感受也會有所不同，也就是當感受高過個人認知臨界時，會感到滿意；反之則感到不滿。

有關滿意度理論模式，目前已發展出許多理論與模型，包括：服務品質模式 (Hill, 1992)、滿意差距模式 (Vavra, 2002)、滿意評價模式 (Hoyer & MacInnis, 1997)、滿意認知模式 (Zeithaml & Bitner, 2000)、顧客滿意度比較模式 (Szwarc, 2005)、期望失真模式 (Engel, Blackwell & Miniard, 1995) 等六項理論。然而在滿意度領域，目前學者常使用 Fornell, Michael, Johnson, Anderson and Barbara (1996)以及 Oliver (1980)的滿意度模式作為理論基礎，前者所提出的模式為美國顧客滿意度指數模式(簡稱 ACSI)，後者提出則為滿意度前因與後果之模式(即期望確認/失驗理論)。ACSI 模式將滿意度分為前因與後果，前因分別為知覺品質、知覺價值以及顧客知覺期望等三種，後果則是忠誠度或選擇退出。因此，滿意的運動賽事經驗有促進對活動的承諾與未來運動意圖積極態度發展之潛力 (Funk et al., 2011)。

2. 運動賽事滿意度之衡量構面

滿意度的衡量大致上可分為「整體滿意度」與「分項滿意度」兩種 (Fornell, 1992)，前者是整體評估，後者指的是產品各屬性的滿意度評估。Fornell et al. (1996)發展出顧客認知品質、顧客期望、顧客認知價值、整體顧客滿意、顧客抱怨及顧客忠誠度等六種構面作為衡量指標。Zeithaml and Bitner (2000)則分為產品品質、服務品質、情境因素、個人因素與價格等構面作為衡量指標。有關運動賽會滿意度的評估，Shonk and Chelladurai (2008)以可及性品質、住宿品質、賽會場地品質與賽會活動品質來評估賽會品質滿意度；林聰哲 (2008)則分為球場設施、球道特色、球場服務及擊球體驗來衡量。至於馬拉松參與滿意度衡量，張家銘 (2006a)將 2004 澎湖世界華人馬拉松賽會滿意度因素區分為品質承諾、接待服務及設施服務等三因素；邱榮基、畢璐鑾 (2008)將台灣地區馬拉松賽會滿意度因素區分為路線、符合期待、宣傳及服務人員等四因素；陳家倫、楊涵鈞、簡欣穎 (2012)將 Nike Running Club 跑者滿意因素區分為活動滿意、設施滿意及整體滿意等三因素；蔡聰智、謝旻諺、曾淑平 (2008)將梨

山馬拉松賽參與者滿意因素區分為身心滿意、場地與賽程滿意及品質承諾滿意等三個構面；曹校章(2013)以臺灣顧客滿意指標(TCSI)為基礎，將富邦臺北馬拉松運動觀光滿意構面區分為預先設想之基準、整體評價、人員的滿意度及績效與認知差距；連央毅、陳美燕(2015)以整體滿意度的概念為基礎，再參考國內相關研究，將馬拉松滿意度因素區分為服務、品質及身心等三個構面。綜合而言，馬拉松參與滿意度衡量構面包括品質承諾、接待服務、設施與路線、活動規劃、身心感受等構面。

3. 滿意度對路跑賽事參與意圖之影響

從觀光文獻分析，滿意度已被證實可強而有力的預測觀光後階段行為意圖(Baker & Crompton, 2000; Bigne et al., 2001; Lee et al., 2004)。滿意度顯示是服務質量(Lee et al., 2005)、態度(Ekinci, & Hosany, 2006)及目的地形象(Bigne et al., 2001; Chen & Tsai, 2007)對行為意圖影響之中介變項；也有研究支持滿意度會強力正向影響態度與行為(Gomez-Jacinto, Martin-Garcia, Bertiche-Haud'Huyze, 1999)，高度滿意個人將會有再參加活動之意圖與行為，正向滿意度是再次參與賽事活動的驅力(Petrack et al., 2001)。早期運動觀光研究中，顯示滿意度對參與意圖與行為有正向影響(如吳育誠、林房儻, 2009; Bigne et al., 2001; Chen, & Funk, 2010; Kaplanidou, & Gibson, 2010; Kaplanidou & Vogt, 2007a)，滿意度會影響態度及造成態度改變(Oliver, 1980)。而在路跑賽事研究發現賽事滿意度對於路跑賽事忠誠度等有正向影響關係(林志偉、黃明祥、林祐陞、劉雅嵐, 2014; 張家銘, 2006a, 2006b; 曹校章, 2013; Wicker, Hallmann, & Zhang, 2012)。綜合上述相關文獻，顯示滿意度與體育賽事的經驗對體能活動休閒的發展是重要角色，賽事的滿意可作為預測活動的承諾與未來參與活動意圖(Funk et al., 2011)。因此，基於文獻探討結果作下列假設：

H8：路跑賽事滿意正向影響路跑參與意圖

(五) 參與意圖之理論與相關研究

消費者態度的發展受到前期服務經驗與經常性過程來決定是否到訪或避開服務公司提供的產品(Colgate & Lang, 2001)。客戶喜好的行為意圖會出現明顯忠誠度，行為意圖具體指標是向人推薦該公司、再參加這家公司及傳播正面口碑(Shoemaker & Lewis, 1999)。

1. 賽事參與意圖之定義與概念

Oliver(2010)指出，行為意圖之實行是對某種行為的肯定，與此相同概念，參與意圖在本研究是指未來會重返其目的地，而且亦會向其家人或親友及他人推薦路跑賽事。參與意圖與參與意圖之間的關聯曾被透過後設分析(meta-analyses)加以檢驗(Sheppard, Hartwick, & Warshaw, 1988; Hagger, Chatzisarantis, & Biddle, 2002)，此種理論架構包括理性行為(Fishbein & Ajzen, 1975)與計劃行為理論(Ajzen, 1991)。此類後設分析結果提供有關參與意圖與參與意圖之間的關聯。Hagger et al.(2002)發現即使是小而顯著的行為意圖對實際體能活動也會有影響，然而Sheppard et al.(1988)卻發現意圖與行為關係受活動類型的影響。在運動與旅遊的環境中，意圖與行為之間有顯著的關聯(Kaplanidou & Vogt, 2007b)，參與意圖可作為預測後

續之再參加行為。

2. 賽事參與意圖構面衡量

有關參與意圖構面衡量，Chen and Tsai (2007)研究指出，遊客正面的行為意向可從其旅遊目的地重遊意願及推薦意願來衡量。也有研究從持續消費、購相關產品、分享相關情形及推薦他人等四個題項來衡量行為意圖 (Rust & Zahorik, 1993; Boulding, Kalra & Zeithaml, 1993; Cronin et al., 2000)；李佳珮、莊茹倩、鍾志強 (2010) 將行為意圖分為推薦他人、重遊意願、協助推廣、購買相關產品等四個構面；李奇勳、蘇瑞蓮 (2008) 則從重遊、推薦意願觀點分出三個題項其衡量行為意圖。

貳、研究方法、步驟

本研究目的主要在探討臺灣路跑賽事品質、賽事意象、知覺價值、賽事滿意及參與意圖之現況，並比較不同背景參與者之差異，以及建構路跑賽事品質、知覺價值、賽事意象、賽事滿意及參與意圖影響模式。本研究之研究架構(如圖 1)：

一、研究架構

綜合本研究目的與研究假設形成本研究影響路跑賽事品質、賽事意象、知覺價值、賽事滿意及參與意圖之研究架構圖，如圖 3。

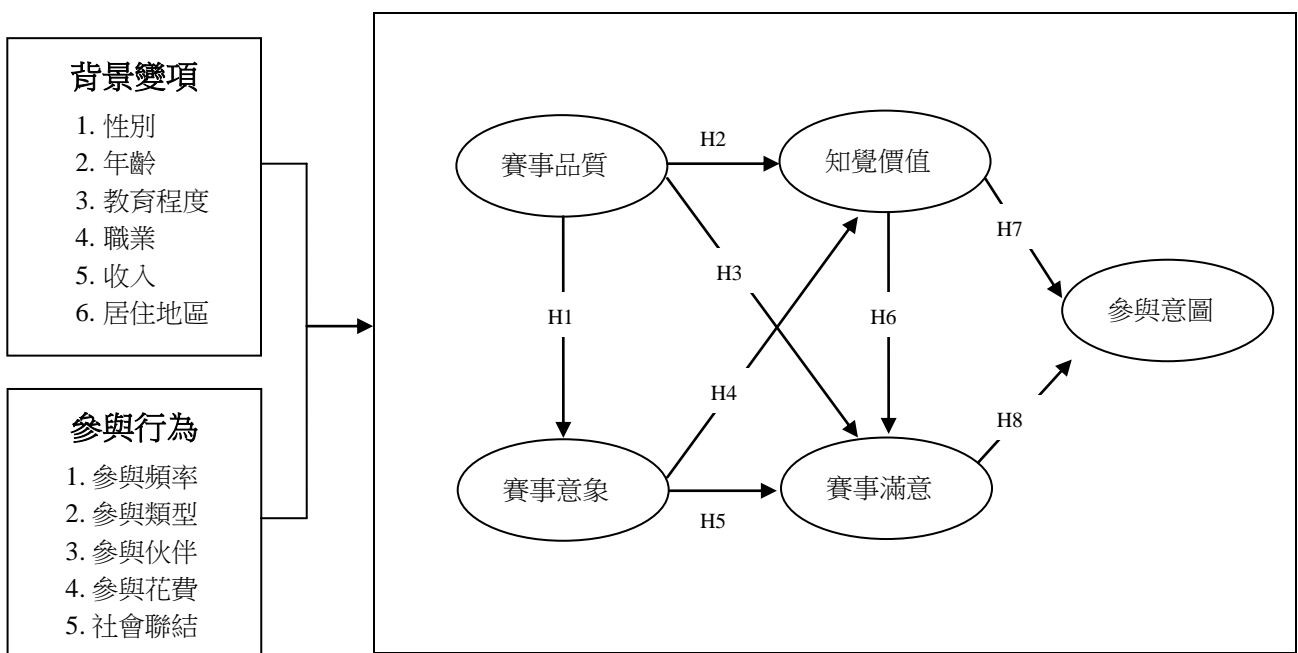


圖 3 路跑賽事品質等變項對賽事滿意及參與意圖影響研究架構圖

二、研究假設

根據研究計畫之目的，建構與驗證臺灣路跑賽事品質、賽事意象、知覺價值、滿意度及

參與意圖之影響模式，形成以下之研究假設：

- H1：路跑賽事品質正向影響賽事意象。
- H2：路跑賽事品質正向影響知覺價值。
- H3：路跑賽事意象正向影響知覺價值。
- H4：路跑賽事品質正向影響賽事滿意。
- H5：路跑賽事意象正向影響賽事滿意。
- H6：路跑知覺價值正向影響賽事滿意。
- H7：路跑知覺價值正向影響再參與意圖。
- H8：路跑賽事滿意正向影響再參與意圖。

三、研究對象

本研究對象（母群）以居住於臺灣地區一年內曾參與路跑賽事或活動之 20 歲以上的參與者。研究樣本則選擇臺灣不同地區（北部、中部、南部、東部及離島）、具代表性（舉辦歷史、類型、組別、族群及參與人數）之路跑賽事現場，採合目標取樣(purposeful sampling)方式（性別、年齡、參與程度、參與年資、地區分布等因素）進行調查，以 1,200 份有效樣本為抽樣目標，蒐集路跑參與者之賽事品質、賽事意象、知覺價值、賽事滿意及參與意圖之資料。

四、資料收集方法與過程

本研究為橫斷面研究 (cross-sectional study)，以臺灣地區路跑賽事或活動參與者為對象，採合目標便利取樣方法。資料蒐集採現場調查方式（配合路跑賽事或活動之舉辦）進行。取樣步驟為先取得受試者同意自願受測（填寫同意書），再由合格施測者（接受四小時問卷訓練，含研究倫理講習）說明研究目的，再進行施測。受試者篩選條件，包括一年內曾參與路跑賽事 20 歲以上的國民，並儘量蒐集不同路跑參與程度（輕度：1-2 次/年；中度：3-5 次/年；重度：6 次以上/年）、性別比例（男女比例）、年齡層（20 歲-65 歲）及地區分布，篩選合格受試者。

五、研究工具

本研究旨在探討臺灣路跑賽事品質、賽事意象、知覺價值、賽事滿意及參與意圖之現況、不同背景差異比較及影響之模式建構，研究工具主要是基於文獻的綜合回顧發展研究問卷初稿，問卷題項採用 Likert 七點尺度量表，問卷初稿擬定後邀請學者專家填寫專家諮詢問卷，以建立問卷內容效度，並根據學者專家對問卷內容與語句修正後，選取預試適合對象並進行預試，並經項目分析、探索性因素分析、驗證性因素分析及信度分析之過程，完成正式問卷之修正。相關研究工具如下：

1. 路跑賽事品質量表：有關路跑賽事品質之問卷設計是基於 Lehtinen and Lehtinen (1991)、Grönroos (2006) 及 Moon et al. (2011)。路跑賽事品質量表共四個構面：賽事品質 (game quality) (3 個題項)、互動品質 (interaction quality) (5 個題項)、成果質量 (outcome quality) (3 個題項) 及環境品質 (physical environment quality) (2 個

- 題項)。本量表採李克特7點量表(7=強烈同意.....;1=強烈不同意)，用於測量路跑賽事品質。
2. 路跑賽事意象量表：路跑賽事意象衡量方法主要參考相關文獻(Bigne´ et al., 2009; Hallmann et al., 2010; Gwinner, 1997; Kaplanidou, 2007; Papadimitriou et al., 2015)所建構之賽事可影響個人觀感之二個構面，包括賽事創意特質(creative features)(2個題項)及賽事聲譽(reputation)(2個題項)。本量表採李克特7點量表(7=強烈同意.....;1=強烈不同意)，用於測量路跑賽事意象。
 3. 路跑賽事知覺價值量表：主要參考相關文獻發展問卷(Chen & Chen, 2010; Holbrook, 2006; Monroe, 1990; Zeithaml, 1988)，量表區分路跑賽事知覺價值為行為價格(behavioral price)(3個題項)及情緒反應(emotional response)(2個題項)。本量表採李克特7點量表(7=強烈同意.....;1=強烈不同意)，用於測量路跑賽事知覺價值。
 4. 路跑賽事滿意度量表：主要參考相關文獻(Goh, 2015; Papadimitriou et al., 2015; Pratminingsih et al., 2014; Shonk, 2012)，主要衡量路跑賽事參與者之滿意程度，包括服務需求(service demand)(3個題項)、品質承諾(quality commitment)(3個題項)與整體滿意(overall satisfaction)(4個題項)。本量表採李克特7點量表(7=強烈同意.....;1=強烈不同意)，用於測量路跑賽事滿意度。
 5. 路跑賽事再參加意圖量表：主要參考相關文獻(Julaimi & Talib, 2016; Kaplanidou & Vogt, 2007a; Som et al., 2012; Wicker et al., 2012)。主要評估路跑賽事參與者活動準備(actively prepared)、再參加意圖(revisiting intention)及推薦意圖(recommendation intention)。本量表採李克特7點量表(7=強烈同意.....;1=強烈不同意)，用於測量路跑賽事再參加意圖量表。
 6. 基本資料調查表：包括受試者之性別、年齡、家庭年收入、教育程度、居住地等人口變項；以及最近一年參與路跑次數、參與組別、參與伙伴等參與型態。

六、資料分析

本研究擬以1200位路跑賽事參與者為研究對象，所得有效問卷資料分析主要以Excel軟體進行建檔，並以SPSS_17.0及AMOS_17.0統計軟體進行分析。其分析方法以SPSS_17.0進行現況分析與差異比較，再以AMOS_17.0進行結構方程模式分析，檢定模式適配度、各變項之信效度及各研究假設檢定，建立適配模式，並以另一組資料進行模式驗證。本研究所得資料其分析步驟如下：

1. 衡量工具之發展：依本計畫之目的，以SPSS17.0統計軟體之描述統計(次數分配、百分比、偏態與峰度)、項目分析(t檢定及積差相關)、因素分析、信度分析及驗證性因素分析(AMOS_17.0)，以建構本研究之研究工具之信效度。
2. 研究變項現況分析：依本計畫之目的，以SPSS17.0統計軟體之描述統計(次數分配、百分比、偏態與峰度)，以瞭解臺灣路跑參與者之特性與現況。

3. 不同背景之差異分析：依本計畫之目的三，以獨立樣本 test 及單因子變異數及 Scheffe 事後檢定探討臺灣不同背景路跑參與者之差異程度。
4. 線性結構方程模式分析：依本計畫之目的四，建構與驗證臺灣路跑賽事品質、賽事意象、知覺價值、賽事滿意及參與意圖之影響模式。首先將所蒐集到可分析的1200份有效問卷，以 SPSS 隨機處理方式分成數目相同各600份的 A（測定樣本）、B（效度樣本）兩組資料，並且先以 A 組資料建立一個適配模式，再以 B 組資料進行模式之交叉驗證（黃芳銘，2007）。

參、研究結果與討論

一、在地化路跑賽事行為量表之發展

(一) 量表初稿編制

本研究旨在探討臺灣地區路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參加意圖之現況、不同背景差異比較及影響之模式建構，研究工具主要是基於前述文獻的綜合回顧發展研究問卷初稿，問卷題項採用 Likert 七點尺度量表，問卷初稿擬定後邀請學者專家填寫專家諮詢問卷，以建立問卷內容效度，並根據學者專家對問卷內容與語句修正後，選取預試適合對象並進行預試，並經項目分析、探索性因素分析、驗證性因素分析及信度分析之過程，完成正式問卷之修正。

(二) 項目分析

本研究將路跑賽事之「賽事品質、賽事意象、知覺價值、賽事滿意及再參加意圖量表」回收之預試有效問卷，利用 t 檢定 (t-test) 及相關分析 (correlation analysis) 進行內部一致性效標分析及同質性考驗。所得之 t 值即所謂的決斷值 (critical ratio; CR)，本研究各題項之 CR 值介於 9.14-16.97，皆達顯著水準 ($p < .05$)，故未刪除任何題項；後者則是計算各題項得分與總分之相關程度，經統計分析後，相關係數皆達 .649 以上，均達 .30 以上之標準 (吳明隆、涂金堂，2006)，故全數題項均予以保留 (如表 3-1)。

經由項目分析，本研究所建構之路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參加意圖之量表，每問項的 CR 值均達顯著水準，顯示所建構之量表具有鑑別度。其次，每問項之平均得分與該量表之總分相關係數均達顯著水準，顯示量表題項具有同質性 (吳明隆、涂金堂，2006)。

表3-1-1

路跑賽事參與行為量表項目分析摘要表

項目	題目	CR 值	總分相關	是否保留
路跑賽事品質量表				
A1	整體規劃符合參與者的需要	9.14*	.692**	保留
A2	工作人員具有專業素養	13.14*	.776**	保留
A3	參與者能遵守賽會的規定	9.97*	.709**	保留
A4	路跑參與者的表現令人讚美	12.91*	.771**	保留
A5	工作人員能樂意提供適當的服務	11.64*	.727**	保留
A6	資訊能讓參與者充分獲得	11.14*	.736**	保留
A7	參與者之間彼此互動良好	9.31*	.651**	保留
A8	標示清楚易懂	11.41*	.788**	保留
A9	辦理結果得到好評	12.90*	.774**	保留
A10	讓我與朋友/家人度過美好時光	10.42*	.718**	保留
A11	讓參與者享受到路跑的樂趣	10.33*	.710**	保留
A12	賽事整體感覺良好	16.76*	.815**	保留
A13	場地與動線規劃良好	12.04*	.747**	保留
A14	醫療與補給服務良好	10.47*	.709**	保留
A15	安全措施良好	10.74*	.755**	保留
A16	交通接駁服務良好	10.52*	.707**	保留
路跑賽事意象				
B1	舉辦地點民眾友善與有趣	11.08*	.690**	保留
B2	舉辦地點提供合適的住宿	12.73*	.752**	保留
B3	舉辦地點附近的娛樂設施豐富	12.96*	.767**	保留
B4	舉辦地點風光優美具吸引力	16.01*	.775**	保留
B5	路跑活動有創意特色	14.15*	.798**	保留
B6	路跑活動有知名度	15.33*	.875**	保留
B7	路跑活動有挑戰性	10.40*	.649**	保留
B8	路跑活動口碑良好	15.85*	.772**	保留
路跑賽事知覺價值				
C1	所花的金錢是值得的	14.90*	.881**	保留
C2	所花的時間是值得的	14.47*	.882**	保留
C3	所花的體力與精神是值得的	14.30*	.924**	保留
C4	獲得服務品質是值得的	14.53*	.875**	保留
C5	參與此次路跑讓我有榮譽感	14.11*	.893**	保留

表3-1-1

路跑賽事參與行為量表項目分析摘要表（續）

項目	題目	CR 值	總分相關	是否保留
路跑賽事滿意度				
F1	到達路跑賽會場地很便利	10.92*	.692**	保留
F2	提供的醫療與補給設施完善	12.66*	.731**	保留
F3	晶片感應與成績登錄快速準確	14.11*	.740**	保留
F4	交通動線與管制規劃完善	12.66*	.762**	保留
F5	確實提供所承諾的服務	16.58*	.792**	保留
F6	服務品質不會因人而異	11.94*	.771**	保留
F7	服務人員具有專業性	11.79*	.793**	保留
F8	工作人員的服務態度良好	11.28*	.796**	保留
F9	整體活動流程令人滿意	13.83*	.803**	保留
F10	整體服務設施令人滿意	12.42*	.802**	保留
F11	賽事組織與管理令人滿意	12.29*	.818**	保留
F12	賽會整體環境品質感到滿意	11.17*	.794**	保留
路跑再參加意圖				
G1	我會留意這項路跑有關的訊息。	10.10*	.816**	保留
G2	我會積極準備參與此項路跑。	16.97*	.871**	保留
G3	我願意邀請親朋好友參與此項路跑。	15.23*	.903**	保留
G4	我明年會再度參與此項路跑。	16.89*	.873**	保留
G5	我願意向他人分享這項路跑經驗。	11.35*	.799**	保留

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

(三) 探索性因素分析

本研究以探索性因素分析作為量表之建構效度，採主成分分析法與最大變異法對路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參加意圖之量表各構面進行因素分析。

1. KMO 值及 Bartlett's 球體檢定

在因素分析前先進行 KMO (Kaiser-Meyer-Olkin) 檢定，各量表分別進行 KMO 值之檢定，以了解各變項相關程度是否適合因素分析，檢定結果顯示五項路跑賽事之賽事品質、賽事意象、知覺價值、賽事滿意及再參加意圖量表之 KMO 值均在 .852 以上（如表 3-2）顯示本研究抽樣之適當性良好。其次，本研究再進行 Bartlett's 球體 (sphericity) 檢定，經由 Bartlett's 球體 (sphericity) 檢定值均達顯著水準 (p 值=0)（如表 2），顯示各量表之題項間具有共同因素存在（吳明隆、涂金堂，2006）。因此，五項路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參加意圖量表均可進行因素分析。

表3-1-2

Kaiser-Meyer-Olkin (KMO) 檢定分析摘要表

量表名稱	KMO 值	Bartlett's 檢定值	自由度	p 值
路跑賽事品質量表	.937	2520.96	120	.000
路跑賽事意象量表	.897	1024.16	28	.000
路跑賽事知覺價量表	.876	1036.99	10	.000
路跑賽事滿意度量表	.930	2074.85	66	.000
路跑賽事再參加意圖量表	.852	784.97	10	.000

2. 路跑賽事品質因素分析與命名

本研究有關路跑賽事品質量表發展初稿，修正賽事品質之相關文獻（如前述量表初稿編制文獻），主要內容包括賽事互動、比賽結果、賽事品質及實體環境等構面，共 16 個題項。經探索性因素分析，路跑賽事品質量表共萃取出四個因素，其因素選項與原理論草案大致相同，惟因部份題項有重疊與變動現象，故予以刪除，再進行第二次因素分析產生互動品質、結果品質、賽事品質及實體環境品質等四個因素共 12 個題項，累積解釋變異量為 75.92%（如表 3-3）。路跑賽事參與動機分析結果與前述文獻（盧瑞山等，2005、劉照金等，2013；Howat et al., 1999; Jin et al., 2013；Ko & Pastore, 2004; Wakefield & Blodgett, 1999）研究結果類似，顯示台灣路跑賽事參與者對於路跑賽事品質的認知仍以賽事互動品質、結果品質、比賽品質及實體環境品質較受重視。

表3-1-3

路跑賽事品質因素分析摘要表

項目	題目	共同性	互動品質	結果品質	比賽品質	實體環境品質
A5	工作人員能樂意提供適當的服務	.78	.805			
A7	參與者之間彼此互動良好	.65	.717			
A6	資訊能讓參與者充分獲得	.69	.654			
A8	標示清楚易懂	.65	.547			
A11	讓參與者享受到路跑的樂趣	.78		.791		
A10	讓我與朋友/家人度過美好時光	.79		.786		
A12	賽事整體感覺良好	.77		.693		
A1	整體規劃符合參與者的需要	.76			.783	
A3	參與者能遵守賽會的規定	.78			.739	
A2	工作人員具有專業素養	.78			.738	
A16	交通接駁服務良好	.84				.838
A15	安全措施良好	.84				.808
	特徵值		2.49	2.35	2.29	1.99
	解釋量		20.72	19.55	19.08	16.58
	累積解釋量		20.72	40.27	59.34	75.92

3. 路跑賽事意象因素分析與命名

本研究有關路跑賽事意象因素，主要基於運動賽事意象(sport event image)的概念(Bigne' et al., 2009; Hallmann et al., 2010; Gwinner, 1997; Kaplanidou, 2007; Papadimitriou et al., 2015)所建構之賽事可影響個人觀感之二個構面，包括賽事創意特質(creative features)及賽事聲譽(reputation)，包含當地民眾友善與有趣、賽事娛樂設施、住宿環境、風光吸引力、路跑口碑、挑戰性、創意特色及知名度。本研究有關賽事意象因素共發展出 8 個題項，經探索性因素分析，共萃取出 2 個因素，其因素選項與原理論初稿類似，故維持原理論 2 個構面，惟因部份題項有重疊現象，故予以刪除，再進行第二次因素分析產生創意特色及賽事聲譽等 2 個因素 7 個題項，累積解釋變異量為 72.43% (如表 3-4)。本研究結果對照早期研究，顯示路跑賽事參與者對路跑賽事意象，較重視路跑活動創意特色及賽事聲譽。

表3-1-4

路跑賽事意象因素分析摘要表

項目	題目	共同性	創意特質	賽事聲譽
B8	路跑活動口碑良好	.76	.829	
B7	路跑活動有挑戰性	.60	.766	
B5	路跑活動有創意特色	.71	.742	
B6	路跑活動有知名度	.81	.737	
B3	舉辦地點附近的娛樂設施豐富	.81		.866
B2	舉辦地點提供合適的住宿	.77		.844
B4	舉辦地點風光優美具吸引力	.62		.624
	特徵值		2.71	2.36
	解釋量		38.71	33.73
	累積解釋量		38.71	72.43

4. 路跑賽事知覺價值因素分析與命名

有關路跑賽事知覺價值因素初稿，主要參考相關文獻發展問卷 (Chen & Chen, 2010; Holbrook, 2006; Monroe, 1990; Zeithaml, 1988)，量表區分路跑賽事知覺價值為行為價格(behavioral price)及情緒反應(emotional response)，共 5 個題項。經探索性因素分析，路跑賽事知覺價值因素量表共萃取出 2 個因素，其因素選項均與原理論草案類似，故維持原理論 2 個構面，累積解釋變異量為 87.99% (如表 3-5)。本研究結果對照前述早期研究之結果類似，顯示路跑賽事參與者對路跑賽事知覺價值，較重視參與路跑活動所花的時間、的金錢、體力與精神是否值得?以及所獲得服務品質及榮譽感之情緒感受。

表3-1-5

路跑賽事知覺價值因素分析摘要表

項目	題目	共同性	行為價格	情緒反應
C2	所花的時間是值得的	.89	.869	
C1	所花的金錢是值得的	.85	.834	
C3	所花的體力與精神是值得的	.87	.737	
C4	獲得服務品質是值得的	.90		.865
C5	參與此次路跑讓我有榮譽感	.89		.839
特徵值			2.33	2.07
解釋量			46.57	46.57
累積解釋量			46.57	87.99

5. 路跑賽事滿意度因素分析與命名

有關路跑賽事滿意度因素初稿，主要參考相關文獻發展問卷（Goh, 2015; Papadimitriou et al., 2015; Pratminingsih et al., 2014; Shonk, 2012），主要衡量路跑賽事參與者之滿意程度，包括服務需求（service demand）、品質承諾（quality commitment）與整體滿意（overall satisfaction）共 12 題項。經探索性因素分析，路跑賽事滿意度因素量表共萃取出三個因素，其因素選項均與原理論草案類似，故維持原理論三個構面，惟因部份題項有重疊現象，故予以刪除，再進行第二次因素分析產生整體滿意、服務需求及品質承諾等三個因素 10 個題項，累積解釋變異量為 75.75%（如表 3-7）。本研究結果對照前述早期研究之結果類似，顯示路跑賽事參與者對路跑賽事滿意度因素，較重視路跑活動整體管理與服務（組織與管理、設施服務及活動過程）、品質承諾（人員專業、服務品質及承諾服務）及服務需求提供（交通動線便利性、醫療與補給完善、交通與管制）。

表3-1-6

路跑賽事滿意度因素分析摘要表

項目	題目	共同性	整體滿意	品質承諾	服務需求
F11	賽事組織與管理令人滿意	.81	.806		
F10	整體服務設施令人滿意	.80	.805		
F12	賽會整體環境品質感到滿意	.79	.798		
F9	整體活動流程令人滿意	.89	.763		
F6	服務品質不會因人而異	.76		.785	
F7	服務人員具有專業性	.76		.748	
F5	確實提供所承諾的服務	.72		.670	
F1	到達路跑賽會場地很便利	.84			.862
F2	提供的醫療與補給設施完善	.80			.801
F4	交通動線與管制規劃完善	.69			.623
特徵值			3.18	2.86	2.30
解釋量			28.93	25.96	20.86
累積解釋量			28.93	54.89	75.75

6. 路跑賽事再參加意圖因素分析與命名

有關路跑賽事參與意圖因素初稿，主要參考相關文獻發展問卷（Julaimi & Talib, 2016; Kaplanidou & Vogt, 2007b; Som et al., 2012; Wicker et al., 2012）。主要評估路跑賽事參與者活動準備(actively prepared)、再參加意圖（revisiting intention）及推薦意圖（recommendation intention），共 5 個題項。經探索性因素分析，路跑賽事參與意圖因素量表共萃取出二個因素，其因素選項均與原理論草案相同，故維持原理論參與準備與推薦分享二個構面 5 個題項，累積解釋變異量為 82.50%（如表 3-8）。本研究結果對照前述早期研究之結果類似，顯示路跑賽事參與者對路跑賽事參與意圖因素，較重視路跑活動參與準備（參與意願、抽時間參與及活動期待）及推薦與分享路跑經驗(分享路跑訊息及邀請親朋好友參與路跑)。

表3-1-7

路跑賽事參與意圖因素分析摘要表

項目	題目	共同性	參與準備	推薦分享
G1	我會留意這項路跑有關的訊息。	.83	.870	
G2	我會積極準備參與此項路跑。	.83	.811	
G4	我明年會再度參與此項路跑。	.79	.749	
G5	我願意向他人分享這項路跑經驗。	.86		.885
G3	我願意邀請親朋好友參與此項路跑。	.82		.617
	特徵值		2.16	1.97
	解釋量		43.10	39.41
	累積解釋量		43.10	82.50

(四) 信度分析

本研究係採 Cronbach's α 內部一致性效標為信度考驗方法，經分析後「臺灣路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參加意圖量表與各分量表」Cronbach's α 信度均達.89 以上，各因素構面之 Cronbach's α 亦在.80 以上（如表 3-8），顯示本研究發展之「臺灣路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參加意圖量表與各分量表」，無論是在各因素構面及總量表上均具有合理之信度（吳明隆、涂金堂，2006），符合學術研究量表所需之一致性或穩定性（邱皓政，2006）。

表3-1-8

路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參加意圖量表信度分析摘要表

分量表名稱	因素名稱	因素的Cornbach's α	整體的Cornbach's α
路跑賽事品質量表	互動品質	.84	.92
	結果品質	.86	
	賽事品質	.87	
	實體環境品質	.85	
路跑賽事意象量表	創意特色	.81	.89
	賽事聲譽	.86	
路跑賽事知覺價值量表	行為價格	.92	.93
	情緒反應	.89	
路跑賽事滿意度量表	整體滿意	.91	.94
	品質承諾	.87	
	服務需求	.84	
路跑賽事參與意圖量表	參與準備	.88	.91
	推薦分享	.80	

(五) 驗證性因素分析

驗證性因素 (CFA) 主要用於評鑑賽事品質 (比賽品質、互動品質、結果品質及物理環境品質)、賽事意象 (創意特色和聲譽; 刪除部分題項)、知覺價值 (行為價格與情緒反應)、賽事滿意度 (服務需求、品質承諾整體滿意度) 及再參加意圖 (積極準備、再參加意圖和推薦意圖; 刪除部分題項) 之各變項, 並檢驗各觀察變項能否正確測量潛在變項, 以及觀察變項與潛在變項之信效度。首先評估 CFA 模式之適配度, 結果顯示模式獲得良好的適配度 ($\chi^2 = 190.75$; d.f. = 67, $\chi^2 / df = 2.85$; GFI=.96; AGFI=.94; NFI=.97; CFI=0.98; RMSEA=0.054)。

其次檢驗證收效度, 一個構面要具有收斂效度必須符合以下幾個標準 (張偉豪, 2011; 陳寬裕、王正華, 2010): (1) 因素負荷量須大於或等於.7; (2) 多元相關係數平方須大於或等於.5; (3) 組成信度 (Composite Reliability, CR) 須大於或等於.7; (4) 平均變異數萃取量 (Average Variance Extracted, AVE) 須大於.5 (Hair, Anderson, Tatham, & Black, 1998)。如表 3-1-9 所示觀察變項對其潛在變項的因素負荷量 (λ) 值介於.78 到.90 之間, 皆高於.7, 符合標準, 顯示所有觀察變項皆足以反映其所建構的潛在變項; 檢定多元相關係數平方值, 發現介於.61 到.81 間, 此結果符合須大於或等於.5 之標準。此外, 對潛在變項而言, 所有潛在變項的組成信度皆介於.80 到.91 之間, 均高於.7 的要求, 而潛在變項的平均變異抽取量介於.66 到.81 之間, 均大於.5 之標準 (Jöreskog & Sörbom, 1984), 由上述結果, 顯示路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參加意圖量表中「賽事品質」、「賽事意象」、「知

覺價值」、「賽事滿意」、「再參加意圖」之潛在構面均具有收斂效度。

最後檢定各變項間之區別效度，如表 3-1-10 所示，對角線上顯示各變項的 AVE，斜方矩陣之間的是兩構面間相關係數之平方，若兩變項間相關平方小於該變項之 AVE，則兩構面具有區別效度 (Chang, 2011; Fornell & Larcker, 1981)，由表 3-1-10 表得知，「賽事品質」、「賽事意象」、「知覺價值」、「賽事滿意」、「再參加意圖」之潛在構面均具有區別效度。

表3-1-9

路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參加意圖量表收斂效度衡量摘要表

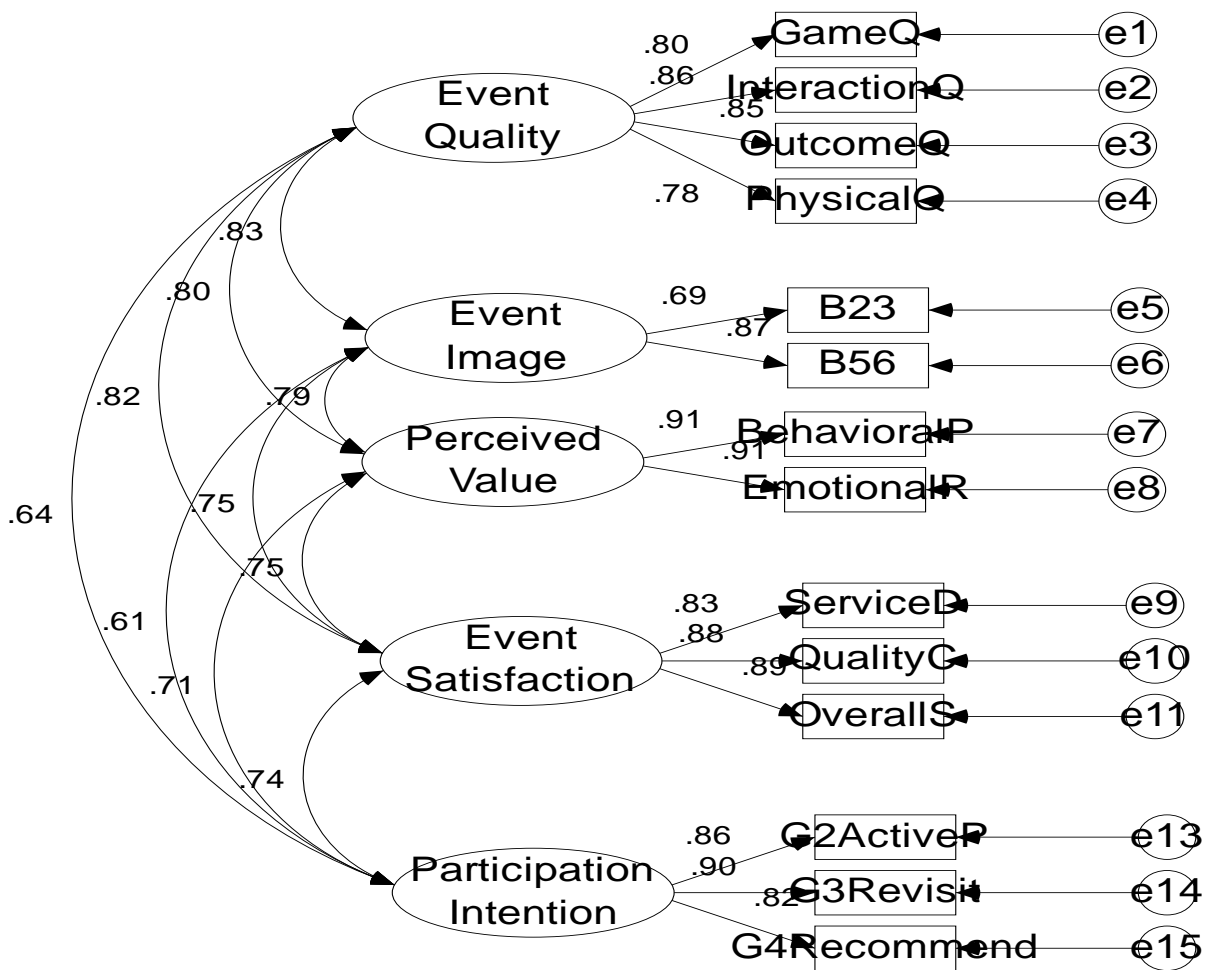
變項	平均數	因素負荷 量 λ 值	多元相關 係數平方	組成信度 CR	平均變異 抽取量 AVE
賽事品質				.90	.68
競賽品質 Game quality(GAQ)	6.00	.80	.64		
互動品質 interaction quality(IAQ)	6.03	.87	.75		
結果品質 Outcome quality(OCQ)	6.11	.85	.73		
硬體環境品質 Physical quality(PHQ)	5.94	.78	.61		
賽事意象				.80	.66
創意特色 creative features(CRF)	5.95	.82	.67		
賽事聲譽 reputation(REP)	5.94	.81	.65		
知覺價值				.89	.81
行為價 behavioral price(BEP)	6.11	.90	.81		
情緒反應 emotional response(EMR)	6.15	.90	.81		
賽事滿意				.91	.76
服務需求 service demand(SED)	5.98	.83	.69		
品質承諾 quality commitment(QUC)	6.05	.90	.81		
整體滿意 overall satisfaction(OVS)	6.07	.89	.79		
再參加意圖				.90	.74
積極準備 actively prepared(ACP)	6.05	.85	.72		
再參與意願 revisiting intention(RVI)	6.12	.90	.81		
推薦意圖 recommendation intention(RCI)	6.07	.83	.69		

表 3-1-10

路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參加意圖量表區別效度衡量摘要表

	賽事 品質	賽事 意象	知覺 價值	賽事 滿意	再參與 意圖
賽事品質 Event Quality	.68				
賽事意象 Event Image	.64	.66			
知覺價值 Perceived Value	.67	.64	.81		
賽事滿意 Event Satisfaction	.66	.55	.59	.76	
再參與意圖 Revisit Intention	.40	.35	.50	.55	.74

Note: The AVE of each dimension is higher than the square of the correlation coefficient of each pair of variables, then this suggests discriminant validity.



norm chi=3.983 GFI=.942
AGFI=.909 CFI=.972 RMSEA=.068

圖 3-1-1 驗證性因素分析結構圖

綜合上述五項量表分析顯示：(1) 各題項決斷值 (critical ratio values) 和總相關係數 (total correlation coefficients) 達到顯著水準，顯示五項建構量表具有區別效度；(2) 探索性因素分析 (EFA) 和驗證性因子分析 (CFA) 分析顯示，所有研究工具數據分析都具有適當的效度和模型適配度；(3) 信度分析顯示，每個量表的 Cronbach 的 α 係數都高於.90，顯示量表內部一致性是可以接受的 (Chiou, 2010)。根據上述結果，五個量表展現出良好的鑑別力、效度及信度，五個量表非常適合於台灣路跑賽事參與者有關賽事品質、賽事意象、知覺價值、賽事滿意及再參加意圖的意見衡量。

二、受試者人口統計與參與行為分析

(一) 受試者人口統計行為分析

有關本研究受試者背景變項分析(如表3-2-1)，顯示男性(59.9%)比例高於女性(40.1%)；年齡層則以21-30歲組(29.3%)及31-40歲(28.4%)所佔比例較高；最高學歷則以大學比例最高(44.8%)；職業則以服務業(30.6%)比例較高；月收入則以20,000-39,999元組之比例最高(36.8%)；居住地則以台灣中部比例最高(36.8%)。經由上述受試者背景變項分析，本研究之研究對象以男性、青壯年齡層、大學學歷、服務業、四萬元以下收入及居住中部者比例較高，其受試者背景與過去臺灣路跑賽事參與者研究結果之屬性接近(陳春安, 2011；陳家倫、楊涵鈞、簡欣穎, 2012；張孝銘、邱姿菁, 2011；劉照金, 2016)，顯示臺灣路跑賽事參與者背景十分多元，可說是全民參與之運動。

表3-2-1

受試者背景變項分析摘要表

(N=641)

背景背項	類別	次數	百分比
性別	男	384	59.9%
	女	257	40.1%
年齡分組	20歲以下	76	11.9%
	21-30歲	188	29.3%
	31-40歲	182	28.4%
	41-50歲	120	18.7%
	51歲以上	75	11.7%
最高學歷	國中(含)以下	38	5.9%
	高中職	154	24.0%
	專科	86	13.4%
	大學	287	44.8%
	研究所(含)以上	76	11.9%

表3-2-1

受試者背景變項分析摘要表 (續) (N=641)

職業	農林漁牧業	23	3.6%
	製造業	102	15.9%
	服務業	196	30.6%
	軍公教人員	98	15.3%
	家管(婦、夫) 退休人員	39	6.1%
	學生	98	15.3%
	其他	85	13.3%
	月收入	19,999元(含)以下	135
20,000-39,999元		236	36.8%
40,000-59,999元		182	28.4%
60,000-79,999元		59	9.2%
80,000元(含)以上		29	4.5%
居住地	台灣北部	135	21.1%
	台灣中部	236	36.8%
	台灣南部	182	28.4%
	台灣東部	59	9.2%
	離島地區	29	4.5%

(二) 臺灣路跑賽事參與者參與頻率分析

由表3-2-2顯示，臺灣路跑賽事參與者一年內參與次數平均為5.81次 (SD=7.01)，而一年內參與1次者138人次 (佔21.4%)，一年內參與2-4次者237人次 (佔36.7%)，一年內參與5-10次者189人次 (佔29.3%)，一年內參與11-20次者67人次 (佔10.4%)，一年內參與21次(含)以上者15人次 (佔2.3%)。顯示臺灣路跑賽事參與者每年平均約參加5.81次，而且以一年內參與2-4次者佔多數。

表 3-2-2

臺灣路跑賽事參與者參與頻率統計分析 (N=641)

平均數	參與次數組別	次數	百分比
1年內參與次數 M=5.81 次/年 SD=7.01	1次(含)/年	138	21.4
	2-4次/年	237	36.7
	5-10次/年	189	29.3
	11-20次/年	67	10.4
	21次(含)以上/年	15	2.3
	合計	646	100.0

(三) 臺灣路跑賽事參與者參與路跑類型分析

由表3-2-3顯示，灣路跑賽事參與者參與路跑類型以半程馬拉松(Half Marathon)最多(佔55.4%)，其次為10 公里以下路跑(佔54.8%)。顯示臺灣路跑賽事參與者參與半程馬拉松及10 公里以下路跑比例最高，可見半程馬拉松與10 公里以下路跑項目較受參與者歡迎。

表 3-2-3

臺灣路跑賽事參與者參與路跑類型統計分析 (N=641)

路跑項目	n	%
超級馬拉松 Ultra Marathon	56	8.7%
馬拉松 Marathon	206	32.1%
半程馬拉松 Half Marathon	355	55.4%
11-20 公里	138	21.5%
11 公里 (含) 以下	351	54.8%

三、台灣路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖之現況

由表3-3-1顯示，臺灣路跑賽事參與者對賽事品質，分為「互動品質」、「結果品質」、「賽事品質」及「實體環境品質」四項因素，其中以「結果品質」得分較高，顯示民眾對路跑賽事品質較重視結果品質；路跑賽事意象因素分別為「創意特色」與「賽事聲譽」兩個因素，其中以「賽事聲譽」得分較高，此說明台灣民眾對路跑意象多來自其路跑賽事聲譽；路跑賽事知覺價值因素分別為「行為價格」及「情緒反應」，其中以「情緒反應」得分較高，顯示路跑參與者對賽事知覺價值主要來自「情緒反應」；路跑賽事滿意度因素分別為「整體滿意」、「服務需求」、「品質承諾」，其中以「整體滿意」得分較高，顯示路跑參與者對路跑賽事滿意度主要來自「整體滿意」；路跑賽事參與意圖因素分別為「參與準備」、「再參加意圖」及「推薦意圖」，其中以「再參加意圖」得分較高，顯示路跑參與者參與意圖仍以再參加意圖為主要指標。上述臺灣民眾對上述路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖變項認同程度之平均達5.94-6.14，顯示臺灣路跑賽事參與者對賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖均有中高程度之認同。

表 3-3-1

台灣路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖描述統計摘要表

分量表名稱	因素與整體	平均數	標準差	因素排序
賽事品質量表	互動品質	6.02	.70	2
	結果品質	6.10	.75	1
	賽事品質	6.00	.71	3
	實體環境品質	5.94	.83	4
	整體	6.02	.65	
賽事意象量表	創意特色	5.96	.97	2
	賽事聲譽	6.02	1.57	1
	整體	5.99	1.01	
賽事知覺價值量表	行為價格	6.10	.80	2
	情緒反應	6.14	.80	1
	整體	6.12	.76	
賽事滿意度量表	整體滿意	6.06	.76	1
	品質承諾	6.04	.76	2
	服務需求	5.97	.79	3
	整體	6.03	.88	
賽事參與意圖量表	參與準備	6.10	.91	2
	再參加意圖	6.06	.92	1
	推薦意圖	6.06	.82	3
	整體	6.02	.70	

註：本研究工具採李克特7點量表：非常同意得7分；同意得6分；有點同意得5分；普通得4分；有點不同意得3分；不同意得2分；非常不同意得1分。

四、比較不同背景參與者之賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖

為瞭解不同背景路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖之差異情形，本研究分別針對性別、年齡、教育程度、職業、月收入、居住地、路跑參與頻率等變項加以分析，以比較不同背景路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖之差異情形，作為未來區隔不同路跑賽事參與者市場之參考。

(一) 性別比較

由表3-4-1，發現不同性別之路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖之差異並不顯著，除了在路跑賽事品質因素中之「結果品質」；在賽事知覺價值之「行

為價格」、「情緒反應」及整體知覺價值；跑賽事參與意圖中之「參與準備」、「再參加意圖」及「整體參與意圖」等構面有顯著差異外，其餘各因素構面之男女差異皆未達顯著水準，而且女性顯著高於男性。綜合上述分析顯示不同性別之路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖之只有部分差異達顯著外，其餘均未達顯著水準，顯示女性較男性對於路跑賽事品質、知覺價值及參與意圖較高。

表 3-4-1

不同性別之賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖差異分析表

變項/因素	性別	個數	平均數	標準差	t值
賽事品質	男	388	5.99	.69	-1.41
	女	258	6.06	.58	
互動品質	男	388	6.02	.74	-.24
	女	258	6.03	.63	
結果品質	男	388	6.04	.77	-2.57*
	女	258	6.19	.70	
賽事品質	男	388	5.99	.74	-.43
	女	258	6.01	.67	
實體環境品質	男	388	5.90	.88	-1.49
	女	258	6.00	.75	
賽事意象	男	388	5.93	.70	-1.74
	女	258	6.08	1.35	
創意特色	男	388	5.92	.77	-1.33
	女	258	6.03	1.20	
賽事聲譽	男	388	5.95	.75	-1.42
	女	258	6.13	2.30	
賽事知覺價值	男	388	6.06	.78	-2.22*
	女	258	6.20	.74	
行為價格	男	388	6.04	.83	-2.23*
	女	258	6.18	.75	
情緒反應	男	388	6.08	.81	-2.02*
	女	258	6.21	.78	
賽事滿意度	男	388	6.03	.71	.30
	女	258	6.01	.70	
整體滿意	男	388	6.06	.77	.30
	女	258	6.05	.76	
品質承諾	男	388	6.04	.76	-.01
	女	258	6.05	.76	
服務需求	男	388	5.99	.78	.52
	女	258	5.95	.80	
賽事參與意圖	男	388	6.02	.83	-2.34*
	女	258	6.17	.73	
參與準備	男	388	5.97	.91	-2.22*
	女	258	6.12	.81	
再參加意圖	男	388	6.03	.96	-2.52*
	女	258	6.21	.81	
推薦意圖	男	388	5.99	.97	-2.20*
	女	258	6.16	.85	

*p<.05

(二) 年齡層比較

由表3-4-2，發現不同年齡組路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖均未有顯著差異。顯示年齡因素不會影響路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖。

表 3-4-2

不同年齡層路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖差異分析表

變項/因素	年齡層	個數	平均數	標準差	F值	事後考驗
賽事品質	A.20歲以下	77	6.05	.70	.611	
	B.21-30歲	190	6.01	.68		
	C.31-40歲	183	5.96	.65		
	D.41-50歲	121	6.07	.62		
	E.51歲以上	75	6.04	.58		
互動品質	A.20歲以下	77	6.00	.73	.687	
	B.21-30歲	190	6.00	.74		
	C.31-40歲	183	6.00	.72		
	D.41-50歲	121	6.12	.65		
	E.51歲以上	75	6.03	.60		
結果品質	A.20歲以下	77	6.14	.78	.705	
	B.21-30歲	190	6.14	.75		
	C.31-40歲	183	6.04	.77		
	D.41-50歲	121	6.15	.69		
	E.51歲以上	75	6.04	.74		
賽事品質	A.20歲以下	77	6.02	.77	.503	
	B.21-30歲	190	5.98	.68		
	C.31-40歲	183	5.95	.70		
	D.41-50歲	121	6.03	.79		
	E.51歲以上	75	6.07	.64		
實體環境品質	A.20歲以下	77	6.05	.82	.895	
	B.21-30歲	190	5.92	.90		
	C.31-40歲	183	5.86	.87		
	D.41-50歲	121	5.98	.76		
	E.51歲以上	75	6.00	.71		
賽事意象	A.20歲以下	77	6.05	.66	1.982	
	B.21-30歲	190	5.94	.86		
	C.31-40歲	183	5.90	.76		
	D.41-50歲	121	6.00	.62		
	E.51歲以上	75	6.27	2.11		
創意特色	A.20歲以下	77	6.09	.68	.745	
	B.21-30歲	190	5.97	1.32		
	C.31-40歲	183	5.88	.86		
	D.41-50歲	121	6.01	.65		
	E.51歲以上	75	5.96	.82		

表 3-4-2

不同年齡層路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖差異分析表(續)

變項/因素	年齡層	個數	平均數	標準差	F 值	事後考驗
賽事聲譽	A.20歲以下	77	6.01	.74	2.778	
	B.21-30歲	190	5.92	.74		
	C.31-40歲	183	5.92	.79		
	D.41-50歲	121	5.99	.71		
	E.51歲以上	75	6.57	4.10		
賽事知覺價值	A.20歲以下	77	6.07	.83	.734	
	B.21-30歲	190	6.11	.77		
	C.31-40歲	183	6.09	.81		
	D.41-50歲	121	6.12	.711		
	E.51歲以上	75	6.25	.64		
行為價格	A.20歲以下	77	6.06	.84	.806	
	B.21-30歲	190	6.06	.84		
	C.31-40歲	183	6.07	.83		
	D.41-50歲	121	6.13	.74		
	E.51歲以上	75	6.24	.67		
情緒反應	A.20歲以下	77	6.07	.91	.737	
	B.21-30歲	190	6.15	.78		
	C.31-40歲	183	6.11	.85		
	D.41-50歲	121	6.11	.73		
	E.51歲以上	75	6.27	.68		
賽事滿意度	A.20歲以下	77	6.06	.76	1.024	
	B.21-30歲	190	5.96	.73		
	C.31-40歲	183	6.00	.70		
	D.41-50歲	121	6.11	.64		
	E.51歲以上	75	6.07	.68		
整體滿意	A.20歲以下	77	6.07	.83	.704	
	B.21-30歲	190	6.02	.78		
	C.31-40歲	183	6.01	.76		
	D.41-50歲	121	6.13	.69		
	E.51歲以上	75	6.12	.77		
品質承諾	A.20歲以下	77	6.10	.84	.632	
	B.21-30歲	190	5.99	.82		
	C.31-40歲	183	6.03	.76		
	D.41-50歲	121	6.11	.67		
	E.51歲以上	75	6.07	.69		
服務需求	A.20歲以下	77	6.01	.77	1.465	
	B.21-30歲	190	5.88	.82		
	C.31-40歲	183	5.95	.80		
	D.41-50歲	121	6.09	.73		
	E.51歲以上	75	6.04	.77		

表 3-4-2

不同年齡層路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖差異分析表(續)

變項/因素	年齡層	個數	平均數	標準差	F 值	事後考驗
賽事參與意圖	A.20歲以下	77	5.98	.80	1.367	
	B.21-30歲	190	6.00	.90		
	C.31-40歲	183	6.07	.80		
	D.41-50歲	121	6.14	.73		
	E.51歲以上	75	6.20	.80		
參與準備	A.20歲以下	77	5.86	.94	1.942	
	B.21-30歲	190	5.98	.95		
	C.31-40歲	183	6.04	.83		
	D.41-50歲	121	6.10	.78		
	E.51歲以上	75	6.21	.84		
再參與意圖	A.20歲以下	77	6.13	.86	.309	
	B.21-30歲	190	6.05	.99		
	C.31-40歲	183	6.10	.91		
	D.41-50歲	121	6.13	.77		
	E.51歲以上	75	6.17	.92		
推薦意圖	A.20歲以下	77	5.96	.88	2.209	
	B.21-30歲	190	5.94	1.01		
	C.31-40歲	183	6.07	.91		
	D.41-50歲	121	6.19	.83		
	E.51歲以上	75	6.21	.86		

*p<.05

(三) 教育程度比較

由表3-4-3，發現不同教育程度組路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖差異並不顯著，除賽事品質之「實體環境品質」、整體賽事意象、「創意特色」及「賽事聲譽」、賽事滿意度之「服務需求」達顯著外，其餘均未達顯著。經由事後比較結果，部分顯示賽事意象之國中(含)以下及高中職各教育程度。顯示國中(含)以下及高中職畢業者在路跑賽事意象顯著高於其他族群外，其他變項之差異並不顯著，可見不同教育程度的參與者在路跑行為因素上並不明顯。

表 3-4-3

不同教育程度賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖差異分析表

變項/因素	教育程度	個數	平均數	標準差	F值	事後考驗
賽事品質	A.國中(含)以下	38	6.21	.45	1.734	
	B.高中職	156	6.07	.65		
	C.專科	87	6.02	.68		
	D.大學	289	5.96	.67		
	E.研究所(含)以上	76	5.98	.59		
互動品質	A.國中(含)以下	38	6.14	.59	1.382	
	B.高中職	156	6.09	.70		
	C.專科	87	6.09	.73		
	D.大學	289	5.96	.711		
	E.研究所(含)以上	76	6.02	.65		
結果品質	A.國中(含)以下	38	6.24	.50	.543	
	B.高中職	156	6.14	.73		
	C.專科	87	6.06	.80		
	D.大學	289	6.08	.79		
	E.研究所(含)以上	76	6.08	.67		
賽事品質	A.國中(含)以下	38	6.25	.53	1.704	
	B.高中職	156	6.03	.74		
	C.專科	87	6.00	.74		
	D.大學	289	5.94	.72		
	E.研究所(含)以上	76	6.01	.64		
實體環境品質	A.國中(含)以下	38	6.22	.55	2.910*	組間無差異
	B.高中職	156	6.05	.79		
	C.專科	87	5.95	.80		
	D.大學	289	5.87	.86		
	E.研究所(含)以上	76	5.80	.94		
賽事意象	A.國中(含)以下	38	6.71	2.78	6.967*	A>B,C,D,E
	B.高中職	156	6.10	.86		
	C.專科	87	5.98	.79		
	D.大學	289	5.90	.69		
	E.研究所(含)以上	76	5.78	.74		
創意特色	A.國中(含)以下	38	6.21	.54	3.741*	B>E
	B.高中職	156	6.14	1.42		
	C.專科	87	5.98	.80		
	D.大學	289	5.90	.73		
	E.研究所(含)以上	76	5.70	.88		
賽事聲譽	A.國中(含)以下	38	7.20	5.65	6.352*	A>B,C,D,E
	B.高中職	156	6.06	.67		
	C.專科	87	5.99	.85		
	D.大學	289	5.89	.79		
	E.研究所(含)以上	76	5.85	.71		

表 3-4-3

不同教育程度賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖差異分析表(續)

變項/因素	教育程度	個數	平均數	標準差	F 值	事後考驗
賽事知覺價值	A.國中(含)以下	38	6.30	.49	1.087	
	B.高中職	156	6.16	.74		
	C.專科	87	6.13	.77		
	D.大學	289	6.06	.83		
	E.研究所(含)以上	76	6.11	.66		
行為價格	A.國中(含)以下	38	6.33	.46	1.684	
	B.高中職	156	6.15	.79		
	C.專科	87	6.15	.79		
	D.大學	289	6.02	.86		
	E.研究所(含)以上	76	6.08	.69		
情緒反應	A.國中(含)以下	38	6.28	.59	.563	
	B.高中職	156	6.18	.77		
	C.專科	87	6.11	.80		
	D.大學	289	6.10	.86		
	E.研究所(含)以上	76	6.13	.68		
賽事滿意度	A.國中(含)以下	38	6.07	.77	1.365	
	B.高中職	156	6.12	.69		
	C.專科	87	6.04	.68		
	D.大學	289	5.96	.74		
	E.研究所(含)以上	76	6.01	.59		
整體滿意	A.國中(含)以下	38	6.07	.83	.598	
	B.高中職	156	6.11	.76		
	C.專科	87	6.07	.77		
	D.大學	289	6.01	.79		
	E.研究所(含)以上	76	6.11	.62		
品質承諾	A.國中(含)以下	38	6.04	.80	.959	
	B.高中職	156	6.15	.69		
	C.專科	87	6.03	.72		
	D.大學	289	6.00	.82		
	E.研究所(含)以上	76	6.01	.69		
服務需求	A.國中(含)以下	38	6.09	.81	2.707*	組間無差異
	B.高中職	156	6.11	.80		
	C.專科	87	6.03	.71		
	D.大學	289	5.88	.80		
	E.研究所(含)以上	76	5.90	.74		

表 3-4-3

不同教育程度路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖差異分析表(續)

變項/因素	教育程度	個數	平均數	標準差	F 值	事後考驗
賽事參與意圖	A.國中(含)以下	38	6.04	.77	1.080	
	B.高中職	156	6.11	.79		
	C.專科	87	6.17	.74		
	D.大學	289	6.00	.89		
	E.研究所(含)以上	76	6.12	.71		
參與準備	A.國中(含)以下	38	6.16	.82	1.120	
	B.高中職	156	6.06	.84		
	C.專科	87	6.11	.80		
	D.大學	289	5.96	.94		
	E.研究所(含)以上	76	6.11	.76		
再參與意圖	A.國中(含)以下	38	5.97	.94	.863	
	B.高中職	156	6.17	.85		
	C.專科	87	6.20	.82		
	D.大學	289	6.05	.98		
	E.研究所(含)以上	76	6.13	.81		
推薦意圖	A.國中(含)以下	38	6.00	.87	1.249	
	B.高中職	156	6.11	.89		
	C.專科	87	6.20	.87		
	D.大學	289	5.98	.98		
	E.研究所(含)以上	76	6.12	.83		

*p<.05

(四) 職業比較

由表4-7，發現不同職業別路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖之差異並不顯著，除賽事品質之「互動品質」有顯著差異外，且經由事後比較結果，發現組間並無顯著差異。顯示職業因素影響路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖並不明顯。

表 3-4-4

不同職業別賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖差異分析表

變項/因素	職業別	個數	平均數	標準差	F值	事後考驗
賽事品質	A.農林漁牧業	23	5.95	.60	1.652	
	B.製造業	103	6.04	.61		
	C.服務業	197	6.03	.62		
	D.軍公教人員	100	6.02	.69		
	E.家管與退休人員	39	6.03	.49		
	F.學生	99	6.11	.67		
	G.其他	43	5.75	.74		

表 3-4-4

不同職業別賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖差異分析表(續)

變項/因素	職業別	個數	平均數	標準差	F值	事後考驗
互動品質	A.農林漁牧業	23	5.99	.74	2.208*	組間無差異
	B.製造業	103	6.07	.70		
	C.服務業	197	6.03	.68		
	D.軍公教人員	100	6.10	.68		
	E.家管與退休人員	39	5.99	.50		
	F.學生	99	6.09	.70		
	G.其他	43	5.68	.84		
結果品質	A.農林漁牧業	23	5.93	.58	1.322	
	B.製造業	103	6.14	.61		
	C.服務業	197	6.12	.74		
	D.軍公教人員	100	6.07	.89		
	E.家管與退休人員	39	6.14	.61		
	F.學生	99	6.19	.73		
	G.其他	43	5.86	.83		
賽事品質	A.農林漁牧業	23	5.91	.70	1.364	
	B.製造業	103	6.01	.70		
	C.服務業	197	6.01	.66		
	D.軍公教人員	100	6.01	.74		
	E.家管與退休人員	39	6.00	.68		
	F.學生	99	6.11	.75		
	G.其他	43	5.75	.78		
實體環境品質	A.農林漁牧業	23	5.98	.78	1.011	
	B.製造業	103	5.93	.77		
	C.服務業	197	5.95	.81		
	D.軍公教人員	100	5.88	.95		
	E.家管與退休人員	39	6.00	.58		
	F.學生	99	6.07	.86		
	G.其他	43	5.72	.92		
賽事意象	A.農林漁牧業	23	6.02	1.02	1.945	
	B.製造業	103	5.97	.66		
	C.服務業	197	6.01	.86		
	D.軍公教人員	100	5.91	.72		
	E.家管與退休人員	39	6.00	.74		
	F.學生	99	6.03	.66		
	G.其他	43	5.73	.76		
創意特色	A.農林漁牧業	23	5.96	.64	.813	
	B.製造業	103	5.91	.79		
	C.服務業	197	6.06	1.30		
	D.軍公教人員	100	5.91	.73		
	E.家管與退休人員	39	5.91	.82		
	F.學生	99	6.04	.71		
	G.其他	43	5.78	.94		

表 3-4-4

不同職業別賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖差異分析表(續)

變項/因素	職業別	個數	平均數	標準差	F 值	事後考驗
賽事聲譽	A.農林漁牧業	23	6.01	1.56	1.741	
	B.製造業	103	6.04	.63		
	C.服務業	197	5.95	.75		
	D.軍公教人員	100	5.91	.82		
	E.家管與退休人員	39	6.09	.77		
	F.學生	99	6.02	.73		
	G.其他	43	5.68	.82		
賽事知覺價值	A.農林漁牧業	23	6.08	.62	.604	
	B.製造業	103	6.18	.62		
	C.服務業	197	6.14	.74		
	D.軍公教人員	100	6.09	.95		
	E.家管與退休人員	39	6.19	.55		
	F.學生	99	6.12	.77		
	G.其他	43	5.95	.77		
行為價格	A.農林漁牧業	23	6.19	.63	.727	
	B.製造業	103	6.15	.66		
	C.服務業	197	6.12	.78		
	D.軍公教人員	100	6.07	.98		
	E.家管與退休人員	39	6.20	.55		
	F.學生	99	6.11	.78		
	G.其他	43	5.90	.87		
情緒反應	A.農林漁牧業	23	5.98	.71	.609	
	B.製造業	103	6.20	.64		
	C.服務業	197	6.17	.75		
	D.軍公教人員	100	6.11	.98		
	E.家管與退休人員	39	6.19	.59		
	F.學生	99	6.14	.87		
	G.其他	43	6.00	.79		
賽事滿意度	A.農林漁牧業	23	5.92	.89	1.545	
	B.製造業	103	6.12	.60		
	C.服務業	197	5.99	.68		
	D.軍公教人員	100	6.04	.71		
	E.家管與退休人員	39	6.11	.50		
	F.學生	99	6.09	.76		
	G.其他	43	5.79	.81		
整體滿意	A.農林漁牧業	23	6.01	.88	.598	
	B.製造業	103	6.20	.62		
	C.服務業	197	6.00	.75		
	D.軍公教人員	100	6.10	.81		
	E.家管與退休人員	39	6.10	.64		
	F.學生	99	6.10	.80		
	G.其他	43	5.78	.81		

表 3-4-4

不同職業別賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖差異分析表(續)

變項/因素	職業別	個數	平均數	標準差	F 值	事後考驗
品質承諾	A.農林漁牧業	23	5.96	.92	1.905	
	B.製造業	103	6.12	.67		
	C.服務業	197	6.01	.75		
	D.軍公教人員	100	6.05	.76		
	E.家管與退休人員	39	6.07	.51		
	F.學生	99	6.15	.84		
	G.其他	43	5.80	.83		
服務需求	A.農林漁牧業	23	5.78	.98	1.375	
	B.製造業	103	6.03	.66		
	C.服務業	197	5.95	.78		
	D.軍公教人員	100	5.98	.79		
	E.家管與退休人員	39	6.15	.60		
	F.學生	99	6.02	.81		
	G.其他	43	5.79	.97		
賽事參與意圖	A.農林漁牧業	23	6.22	.913	1.213	
	B.製造業	103	6.09	.64		
	C.服務業	197	6.09	.79		
	D.軍公教人員	100	6.03	.99		
	E.家管與退休人員	39	6.34	.55		
	F.學生	99	6.01	.82		
	G.其他	43	5.95	.79		
參與準備	A.農林漁牧業	23	6.26	.92	1.068	
	B.製造業	103	6.06	.67		
	C.服務業	197	6.04	.85		
	D.軍公教人員	100	6.02	1.04		
	E.家管與退休人員	39	6.26	.64		
	F.學生	99	5.91	.94		
	G.其他	43	6.05	.79		
再參與意圖	A.農林漁牧業	23	6.22	1.13	1.179	
	B.製造業	103	6.15	.75		
	C.服務業	197	6.11	.87		
	D.軍公教人員	100	6.01	1.07		
	E.家管與退休人員	39	6.44	.60		
	F.學生	99	6.12	.94		
	G.其他	43	6.05	.82		
推薦意圖	A.農林漁牧業	23	6.17	.94	1.722	
	B.製造業	103	6.08	.78		
	C.服務業	197	6.11	.86		
	D.軍公教人員	100	6.06	1.07		
	E.家管與退休人員	39	6.33	.70		
	F.學生	99	5.99	.92		
	G.其他	43	5.74	1.09		

*p<.05

(五) 月收入比較

由表3-4-5，發現不同月收入之路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖均無顯著差異。顯示月收入因素不會明顯影響路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖。

表 3-4-5

不同月收入賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖差異分析表

變項/因素	月收入	個數	平均數	標準差	F值	事後考驗
賽事品質	A.19,999元(含)以下	136	6.00	.65	.626	
	B.20,000-39,999元	238	6.01	.70		
	C.40,000-59,999元	182	6.01	.62		
	D.60,000-79,999元	61	6.01	.58		
	E.80,000元(含)以上	29	6.20	.61		
互動品質	A.19,999元(含)以下	136	5.97	.706	.495	
	B.20,000-39,999元	238	6.01	.75		
	C.40,000-59,999元	182	6.04	.66		
	D.60,000-79,999元	61	6.09	.59		
	E.80,000元(含)以上	29	6.11	.71		
結果品質	A.19,999元(含)以下	136	6.07	.73	1.891	
	B.20,000-39,999元	238	6.13	.79		
	C.40,000-59,999元	182	6.09	.69		
	D.60,000-79,999元	61	6.01	.87		
	E.80,000元(含)以上	29	6.31	.61		
賽事品質	A.19,999元(含)以下	136	5.98	.76		
	B.20,000-39,999元	238	5.97	.73		
	C.40,000-59,999元	182	6.00	.68		
	D.60,000-79,999元	61	5.99	.70		
	E.80,000元(含)以上	29	6.34	.49		
實體環境品質	A.19,999元(含)以下	136	5.97	.81	.238	
	B.20,000-39,999元	238	5.92	.88		
	C.40,000-59,999元	182	5.92	.83		
	D.60,000-79,999元	61	5.96	.71		
	E.80,000元(含)以上	29	6.03	.90		

表 3-4-5

不同月收入賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖差異分析表(續)

變項/因素	月收入	個數	平均數	標準差	F 值	事後考驗
賽事意象	A.19,999元(含)以下	136	6.11	1.63	.804	
	B.20,000-39,999元	238	5.99	.85		
	C.40,000-59,999元	182	5.95	.70		
	D.60,000-79,999元	61	5.90	.60		
	E.80,000元(含)以上	29	5.88	.85		
創意特色	A.19,999元(含)以下	136	6.00	.73	.772	
	B.20,000-39,999元	238	6.03	1.25		
	C.40,000-59,999元	182	5.89	.77		
	D.60,000-79,999元	61	5.90	.68		
	E.80,000元(含)以上	29	5.85	.88		
賽事聲譽	A.19,999元(含)以下	136	6.23	3.10	.878	
	B.20,000-39,999元	238	5.95	.76		
	C.40,000-59,999元	182	6.01	.73		
	D.60,000-79,999元	61	5.89	.67		
	E.80,000元(含)以上	29	5.91	.90		
賽事知覺價值	A.19,999元(含)以下	136	6.10	.73	1.260	
	B.20,000-39,999元	238	6.10	.78		
	C.40,000-59,999元	182	6.14	.67		
	D.60,000-79,999元	61	6.00	1.01		
	E.80,000元(含)以上	29	6.37	.68		
行為價格	A.19,999元(含)以下	136	6.09	.76	1.229	
	B.20,000-39,999元	238	6.06	.82		
	C.40,000-59,999元	182	6.14	.72		
	D.60,000-79,999元	61	5.99	1.02		
	E.80,000元(含)以上	29	6.34	.68		
情緒反應	A.19,999元(含)以下	136	6.11	.81	1.225	
	B.20,000-39,999元	238	6.14	.81		
	C.40,000-59,999元	182	6.15	.70		
	D.60,000-79,999元	61	6.01	1.03		
	E.80,000元(含)以上	29	6.40	.70		
賽事滿意度	A.19,999元(含)以下	136	6.01	.72	1.182	
	B.20,000-39,999元	238	5.98	.77		
	C.40,000-59,999元	182	6.08	.62		
	D.60,000-79,999元	61	5.98	.62		
	E.80,000元(含)以上	29	6.21	.71		
整體滿意	A.19,999元(含)以下	136	6.00	.79	2.043	
	B.20,000-39,999元	238	6.00	.84		
	C.40,000-59,999元	182	6.14	.65		
	D.60,000-79,999元	61	6.01	.74		
	E.80,000元(含)以上	29	6.33	.65		

表 3-4-5

不同月收入路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖差異分析表(續)

變項/因素	月收入	個數	平均數	標準差	F 值	事後考驗
品質承諾	A.19,999元(含)以下	136	6.08	.80	.588	
	B.20,000-39,999元	238	6.01	.80		
	C.40,000-59,999元	182	6.08	.68		
	D.60,000-79,999元	61	5.96	.71		
	E.80,000元(含)以上	29	6.15	.86		
服務需求	A.19,999元(含)以下	136	5.95	.77	.937	
	B.20,000-39,999元	238	5.92	.87		
	C.40,000-59,999元	182	6.03	.71		
	D.60,000-79,999元	61	5.96	.70		
	E.80,000元(含)以上	29	6.15	.80		
賽事參與意圖	A.19,999元(含)以下	136	6.03	.90	1.256	
	B.20,000-39,999元	238	6.03	.84		
	C.40,000-59,999元	182	6.11	.69		
	D.60,000-79,999元	61	5.98	.98		
	E.80,000元(含)以上	29	6.33	.63		
參與準備	A.19,999元(含)以下	136	5.99	.97	1.959	
	B.20,000-39,999元	238	6.00	.89		
	C.40,000-59,999元	182	6.10	.74		
	D.60,000-79,999元	61	5.90	1.03		
	E.80,000元(含)以上	29	6.38	.56		
再參與意圖	A.19,999元(含)以下	136	6.12	1.01	.898	
	B.20,000-39,999元	238	6.09	.91		
	C.40,000-59,999元	182	6.10	.76		
	D.60,000-79,999元	61	6.00	1.08		
	E.80,000元(含)以上	29	6.38	.73		
推薦意圖	A.19,999元(含)以下	136	6.01	.98	.911	
	B.20,000-39,999元	238	6.00	.93		
	C.40,000-59,999元	182	6.14	.83		
	D.60,000-79,999元	61	6.03	1.05		
	E.80,000元(含)以上	29	6.24	.83		

*p<.05

(六) 居住地區比較

由表4-9，發現不同居住地區之路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖均無顯著差異。顯示居住地區不會明顯影響路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖。

表 3-4-6

不同居住地區賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖差異分析表

變項/因素	居住地區	個數	平均數	標準差	F值	事後考驗
賽事品質	A.台灣北部	193	5.98	.66	.448	
	B.台灣中部	141	6.06	.59		
	C.台灣南部	208	6.03	.59		
	D.台灣東部	70	5.99	.85		
	E.離島地區	34	5.99	.72		
互動品質	A.台灣北部	193	5.99	.69	.733	
	B.台灣中部	141	6.09	.66		
	C.台灣南部	208	6.04	.66		
	D.台灣東部	70	5.98	.84		
	E.離島地區	34	5.90	.80		
結果品質	A.台灣北部	193	6.06	.71	.825	
	B.台灣中部	141	6.16	.68		
	C.台灣南部	208	6.13	.74		
	D.台灣東部	70	6.05	.96		
	E.離島地區	34	6.00	.79		
賽事品質	A.台灣北部	193	5.93	.73		
	B.台灣中部	141	6.06	.65		
	C.台灣南部	208	6.03	.65		
	D.台灣東部	70	5.95	.91		
	E.離島地區	34	6.01	.79		
實體環境品質	A.台灣北部	193	5.92	.87	.150	
	B.台灣中部	141	5.94	.82		
	C.台灣南部	208	5.94	.78		
	D.台灣東部	70	5.96	.95		
	E.離島地區	34	6.03	.82		

表 3-4-6

不同居住地區賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖差異分析表(續)

變項/因素	居住地區	個數	平均數	標準差	F 值	事後考驗
賽事意象	A.台灣北部	193	5.92	.70	1.160	
	B.台灣中部	141	5.96	.68		
	C.台灣南部	208	6.00	.83		
	D.台灣東部	70	6.21	2.22		
	E.離島地區	34	6.07	.70		
創意特色	A.台灣北部	193	5.90	.81	.487	
	B.台灣中部	141	5.94	.72		
	C.台灣南部	208	6.02	1.28		
	D.台灣東部	70	6.00	.86		
	E.離島地區	34	6.02	.66		
賽事聲譽	A.台灣北部	193	5.94	.72	1.356	
	B.台灣中部	141	5.96	.75		
	C.台灣南部	208	5.98	.72		
	D.台灣東部	70	6.41	4.29		
	E.離島地區	34	6.12	.80		
賽事知覺價值	A.台灣北部	193	6.12	.71	.582	
	B.台灣中部	141	6.15	.69		
	C.台灣南部	208	6.14	.81		
	D.台灣東部	70	6.00	.90		
	E.離島地區	34	6.05	.71		
行為價格	A.台灣北部	193	6.11	.77	.494	
	B.台灣中部	141	6.10	.72		
	C.台灣南部	208	6.13	.83		
	D.台灣東部	70	6.00	.95		
	E.離島地區	34	5.99	.74		
情緒反應	A.台灣北部	193	6.13	.74	.723	
	B.台灣中部	141	6.20	.73		
	C.台灣南部	208	6.15	.86		
	D.台灣東部	70	6.00	.92		
	E.離島地區	34	6.10	.77		
賽事滿意度	A.台灣北部	193	6.02	.65	.643	
	B.台灣中部	141	6.01	.65		
	C.台灣南部	208	6.06	.69		
	D.台灣東部	70	5.93	.94		
	E.離島地區	34	6.11	.79		
整體滿意	A.台灣北部	193	6.09	.70	.601	
	B.台灣中部	141	6.04	.71		
	C.台灣南部	208	6.07	.77		
	D.台灣東部	70	5.94	.98		
	E.離島地區	34	6.13	.81		

表 3-4-6

不同居住地區路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖差異分析表(續)

變項/因素	居住地區	個數	平均數	標準差	F 值	事後考驗
品質承諾	A.台灣北部	193	6.01	.733	.896	
	B.台灣中部	141	6.09	.68		
	C.台灣南部	208	6.08	.73		
	D.台灣東部	70	5.92	1.00		
	E.離島地區	34	6.11	.88		
服務需求	A.台灣北部	193	5.95	.77	.918	
	B.台灣中部	141	5.90	.76		
	C.台灣南部	208	6.04	.76		
	D.台灣東部	70	5.92	.96		
	E.離島地區	34	6.09	.80		
賽事參與意圖	A.台灣北部	193	6.07	.81	.370	
	B.台灣中部	141	6.04	.83		
	C.台灣南部	208	6.10	.80		
	D.台灣東部	70	5.98	.87		
	E.離島地區	34	6.12	.85		
參與準備	A.台灣北部	193	6.07	.848	.645	
	B.台灣中部	141	6.01	.878		
	C.台灣南部	208	6.02	.882		
	D.台灣東部	70	5.91	.913		
	E.離島地區	34	6.18	.904		
再參與意圖	A.台灣北部	193	6.15	.943	.614	
	B.台灣中部	141	6.06	.904		
	C.台灣南部	208	6.13	.850		
	D.台灣東部	70	5.97	.963		
	E.離島地區	34	6.12	.913		
推薦意圖	A.台灣北部	193	5.98	.927	.786	
	B.台灣中部	141	6.04	.929		
	C.台灣南部	208	6.14	.878		
	D.台灣東部	70	6.04	.984		
	E.離島地區	34	6.06	1.013		

*p<.05

(七) 運動觀光參與頻率比較

由表4-10，發現不同參與頻率之路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖均無顯著差異。顯示參與頻率不會明顯影響路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖。

表 3-4-7

不同參與頻率賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖差異分析表

變項/因素	參與頻率	個數	平均數	標準差	F值	事後考驗
賽事品質	A. 1次/年	138	6.10	.63	1.466	
	B. 2-4次/年	237	5.94	.67		
	C. 5-10次/年	189	6.02	.64		
	D. 11-20次/年	67	6.08	.64		
	E. 21次以上/年	15	6.07	.65		
互動品質	A. 1次/年	138	6.10	.73	1.976	
	B. 2-4次/年	237	5.95	.70		
	C. 5-10次/年	189	6.01	.71		
	D. 11-20次/年	67	6.18	.61		
	E. 21次以上/年	15	6.05	.66		
結果品質	A. 1次/年	138	6.23	.69	1.766	
	B. 2-4次/年	237	6.04	.75		
	C. 5-10次/年	189	6.09	.76		
	D. 11-20次/年	67	6.05	.84		
	E. 21次以上/年	15	6.27	.64		
賽事品質	A. 1次/年	138	6.10	.68	1.742	
	B. 2-4次/年	237	5.91	.73		
	C. 5-10次/年	189	6.00	.71		
	D. 11-20次/年	67	6.07	.67		
	E. 21次以上/年	15	6.02	.87		
實體環境品質	A. 1次/年	138	5.96	.78	.601	
	B. 2-4次/年	237	5.87	.88		
	C. 5-10次/年	189	5.98	.81		
	D. 11-20次/年	67	6.01	.85		
	E. 21次以上/年	15	5.93	.80		

表 3-4-7

不同參與頻率賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖差異分析表(續)

變項/因素	參與頻率	個數	平均數	標準差	F 值	事後考驗
賽事意象	A. 1次/年	138	6.07	.65	1.350	
	B. 2-4次/年	237	5.88	.71		
	C. 5-10次/年	189	6.06	1.53		
	D. 11-20次/年	67	6.07	.67		
	E. 21次以上/年	15	5.81	.79		
創意特色	A. 1次/年	138	6.07	.68	1.253	
	B. 2-4次/年	237	5.87	.82		
	C. 5-10次/年	189	5.98	1.33		
	D. 11-20次/年	67	6.06	.74		
	E. 21次以上/年	15	5.84	.90		
賽事聲譽	A. 1次/年	138	6.06	.74	.820	
	B. 2-4次/年	237	5.89	.74		
	C. 5-10次/年	189	6.14	2.66		
	D. 11-20次/年	67	6.08	.69		
	E. 21次以上/年	15	5.78	.81		
賽事知覺價值	A. 1次/年	138	6.18	.67	.457	
	B. 2-4次/年	237	6.07	.77		
	C. 5-10次/年	189	6.13	.76		
	D. 11-20次/年	67	6.11	.90		
	E. 21次以上/年	15	6.09	.80		
行為價格	A. 1次/年	646	6.12	.76	.402	
	B. 2-4次/年	138	6.16	.73		
	C. 5-10次/年	237	6.05	.81		
	D. 11-20次/年	189	6.11	.79		
	E. 21次以上/年	67	6.09	.92		
情緒反應	A. 1次/年	15	6.09	.80	.439	
	B. 2-4次/年	138	6.20	.70		
	C. 5-10次/年	237	6.09	.81		
	D. 11-20次/年	189	6.15	.81		
	E. 21次以上/年	67	6.12	.94		
賽事滿意度	A. 1次/年	15	6.10	.81	1.455	
	B. 2-4次/年	138	6.11	.64		
	C. 5-10次/年	237	5.95	.73		
	D. 11-20次/年	189	6.04	.73		
	E. 21次以上/年	67	6.10	.66		
整體滿意	A. 1次/年	15	5.92	.70	1.067	
	B. 2-4次/年	138	6.17	.66		
	C. 5-10次/年	237	5.97	.78		
	D. 11-20次/年	189	6.06	.81		
	E. 21次以上/年	67	6.12	.74		

表 3-4-7

不同參與頻率路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖差異分析表(續)

變項/因素	參與頻率	個數	平均數	標準差	F 值	事後考驗
品質承諾	A. 1次/年	138	6.13	.72	.896	
	B. 2-4次/年	237	5.98	.80		
	C. 5-10次/年	189	6.04	.79		
	D. 11-20次/年	67	6.11	.66		
	E. 21次以上/年	15	6.13	.76		
服務需求	A. 1次/年	138	6.02	.71	2.028	
	B. 2-4次/年	237	5.89	.84		
	C. 5-10次/年	189	6.04	.78		
	D. 11-20次/年	67	6.05	.73		
	E. 21次以上/年	15	5.60	.79		
賽事參與意圖	A. 1次/年	138	6.16	.67	1.810	
	B. 2-4次/年	237	5.96	.86		
	C. 5-10次/年	189	6.13	.79		
	D. 11-20次/年	67	6.08	.93		
	E. 21次以上/年	15	5.96	1.05		
參與準備	A. 1次/年	138	6.12	.76	1.654	
	B. 2-4次/年	237	5.94	.90		
	C. 5-10次/年	189	6.11	.86		
	D. 11-20次/年	67	5.99	.98		
	E. 21次以上/年	15	5.87	1.13		
再參與意圖	A. 1次/年	138	6.24	.76	1.769	
	B. 2-4次/年	237	6.01	.97		
	C. 5-10次/年	189	6.13	.88		
	D. 11-20次/年	67	6.15	.96		
	E. 21次以上/年	15	5.87	1.13		
推薦意圖	A. 1次/年	138	6.12	.85	1.727	
	B. 2-4次/年	237	5.93	.96		
	C. 5-10次/年	189	6.14	.88		
	D. 11-20次/年	67	6.12	1.01		
	E. 21次以上/年	15	6.13	.99		

*p<.05

綜合上述，比較受試者不同背景分析，主要結果如下（如表 4-11）：(1)性別比較結果，除了在路跑賽事品質因素中之「結果品質」；在整體賽事知覺價值及因素中之「行為價格」、「賽

事聲譽」；整體再參與意圖及因素中之「參與準備」、「再參與意願」及「推薦意圖」等有顯著差異外，其餘各因素構面之男女差異均未達顯著水準；(2)不同年齡組比較結果，各構面差異均未達顯著；(3)不同教育程度組比較結果，除賽事品質之「實體環境品質」、整體賽事意象及其因素之「創意特色」及「賽事聲譽」、賽事滿意度之「服務需求」達顯著外，其餘均未達顯著；(4)不同職業組比較結果，除賽事品質因素中之「互動品質」達顯著差異外，其餘構面均無顯著差異；(5)不同月收入組比較結果，所有構面均無顯著差異；(6)不同居住地區組比較結果，所有構面均無顯著差異；(7)不同參與頻率組比較結果，所有構面均無顯著差異。從上述背景變項比較，除性別、教育程度及職業別部分有顯著差異外，其餘大都無顯著差異，顯示不同背景變項對於路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖之影響並不明顯。

表表 3-4-8

不同背景路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖比較差異表

構面／因素	背景變項	性別	年齡	教育	職業	月收入	居住地	參與頻率
賽事品質	互動品質				*			
	結果品質	*						
	賽事品質							
	實體環境品質			*				
賽事意象	創意特色			*				
	賽事聲譽			*				
知覺價值		*						
	行為價格	*						
	情緒反應	*						
賽事滿意	整體滿意							
	品質承諾							
	服務需求			*				
再參與意圖		*						
	參與準備	*						
	再參與意願	*						
	推薦意圖	*						

*表示有顯著差異

五、建構台灣路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖模式

由 641 份樣本進行模式適配度評鑑，在本研究中，模型的 χ^2/df 為 2.82 (194.81 / 69) 與其他適配度指標 (GFI = 0.96, AGFI = 0.94, NFI = 0.97, CFI = 0.96, RMSEA = 0.053) 均符合標準，顯示由樣本資料分析所得之台灣路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖模式模式是一個適配良好的模式 (張偉豪, 2011)，其次驗證研究模式之假設是否成立，各變項間的路徑效果分析及整體研究模式的解釋力。

台灣路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖模式模式經由 SEM 估計各構面間的徑路關係(表 3-5-1)，其徑路值係採用標準化係數，各路徑係數分別是：賽事品質顯著正向影響賽事意象 (.79***)、知覺價值 (.49 ***) 和賽事滿意 (.48***)，因而 H1、H2 和 H4 獲得支持；賽事意象顯著正向影響知覺價值 (.41 ***) 和賽事滿意度 (.14 *)，從而支持 H3 和 H5；知覺價值顯著正向影響賽事滿意 (.27***) 和再參與意圖 (.32 ***)，因此 H6 和 H7 得到支持；賽事滿意顯著正向影響再參與意圖 (.49 ***)，因而 H8 獲得支持，上述模式中所有路徑值皆達到顯著水準，因此八個假設獲得支持。

表3-5-1

本研究假設檢驗結果摘要表

路徑	結構係數	S.E.	t-值	結果
H1: 賽事品質→賽事意象	.79	.06	17.22***	支持
H2: 賽事品質 →知覺價值	.49	.08	7.88 ***	支持
H3: 賽事意象 →知覺價值	.41	.06	6.37 ***	支持
H4: 賽事品質→賽事滿意	.48	.08	7.36 ***	支持
H5: 賽事意象 →賽事滿意	.14	.06	2.03*	支持
H6: 知覺價值→賽事滿意	.27	.06	4.16 ***	支持
H7: 知覺價值→再參與意圖	.32	.06	5.68 ***	支持
H8: 賽事滿意 →再參與意圖	.49	.06	8.59 ***	支持

*p < 0.05; ***p < 0.001

在探討變項間之路徑效果時，對內生潛在變項而言，包含外生潛在變項的直接效果以及透過其他變項所產生的間接效果，因此，總效果係為直接效果與間接效果的加總。由表 3-5-2 就各變項加以分析，從樣本資料中發現，(1) 賽事品質對賽事意象 (0.79) 的直接影響大於知覺價值 (0.49) 和賽事滿意 (0.48)；此外賽事品質還有對知覺價值 (0.32)、賽事滿意 (0.33) 的間接影響；(2) 賽事意象對知覺價值的直接影響 (0.41) 大於賽事滿意 (0.14)，而賽事意象對賽事滿意亦有間接影響 (0.11)；(3) 知覺價值對再參與意圖 (.32) 的直接影響大於賽事滿意

(0.27)，且間接影響再參與意圖 (0.13)；(4) 賽事滿意對再參與意圖有直接影響 (.49)。

圖3-5-1

結構模式測量結果

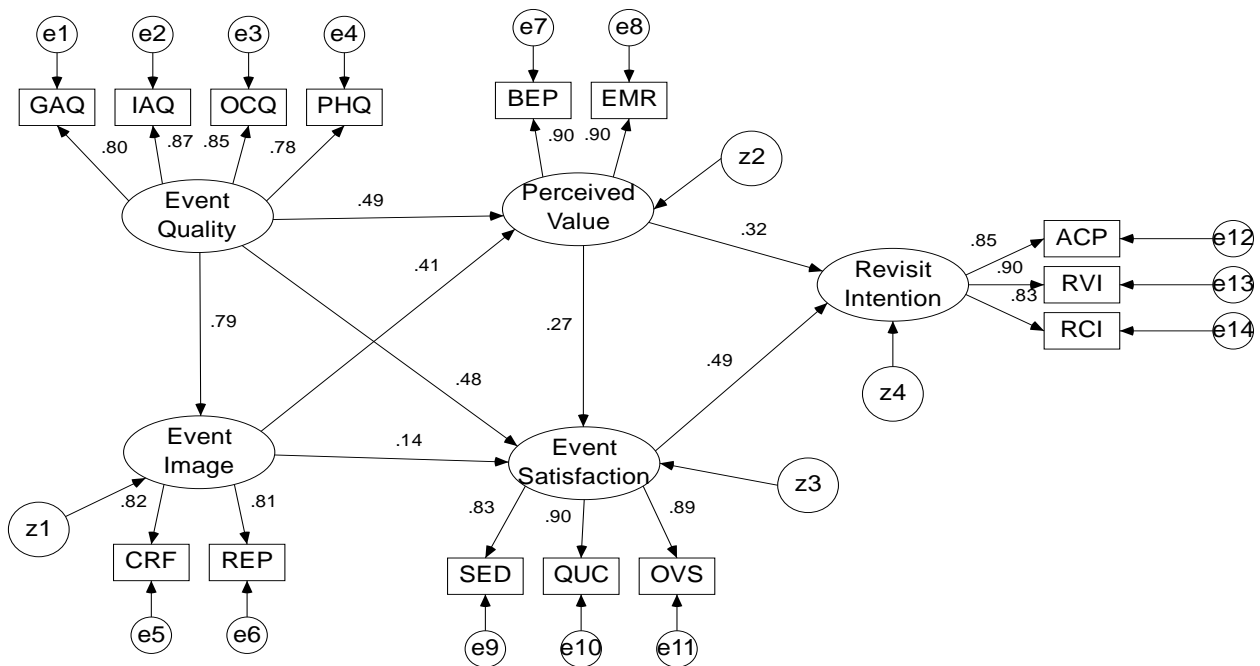


表 3-5-2

本研究主要變項直接效果、間接效果及整體效果

Path	Direct effect	Indirect effect	Total effect
賽事品質 → 賽事意象	.79	N.A	.79
賽事品質 → 知覺價值	.49	.32	.81
賽事品質 → 賽事滿意	.48	.33	.81
賽事意象 → 知覺價值	.41	N.A	.41
賽事意象 → 賽事滿意	.14	.11	.25
知覺價值 → 賽事滿意	.27	N.A	.27
知覺價值 → 再參與意圖	.32	.13	.45
賽事滿意 → 再參與意圖	.49	N.A	.49

Note: N.A.: It was not possible to determine the direct or indirect effects.

1. 賽事品質在路跑賽事中的角色

本研究的結果支持賽事品質對賽事意象 (H1)、知覺價值 (H2) 和賽事滿意 (H4) 有影響的假設，影響係數分別為.79、.81 和 .81。這些結果支持以前的研究結果 (Chen & Tsai, 2007; Dann, 1996; Kandampully & Suhartanto, 2000; Lee et al., 2005)，知覺價值 (Cronin et al., 2000;

Cronin & Taylor, 1994; Jin et al., 2015; Zeithaml, 1988) 和賽事滿意 (Chen & Chen, 2010; Cronin et al., 2000) , 顯示路跑賽事品質對影響賽事意象、知覺價值和賽事滿意最重要因素。

2. 賽事意象在路跑賽事中的角色

本研究結果支持賽事意象影響參與者的知覺價值 (H3) 和賽事滿意 (H5) 的假設, 影響係數分別為.41 和.25。路跑賽事的背景下, 本研究結果指出賽事意象是影響感知覺價值的重要因素這些結果, 也符合過去研究之相關文獻 (Chen & Chen, 2010; Chen & Tsai, 2007; Lee, 2009; Kaplanidou & Christine, 2007; Oshimi & Harada, 2016) 和事件滿意度 (Chen & Chen, 2010; Koo et al., 2014; Lee, 2009) 。然而, 本研究沒有發現賽事意象對再參加意圖的直接正面影響, 這與以前的研究結果有所不同 (Jin et al., 2013; Papadimitriou et al., 2015; Shonk, 2012) 。

3. 知覺價值在路跑賽事中的角色

本研究結果支持參與者知覺價值影響賽事滿意度 (H6) 和再參加意圖 (H7) 的假設, 影響係數分別為.27 和.45。這些結果與過去的相關文獻一致, 因為路跑賽事的知覺價值被證明是賽事滿意的重要因素 (Chen & Chen, 2010; Lee, 2009) 和再參加意圖 (Brady et al., 2005; Jin et al., 2013; Yu et al., 2014) 。

4. 賽事滿意在路跑賽事中的角色

本研究結果支持參與者的賽事滿意影響其再參加意圖 (H8) 的假設, 影響係數為.49。本研究發現與過去相關文獻相一致, 賽事滿意是再參加意圖的重要預測因素 (Chi & Qu, 2008; Kaplanidou & Vogt, 2007; Koo et al., 2014; Papadimitriou et al., 2015; Shonk, 2012) 。

肆、結論

本研究發展本土化路跑行為之衡量工具, 可有效衡量路跑賽事品質、賽事意象、知覺價值、賽事滿意及參與意圖; 路跑參加者包含不同的群體, 且較喜歡參與半程馬拉松、10 公里及馬拉松賽事; 不同背景路跑參加者對於賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖之影響並不明顯, 除性別、教育程度及職業別部分有顯著差異外。本研究所建構和應用的假設模型形成過程乃是基於 QVB (Zeithaml, 1988)。該模型用於探討馬拉松跑者參與賽事時、賽事品質與賽事意象之經驗所引發知覺價值、賽事滿意及再參與意圖。本模型也用於探索影響因素之間的因果關係。本項研究發現賽事品質影響賽事意象、知覺價值與賽事滿意 (H1、H2 和 H4)。此外, 賽事意象影響知覺價值 (H3) 與賽事滿意 (H5), 而知覺價值影響賽事滿意 (H6) 及再參與意圖 (H7), 而賽事滿意影響再參與意圖 (H8)。因此, 本研究的結果支持先前的假設。

本項研究的實證結果顯示賽事品質整體影響賽事意象 (.79)、知覺價值 (.81) 及賽事滿意 (.81) 的關鍵因素, 顯示賽事品質影響係數高於所有其他因素。在路跑賽事的背景下, 發

現指賽事意象整體影響知覺價值 (.41) 和賽事滿意 (.25)，也是扮演重要角色。此外，知覺價值整體對賽事滿意 (.27) 和再參加意圖 (.45)，顯示知覺價值也是影響賽事滿意和再參加意圖的重要因素。因此，描述馬拉松賽跑結構時，賽事品質是影響參與者行為的最重要因素，因為它影響知覺價值與賽事滿意，進而間接影響路跑的再參加意圖。這項研究結果指出路跑賽事中，賽事品質和賽事意象是影響參與者的知覺價值、賽事滿意及再參加意圖之最重要因素。因此，有關路跑賽事特色、氛圍、競賽品質、互動品質、結果品質及硬體環境品質是影響路跑賽事知覺價值、滿意度及再參加意圖的重要因素。因此，這些結果可以作為補充運動賽事與觀光活動理論架構重要參考。

有關本研究結果之實際應用，結果指出組織與主辦路跑賽事最成功的方法是優化賽事品質與賽事意象的服務策略。這種優化應通過消費行為與情緒反應來提高參與者的服務體驗品質，並增加參與賽事經驗之知覺價值（行為價值與情緒獲得）。因此，組織主辦單位與城市應考慮參與者對路跑賽事的情感認知，加強目的地的特色以達到參賽者的期望，喚醒路跑賽事參與之目標導向。例如，路跑賽事主辦城市應通過提供當地住宿、交通、餐飲與景點，以提供路跑賽事參與者更多元運動觀光旅程，以及安排訓練有素的工作人員或志工來完成整體賽程。這樣的服務不僅保證良好的服務品質，而且有助於建立一個正面的賽事意象、知覺價值和滿意度，從而有效提高參與者對路跑賽事的再參加與推薦意願(Goh,2015; Hallmann et al., 2010; Jin et al., 2013; Pratminingsih et al., 2014; Som et al., 2012)。

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附錄一 正式問卷

敬愛的先生/小姐您好：

這是一份關於台灣路跑賽事品質、賽事意象、知覺價值、賽事滿意及參與意圖的調查問卷，主要希望透過本問卷了解台灣路跑賽參與者的觀點與行為。問卷內容主要分為路跑賽事品質、賽事意象、知覺價值、賽事滿意及再參與意圖等內容，總問卷題數約為 53 題，約需花費 7-10 分鐘填寫，感謝您撥冗填答。

本問卷採不記名方式作答，紙本資料將放置於上鎖的櫃中，不會對您造成名譽與金錢上的風險，請安心作答。完成本問卷者，請將問卷繳回，此問卷附上 35 元左右之美容組或文具及 1 枝原子筆聊表謝意。

您可以自由決定是否填寫本研究問卷，亦可以中途放棄填寫或填寫後不交，惟問卷無記名，回收後將無法辨識個別填寫者，資料便無法退回。研究資料待發表後，紙本問卷保存 2 年，電子檔再保存 3 年後會從電腦檔裡刪除。

若您對問卷內容有疑問或希望了解研究結果，本研究預計 2017/10/31 後會完成，歡迎您與下列人員聯絡：本計畫主持/聯絡人：劉照金，電話：08-7799821 轉 8284。

若您想諮詢或申訴參與研究的權益，本研究已由美和科技大學委託國立成功大學人類研究倫理審查委員會倫理審查通過，可聯繫該委員會，電話：06-2757575 轉 51020，email: em51020@email.ncku.edu.tw。

計畫主持人：劉照金教授
美和科技大學運動與休閒系
敬上
2016 年 10 月 1 日

～若您同意參與本研究，請留存本頁，並從下頁開始作答～

台灣路跑賽事品質、賽事意象、知覺價值、賽事滿意及參與意圖之調查問卷

各位先生、女士您好：

非常感謝您願意撥冗填答本問卷，本問卷目的主要是在探討路跑賽事品質、賽事意象、知覺價值對賽事滿意及參與意圖影響。本研究需要您寶貴的意見，填寫採不具名方式，問卷資料僅作整體學術研究分析，不作其他用途使用，敬請您安心填答。非常感謝您的協助與填答！

敬祝 萬事如意 健康平安

美和科技大學運動與休閒系教授

劉照金博士敬上

一、基本資料（請依您個人的背景狀況，在適當的□內打「✓」或填寫您的資料）

1. 您的性別： 男 女
2. 出生年：民國_____年出生
3. 您的最高學歷：國中(含)以下 高中職 專科 大學 研究所(含)以上
4. 您的職業：1農林漁牧業 2製造業 3商業 4服務業 5軍公教人員
6家管(婦、夫)7退休人員 8學生 9待業中(含失業)10自由業 11其他()
5. 您的月收入約：19,999元(含)以下20,000-39,999元 40,000-59,999元
60,000-79,999元 80,000元(含)以上
6. 您居住地：台灣北部 台灣中部 台灣南部 台灣東部 離島地區
7. 您最近一年內參加正式路跑活動大約：_____次，主要參賽組別(可複選)：
超馬(50公里以上)約_____次 全馬約_____次 半馬約_____次
11-20公里約_____次 6-10公里約_____次 5公里以下_____次
鐵人三項約_____次

二、路跑賽事品質、賽事意象、知覺價值、賽事滿意及參與意圖量表

請您針對參與此次「路跑活動問項」的看法，請在適合的□中打「✓」。

A	您對這項路跑賽事品質的看法	非常同意	同意	有點同意	普通	有點不同意	不同意	非常不同意
A1	整體規劃符合參與者的需要	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A2	工作人員具有專業素養	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A3	參與者能遵守賽會的規定	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A4	路跑參與者的表現令人讚美	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A5	工作人員能樂意提供適當的服務	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A6	資訊能讓參與者充分獲得	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A7	參與者之間彼此互動良好	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A8	標示清楚易懂	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A9	辦理結果得到好評	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A10	讓我與朋友/家人度過美好時光	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A11	讓參與者享受到路跑的樂趣	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A12	賽事整體感覺良好	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A13	場地與動線規劃良好	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A14	醫療與補給服務良好	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A15	安全措施良好	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A16	交通接駁服務良好	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B	您對這項路跑賽事意象的看法							
B1	舉辦地點民眾友善與有趣	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B2	舉辦地點提供合適的住宿	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B3	舉辦地點附近的娛樂設施豐富	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B4	舉辦地點風光優美具吸引力	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B5	路跑活動有創意特色	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B6	路跑活動有知名度	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B7	路跑活動有挑戰性	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B8	路跑活動口碑良好	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C	您對這項路跑賽事知覺價值的看法							
C1	所花的金錢是值得的	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C2	所花的時間是值得的	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

C3	所花的體力與精神是值得的	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C4	獲得服務品質是值得的	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C5	參與此次路跑讓我有榮譽感	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F	您對這項路跑賽事的滿意度	非常同意	同意	有點同意	普通	有點不同意	不同意	非常不同意
F1	到達路跑賽會場地很便利	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F2	提供的醫療與補給設施完善	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F3	晶片感應與成績登錄快速準確	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F4	交通動線與管制規劃完善	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F5	確實提供所承諾的服務	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F6	服務品質不會因人而異	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F7	服務人員具有專業性	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F8	工作人員的服務態度良好	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F9	整體活動流程令人滿意	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F10	整體服務設施令人滿意	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F11	賽事組織與管理令人滿意	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F12	賽會整體環境品質感到滿意	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G	您再次參與路跑的意圖							
G1	我會留意這項路跑有關的訊息。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G2	我會積極準備參與此項路跑。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G3	我願意邀請親朋好友參與此項路跑。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G4	我明年會再度參與此項路跑。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G5	我願意向他人分享這項路跑經驗。	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

本問卷至此全部結束，衷心感謝您的幫助，並為您的熱忱與協助致上最高的敬意。

附錄二 已發表論文 1

Liu, C. C. (2017). Event Quality, Perceived Value, Event Image, Satisfaction and Intention of Road Race Events in Taiwan. *Proceeding of The 1st Global Congress of Special Interest Tourism & Hospitality* (Beppu, Japan, 24 – 26 June 2017).

Event Quality, Perceived Value, Event Image, Satisfaction, and Revisit Intention of Road Race Events in Taiwan

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Abstract: This study proposes a conceptual model for investigating participants' perceptions of an event's quality according to the perceived value and event image, and for exploring participants' resulting revisit intention in the context of road race events in Taiwan. A questionnaire was developed for this quantitative study to examine these variables for road race event participants. A total of 800 questionnaires were distributed to respondents who had participated in nine road race events in Taiwan, of which 641 valid questionnaires were collected. The data were analyzed using stepwise regression. The results revealed that (1) the event quality, perceived value, and event image were positively related to the participants' satisfaction and revisit intention; (2) 58.8% of the variation in the participants' satisfaction was due to their event quality and perceived value, among which event quality explained the largest proportion of variance at 53.8%; and (3) 54.5% of the variation in the participants' revisit intention was due to participants' satisfaction and perceived value, among which participants' satisfaction was the most significant factor in explaining the variance at 48.6%. In conclusion, the results showed that an event quality and its perceived value are the most important variables that affect road race event participants' satisfaction. Moreover, the participants' satisfaction and perceived value play key roles in influencing the revisit intention of road race events, and especially satisfaction is important mediating variable in road race event in Taiwan. The implications of the results have merit for academic researchers and organizers. For example, organizers and operators of events should consider participants' demands and strengthen event quality accordingly. They could also improve participants' satisfaction to enhance their willingness to revisit.

Keywords: event quality, event image, perceived value, road race events, satisfaction, revisit intention

Introduction

In recent years, small-scale sporting events have become potential tourist activities hosted by the community (Kaplanidou & Gibson, 2010; Koo, Byon, & Baker, 2014). Some events, including marathons, Senior Games, and Masters' Games, have gradually established themselves as "good events" because the well-known "good location" attracts foreign tourists (Oshimi & Harada, 2016; Wicker, Hallmann, & Zhang, 2012). According to the registration information provided in the Runner's Plaza (2016), Taiwan's road race events grew from 91 events in 2006 to 1,315 events in 2016, which is a 14-fold increase in ten years. The consumption of visiting participants has increased Taiwan's economy by an estimated NT 8.1 billion to NT 30.3 billion each year (Liu, 2015). These popular road race events thus have a substantial impact on the social, environmental, and economic situation of the destination community (Liu, Chuang, Chang, & Chang, in Press; Liu, Hsu, Chen, & Chuang, 2015; Liu, Tseng, Lee, & Tung, 2016).

The significant growth of road race events in Taiwan and the development of a sustainability strategy have become increasingly important to organizers. Revisit intention has been recognized as an essential factor for an event's sustainability and growth, which can be analyzed through assessing tourists' behaviors related to satisfaction, revisit intention, and various types of consumer key variables (Liu et al., 2016). Regarding revisit intention, important factors of influence include event quality (Jin, Lee, & Lee, 2013; Ko & Pastore, 2004; Theodorakis, Kaplanidou, & Karabaxoglou, 2015), perceived value (Chen, & Chen, 2010; Cheng & Lu, 2013; Jin et al., 2013; Nuviala, Grao-Cruces, Pérez-Turpin, & Nuviala, 2012; Yang, Gu, Cen, 2011), event image (Jin et al., 2013; Kaplanidou & Vogt, 2007; Oshimi & Harada, 2016; Som, Marzuki, Yousefi, & Abu Khalifeh, 2012), and satisfaction (Bigne', Sanchez, & Andreu, 2009; Goh, 2015; Koo et al., 2014; Theodorakis et al., 2015).

This study therefore investigates road race event participants' revisit intentions influences factors and examines the relationship between road race event participants' event quality, perceived value, event image, satisfaction, and revisit intentions in Taiwan. The findings will provide useful insights for establishing a road race events tourism policy and will help operators and organizers of road race events to develop strategies for product planning, services, and marketing, and to improve service quality.

Research Objectives

This study proposes a conceptual model for investigating participants' perceptions of an event's quality according to their perceived value, event image, and their resulting satisfaction and revisit intentions in the context of road race events in Taiwan. This study therefore has the research objectives: Explore the relationships between event quality, event image, perceived value and participants' satisfaction and revisit intentions on road race event in Taiwan.

Literature Review

Zeithaml's (1988) model of Quality-Value-Behavior Intention (QVB) states that service quality and perceived value are closely related to consumers' purchasing decisions (Cronin & Taylor, 1994). This empirical study shows the significant positive correlation between service quality and the perceived value, in which good quality is an antecedent for increased perceived value (Cronin, Brady, & Hult, 2000). According to Jin, Lee, and Lee, (2015) the quality of a participant's experience significantly affects their perceived value, image, and satisfaction. Perceived value and image also directly influences customer satisfaction and behavioral intentions. Thus, the current study is based on the QVB formation process.

2-1. Event Quality

Service quality is "a global judgment or attitude relating to the superiority of a service" (Parasuraman, Zeithaml, & Berry, 1985, p. 16). A customer's perceived service quality depends on the difference between their prior expectation and their evaluation after experiencing the service (Zeithaml, Berry, & Parasuraman, 1993). These services can be categorized as either tangible (e.g., the environment, equipment, and design) or intangible (e.g., security, insurance, and communication) (Ko & Pastore, 2004; Liu, Tung, Tsai, & Liu, 2013; Wakefield & Blodgett, 1999). Additionally, a consumer's perception of service quality typically includes outcome and process dimensions (Lehtinen & Lehtinen, 1991; Grönroos, 2000, 2006). Lehtinen and Lehtinen (1991) extended this idea by suggesting a complementary three-dimensional quality model, which included physical, interactive, and corporate quality. In recent years, an increasing amount of research has focused on service quality and consumer behavior. Moon, Kim, Ko, Connaughton, and Lee's (2011) study adapted tangible and intangible factors from previous service quality research to the spectators and tourists of an international bicycling race. This adaptation measured the influence of consumers' event quality perception on the destination's image, identifying a positive relationship between these factors. Therefore, within the context of spectator sports, event quality includes consumers' overall impression of the game (Ko & Pastore, 2004), interaction (Brady & Cronin, 2001; Ko & Pastore, 2004), outcome (Deighton, 1992; Grönroos, 1984), and the physical environment (Bitner, 1992; Westerbeek, 2000).

2-2. Event Image

The term "event image" derives from the brand image theory and can be defined as a participant's psychological representation of an event (Kaplanidou, 2007). Given that a destination hosts a sporting event to attract spectators or participants (Kaplanidou & Vogt, 2010), the concept of event image is in this case related to the concept of destination image (Hallmann, Kaplanidou, & Breuer, 2010; Oshimi & Harada, 2016). Regardless of the size of a sporting event, event image partly depends on the cognitive and affective image, which contribute to a holistic evaluation of the event (Baloglu & McCleary, 1999). Following

Keller's (1993) theoretical framework, Gwinner (1997) defined event image as "the cumulative interpretation of meanings or associations attributed to events by consumers" (p. 147). Gwinner (1997) also proposed a framework of three main factors that might influence an individual's perception of an event: (a) event type (e.g., sports, music concert, or art festivals); (b) event characteristics (e.g., size, professional status, history, venue, and promotional appearance); and (c) individual factors (e.g., meanings associated with the event, the strength of these associations, and their past experience of the event).

2-3. Perceived Value

Customer value is defined as "the customer's overall assessment of the utility of a product on perceptions of what is received and what is given" (Zeithaml, 1988: 14), which is also defined by the relationship between the benefits received versus the sacrifice of intangible resources. The consumers' perceived value (PV) is closely related to the quality or the benefits they perceive from the product in exchange for the price they pay (Monroe, 1990; Zeithaml, 1988). This can include economic, social, and psychological benefits developed through the customers' subjective estimation of products or services. Holbrook's (2006) classification research categorized customer value into economic, social, hedonic, and altruistic values. Many researchers (Chen & Chen, 2010; Cheng & Lu, 2013; Jin et al., 2015) reported that customers' PV is positively related to word-of-mouth, recommendation behavior, and revisit intention, while other researchers found that PV is affected by service quality and price, which mediates between service quality, customer satisfaction and future intentions (McDougall & Levesque, 2000; Murray & Howat, 2002; Moon, Kim, Ko, Connaughton, & Lee, 2013; Nuviala et al., 2012). This factor is also a determinant for customers' future intentions, with a positive, combined influence on customer behavior and service loyalty (Brady, Knight, Cronin, Hult, & Keillor, 2005; Yu, Zhang, Kim, Chen, & Huang, 2014).

2-4. Satisfaction

Satisfaction is an important research issue for tourism and sporting events (E.g Goh, 2015; Jin et al., 2015), which can be described as the consumer's subjective and objective evaluation on the execution of products and activities (Goh, 2015; Pratminingsih, Rudatin, & Rimenta, 2014), including its destination and components (Koo et al., 2014; Shonk, 2012). Related research shows that event satisfaction is affected by many factors, comprehensively including event quality (Jin et al., 2013; Ko & Pastore, 2004; Theodorakis et al., 2015; Liu et al., 2013), perceived value (Chen, & Chen, 2010; Cheng & Lu, 2013; Jin et al., 2013; Nuviala et al., 2011; Yang et al., 2011), and event image (Jin et al., 2013; Kaplanidou & Vogt, 2007; Oshimi & Harada, 2016; Som et al., 2012).

2-5. Revisit Intentions

Chen and Tsai (2007) stated that important tourist behaviors include the participant's choice of

destination, subsequent evaluations, and future behavioral intentions. While “subsequent evaluations” refers to the travel experience or perceived value and the overall visitors’ satisfaction, “future behavioral intentions” refers to the visitor’s judgment about their likeliness to revisit the same destination and their willingness to recommend it to others (Som et al. 2012). Therefore, revisit intention is an important predictor of future travel behavior (Lee, 2009; Severt, Wang, Chen, & Breiter, 2007). Baker and Crompton (2000) defined revisiting behavioral intention as the possibility of a tourist participating in an activity again. Many researchers recommend using assessments of consumer loyalty (Chi & Qu, 2008; Koo et al., 2014; Papadimitriou, Apostolopoulou, & Kaplanidou, 2015) and behavioral intention (Chen & Chen, 2010; Jin et al., 2013) to measure the possibility of revisiting, including specific behavioral contexts, and multi-dimensional scales (Baker & Crompton, 2000; Lee, 2009; Severt et al., 2007; Williams & Soutar, 2009).

2-6. Relationships among Event Quality, Perceived Value, Event Image, Satisfaction and Revisit

Intentions

Lee, Lee, and Lee (2005) suggested that event quality will affect the personal event image, and other researchers demonstrated that customers’ experiences with products and services significantly influence their notions of an image (Dann, 1996; Kandampully & Suhartanto, 2000; Chen & Tsai, 2007). For instance, Dann (1996) suggested that tourists’ experiences can affect place image and that a satisfactory image can influence the perception of a destination. Similarly, Jin et al. (2015) found that the quality of participants’ experiences significantly affects perceived value, image, and customer satisfaction, while perceived value and image exert a direct influence on customer satisfaction and behavioral intention. Jin et al. (2013) found that sporting event quality would positively affect perceived value, event imagery and participatory intent. Cronin et al. (2000) state that perceived value may be a better predictor of repurchase intention than either satisfaction or quality. Chen and Chen (2010) revealed that experience quality appeared to be a significant predictor of perceived value and that among heritage tourists, perceived value influenced satisfaction and behavioral intention positively and directly.

Cole and Illum (2006) found that visitor experiences entail a partial response to management’s performance, and experiential quality directly contributes to visitors’ overall satisfaction and behavioral intentions. Furthermore, Kao, Huang, and Wu (2008) examined the relationship between experiential quality, satisfaction, and intention toward the loyalty of theme park visitors. The authors found that experience quality was an important predictor of experiential satisfaction. The findings reveal experiential quality as a positive influencer of other critical outcomes such as satisfaction and behavioral intentions (Jin et al., 2015).

Kaplanidou and Christine (2007) found that event and destination image, which are similar and positively related, are commonly considered as important indicators of a tourists’ perceived value; both

factors are sufficient to influence a visitor’s decision-making process (Fakeye & Crompton, 1991; Echtner & Brent Ritchie, 1993). Similarly, several studies within the tourism literature support that destination image and perceived value are antecedents to customer satisfaction. In other words, the positive image of a destination before the trip is associated with higher perceived value obtained after the visit (Chen & Chen, 2010; Lee, 2009). Chen and Tsai (2007) showed that tourists’ destination image positively affects the perceived value of travelling. In other words, the positive image of a destination before a trip is associated with higher perceived value obtained after the visit. Jin et al. (2013) also found that the sporting destination image determined visitors’ perceptions of value, which directly affects future participation intention. Within the literature, event image is often suggested to be an antecedent variable to destination image (Oshimi & Harada, 2016), consequently affecting positive word-of-mouth, and event and destination images positively affect event satisfaction (Koo et al., 2014) and behavioral intentions (Kaplanidou, 2007; Kaplanidou, & Vogt, 2007). Few studies have found a direct influence of a participant’s event image on revisit intention (Jin et al., 2015; Oshimi & Harada, 2016; Wicker et al., 2012).

Some studies have shown that satisfaction directly affects behavioral intentions (Chi & Qu, 2008; Kaplanidou & Vogt, 2007). For example, Koo et al. (2014) found that satisfaction determined the process of consumption, which includes brand loyalty, positive reputation, and repurchase intention. However, other studies have shown that satisfaction is an important predictor of revisit intention, with empirical evidence supporting the direct relationship of event image and satisfaction with revisit intention (Papadimitriou et al., 2015; Shonk, 2012). Through satisfaction, event image indirectly affects revisit intention, which suggests that satisfaction is a mediating variable. The current study therefore proposes the conceptual relationship model shown in Figure 1 and the following seven hypotheses:

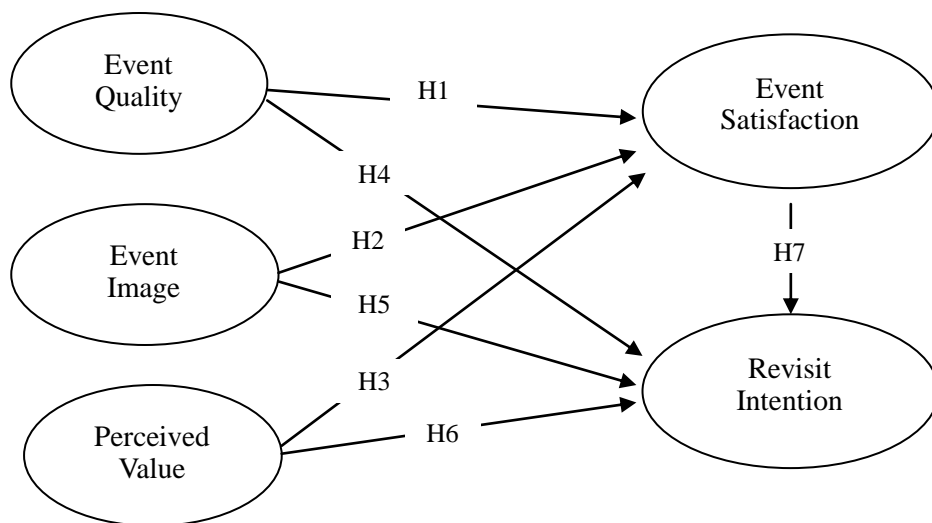


Figure 1 Conceptual Model.

- H1*: Event quality has a positive effect on event satisfaction.
- H2*: Event image has a positive effect on event satisfaction.
- H3*: Perceived value has a positive effect on event satisfaction.
- H4*: Event quality has a positive effect on revisit intention.
- H5*: Event image has a positive effect on revisit intention.
- H6*: Perceived value has a positive effect on revisit intention.
- H7*: Event satisfaction has a positive effect on revisit intention.

METHODOLOGY

Data Collection

This study targeted road running event participants who participated in Taiwan road running events. A purposive convenience sampling and convenient method were adopted to collect data from those aged 18 or more. A total of 800 questionnaires were distributed to people who had participated in Taiwan road running events held from October 22, 2016, to February 12, 2017, of which, 641 valid questionnaires were collected.

Instrumentation

The design of a questionnaire for gathering data for this study arises from previous research and incorporates specific characteristics of sporting event/tourism, which relevant literature regarding event quality, event image, perceived value, satisfaction and revisit intention. The questionnaire consists of five sections, and the background information of the respondents. Responses were indicated on a seven point Likert scale (7 = strongly agree, 1 = strongly disagree). The questions regarding event quality were designed based on the studies of Lehtinen and Lehtinen (1991), Grönroos (2006), and Moon et al. (2011), there are four constructs, game quality (three items), interaction quality (five items), outcome quality (three items), and physical environment quality (two items). The questions regarding event image were designed based on Bigne´ et al. (2009), Hallmann et al. (2010), Gwinner (1997), Kaplanidou (2007), and Papadimitriou et al. (2015) proposed a framework two factors that might influence an individual's perception of a particular event, which include creative features (two items), and reputation (two items). The questions regarding perceived value were designed based on Chen & Chen (2010), Holbrook (2006), Monroe (1990), and Zeithaml (1988) classified perceived value was categorized into behavioral price (three items) and emotional response (two items). The questions regarding event satisfaction were designed based on Goh (2015), Papadimitriou et al. (2015), Pratminingsih et al. (2014), and Shonk (2012), which measured event satisfaction with service demand (three items), quality commitment (three items), and overall satisfaction (four items). The questions of Revisit intention have three constructs, actively prepared, revisiting intention, and recommendation

intention were used to measure revisiting behavioral intention based on the studies of Julaimi and Talib (2016), Kaplanidou and Vogt (2007), Som et al. (2012), and Wicker et al. (2012).

The five scales analysis revealed that the critical ratio values and total correlation coefficients for each item reached a significant level, showing construction of the scale has discrimination; which exploratory factor analyses (EFA) and confirmatory factor analysis (CFA) showed that the analyses revealed that all research instruments exhibited validity and model fit the data appropriately; which reliability analysis showed that each scale's Cronbach's alpha coefficients was above .90, which revealed the internal consistency was acceptable (Chiou, 2010). Based on the results, five scales demonstrated sound discriminant, validity, and reliability, which five scales are well suited to the measurement of participant opinion regarding the event quality, event image, perceived value, event satisfaction and revisit intention for road race events in Taiwan.

Data Analysis

SPSS version 17.0 was used to provide descriptive statistical analysis of participants' demographics and participants' behaviors. The Pearson's correlation coefficient was used to analyze the relationship between participants' event quality, event image, perceived value, event satisfaction and revisit intention to participate in road race events in Taiwan. Stepwise regression analysis was selected to predict road race event participants' satisfaction and revisit intention by their event quality, event image, and perceived value. Before undertaking stepwise regression analysis, tests were conducted on the hypothesis which includes the level of satisfaction's normal distribution, independency of independent variables autocorrelation, and linear modeling's goodness of fit (Kleinbaum, Kupper, & Muller, 1988).

Results and Discussions

Analysis of the Types of Road Race Event Participants

As shown in Table 1, the participants comprised 384 males (59.9%) and 257 females (40.1%), with an average age of 34.58 (SD=11.97); most were aged between 21–40 years. In terms of education, occupation, and income, 44.8% of participants had a university degree, 30% worked within the services industry, and 36% had a monthly income between NTD 20,000–39,999, which was the highest proportion of shared participant characteristics. The average rate of participation in road race events per year as reported by participants is 5.79 (SD=7.11). Regarding the types of road running events (Table 1), the one with the highest percentage is half marathon (55.4%), followed by 10K & below (54.8%), marathon (32.1%), 11-20 km (21.5%), and ultra-marathon (8.7%). The analysis shows that participants favor half marathons, 10K & below, and marathons. Moreover, the analysis of participants'

demographics and behaviors show that population of participants contains diverse groups, its' indicating that the road running activity is a “running for all” in Taiwan (Liu, 2015; Liu et al., 2016).

Table 1

Participants' demographics and participate behaviors analysis.

N=641

Variable	Category	Frequency	Percentage
Gender	Male	384	59.9%
	Female	257	40.1%
Age M=34.58 SD=11.97	20 years old & below	76	11.9%
	21-30 years old	188	29.3%
	31-40 years old	182	28.4%
	41-50 years old	120	18.7%
	51 years old & over	75	11.7%
Education	Senior high school	38	5.9%
	high school	154	24.0%
	College degree	86	13.4%
	University degree	287	44.8%
	Master & doctor degree	76	11.9%
Occupations	Agriculture, Forestry, Animal & Livestock	23	3.6%
	Manufacturing	102	15.9%
	Services Industry	196	30.6%
	Government Employees	98	15.3%
	House wives & Retirees	39	6.1%
	Students	98	15.3%
	Others	85	13.3%
Monthly Income	NTD 19,999 below	135	21.1%
	NTD 20,000–39,999	236	36.8%
	NTD 40,000–59,999	182	28.4%
	NTD 60,000–79,999	59	9.2%
	NTD 80,000 & More	29	4.5%
Participate category in the past year	Ultra-Marathon	56	8.7%
	Marathon	206	32.1%
	Half Marathon	355	55.4%
	11-20K	138	21.5%
	10K & below	351	54.8%

Relationship between Event Quality, Event Image, Perceived Value, Event Satisfaction and Revisit Intention

Analysis based on the correlation coefficient matrix (see Table 2) shows that road race participants' event quality, event image, perceived value have significantly positive correlations ($p < .05$) to event satisfaction and revisit intention in road race events, with correlation coefficients ranging between .353 to .733. It is shown that the independent variables of this study are positively correlated with the dependent variables. The results are similar to those of relevant literature, as the satisfaction of road race events is significantly correlated with event quality (Cole & Illum, 2006; Jin et al., 2015; Kao et al., 2008), event

image (Jago, Chalip, Brown, Mules, & Shameem, 2003; Koo et al., 2014; Xing & Chalip, 2006) and perceived value (Chen & Chen, 2010; McDougall & Levesque, 2000; Murray & Howat, 2002; Moon et al., 2013; Nuviola et al., 2012; Lee, 2009). The intent to participate in road race events is also significantly correlated with participants' event quality (Cole & Illum, 2006; Jin et al., 2015; Kao, Huang, & Wu, 2008), event image (Jin et al., 2015; Kaplanidou, 2007; Kaplanidou & Gibson, 2010; Oshimi & Harada, 2016; Wicker et al., 2012), perceived value (Brady et al., 2005; Jin et al., 2013; Yu et al., 2014) and satisfaction (Chi & Qu, 2008; Koo et al., 2014; Papadimitriou et al., 2015; Shonk, 2012). The results of this study show that road race participants' event quality, event image, perceived value have significantly positive correlations to event satisfaction and revisit intention in road race events.

Table 2

Summary of Pearson Correlation Coefficient for the Relationship Between Road Race Event Participants' Event Quality, Event Image, Perceived Value, Satisfaction and Revisit Intention

Variables	M	SD	EQ	EI	PV	ES
Event Quality (EQ)	6.02	.64				
Event Image (EI)	5.98	.97	.527**			
Perceived Value (PV)	6.13	.72	.731**	.495**		
Event Satisfaction (ES)	6.02	.70	.733**	.427**	.689**	
Revisit Intention (RI)	6.09	.75	.588**	.353**	.656**	.697**

** P < .01; * P < .05 (two-tailed)

Regression Analysis of Road Race Event Satisfaction Based on Event Quality, Event Image, Perceived Value

Relevant factors for road race event participants' satisfaction cognition were selected according to stepwise regression analysis results. The chosen variables included event quality (EQ) and perceived value (PV). From the road race event participants' satisfaction fixed standard, residual figures in frequency histogram, and normal probability distribution, the collinearity between normal distribution and independent variable matched the variance inflation factor. VIF=2.15 and the maximum CI was 29.32 (CI<30) (Kleinbaum, Kupper, & Muller, 1988). Thus, no significant collinearity exists among independent variables in this research, and the test for residual autocorrelation (Durbin-Watson D=1.892) revealed no autocorrelation. An equation was generated from all influencing factors of road race event participants' satisfaction analyzed by stepwise regression (see Table 3).

$$\text{Participants' event satisfaction} = .493(\text{EQ}) + .329(\text{PV})$$

Table 3

Regression Coefficient of Road Race Event Satisfaction N=641

Model	R ²	F	Unstand. Coeff.	Standard Coeff.	t	Collinearity		Durbin- Watson
						Toler	VIF	
Intercept			.871		5.06*			
Event Quality (EQ)	.538	743.60*	.534	.493	13.23*	.47	2.15	1.892
Perceived Value (PV)	.588	78.01*	.317	.329	8.83*	.47	2.15	

Dependent variable = Event satisfaction; *p < .05

The above equation reveals that road race event participants' satisfaction can be explained by event quality (EQ) and perceived value (PV). The total explained variance is 58.8%, with event quality being the most significant factor in explaining variance (53.8%), followed by perceived value (5.0%). Foregoing results show that event quality is the most salient factor impacting the satisfaction of road race event participants, while event image is less obvious. The results of this study are similar to those of previous studies regarding event quality (Jin et al., 2013; Ko & Pastore, 2004; Theodorakis et al., 2015; Liu et al., 2013) and perceived value (Chen, & Chen, 2010; Cheng & Lu, 2013; Jin et al., 2013; Nuviala et al., 2011; Yang et al., 2011). However, the study also found that participants' event image in road race events was not significant influences to participants' satisfaction, which results are different from the past researches (Jin et al., 2013; Kaplanidou & Vogt, 2007; Oshimi & Harada, 2016; Som et al., 2012). Therefore, the results of this study supported finding of previous research on the relationship among event quality and perceived value and satisfaction revealed that event quality and perceived value has direct impact on satisfaction. It also found that road race participants are rather concerned about the quality and value of the road race event in Taiwan, but less concerned about the image of the road race.

Regression Analysis of Road Race Event Participants' Revisit Intention Based on Event Quality, Event Image, Perceived Value, and Satisfaction

Relevant factors for road race event participants' revisit intention were selected according to stepwise regression analysis results. The chosen variables included participation event satisfaction (ES) and perceived value (PV). From the road event participants' participants' revisit intention fixed standard, residual figures in frequency histogram, and normal probability distribution, the collinearity between normal distribution and independent variable matched the variance inflation factor. VIF=1.91 and the maximum CI was 26.80 (CI<30) (Kleinbaum et al., 1988). Thus, no significant collinearity exists among independent variables in this research, and the test for residual autocorrelation (Durbin-Watson D=1.791) revealed no autocorrelation. An equation was generated from all influencing factors of road event participants' intent analyzed by stepwise regression (see Table 4).

$$\text{Participants' revisit intention} = .467 (\text{ES}) + .334 (\text{PV})$$

Table 4

Regression Coefficient of Road Race Event Participants' Revisit Intention

N=1566

Model	R ²	F	Unstand. Coeff.	Standard Coeff.	t	Collinearity		Durbin- Watson
						Toler	VIF	
Intercept			.901		4.76*			
Event Satisfaction (ES)	.486	604.74*	.506	.467	12.67*	.53	1.91	1.719
Perceived Value (PV)	.545	81.92*	.349	.334	9.05*	.53	1.91	

Dependent variable = Participants' satisfaction; *p < .05

The above equation reveals that road event participants' revisit intention (RI) can be explained by participants' event satisfaction (ES) and perceived value (PV). The total explained variance is 54.5%, with participants' event satisfaction being the most significant factor in explaining variance (48.6%), followed by and perceived value (5.9%). Foregoing results show that road race event participant's satisfaction and perceived value are the salient factor impacting participants' revisit intention, while the event quality and event image of are less obvious, merely the event quality through the event satisfaction indirect impact on revisit intention. The results of this study are similar to those of previous studies regarding event satisfaction positively affects behavioral intentions (Chi & Qu, 2008; Kaplanidou & Vogt, 2007; Koo et al., 2014; Papadimitriou et al., 2015; Shonk, 2012), and perceived value positively affects behavioral intentions (Moon et al., 2013; Nuviala et al., 2012; Brady et al., 2005; Yu et al., 2014). However, the study also found that participants' event image was not significant influences to participants' revisit intention, which results are different from the past researches (Jin et al., 2013; Jin et al., 2015; Kaplanidou & Gibson, 2010; Oshimi & Harada, 2016; Som et al., 2012; Wicker et al., 2012). Moreover, the results of this study have supporting the event quality through satisfaction indirectly affects revisit intention, which suggests that satisfaction is a mediating variable (Papadimitriou et al., 2015; Shonk, 2012). Therefore, the results of this study supported finding of previous research on the relationship among satisfaction, perceived value and revisit intention revealed that satisfaction and perceived value has direct impact on revisit intention, and event quality through satisfaction indirectly affects revisit intention, satisfaction is important mediates between event quality and future revisit intentions (McDougall & Levesque, 2000; Murray & Howat, 2002; Moon et al., 2013; Nuviala et al., 2012). This factor is also a determinant for participants' future revisit intentions, with a positive, combined influence on participants' revisit behavior (Brady et al., 2005; Yu et al., 2014). Participants who are satisfied, perceived valuable and quality with the of road race event will revisit in the future.

Based on the above stepwise regression analysis and discussion that was performed to examine the influence of event quality, event image, perceived value on satisfaction and revisit intention in road race events. The result of the study is illustrated in Figure 2, which provides path coefficient about the parameter estimates for the model, and Table 5 reports the results of the hypothesis tests. In total, four of the eight

hypotheses were supported. As indicated by the path coefficients achieve significance levels, the influence of event quality, perceived value on event satisfaction was significant at the 0.05 level, thus supporting H1 and H3; the satisfaction and perceived value had a significant and positive effect on revisit intention at the 0.05 level, thus supporting H7 and H6.

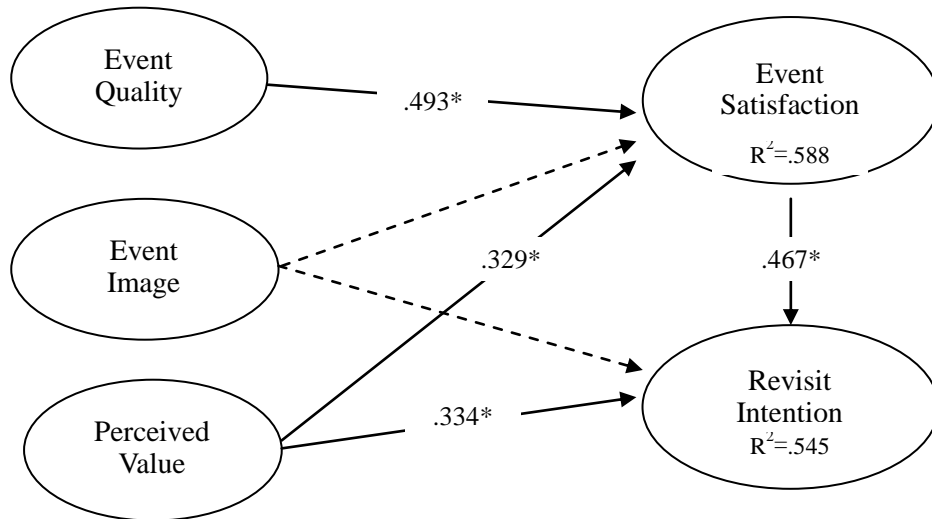


Figure 2. Research Model.

Table 5 The Results of the Hypothesis Tests

Hypothesized path	Beta	Sig	Test result
<i>H1</i> : Event quality positive effect event satisfaction.	.493	.000	Supported
<i>H2</i> : Event image effect event satisfaction.	-	>.05	Not Supported
<i>H3</i> : Perceived value positive effect event satisfaction.	.329	.000	Supported
<i>H4</i> : Event quality positive effect revisit intention.	-	>.05	Not Supported
<i>H5</i> : Event image positive effect revisit intention.	-	>.05	Not Supported
<i>H6</i> : Perceived value positive effect revisit intention.	.334	.000	Supported
<i>H7</i> : Event satisfaction positive effect revisit intention.	.467	.000	Supported

*p < 0.05; ***p < 0.001

CONCLUSION

The hypothesized model constructed and used within this study is based on the QVB (Zeithaml, 1988) formation process. This model is used to discuss participants' event quality, event image, perceived value, event satisfaction, and revisit intention when participating in road race events. The model is also used to explore the causal relationships between influencing factors. This study found that event quality and perceived value influence event satisfaction (H1 and H3). In addition, perceived value and event satisfaction

influence revisit intention (H6 and H7). However, the study also found that participants' event image was not significant influencing participants' event satisfaction (H2) and revisit intention (H6), merely the event quality through the event satisfaction indirect impact on revisit intention. Therefore, some results of this study support the current hypotheses and some do not support.

The empirical findings of this study show that event quality is the key contributor to event satisfaction because the influence coefficient is larger than all other factors. Within the context of a road race event, these findings suggest that event quality is a major factor alongside event satisfaction. In addition, perceived value has an indirect influence on event satisfaction and revisit intention. Therefore, within the context of a road race event, perceived value is also an important factor influencing event satisfaction and revisit intention. Thus, when describing the road race event, event quality is the most significant factor affecting participant behavior because it influences perceived value and event satisfaction, which subsequently affects revisit intention. This study suggests that within road race events, event quality and perceived value are the most important factors influencing participants' satisfaction and revisit intention. Namely, regarding event characteristics, atmosphere, game quality, interaction quality, outcome quality, physical quality, behavioral price and emotional response are important factors influencing an event's satisfaction and revisit intention. Moreover, this study also found that event quality through satisfaction indirectly affects revisit intention, which mediates between event quality and future revisit intentions, it show that satisfaction is important mediating variable in road race event. These results can thus be used as a theoretical supplementary reference for the construction of sport and tourist events on behavioral model.

To address the practical application of this study, the results indicate that the most successful approach to organizing a road racing event is to optimize the service strategy for event quality. This optimization should enhance the quality of participants' service experience and increase the perceived value, observed through spending behaviors and emotional responses. Therefore, organizers and cities should consider the participants' emotional perceptions of road race events, strengthen the characteristics of the events to meet participant expectations. For example, the road race host city should consider expectations of the event quality by providing local accommodation, transportation, restaurants, and attractions, and by arranging well-trained staff or volunteers. Such services not only ensure good service quality, but they also help to build a positive event quality, perceived value, and satisfaction, thus effectively enhancing participants' revisit intention toward road race events (Goh, 2015; Hallmann et al., 2010; Jin et al., 2013; Pratminingsih et al., 2014; Som et al., 2012).

Reference

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附錄三 已發表論文2

Liu, C. C., Liu, N. Y. & Liu, Y. H. (2017). **The Relationship among Event Quality, Perceived Value, Event Image, Satisfaction and Revisit Intentions of Marathon Runners' in Taiwan.** *Proceeding of 2017 International Conference on Hospitality, Leisure, Sports, and Tourism – Summer Session* (Sapporo, Japan, August 23-25, 2017)

The Relationship among Event Quality, Perceived Value, Event Image, Satisfaction and Revisit Intentions of Marathon Runners' in Taiwan

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ABSTRACT

The significant growth of road race events in Taiwan and the development of a sustainability strategy have become increasingly important. Revisit intention has been recognized as one of the essential factors for an event's sustainability and growth. Various factors influence participants revisiting an event including event quality, perceived value, event image, and satisfaction. This study proposes a conceptual model for investigating participants' perceptions of an event's quality according to the perceived value and event image, as well as participants' resulting revisit intentions in the context of road race events in Taiwan. A questionnaire was developed for this quantitative study to examine the level of these variables in road race event runners. The primary 641 valid questionnaires were collected from respondents who had participated in nine road race events in Taiwan. The data were analyzed using structural equation modeling. The results revealed the following: 1) the explanatory power of this study's theoretical development model showed that all latent variables of the overall model were satisfactory. 2) Event satisfaction and its perceived value had a significant positive effect on revisit intentions. Moreover, event quality, event image, and perceived value exerted a direct positive influence on event satisfaction; event quality and event image directly influenced perceived value; and event quality directly influenced event image. However, event quality and event image had non-significant direct effects on revisit intentions, which, through perceived value and satisfaction, indirectly and positively influenced revisit intentions. 3) The explanatory power of each variable for event image, perceived value, satisfaction, and revisit intention was 63%, 72%, 70%, and 59%, respectively,

showing that the explanatory power of all of the potential variables for the entire model was satisfactory. In conclusion, the results showed that event quality, event image, perceived value, satisfaction play key roles in predicting road race runners' revisit intentions in Taiwan. The findings of this study have significant managerial implications for event marketing managers and organizers. For example, organizers and operators of events should consider participants' demands and strengthen an event's quality accordingly. They should also improve participants' satisfaction, to enhance their willingness to revisit.

Keywords: event quality, event image, perceived value, road race events, satisfaction, revisit intention

1. INTRODUCTION

According to the registration information provided in the Runner's Plaza (2016), Taiwan's road race events grew from 91 events in 2006 to 1,315 events in 2016, which is a 14-fold increase in ten years. The consumption of visiting participants has increased Taiwan's economy by an estimated NT 8.1 billion to NT 30.3 billion each year (Liu, 2015). These popular road race events thus have a substantial impact on the social, environmental, and economic situation of the destination community (Liu, Chuang, Chang, & Chang, in Press; Liu, Hsu, Chen, & Chuang, 2015; Liu, Tseng, Lee, & Tung, 2016).

The significant growth of road race events in Taiwan and the development of a sustainability strategy have become increasingly important to organizers. Revisit intention has been recognized as an essential factor for an event's sustainability and growth, which can be analyzed through assessing tourists' behaviors related to satisfaction, revisit intention, and various types of consumer key variables (Liu et al., 2016). Regarding revisit intention, important factors of influence include event quality (Jin, Lee, & Lee, 2013; Ko & Pastore, 2004; Theodorakis, Kaplanidou, & Karabaxoglou, 2015), perceived value (Chen, & Chen, 2010; Cheng & Lu, 2013; Jin et al., 2013; Nuviala, Grao-Cruces, Pérez-Turpin, & Nuviala, 2012; Yang, Gu, Cen, 2011), event image (Jin et al., 2013; Kaplanidou & Vogt, 2007; Oshimi & Harada, 2016; Som, Marzuki, Yousefi, & Abu Khalifeh, 2012), and satisfaction (Bigne', Sanchez, & Andreu, 2009; Goh, 2015; Koo et al., 2014; Theodorakis et al., 2015).

This study therefore investigates marathon runners' revisit intentions and examines the relationship between marathon runners' event quality, perceived value, event image, satisfaction, and revisit intentions in Taiwan. The findings will provide useful insights for establishing a road race sports tourism policy and will help operators and organizers of road race events to develop strategies for product planning, services, and marketing, and to improve service quality. This study therefore has the following research objectives:

- 1) Investigate the suitability of the construct to marathon runners in Taiwan and the overall model of revisit intention.

- 2) Explore the effects of event quality, perceived value, event image, and satisfaction on marathon runners' revisit intentions in Taiwan.

2. LITERATURE REVIEW

2-1. Event Quality

A customer's perceived service quality depends on the difference between their prior expectation and their evaluation after experiencing the service (Zeithaml, Berry, & Parasuraman, 1993). Additionally, a consumer's perception of service quality typically includes outcome and process dimensions (Lehtinen & Lehtinen, 1991; Grönroos, 2000, 2006). Lehtinen and Lehtinen (1991) extended this idea by suggesting a complementary three-dimensional quality model, which included physical, interactive, and corporate quality. In recent years, an increasing amount of research has focused on service quality and consumer behavior. Moon, Kim, Ko, Connaughton, and Lee's (2011) study adapted tangible and intangible factors from previous service quality research to the spectators and tourists of an international bicycling race. This adaptation measured the influence of consumers' event quality perception on the destination's image, identifying a positive relationship between these factors. Therefore, within the context of spectator sports, event quality includes consumers' overall impression of the game (Ko & Pastore, 2004), interaction (Brady & Cronin, 2001; Ko & Pastore, 2004), outcome (Deighton, 1992; Grönroos, 1984), and the physical environment (Bitner, 1992; Westerbeek, 2000).

2-2. Event Image

The term "event image" derives from the brand image theory and can be defined as a participant's psychological representation of an event (Kaplanidou, 2007). Given that a destination hosts a sporting event to attract spectators or participants (Kaplanidou & Vogt, 2010), the concept of event image is in this case related to the concept of destination image (Hallmann, Kaplanidou, & Breuer, 2010; Oshimi & Harada, 2016). Following Keller's (1993) theoretical framework, Gwinner (1997) defined event image as "the cumulative interpretation of meanings or associations attributed to events by consumers" (p. 147). Gwinner (1997) also proposed a framework of three main factors that might influence an individual's perception of an event: (a) event type (e.g., sports, music concert, or art festivals); (b) event characteristics (e.g., size, professional status, history, venue, and promotional appearance); and (c) individual factors (e.g., meanings associated with the event, the strength of these associations, and their past experience of the event).

2-3. Perceived Value

Customer value is defined as "the customer's overall assessment of the utility of a product on

perceptions of what is received and what is given” (Zeithaml, 1988: 14), which is also defined by the relationship between the benefits received versus the sacrifice of intangible resources. The consumers’ perceived value (PV) is closely related to the quality or the benefits they perceive from the product in exchange for the price they pay (Monroe, 1990; Zeithaml, 1988). This can include economic, social, and psychological benefits developed through the customers’ subjective estimation of products or services. Holbrook’s (2006) classification research categorized customer value into economic, social, hedonic, and altruistic values. Many researchers (Chen & Chen, 2010; Cheng & Lu, 2013; Jin et al., 2015) reported that customers’ PV is positively related to word-of-mouth, recommendation behavior, and revisit intention, while other researchers found that PV is affected by service quality and price, which mediates between service quality, customer satisfaction and future intentions (McDougall & Levesque, 2000; Murray & Howat, 2002; Moon, Kim, Ko, Connaughton, & Lee, 2013; Nuviala, Grao-Cruces, Pérez-Turpin, & Nuviala, 2012). This factor is also a determinant for customers’ future intentions, with a positive, combined influence on customer behavior and service loyalty (Brady, Knight, Cronin, Hult, & Keillor, 2005; Yu, Zhang, Kim, Chen, & Huang, 2014).

2-4. Satisfaction

Satisfaction is an important research issue for tourism and sporting events (E.g Goh, 2015; Jin et al., 2015), which can be described as the consumer's subjective and objective evaluation on the execution of products and activities (Goh, 2015; Pratminingsih, Rudatin, & Rimenta, 2014), including its destination and components (Koo et al., 2014; Shonk, 2012). Related research shows that event satisfaction is affected by many factors, comprehensively including event quality (Jin et al., 2013; Ko & Pastore, 2004; Theodorakis et al., 2015; Liu et al., 2013), perceived value (Chen, & Chen, 2010; Cheng & Lu, 2013; Jin et al., 2013; Nuviala, Grao-Cruces, Pérez-Turpin, & Nuviala, 2011; Yang et al., 2011), and event image (Jin et al., 2013; Kaplanidou & Vogt, 2007; Oshimi & Harada, 2016; Som et al., 2012).

2-5. Revisit Intentions

Chen and Tsai (2007) stated that important tourist behaviors include the participant’s choice of destination, subsequent evaluations, and future behavioral intentions. While “subsequent evaluations” refers to the travel experience or perceived value and the overall visitors’ satisfaction, “future behavioral intentions” refers to the visitor’s judgment about their likeliness to revisit the same destination and their willingness to recommend it to others (Som et al. 2012). Therefore, revisit intention is an important predictor of future travel behavior (Lee, 2009; Severt, Wang, Chen, & Breiter, 2007). Baker and Crompton (2000) defined revisiting behavioral intention as the possibility of a tourist participating in an activity again. Many

researchers recommend using assessments of consumer loyalty (Chi & Qu, 2008; Koo et al., 2014; Papadimitriou, Apostolopoulou, & Kaplanidou, 2015) and behavioral intention (Chen & Chen, 2010; Jin et al., 2013) to measure the possibility of revisiting, including specific behavioral contexts, and multi-dimensional scales (Baker & Crompton, 2000; Lee, 2009; Severt et al., 2007; Williams & Soutar, 2009).

2-6. Relationships among Event Quality, Perceived Value, Event Image, Satisfaction and Revisit

Intentions

Lee, Lee, and Lee (2005) suggested that event quality will affect the personal event image, and other researchers demonstrated that customers' experiences with products and services significantly influence their notions of an image (Dann, 1996; Kandampully & Suhartanto, 2000; Chen & Tsai, 2007). For instance, Dann (1996) suggested that tourists' experiences can affect place image and that a satisfactory image can influence the perception of a destination. Similarly, Jin et al. (2015) found that the quality of participants' experiences significantly affects perceived value, image, and customer satisfaction, while perceived value and image exert a direct influence on customer satisfaction and behavioral intention. Jin et al. (2013) found that sporting event quality would positively affect perceived value, event imagery and participatory intent. Cronin et al. (2000) state that perceived value may be a better predictor of repurchase intention than either satisfaction or quality. Chen and Chen (2010) revealed that experience quality appeared to be a significant predictor of perceived value and that among heritage tourists, perceived value influenced satisfaction and behavioral intention positively and directly.

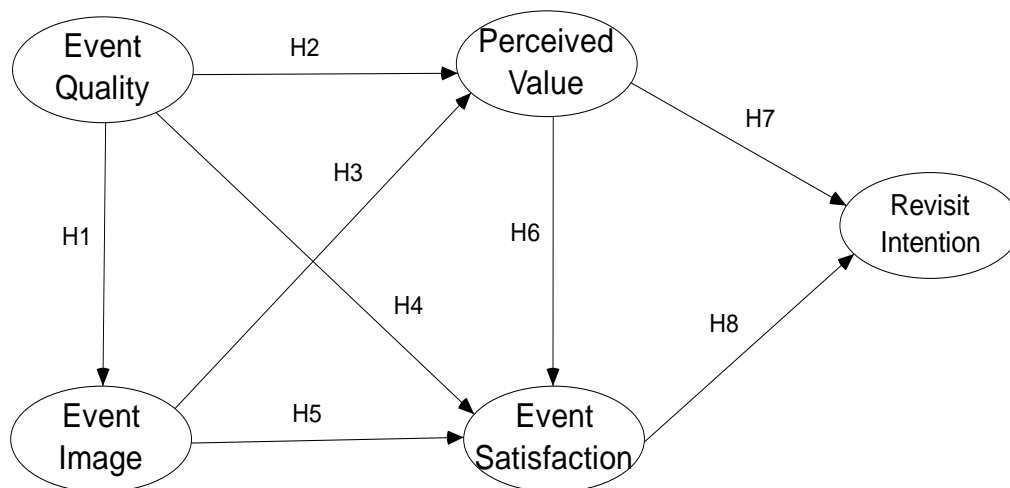
Cole and Illum (2006) found that visitor experiences entail a partial response to management's performance, and experiential quality directly contributes to visitors' overall satisfaction and behavioral intentions. Furthermore, Kao, Huang, and Wu (2008) examined the relationship between experiential quality, satisfaction, and intention toward the loyalty of theme park visitors. The authors found that experience quality was an important predictor of experiential satisfaction. The findings reveal experiential quality as a positive influencer of other critical outcomes such as satisfaction and behavioral intentions (Jin et al., 2015).

Kaplanidou and Christine (2007) found that event and destination image, which are similar and positively related, are commonly considered as important indicators of a tourists' perceived value; both factors are sufficient to influence a visitor's decision-making process (Fakeye & Crompton, 1991; Echtner & Brent Ritchie, 1993). Similarly, several studies within the tourism literature support that destination image and perceived value are antecedents to customer satisfaction. In other words, the positive image of a destination before the trip is associated with higher perceived value obtained after the visit (Chen & Chen, 2010; Lee, 2009). Chen and Tsai (2007) showed that tourists' destination image positively affects the

perceived value of travelling. In other words, the positive image of a destination before a trip is associated with higher perceived value obtained after the visit. Jin et al. (2013) also found that the sporting destination image determined visitors' perceptions of value, which directly affects future participation intention. Within the literature, event image is often suggested to be an antecedent variable to destination image (Oshimi & Harada, 2016), consequently affecting positive word-of-mouth, and event and destination images positively affect event satisfaction (Koo et al., 2014) and behavioral intentions (Kaplanidou, 2007; Kaplanidou, & Vogt, 2007). Few studies have found a direct influence of a participant's event image on revisit intention (Jin et al., 2015; Kaplanidou & Gibson, 2010; Oshimi & Harada, 2016; Wicker et al., 2012).

Some studies have shown that satisfaction directly affects behavioral intentions (Chi & Qu, 2008; Kaplanidou & Vogt, 2007). For example, Koo et al. (2014) found that satisfaction determined the process of consumption, which includes brand loyalty, positive reputation, and repurchase intention. However, other studies have shown that satisfaction is an important predictor of revisit intention, with empirical evidence supporting the direct relationship of event image and satisfaction with revisit intention (Papadimitriou et al., 2015; Shonk, 2012). Through satisfaction, event image indirectly affects revisit intention, which suggests that satisfaction is a mediating variable. The current study therefore proposes the conceptual relationship model shown in Figure 1 and the following eight hypotheses:

- H1*: Event quality has a positive effect on event image.
- H2*: Event quality has a positive effect on perceived value.
- H3*: Event image has a positive effect on perceived value.
- H4*: Event quality has a positive effect on event satisfaction.
- H5*: Event image has a positive effect on event satisfaction.
- H6*: Perceived value has a positive effect on event satisfaction.
- H7*: Perceived value has a positive effect on revisit intention.
- H8*: Event satisfaction has a positive effect on revisit intention.



3. METHODOLOGY

3-1. Participants

This study targeted road race event participants who had participated in road race events in the past year in Taiwan. A purposive convenience sampling and convenient method was adopted to collect data from those aged 18 or more. A total of 800 questionnaires were distributed to respondents who had participated in road race events on the October 22, 2016 to February 12, 2017 in Taiwan, of which, 641 valid questionnaires were collected.

3-2. Instrumentation

The design of a questionnaire for gathering data for this study arises from previous research and incorporates specific characteristics of sporting event/tourism, which relevant literature regarding event quality, event image, perceived value, satisfaction and revisit intention (see Table 2). The questionnaire consists of five sections, and the background information of the respondents.

3-2-1 Event quality. The questions regarding event quality were designed based on the studies of Lehtinen and Lehtinen (1991), Grönroos (2006), and Moon et al. (2011). Four constructs, game quality (three items), interaction quality (five items), outcome quality (three items), and physical environment quality (two items), and a seven-point Likert scale (7= strongly agree, 1= strongly disagree) were used to measure the event quality of road race event.

3-2-2 Event image. The questions regarding event image were designed based on Bigne´ et al. (2009), Hallmann et al. (2010), Gwinner (1997), Kaplanidou (2007), and Papadimitriou et al. (2015) proposed a framework two factors that might influence an individual's perception of a particular event, which include creative features (two items), and reputation (two items), and a seven-point Likert scale (7= strongly agree, 1= strongly disagree) were used to measure the event image of road race event.

3-2-3 Perceived value. The questions regarding perceived value were designed based on Chen & Chen (2010), Holbrook (2006), Monroe (1990), and Zeithaml (1988) classified perceived value was categorized into behavioral price (three items) and emotional response (two items), and a seven-point Likert scale (7 = strongly agree, 1 = strongly disagree) were used to measure the perceived value of road race event.

3-2-4 Event satisfaction. The questions regarding event satisfaction were designed based on Goh (2015), Papadimitriou et al. (2015), Pratminingsih et al. (2014), and Shonk (2012), which measured event satisfaction with service demand (three items), quality commitment (three items), and overall satisfaction (four items). A seven point Likert scale (7 = strongly agree, 1 = strongly disagree) was applied to the 10 items measuring event satisfaction of road race event.

3-2-5 Revisit intention. Three constructs, actively prepared, revisiting intention, and recommendation intention were used to measure revisiting behavioral intention based on the studies of Julaimi and Talib (2016), Kaplanidou and Vogt (2007), Som et al. (2012), and Wicker et al. (2012). Responses were indicated on a seven point Likert scale (7 = strongly agree, 1 = strongly disagree).

The five scales analysis revealed that: (1) the critical ratio values and total correlation coefficients for each item reached a significant level, showing construction of the scale has discrimination; (2) exploratory factor analyses (EFA) and confirmatory factor analysis (CFA) showed that the analyses revealed that all research instruments exhibited validity and model fit the data appropriately; (3) Reliability analysis showed that each scale's Cronbach's alpha coefficients was above .90, which revealed the internal consistency was acceptable (Chiou, 2010). Based on the results, five scales demonstrated sound discriminant, validity, and reliability, which five scales are well suited to the measurement of participant opinion regarding the event quality, event image, perceived value, event satisfaction and revisit intention for road race events in Taiwan.

3-3. Data Analysis

The collected data were statistically analyzed using SPSS 17.0 for Windows. This provides a descriptive statistics analysis for participants' demographics and participants' behaviors. Thereafter, the proposed model was examined using structural equation modeling (SEM) to test both the theoretical relationships in the model and the overall model fit with regard to the survey data. AMOS 17.0 for Windows was used for the SEM analysis. All parameters were estimated using the maximum-likelihood estimation (MLE) method. Hypotheses were tested to determine the direction and significance of relationships.

4. RESULTS

4-1. Participants' demographics and participate behaviors analysis

As shown in Table 1, the participants comprised 384 males (59.9%) and 257 females (40.1%), with an average age of 34.58 (SD=11.97); most were aged between 21–40 years. In terms of education, occupation, and income, 44.8% of participants had a university degree, 30% worked within the services industry, and 36% had a monthly income between NTD 20,000–39,999, which was the highest proportion of shared participant characteristics. Regarding the participants' participate times to sporting events average was 5.79 (SD=7.11) times, and each year 2-10 times was the highest proportion. In addition, the highest proportion of participants' category was Half Marathon on road race event in the past year. The abovementioned participant statistics show that this study's sample contains a diverse population of runners, thus indicating that the road race activity is a "sport for all" in Taiwan (Liu, 2015; Liu et al., 2016).

Table 1 Participants' demographics and participate behaviors analysis.

N=641

Variable	Category	Frequency	Percentage
Gender	Male	384	59.9%
	Female	257	40.1%
Age M=34.58 SD=11.97	20 years old & below	76	11.9%
	21-30 years old	188	29.3%
	31-40 years old	182	28.4%
	41-50 years old	120	18.7%
	51 years old & over	75	11.7%
Education	Senior high school	38	5.9%
	high school	154	24.0%
	College degree	86	13.4%
	University degree	287	44.8%
	Master & doctor degree	76	11.9%
Occupations	Agriculture, Forestry, Animal & Livestock	23	3.6%
	Manufacturing	102	15.9%
	Services Industry	196	30.6%
	Government Employees	98	15.3%
	House wives & Retirees	39	6.1%
	Students	98	15.3%
	Others	85	13.3%
Monthly Income	NTD 19,999 below	135	21.1%
	NTD 20,000–39,999	236	36.8%
	NTD 40,000–59,999	182	28.4%
	NTD 60,000–79,999	59	9.2%
	NTD 80,000 & More	29	4.5%
Participate category in the past year	Ultra Marathon	56	8.7%
	Marathon	206	32.1%
	Half Marathon	355	55.4%
	11-20K	138	21.5%
	10K & below	351	54.8%

4-2. Measurement Model

Confirmatory factor analysis (CFA) was used to confirm the factor loadings of the five constructs, including event quality (game quality, interaction quality, outcome quality and physical quality), event image (creative features, and reputation), perceived value (behavioral price, and emotional response), event satisfaction (service demand, quality commitment, and overall satisfaction), and revisiting intention (actively prepared, revisiting intention, and recommendation intention), and to assess the model fit. To analyze the convergent validity of the scale, a CFA was performed using the MLE, and the results show that the model obtained a good fit ($\chi^2 = 190.75$, d.f. = 67, $\chi^2/\text{d.f.} = 2.85$, goodness-of-fit index (GFI) = .96, adjusted GFI (AGFI) = .94, normed fit index (NFI) = .97, comparative fit index (CFI) = 0.98, root mean square error of approximation (RMSEA) = .054). The convergent validity of the CFA results should be supported by item reliability, construct reliability, and average variance extracted (AVE) (Hair, Anderson, Tatham, & Black,

1998). As shown in Table 2, t-values for all the standardized factor loadings of the items were found to be significant ($p < 0.01$). In addition, construct reliability estimates that ranged from 0.80 to 0.91 exceeded the critical value of 0.7 (Hair et al., 1998), indicating a satisfactory estimation. Discriminant validity was assessed by comparing the AVE of each individual construct with shared variances between the individual constructs and all the other ones. If the AVE of each construct with that is higher than the square of the correlation coefficient of each pair of variables, then this suggests discriminant validity (Chang, 2011; Fornell & Larcker, 1981). The AVEs of all the constructs ranged between 0.66 and 0.81, with most of them being above the suggested value of 0.5 (Jöreskog, & Sörbom, 1984). Table 3 reports the inter-construct correlations off the diagonal of the matrix. Comparing all the correlations and the AVEs shown on the diagonal, the results indicate adequate discriminant validity. These results show that the measurement model has good convergent validity. Therefore, the hypothesized measurement model is reliable with regard to testing the structural relationships between the constructs.

Table 2 Convergent Validity

Constructs and items	Mean	Standardized factor loading	R ²	CR	AVE
<i>Event quality</i>				.90	.68
Game quality(GAQ)	6.00	.80	.64		
interaction quality(IAQ)	6.03	.87	.75		
Outcome quality(OCQ)	6.11	.85	.73		
Physical quality(PHQ)	5.94	.78	.61		
<i>Event image</i>				.80	.66
creative features(CRF)	5.95	.82	.67		
reputation(REP)	5.94	.81	.65		
<i>Perceived value</i>				.89	.81
behavioral price(BEP)	6.11	.90	.81		
emotional response(EMR)	6.15	.90	.81		
<i>Event satisfaction</i>				.91	.76
service demand(SED)	5.98	.83	.69		
quality commitment(QUC)	6.05	.90	.81		
overall satisfaction(OVS)	6.07	.89	.79		
<i>Revisit intention</i>				.90	.74
actively prepared(ACP)	6.05	.85	.72		
revisiting intention(RVI)	6.12	.90	.81		
recommendation intention(RCI)	6.07	.83	.69		

Table 3 Analysis of AVE Discriminant Validity

Event Quality	Event Image	Perceived Value	Event Satisfaction	Revisit Intention

Event Quality	.68				
Event Image	.64	.66			
Perceived Value	.67	.64	.81		
Event Satisfaction	.66	.55	.59	.76	
Revisit Intention	.40	.35	.50	.55	.74

Note: The AVE of each dimension is higher than the square of the correlation coefficient of each pair of variables, then this suggests discriminant validity.

4-3. Structural Model

To test the proposed hypotheses, the structural model was fitted using the full sample. The assessment of the structural model involved estimating the path loadings and the R^2 values. To examine the model fit, this study used sample size-dependent measures of goodness of fit. The $\chi^2/d.f.$ ratio of less than 5 was used as the common decision rule of an acceptable overall model fit. In this study, the χ^2 of the model was 2.82 ($\chi^2/d.f. = 194.81/69$), and other indicators of goodness of fit (GFI = 0.96, AGFI = 0.94, NFI = 0.97, CFI = 0.96, RMSEA = 0.053) indicated the model to have acceptable fitness. Figure 2 provides details about the parameter estimates for the model, and Table 4 reports the results of the hypothesis tests. In total, eight of the eight hypotheses were supported. As indicated by the path loadings and associated significance levels, the influence of event quality on event image (t-value = 17.22***), perceived value (t-value = 7.88***) and event satisfaction (t-value = 7.36***) was significant at the 0.05 level, thus supporting H1, H2 and H4; the event image had a significant and positive effect on perceived value (t-value = 6.37***), and event satisfaction (t-value = 2.03*) at the 0.05 level, thus supporting H3 and H5; the influence of perceived value on event satisfaction (t-value = 4.16***), and revisit intention (t-value = 5.68***) was significant at the 0.05 level, thus supporting H6 and H7; the influence of event satisfaction on revisit intention (t-value = 8.59***) was significant at the 0.05 level, thus supporting H8.

Table 4 The Results of the Hypothesis Tests

Path	Structural coefficients	S.E.	t-Value	Test result
<i>H1</i> : Event quality → Event image	.79	.06	17.22***	Support
<i>H2</i> : Event quality → Perceived value	.49	.08	7.88 ***	Support
<i>H3</i> : Event image → Perceived value	.41	.06	6.37 ***	Support
<i>H4</i> : Event quality → Event satisfaction	.48	.08	7.36 ***	Support
<i>H5</i> : Event image → Event satisfaction	.14	.06	2.03*	Support
<i>H6</i> : Perceived value → Event satisfaction	.27	.06	4.16 ***	Support
<i>H7</i> : Perceived value → Revisit intention	.32	.06	5.68 ***	Support
<i>H8</i> : Event satisfaction → Revisit intention	.49	.06	8.59 ***	Support

*p < 0.05; ***p < 0.001

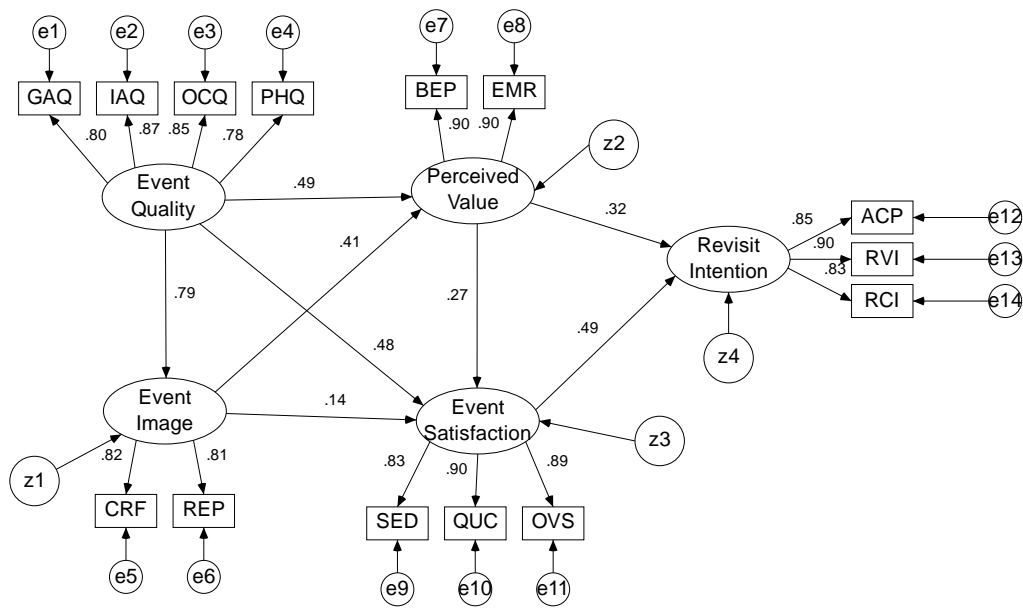


Figure 2 Estimated Results of the Model

Table 5 reports the measured effects of all the relationships. First, the direct effect of event quality on event image (0.79) was greater than that on perceived value (0.49) and event satisfaction (0.48), moreover indirect effect on perceived value (0.32) and event satisfaction (0.33). Second, the direct effect of event image on perceived value (0.41) was greater than that on event satisfaction (0.14), moreover indirect effect on event satisfaction (0.11). Third, the direct effect of perceived value on revisit intention (.32) was greater than that on event satisfaction (0.27), moreover indirect effect on revisit intention (0.13). Fourth, the event satisfaction has direct effect on revisit intention (.49).

Table 5 Direct, Indirect, and Total Effects of Relationships

Path	Direct effect	Indirect effect	Total effect
Event quality → Event image	.79	N.A	.79
Event quality → Perceived value	.49	.32	.81
Event image → Perceived value	.41	N.A	.41
Event quality → Event satisfaction	.48	.33	.81
Event image → Event satisfaction	.14	.11	.25
Perceived value → Event satisfaction	.27	N.A	.27
Perceived value → Revisit intention	.32	.13	.45
Event satisfaction → Revisit intention	.49	N.A	.49

Note: N.A.: It was not possible to determine the direct or indirect effects.

5. DISCUSSION

The results of the current study supported the hypotheses that event quality had an influence on event

image (H1), perceived value (H2), and event satisfaction (H4), with coefficients of .79, .81 and .81, respectively. These results support previous findings, suggesting that event quality is the most significant factor contributing to event image (Chen and Tsai, 2007; Dann, 1996; Kandampully & Suhartanto, 2000; Lee et al., 2005), perceived value (Cronin et al., 2000; Cronin & Taylor, 1994; Jin et al., 2015; Zeithaml, 1988), and event satisfaction (Chen & Chen, 2010; Cronin et al., 2000) of the road race event. The current study supports the hypotheses that event image influences a participant's perceived value (H3) and event satisfaction (H5), with coefficients of .41 and .25, respectively. In the context of a road race event, these results suggest that event image is an important factor contributing to the impact of perceived value (Chen & Chen, 2010; Chen & Tsai, 2007; Lee, 2009; Kaplanidou & Christine, 2007; Oshimi & Harada, 2016) and event satisfaction (Chen & Chen, 2010; Koo et al., 2014; Lee, 2009). These results align with the relevant literature; however, this study did not find a positive effect of event image on revisit intention, which was contrary to some past findings (Jin et al., 2013; Papadimitriou et al., 2015; Shonk, 2012).

The current study supported the hypotheses that a participant's perceived value of the event influences event satisfaction (H6) and event revisit intention (H7) with coefficients of .27 and .45, respectively. These results align with the relevant literature, as the perceived value of the road race event is shown to be an important contributing factor to event satisfaction (Chen & Chen, 2010; Lee, 2009) and revisit intention (Brady et al., 2005; Jin et al., 2013; Yu et al., 2014). The current research supported the hypothesis that a participant's event satisfaction influences their revisit intention (H8), with a coefficient of .49. This finding aligns with the relevant literature that road race event satisfaction is an important predictor of revisit intention (Chi & Qu, 2008; Kaplanidou & Vogt, 2007; Koo et al., 2014; Papadimitriou et al., 2015; Shonk, 2012).

6. CONCLUSION

The hypothesized model constructed and used within this study is based on the QVB (Zeithaml, 1988) formation process. This model is used to discuss marathon runner's perceived value, event satisfaction, and revisiting behavioral intention when participating in marathon events. The model is also used to explore the causal relationships between influencing factors. This study found that event quality influences event image, perceived value, and event satisfaction (H1, H2, and H4, respectively). In addition, event image influences perceived value (H3) and event satisfaction (H5), perceived value influences event satisfaction (H6) and revisit intention (H7), and event satisfaction influences revisit intention (H8). Therefore, the findings of this study support the current hypotheses.

The empirical findings of this study show that event quality is the key contributor to event image (.79), perceived value (.81), and event satisfaction (.81) because the influence coefficient is larger than all other

factors. Within the context of a road race event, these findings suggest that event quality is a major factor alongside event image, influencing perceived value (.41), and event satisfaction (.25). In addition, perceived value has an indirect influence on event satisfaction (.27) and revisit intention (.45). Therefore, within the context of a road race event, perceived value is also an important factor influencing event satisfaction and revisit intention. Thus, when describing the Marathon road race, event quality is the most significant factor affecting participant behavior because it influences perceived value and event satisfaction, which subsequently affects revisit intention. This study suggests that within road race events, event quality and event image are the most important factors influencing participants' perceived value, satisfaction, and revisit intention. Similarly, event characteristics, atmosphere, game quality, interaction quality, outcome quality, and physical quality are important factors influencing an event's perceived value, satisfaction, and revisit intention. These results can thus be used as a theoretical supplementary reference for the construction of sport and tourist events.

To address the practical application of this study, the results indicate that the most successful approach to organizing a road racing event is to optimize the service strategy for event quality and image. Therefore, organizers and cities should consider the participants' emotional perceptions of road race events, strengthen the characteristics of the destination to meet participant expectations, and wake up to participate in road driving target-oriented stimulus and drive. For example, the road race host city should consider expectations of the destination image by providing local accommodation, transportation, restaurants, and attractions, and by arranging well-trained staff or volunteers. Such services not only ensure good service quality, but they also help to build a positive event image, perceived value, and satisfaction, thus effectively enhancing runners' revisit intention toward road race events (Goh, 2015; Hallmann et al., 2010; Jin et al., 2013; Pratminingsih et al., 2014; Som et al., 2012).

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106 年度教師專題研究計畫結案注意事項

以下事情請老師注意並確實執行。

1. 核銷期限及規定：

- (1).應於 106 年 11 月 30 日 前完成經費核銷。
- (2).自計畫執行日起至 106 年 11 月 30 日，主持人未曾使用經費者，視同放棄本計畫之執行，會計單位得凍結研究經費之使用。
- (3).如在 106 年 11 月 30 日前有核銷過任何一筆經費且又未申請放棄者，則於 106 年 11 月 30 日起不得申請放棄計畫。

2. 結案報告繳交：

- (1).繳交日期：請於 **106 年 1 月 31 日前** 繳交一份至研發處。
- (2).結案報告書需檢附精簡報告之電子檔及 **結案報告書需先行至圖書館上傳機構典藏。**
- (3).結案報告內容格式：
 - (I).以中文(或英文)撰寫結案報告，字體為 12 號標楷體。
 - (II).內容格式需有：
 - 題目：計畫名稱 (中英文)
 - 中英文摘要：500~1000 字以內
 - 前言
 - 研究方法、步驟
 - 研究結果與討論
 - 結論
 - 中英文參考文獻

(4).結案報告封面與裝訂：

結案報告需裝訂且膠裝(封面顏色統一為“紫色”任何紫色系都可”，封面格式請至研發處網站下載專區下載。

3. 成果發表：計畫結束二年內投稿於學術性期刊或發表於校內外相關單位所主辦的學術研討會。

注意事項：計畫編號、計畫名稱及獎助金額，在繳交報告時，請務必與原先申請計畫書相符(如無申請變更)。日後有關計畫各相關事宜，會 mail 至各位老師信箱，請老師們隨時注意。

研究發展處 綜合規劃組 分機 8141