THE INFLUENCE OF SPORTS FACILITIES' ACCESSIBILITY, MOTIVATION, AND SATISFACTION ON WORD-OF-MOUTH AND RE-PARTICIPATION INTENTIONS OF ATHLETES WITH PHYSICAL DISABILITIES

Mr. Thee Trongjitpituk

A Dissertation Submitted in Partial Fulfillment of the Requirements
for the Degree of Doctor of Philosophy in Sports Science
Common Course
FACULTY OF SPORTS SCIENCE
Chulalongkorn University
Academic Year 2020

อิทธิพลของการเข้าถึงสนามกีฬา แรงจูงใจ และความพึงพอใจ ที่มีต่อความตั้งใจในการบอกต่อ และความตั้งใจในการกลับมาเข้าร่วมแข่งขัน ของนักกีฬาคนพิการทางการเคลื่อนไหว

นายธีร์ ตรงจิตพิทักษ์

วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาวิทยาศาสตรดุษฎีบัณฑิต
สาขาวิชาวิทยาศาสตร์การกีฬา ไม่สังกัดภาควิชา/เทียบเท่า
คณะวิทยาศาสตร์การกีฬา จุฬาลงกรณ์มหาวิทยาลัย
ปีการศึกษา 2563

Thesis Title	THE INFLUENCE OF SPORTS FACILITIES' ACCESSIBILITY, MOTIVATION, AND SATISFACTION ON WORD-OF-MOUTH AND RE-PARTICIPATION INTENTIONS OF ATHLETES WITH PHYSICAL DISABILITIES
By	Mr. Thee Trongjitpituk
Field of Study	Sports Science
Thesis Advisor	Associate Professor TEPPRASIT GULTHAWATVICHAI
Thesis Co Advisor	SARIST GUITHAWATVICHAI, Ph.D.

Accepted by the FACULTY OF SPORTS SCIENCE, Chulalongkorn University in Partial Fulfillment of the Requirement for the Doctor of Philosophy

..... Dean of the FACULTY OF SPORTS SCIENCE
(Assistant Professor SITHA PHONGPHIBOOL, Ph.D.)

DISSERTATION COMMITTEE

..... Chairman
(Assistant Professor WANCHAI BOONROD, Ph.D.)
..... Thesis Advisor
(Associate Professor TEPPRASIT GULTHAWATVICHAI)
..... Thesis Co-Advisor
(SARIST GUITHAWATVICHAI, Ph.D.)
..... Examiner
(KAVEEPONG LERTWACHARA, D.B.A.)
..... Examiner
(TOSSAPORN YIMLAMAI, Ph.D.)
..... External Examiner
(Juta Tingsabhat, Ph.D.)

ธีร์ ตรงจิตพิทักษ์ : อิทธิพลของการเข้าถึงสนามกีฬา แรงจูงใจ และความพึงพอใจ ที่มีต่อความตั้งใจในการบอกต่อและความตั้งใจในการกลับมาเข้าร่วมแข่งขัน ของนักกีฬาคนพิการทางการเคลื่อนไหว. (THE INFLUENCE OF SPORTS FACILITIES' ACCESSIBILITY, MOTIVATION, AND SATISFACTION ON WORD-OF-MOUTH AND RE-PARTICIPATION INTENTIONS OF ATHLETES WITH PHYSICAL DISABILITIES) อ.ที่ปรึกษาหลัก : รศ.เทพประสิทธิ์ กุลธวัชวิชัย, อ.ที่ปรึกษาร่วม : ดร.สาริษฐ์ กุลธวัชวิชัย

คาดการณ์ว่า มีผู้คนจำนวนมากกว่าหนึ่งพันล้านคน หรือคิดเป็นประมาณร้อยละ 15 ของประชากรโลก ต้องเผชิญอยู่กับความพิการในรูปแบบต่าง ๆ ซึ่งตัวเลขดังกล่าวนี้ยังคงเพิ่มสูงขึ้นอย่างต่อเนื่อง ในความเป็นจริงแล้ว กลุ่มคนพิการมีการเข้าร่วมกิจกรรมกีฬาในอัตราที่ต่ำ เนื่องมาจากอุปสรรคทางด้านกายภาพหลายประการที่ต้องเผชิญ ด้วยความพยายามที่จะหาวิธีเพิ่มอัตราการเข้าร่วมกิจกรรมกีฬาของกลุ่มคนพิการ ผู้วิจัยจึงได้นำแนวคิดด้านการตลาด ได้แก่ ความพึงพอใจ ความตั้งใจในการบอกต่อ และความตั้งใจในการกลับมาเข้าร่วม มาประยุกต์ใช้ในบริบทของการเข้าถึงสนามกีฬาเป็นครั้งแรก การวิจัยครั้งนี้ประกอบไปด้วยวัตถุประสงค์ 3 ประการ ได้แก่ 1) เพื่อค้นหาจำนวนองค์ประกอบของตัวแปรการเข้าถึงสนามกีฬา และจำนวนองค์ประกอบของตัวแปรแรงจูงใจ 2) เพื่อศึกษาอิทธิพลของตัวแปรการเข้าถึงสนามกีฬาที่มีต่อตัวแปรความตั้งใจในการบอกต่อและความตั้งใจในการกลับมาเข้าร่วมแข่งขัน ซึ่งมีตัวแปรความพึงพอใจเป็นตัวแปรส่งผ่าน และ 3) เพื่อศึกษาอิทธิพลของตัวแปรแรงจูงใจที่มีต่อตัวแปรความตั้งใจในการกลับมาเข้าร่วมแข่งขัน การวิจัยครั้งนี้ได้ดำเนินการเก็บข้อมูลจากกลุ่มนักกีฬาคนพิการทางการเคลื่อนไหวจำนวน 330 คน ใน 22 รายการแข่งขันกีฬาคนพิการ ผลจากการวิเคราะห์องค์ประกอบ พบว่า ตัวแปรการเข้าถึงสนามกีฬาประกอบไปด้วย 7 องค์ประกอบ และ ตัวแปรแรงจูงใจประกอบไปด้วย 3 องค์ประกอบ ผลของการวิเคราะห์สมการเชิงโครงสร้าง พบว่า ตัวแปรการเข้าถึงสนามกีฬาส่งอิทธิพลอย่างมีนัยสำคัญทางสถิติต่อตัวแปรความตั้งใจในการบอกต่อ และความตั้งใจในการกลับมาเข้าร่วมแข่งขัน ผ่านตัวแปรความพึงพอใจ และ ยังพบว่า ตัวแปรแรงจูงใจส่งอิทธิพลทางตรงต่อตัวแปรความตั้งใจในการกลับมาเข้าร่วมแข่งขัน ผลการวิจัยครั้งนี้ ได้เพิ่มพูนองค์ความรู้ให้กับสาขาวิชาการจัดการกีฬา และเป็นแนวทางเพื่อนำไปสู่ การเพิ่มประสิทธิภาพของการจัดการสนามกีฬา และการแข่งขันกีฬาให้ดียิ่งขึ้น โดยเฉพาะกับกลุ่มนักกีฬาคนพิการทางการเคลื่อนไหว

สาขาวิชา วิทยาศาสตร์การกีฬา
ปีการศึกษา 2563

ลายมือชื่อนิสิต .....
ลายมือชื่อ อ.ที่ปรึกษาหลัก .....
ลายมือชื่อ อ.ที่ปรึกษาร่วม .....

5978601339 : MAJOR SPORTS SCIENCE
KEYWORD: Sport Facility, Accessibility, Disability, Behavioral Intention, Motivation, Satisfaction, Word-of-mouth, Re-participation

Thee Trongjitpituk : THE INFLUENCE OF SPORTS FACILITIES' ACCESSIBILITY, MOTIVATION, AND SATISFACTION ON WORD-OF-MOUTH AND RE-PARTICIPATION INTENTIONS OF ATHLETES WITH PHYSICAL DISABILITIES. Advisor: Assoc. Prof. TEPPRASIT GULTHAWATVICHAI Co-advisor: SARIST GUITHAWATVICHAI, Ph.D.

More than a billion people are estimated to live with some form of disability, or about 15% of the world's population and the number is still growing. People with disabilities are less likely to participate in sports due to several physical barriers they face. In an effort to find ways to increase the sports participation rate of people with disabilities, the concept of marketing (satisfaction, word-of-mouth intention, and re-participation intention) was applied to the field of accessibility for the first time. This study consisted of three objectives: (1) to find out the dimension of sports facilities' accessibility and motivation, (2) to examine the effect of sports facilities' accessibility on word-of-mouth and re-participation intentions through satisfaction, and (3) to explore the effect of motivation on re-participation intention. Data were collected from 330 athletes with physical disabilities in 22 disability sports events. Factor analysis revealed seven dimensions of sports facilities' accessibility and three dimensions of motivation. Structural equation model (SEM) findings demonstrated that sports facilities' accessibility significantly influenced both word-of-mouth and re-participation intentions through satisfaction, and motivation had a direct effect on re-participation intention. The results of this study broadened the knowledge in the field which later leads to better management and performance of sports facilities, particularly for athletes/people with physical disabilities.

Field of Study:	Sports Science	Student's Signature .....
Academic Year:	2020	Advisor's Signature .....
		Co-advisor's Signature .....

ACKNOWLEDGEMENTS

I would first like to express my deep gratitude to Assoc. Prof. Tepprasit Gulthawatvichai, Thesis advisor, Faculty of Sports Science, Chulalongkorn University for his patience, useful advice, generosity of time, immense knowledge and, inspiration. He has set an example of excellence as a researcher, instructor, and role model.

I express my warmest gratitude to Dr. Sarist Gulthawatvichai, Thesis co-advisor, and Asst. Prof. Dr. Chatchai Chatpunyakul, King Mongkut's Institute of Technology Ladkrabang Business School, for sharing valuable experiences of Ph.D. life and providing great academic advice in the field of sports management.

Special appreciation passes to Dr. Juta Tingsabhat for accepting to be an external examiner and excellently providing suggestions in the field of sports marketing and sports management.

A great deal of appreciation goes to all faculty members of the Faculty of Sports Science, Chulalongkorn University particularly my thesis committee members, Asst. Prof. Dr. Wanchai Boonrod, Dr. Tossaporn Yimlamai, Dr. Kaveepong Lertwachara for their useful comments and helpful suggestions about my work. With many thanks to Ms. Keeranan Phusri, administrative support staff for her excellent administration assistance while I was spending my student life.

I would like to give a special thanks to Mr. Maitree Kongruang, Department of Sports Association for the Disabled of Thailand, who always provides great support. Thank you to all respondents for their good participation, and their kindness.

I could not have completed this dissertation without the support of all my sports management classmates specifically Ms. Supalux Suvathi, Mr. Kasidech Treethong, and Ms. Nuanphan Netitaweesub.

Finally, I would like to express my deep and sincere gratitude to my Tronjitpituk family, Mom (Ampai), Dad (Winai), and Sister (Narapart), for their continuous supports and unparalleled love. I could not have done it without them. I am deeply thankful to Miss Sasicha Nopsiri for her wise counsel, sympathetic ear, supports, encouragement, and always being there for me.

Thee Trongjitpituk

TABLE OF CONTENTS

Page

LIST OF TABLE

PAGE

LIST OF FIGURES

PAGE

CHAPTER 1
INTRODUCTION

The word sports facility management can be explained when people come to a facility and witness it for themselves because people can sense a well-run facility regardless of a team's win–loss record. The main focus of facility management is to make sure an existing facility runs smoothly and is safe for its intended purpose (Fried, 2010). One of the key aspects of sports facility management is accessibility. In Greek and Roman times, people with disabilities who could not enter a facility would be out of luck, but now they can sue to get into a facility. The good efforts to improve accessibility for these people can be seen. For example, the Americans with Disabilities Act (ADA) requires facilities and programs to accommodate the needs of the disabled whenever practicable. This also reflects in major-sports events for people with disabilities, such as the Paralympics held immediately after the Olympic Games whilst sharing share the same facilities which must also accommodate the needs of the disabled.

One of the fundamental rights that need to be considered for all members in a society is the right to access all facilities, sources and services, despite their varying abilities or limitations (Bodaghi & Zainab, 2012). In terms of sport, the concept "Sport for All – Sport for Life" was begun in 2008 in order to raise awareness of social inclusion. This focuses on able-bodied people, the physically disabled, the very young, the very old, those with visual or hearing impairment, and those suffering from mental illness. Particularly, universal access is an essential component of this theme and of all the initiatives emanating from it.

In September 2015, the new agenda which is called Sustainable Development Goals (SDGs) was released by the United Nations General Assembly (UNGA). This agenda includes 17 goals with 169 targets that all 191 UN Member States have agreed to achieve in 2030. According to the agenda, the importance of the Universal Declaration of Human Rights is reaffirmed and the responsibilities of all states are also emphasized, in conformity with the Charter of the United Nations, in order to respect, protect and promote human rights and fundamental freedoms for all, without distinction

of any kind of status, such as race, gender, religion, disability, or other status (United nations general assembly: UNGA, 2015) .

To achieve the goal of SDGs as adopted by Thailand, together with the 6th National Sports Development Plan of Thailand (2017), reducing social inequality of people especially those with disabilities is very important since it could help them become more involved with society, be able to live independently, and be able to participate in sports. Thus, people of all ages and people of all sectors in society should access sports facilities more easily and conveniently across the country.

More than a billion people were estimated to live with some form of disability, or about 15% of the world's population (based on 2010 global population estimates) and the number was still growing. In Thailand, the number of the disabled was 2,058,082 (Data on 30th Sep, 2020), representing 3.09 % of Thailand's population (Department of Empowerment of persons with disabilities, 2020). Among these numbers, there were 1,021,065 people who were regarded as people with physical disabilities (PwPD), which was the highest number when compared to other types of disability.

According to the report of the English Federation of Disability Sport&County Sports Partnership Network (2013), people with disabilities remained significantly less likely to participate in leisure and sporting activities than non-disabled people due to several physical barriers they faced when traveling to and from venues and moving around and inside the facilities. With regard to an increased number of people with disabilities, these could represent a vast group of people that is often overlooked.

Several corporeal benefits of participating in sports have been reported in previous literature, for example, improving quality of life, health (physical and psychological functioning), social inclusion, self-esteem, and sports performance (Lee & Park, 2010; Mauerberg-deCastro et al., 2016; Shapiro & Malone, 2016; Yazicioglu, Yavuz, Goktepe, & Tan, 2012). Participating in sports and physical activities are critical for disabled people since many of them have been reported to have poor health (Rasinaho, Hirvensalo, Leinonen, Lintunen, & Rantanen, 2006). Participating in sports can prevent health problems by reducing the risk of developing secondary conditions that are related to a primary disability, such as heart disease, fatigue, obesity, social isolation, deconditioning, pressure sores, diabetes, and urinary tract

infections (Kehn & Kroll, 2009; Lakowski & Long, 2011). It also helps disabled people to create defenses against bone and muscle diseases, such as spinal injury, arthritis, atrophy, osteoporosis, and orthopedic disorders (Mauerberg-deCastro, Campbell, & Tavares, 2016; Smith & Sparkes, 2012).

Focusing on accessibility for people with disabilities could benefit other groups of people, for example, carers, parents pushing baby strollers, persons using other mobility devices, walkers or delivery carts, physically injured persons, short people, large people, and elderly people (World Health Organization (WHO), 2011).

In this study, accessibility is defined as the ease of reaching a sport facility and performing the functions at different stages of a journey (Alagappan, Hefferan, & Parivallal, 2017; El-Geneidy & Levinson, 2006). Based on previous literature, most studies capture accessibility in one stage – accessibility within the destination (Bodaghi & Zainab, 2012; Isa, Zanol, Alauddin, & Nawi, 2016; Pratiwi, Zhao, & Mi, 2015; Rimmer, Padalabalanarayanan, Malone, & Mehta, 2016; Sáa, Azevedob, Martins, Machadob, & Tavaresb, 2012; Talib, Ghani, Ismail, & Salleh, 2016; Tutuncu, 2017). Our study argues that accessibility should be explored as a whole journey (multiple stages). This is because the experience for a disabled person attending a sporting event is not just about their seat, it starts as soon as they plan the trip until leaving the sports facilities. It also includes their journey to and from the gate to their seat, getting around the venue, experiencing the sporting event itself, and accessibility of the toilets (Department for Work and Pensions: DWP, 2015). Moreover, the factor of motivation is included in this study (the literature for motivation part is explained in the later section).

The existing literature indicates that various categories (dimensions) of motivation factors have been explored in terms of non-disabled people/athletes, (Chang & Tsai, 2016; Funk, Toohey, & Bruun, 2007). However, exploring the motivational dimensions was still lacking in aspects of athletes with physical disabilities. Thus, focusing on motivation could lead to a better understanding needs and decision processes of the participants, which was a necessity for effectively improving elements of an event (i.e. sports event). The event element might be presented in a suboptimal way if those motivations are not understood (Crompton & McKay, 1997). Therefore, investigating sports facilities' accessibility (SFA) more

deeply in holistic ways (multiple stages) and exploring dimensions of motivation are necessary for fulfilling these gaps. This leads to the first research question: 1) what are the actual dimensions of sports facilities' accessibility and motivation?

As stated earlier, disabled people were less likely to participate in sports (English Federation of Disability Sport & County Sports Partnership Network, 2013). A key goal of this study was to find ways to increase the participation rate of PwPD. For this reason, the concepts of marketing, namely satisfaction, re-participation intention (RI), and word-of-mouth intention (WOM), were applied into the world of accessibility for the first time to help sport providers retain existing participants and attract more participants by designing, managing and operating facilities in a manner which meets user expectations.

Satisfaction refers to "an overall evaluation of expectation based on the individual's consumption experience regarding sports facilities' accessibility (Anderson, Fornell, & Lehmann, 1994; Oliver, 1980). Satisfaction is considered as an important factor in marketing aspects because service providers cannot survive without satisfied customers (Tutuncu, 2017). Likewise, satisfaction can play a role to increase customers' willingness to engage in favorable service/product, for example, sports facilities (Oliver, 1997). Moreover, when customers satisfy with service, they are more likely to recommend others and return to the same service again (Oliver, 2010).

It is believed that accessibility can effect users' satisfaction. According to Wakefield, Blodgett, &Sloan (1996) who found that accessibility of football stadium (refer to parking) had a positive effect on spectators' pleasure. Moreover, a previous study by Tutuncu (2017) found that hotel accessibility (e.g., public areas, recreation & other areas, and bathrooms) had an effect on satisfaction of PwPD. Apart from their studies, it was still curious if there was any relationship between accessibility and satisfaction since the relationship between these two factors has not been discovered before in the context of sports facilities. This leads to the second research question: 2) Is there any relationship between sports facilities' accessibility and satisfaction?

The relationship between satisfaction and behavioral intentions has been consistently reported in the existing literature (Hutchinson et al., 2009; Jin, Lee, & Lee, 2015; Kaplanidou & Gibson, 2010; Meng & Han, 2018; Saha & Theingi, 2009;). The behavioral intentions of this study include re-participation (revisit) intention (RI)

and word-of-mouth intention (WOM) due to their impact on customer purchase decision and their impact on the attention of new customers (Richins & Root-Shaffer, 1988); moreover, both factors are the most usual factors of behavioral intentions (Zeithaml, Bitner, & Gremler, 2017). Exploring these two factors can be seen in numerous studies (Choudhury, 2014; Kim, 2018; Kim, Lee, Petrick, & Hahn, 2018; Maxham, 2001; Meng & Han, 2018; Ong, Lee, & Ramayah, 2018; Sharma & Nayak, 2018).

Word-of-mouth (WOM) intention refers to "a form of informal communication of people who share their experience and opinion about any specific product or service (this study means sports facilities' accessibility) after their consumption without commercial purpose" (Arndt, 1967b; Jeong & Jang, 2011). There have been evidences showing that WOM seems to be more effective in influencing customers' behavior than other marketing forms. Hossain, Sultana, &Biswas (2015) and Trusov, Bucklin, &Pauwels (2009) compared WOM with other forms of traditional marketing. It was found that WOM referrals had a stronger impact on new customer acquisition than traditional marketing forms.

In terms of hospitality industry, the influence of WOM is particularly strong because the quality of services is often unidentified prior to consumption (Muzamil, Qadeer, Makhija, & Jahanzeb, 2018). For this reason, a lot of people seek out recommendation from other people before purchasing something (Attia, Aziz, & Friedman, 2012). Understanding antecedents of WOM can help service providers to work on the factors (i.e., accessibility) in a way which is liked by customers leading towards positive WOM and resulting in more customers (Muzamil et al., 2018).

Several researchers have examined the link between satisfaction and WOM intention in various contexts. For example, in the context of sports events, a visitor who was satisfied with the destination were more likely to spread positive WOM (Yürük, Akyol, & Simsek, 2017). In the service context, Hennig-Thurau, Gwinner, & Gremler (2002) found that satisfaction was positively related to WOM communication. In the sport tourism context, Hutchinson, Lai, &Wang (2009) reported that satisfaction of golf travelers with their visit had an effect on revisit intention. Saha&Theingi (2009) also found that passengers' satisfaction with service quality (including tangible factors) was highly correlated with a positive WOM and revisit

intention in airline study. In the context of hospital, satisfaction of patients with hospital experience (such as facilities, service personnel) was found to have an influence on WOM (Hsu, 2018).

Even though investigating the relationship between satisfaction and WOM intention has been identified in various studies, the relationship between these two factors has been undercover in the context of sports facilities' accessibility. This leads to the third research questions: 3) Is there any relationship between satisfaction and word-of-mouth intention?

In this study re-participation intention is defined as "the participant's desire to repeat an activity or participate a sport event again" (Baker & Crompton, 2000). The word "re-participation intention" and "revisit intention" was interchangeably used depending on the context. Many firms/organizations are more successful because of creating loyal customers (Reichheld, 2001). Revisit intention is a very important consideration for marketers since the cost of retaining an existing customer is less expensive than finding for a new customer (Spreng, Harrell, & Mackoy, 1995). Many firms involve customer satisfaction data to determine service/product quality and to increase customer retention (Chi & Qu, 2008). A customer who is satisfied with the service providers is likely to make a repeat purchase (Wang & Wu, 2012).

It has been proved that re-participation intention can be directly affected by satisfaction in various contexts. For example, Lee (2003) found that customer satisfaction had a positive effect on revisit intention in his leisure-sport facility study. Kaplanidou&Gibson (2010) found that satisfaction with the event was particularly powerful in predicting the likelihood that an athlete would take part in future sport events again. In the tourism context, it was revealed that tourists' satisfaction had a direct positive effect on intention to revisit the destination (Jin, Lee, & Lee, 2015; Kim, Holland, & Han, 2013; Moon & Han, 2018).

To date, research investigating the relationship between satisfaction and re-participation intention in the aspect of sports facilities' accessibility was still limited. Hence, investigating the relationship between them was needed. This leads to the fourth research questions: 4) Is there any relationship between satisfaction and re-participation intention?

Previous studies indicated that satisfaction can efficiently work as a mediator of the relationship between customer experience and WOM intention. In the context of restaurant, it was found that service encounter performance was positively associated with customer satisfaction, which later created WOM intentions (Han & Ryu, 2012). In the airline context, physical environment factors such as spatiality, amenity, aesthetics and entertainingness were found to have a positive impact on positive WOM through satisfaction (Maeng & Park, 2015). The similar results were also found by Saha&Theingi (2009) as they indicated that the dimensions of service quality (tangible features, schedules, services of staff) had an indirect influence on those of behavioral intentions (WOM and RI) through passenger satisfaction.

Based on prior studies, it can be assumed that satisfaction is likely to be a key mediator of the relationship between customer experience and WOM intention. However, it is still unclear on how satisfaction mediates the relationship between sports facilities' accessibility and WOM. This leads to our fifth research questions: 5) How does satisfaction mediate the relationship between sports facilities' accessibility and WOM intention?

Moreover, the role of satisfaction mediator was clarified to mediate the relationship between sports facilities' accessibility and re-participation intention. A previous study by Lee (2003) and Wakefield et al. (1996) demonstrated that the pleasure with the physical environment (e.g., stadium accessibility and layout accessibility) in sports facilities was shown to strongly influence spectators desire to stay and revisit the stadium in the future. In the tourism context, working-holiday tourism attributes were found to positively influence satisfaction, and satisfaction has a significant mediating impact in determining revisit intention for the destination (Meng & Han, 2018). The results are in agreement with the other studies as Saha & Theingi (2009) and Tanford&Jung (2017) indicated that when travelers are satisfied with their specific travel experiences, they are likely to participate in this kind of travel again. Besides, Perovic, Moric, Pekovic, &Stanovcic (2018) proved that both tangible and intangible elements affect tourist satisfaction which leads to influencing tourist revisit intention.

It could be summarized that satisfaction can work well in mediating the relationship between customer experience and re-participation intention. However, it is

still curious on how satisfaction mediated the relationship between both factors in aspect of sports facilities' accessibility. This leads to our sixth research questions: 6) How does satisfaction mediate the relationship between sports facilities' accessibility and re-participation intention?

Based on past literature, motivation was also revealed to possibly contribute to an athletes' re-participation. Motivation is defined as "an internal factor that arouses, directs, and integrates a person's behavior" (Murray, 1964). Research revealed that athletes may be motivated out of two main types of motivation. On the one hand, athletes may be intrinsically motivated to engage in sports activities in order to seek new sensations, attempt to master complex skills, or conquer challenges, and improve their performance. On the other hand, they may be extrinsically motivated to participate in sports in order to gain tangible benefits such as material (e.g., trophies, medals, money, and prizes) or social rewards (e.g., prestige) (Vallerand & Losier, 1999; Weinberg & Jackson, 1979).

Moreover, various factors motivating athletes to participate in sports activities/competitions were reviewed. These include personal motive, self-esteem, social motive, pushing their limits (Ogles & Masters, 2003), the experience and type of event (Getz & Andersson, 2010), seeking competition, experiencing unique and/or famous places, desire to win (Robinson & Gammon, 2004), and escaping from the daily routine (Adler & Adler, 1999).

The association between motivation and re-participation intention was explained by previous sports tourism studies. Chang&Tsai (2016) demonstrated that participant motivation, which was comprised of goal achievement, relaxation, skill learning, socializing, and fitness maintenance, significantly influenced revisit intentions. Similarly, motivation was a prominent factor in motivating participants to participate in a foreign sporting event (Funk, Toohey, & Bruun, 2007). This is in line with Chang (2008) who pointed out that the windsurfers' motivation influenced their intention to participate.

To summarize, investigating sport motivation is required because the motivation is likely to influence athletes to participate in a sporting event. Moreover, exploring the relationship between sport motivation and participation intention of

PwPD was still lacking. This can lead to our seventh research questions: 7) Is there any relationship between motivation and re-participation intention?

Based on literature, the accessibility measurement can be categorized into two aspects: 1) a questionnaire – refers to subjective measurement (Bodaghi & Zainab, 2012; Pratiwi et al., 2015; Sang et al., 2016; Tutuncu, 2017) and 2) a checklist – refers to objective measurement (Dickson, Darcy, Johns, & Pentifallo, 2016; Isa et al., 2016; Rimmer et al., 2016; Sáa et al., 2012; Talib et al., 2016). Evaluating sports facilities' accessibility (SFA) using the questionnaire alone may not be enough since some discrepancies between both measurements were found when evaluating accessibility (Lotfi & Koohsari, 2009). For this reason, both subjective (questionnaire) and objective (the compliance list of accessibility requirements) measurements were used in this study to measure the sports facilities' accessibility. This leads to the eighth research questions: 8) What is the actual condition of sports facilities' accessibility in the context of sports events?

In order to answer these questions, a new measurement was developed and existing measurements were applied. The sports facilities' accessibility measurement was newly created based on eight accessibility guidelines: DWP (2015), Disability Sport NI (2016), Interior Ministerial Regulation B.E. 2548 (2005), International Paralympic Committee (2013), Social Development and Human Security Ministerial Regulation B.E. 2555 (2012), Sports England (2010), the Americans with Disabilities Act, and UEFA (2011). Various measurements were applied from existing measurements including motivation (Fotiadis et al., 2016; Sports Association for the Disabled of Thailand, 2019), Satisfaction (Chi & Gursoy, 2009), Word-of-mouth intention (Choudhury, 2014), Re-participation intention (Kim, 2018; Moon & Han, 2018). The compliance list of accessibility requirements adapted from Thai regulations regarding persons with disabilities was used to assess accessibility items within sports facilities.

Data were analyzed using the SPSS and Lisrel 8.72 software. The dimensions of sports facilities' accessibility and motivation were constructed using exploratory factor analysis (EFA). Confirmatory factor analysis (CFA) was applied to test the fit of the measurement models. Finally, Structural Equation Model (SEM) was utilized to test the conceptual model.

CHAPTER 2
LITERATURE REVIEW

2.1 Disabled People Principles

2.1.1 Importance of research regarding disabled people

Doing research on disability issues is important and should be expanded to increase public understanding. Those areas, for example, included the impact of environmental factor on disability, barriers to specific services, and particularly appropriate accessibility programs (World Health Organization, 2011).

More than a billion people are estimated to live with some form of disability, or about 15% of the world's population (based on 2010 global population estimates). This is higher than previous WHO estimates, which date from the 1970s and suggested a figure of around 10% and the number is still growing. The number of the disabled was 2,058,082 (Data on 30th Sep, 2020), representing 3.09 % of Thailand's population (Department of Empowerment of Persons with Disabilities, 2020). Among these numbers, there are 1,021,065 people who are regarded as people with physical disabilities (PwPD), which is the highest number when compared to other types of disability.

According to the report of English Federation of Disability Sport (EFDS) & County Sports Partnership Network (CSPN) (2013), people with disabilities remain significantly less likely to participate in leisure and sporting activities than non-disabled people due to several physical barriers they face when traveling to and from venues and moving around and inside the facilities. With regard to an increased number of people with disabilities, these could represent a vast group of people that is often overlooked.

Disability results from the interaction between persons with impairments, attitudinal barriers, and environmental barriers that hinder their full and effective participation in society on an equal basis with others". Defining disability as an interaction means that "disability" is not an attribute of the person. From these three barriers, environmental barrier is seen as a huge impact on the experience and extent of disability (The United Nations, 2006).

2.1.2 Athletes with Physical Disabilities (AwPD)

Before defining the word “athletes with physical disabilities (AwPD)”, some definitions of the word “people with physical disabilities (PwPD)” should be first considered. The National Office of Support and Quality of Life for Disabled People of Thailand (2009) defined PwPD as people who have mobility limitation in participating activities, and those who are physically disabled or impaired on hands, feet, and limbs. The similar definition is defined by Herdman&Kamitsuru (2014) who described physical disability as a limitation in independent, purposeful physical movement of the body or of one or more extremities.

However, the other two scholars have explained this word by mentioning the assistive devices. Agree (2014) and Scherer (1996) describe that PwPD are more likely to be sedentary than the other disabled population and are a highly heterogeneous group with different needs and capacities compared to other disabilities. They may have difficulty participating in activities due to physical barriers. PwPD can use different types of assistive technologies and mobility devices, such as power or wheelchairs, scooters, walkers, canes, crutches and prosthetics to enhance their mobility. Specifically, the definition of people with physical disabilities has been found in the sports context. UEFA (2011) stated that people with physical disabilities (PwPD) refers to ambulant disabled people, such as those who can walk but require walking aids or those who find covering longer distances more difficult. This group benefits from facilities and services that are designed to reduce travel distances and limit the need to stand for long periods. Ambulant disabled people may be limited by physical and/ or attitudinal barriers.

Based on previous definitions (Agree, 2014; Scherer, 1996; The National Office of Support and Quality of Life for Disabled People of Thailand, 2009), this study summarized and defined the word “athletes with physical disabilities (AwPD)” as people who have mobility limitation and who are physically disabled or have impaired hands, feet, and limbs who are able to use an assistive device, including a wheelchair, crutch walker and/or prosthesis, such as prosthetic arm and prosthetic leg when participating in sports activities/events. It should be noted that the words “athletes with physical disabilities (AwPD)” and “people with physical disabilities (PwPD)” were used interchangeably in this study.

2.1.3 Models of disability

1) Medical Model

Generally, the medical model is derived from the problems that people with disabilities face, which are mainly derived from their physical and/or intellectual impairments regardless of the wider socio-cultural, physical, and political environments. The power of the medical profession within society has played a significant role in creating many of the societal perceptions of disability that are embedded within the medical model discourse (Wendell, 1996). Consequently, it appears to PwD that the cause of their problems lies within themselves and their impairments.

2) Social Model

Recently, many of those disability activists have argued against the perceptions of disabilities embedded in the medical model, by which the medical professions and general public tend to label people with disabilities. Disability activists have, therefore, developed a social model of disability. They explain that it is the environmental barriers and social attitudes that disable a person (Brittain, 2010). According to Morris (1991), this perspective takes the point of view that many of the problems associated with disability would disappear if people's attitude were to change, and there was the proper public policy legislating that "environmental barriers should be removed".

The social model is used in this study because we do not recognize the disabled's impairments as a major problem, whereas a huge problem is from environmental barriers. Similarly, as Culley&Pascoe (2009) and Sport England (2010) described, disabled people are disabled by poorly designed environments, however, providing add-ons or special facilities creates segregation rather than inclusion. It is evident that the presence of sports facilities is associated with participation in physical activity (Sáa et al., 2012; Sang et al., 2016). Commonly sports facilities have been found to have lots of disadvantages such as, poor quality of sports equipment, lack of ramps, racks, handrails, lifts, signs, and facilities/equipment for people with eyesight and hearing disabilities, and difficult access of disabled people to sports grounds, public areas and the audience (Grady & James, 2013; Makhov, Stepanova, Shmeleva, Petrova, & Dubrovinskaya, 2015). These evidences

show that PwD are unequally treated in terms of sports facilities' accessibility; moreover, this is consistent with a survey of English Federation of Disability Sports (EFDS) in 2013 found that 70% of people with disabilities would prefer to be more active, but they are often thwarted by problems of access (Burki, 2015). Based on the evidences, it is clearly seen that their sports participation can be affected by environmental factors.

2.1.4 Benefits of participating in sports

In general, disabled people are defined by their disability as being marginalized and pitied. They are often viewed as incapable and limited in their ability to be independent and successful (Martin, 2013). However, having a disability does not mean they are unhealthy since health and wellness goals of people can be achieved through participation in sport regardless of disability status (Blinde & McClung, 1997). There is an argument that sports and physical activities for people with disabilities are more important to them than for people without disabilities because the rates of secondary conditions, such as obesity and diabetes of people with disabilities, are higher than non-disabled people (Anderson & Heyne, 2010).

Participating in sports and physical activities is critical to alleviate these serious problems as many people with disabilities have been reported to have poor health (Martin, 2013). Moreover, plenty of corporeal benefits by participating in sports have been reported in previous literature, such as improving quality of life, health (physical and psychological functioning), social inclusion, and self-esteem.

Many researchers pointed out that sports can help disabled people improve their quality of life. A study done by Yazicioglu et al. (2012) confirmed that people with people with physical disabilities who participated in adapted sports had a significantly higher quality of life and life satisfaction scores compared to people with physical disabilities not involved in any adapted sports. Similarly, Shapiro & Malone (2016) indicated that youth athletes with physical disabilities who were involved in sports (at least 60 min per week of practicing) have positive perceptions on their health related quality of life in four aspects: physical functioning, emotional functioning, social functioning and school functioning. The result is consistent with Lee & Park's study (2010) as they reported that there is a significant relationship between frequency of physical activity and life satisfaction in adults with disabilities.

Health benefits are explained as corporeal benefits that come with being physically active. In this explanation, health benefits involve disease prevention and alleviation, physical and psychological functioning. Sports and physical activity participation can prevent health problems by reducing the risk of developing secondary conditions that are related to a primary disability, such as heart disease, fatigue, obesity, social isolation, deconditioning, pressure sores, diabetes, and urinary tract infections etc. (Kehn & Kroll, 2009; Lakowski & Long, 2011). It also helps disabled people create defenses against bone and muscle diseases, such as spinal injury, arthritis, atrophy, osteoporosis, and significant orthopedic disorders etc. (Mauerberg-deCastro, Campbell & Tavares, 2016; Smith & Sparkes, 2012). Furthermore, participating in sports has been proved to enhance physical functioning of PwD. Johnson (2009) reviewed 14 research studies regarding disabled children (e.g., neuromuscular disability, cerebral palsy, and intellectual disabilities) and concluded that swimming, group exercise, treadmill training, horseback riding, and adapted skiing were all activities that produced health benefits such as enhanced muscle strength, motor skill development and cardiovascular fitness. Besides, Lakowski&Long (2011) indicated that the strength and stamina which is developed through sports can help maintain a higher independence level.

Additionally, psychological benefit is another outcome that comes with being physically active. Participation in sport and exercise has the potential to enhance self-esteem, enhance perceptions of competence, improve body satisfaction, boost confidence, help escape worries associated with disability, and reduce stress (Smith & Sparkes, 2012; Taub & Greer, 2000). A study done by Taub&Greer (2000) also reported that students with disabilities acknowledged that the success of enjoying in sports helped them change the negative image held by their classmates. Moreover, the mood can be one of many psychological benefits derived from exercising as it is helpful when disabled people are having bad days especially for people with neurotic tendencies (Giacobbi et al., 2006). This is similar to the study of Kosma, Ellis, Cardinal, Bauer, &McCubbin (2007) since they described emotional functioning as the biggest benefit after involving in physical activity.

Lastly, participating in sports has been linked to promote the social inclusion of disabled people (Sport England, 2010). Social inclusion has been cited as a critical benefit for disabled people. Martin (2005) explained that social inclusion, social bonding and friendships could be increased through sports and physical activities. For example, children with disabilities who participated in an adapted sport program could have a chance to communicate with other friends who also had disabilities. This led them to interact with others and feel independent (Groff & Kleiber, 2001). Increases in physical activity may also affect a person's ability to go to school, work, and participate in all aspects of community life (Lakowski & Long, 2011). Additionally, social status can be enhanced through sports participation. Arbour, Latimer, Martin Ginis, &Jung (2007) found that people without disability viewed disabled people who were active more favorably than disabled people who were non-active. Exercisers were viewed as more self-reliant, friendly, healthier and persistent compared to non-exercising and control groups.

2.2 Accessibility Principles

2.2.1 Definitions of accessibility

The concept of accessibility has become central to transportation planning field for more than 40 years. The word accessibility is derived from the words "access" and "ability", thus meaning *ability* to *access*, where "access" is the act of approaching something. The word is derived from the Latin *accedere* "to come" or "to arrive" (El-Geneidy & Levinson, 2006). Several definitions of accessibility have been widely defined. The first definition of accessibility in planning field was possibly arisen from Hansen (1959) who defined accessibility as the potential for interaction and exchange. Then accessibility was defined as the ease of reaching destinations or activities (El-Geneidy & Levinson, 2006). Handy (2005) defined accessibility as an ability to get what one needs, if necessary by getting to the places where those needs can be met. Moreover, Litman (2017) defined accessibility (or access) as people's ability or the ease of reaching goods, services, activities and destinations, which together are called opportunities.

Evidently, these literatures generally define accessibility as the ease of reaching a place or destination and they also point out the ability of people to get to the places. However, accessibility not only encompasses reaching a place with ease but also requires the ability to perform the functions within the place without any architectural or environmental hindrances (Alagappan, Hefferan, & Parivallal, 2017). Due to the increasing number of people with disabilities, the issue of disability has become more interesting for the architectural, and it is later called as accessible design (accessibility) (Litman, 2017). According to WHO (2011), accessibility is described as the degree to which an environment, service, or product allows access by as many people as possible, in particular people with disabilities. In facility design aspect, "*accessible design"* refers to facilities designed to accommodate people with disabilities. For example, a pathway designed to accommodate people in wheelchairs may be called "*accessible"* (Litman, 2017).

In this study, the word accessibility is described based on previous literature as the ease of reaching a sport facility and performing the functions at different stages of a journey (Alagappan, Hefferan, & Parivallal, 2017; Litman, 2017).

2.2.2 Measurements of accessibility

The measurement for evaluating accessibility could be mainly divided into two ways based on accessibility literature in the transportation area.

First, objective accessibility is considered as conventional accessibility measure. This measure usually deals with certain predetermined aspects of travel (distance, or time). It can be used to determine what the objective options for travel are, as in "from area A, it takes 5 minutes to go to the nearest pharmacy by bus", but not how these options are experienced by the target group.

Second, subjective accessibility, also called "perceive accessibility", has been neglected in research (Budd & Mumford, 2006; Curl, Nelson, & Anable, 2011). It is about how people rate the conditions in which they live; how easy it is to perform everyday activities with a specific travel mode or if it is possible to continue living the life he or she wants using, for instance, public transport as the main travel mode.

The discrepancy between both measures was reported. Lotfi&Koohsari (2009) compared subjective to objective accessibility in their Teheran study and operationalized subjective accessibility by a single-item interview question where the participants were given four alternatives for describing their level of accessibility-satisfaction into, very good, good, moderate, or low. The difference between perceived and objective accessibility in their comparison were found. When measuring objective accessibility, accessibility in neighborhood A was considered low, whereas measuring perceived accessibility led to outcomes of high accessibility in the same neighborhood. This discrepancy could lead to a waste of government and resources, or misdirected interventions, as well as increased social exclusion (Lättman, Olsson, & Friman, 2016).

In terms of facility, the accessibility measurement can be categorized into two aspects. First, objective measurement (a checklist) has been used in various studies (Dickson et al., 2016; Isa et al., 2016; Rimmer et al., 2016; Sáa et al., 2012; Talib et al., 2016). Second, subjective measurement (a questionnaire) which allows participants to rate items from their perception has also been applied in prior studies (Bodaghi & Zainab, 2012; Pratiwi et al., 2015; Sang et al., 2016; Tutuncu, 2017).

In this study, both subjective (questionnaire) and objective (the compliance list of accessibility requirements, similar to a checklist measurement are used; however, a subjective measurement, chosen as a major tool, is completed first, followed by an objective measurement which is used as a complementary tool for the reasons listed below.

Firstly, a growing body of research suggests that in order to enhance our understanding of accessibility, capturing the perceptions and experiences of accessibility should be added to the concept of accessibility. This should be the case since objective accessibility may currently be insufficient in providing enough information to create a reliable base for decision making that will ultimately lead to benefits in accessibility (Budd & Mumford, 2006; Curl et al., 2011; Lotfi & Koohsari, 2009). There is a reason to believe that perceived accessibility, by comprising the perspective, knowledge, and experience of the traveler, captures accessibility in a way that objective accessibility measures can do (Curl et al., 2011; Stanley & Vella-Brodrick, 2009).

Secondly, involving people with disabilities when having issues in society that concern them directly is necessary because they often have unique insights about their disability, their situation, and their lives (WHO, 2011)

Thirdly, by developing a measure for perceived accessibility, we can complement existing theory and knowledge on accessibility with the subjective experience and awareness-horizon of the travelers. This inclusion of perceptions also ensures accessibility indicators to gain more behavior-realism (Van Wee, 2016).

Lastly, the measure of an individual's accessibility can describe the individual's experience of accessibility, instead of assuming that the accessibility level is consistent with the results of objective measurement. .

Due to these reasons and the difference between subjective and objective measurements in their comparison, evaluating sports facilities' accessibility (SFA) using the questionnaire alone may not be enough (Lotfi & Koohsari, 2009). For this reason, both subjective (questionnaire) and objective (the compliance list of accessibility requirements) measurements were used in this study to measure the sports facilities' accessibility.

2.2.3 Benefits of hosting accessible sports event

Before exploring events in further detail, it is important to clarify the terms used. The word "event" is defined as anything which happens; any incidence or occurrence especially a memorable one; a type of sport competition; an organized activity at a particular venue, e.g., for sales promotion and fundraising (The Chambers Dictionary, 1998). An event is personal and unique stemming from the blend of setting, program, and people which created to achieve specific outcomes (Getz, 2007).

In accordance with these definitions, a sports event is one kind of events which can be one-time or recurring events, one or several days in nature, and size and scale can differ enormously (Masterman, 2009). Nowadays, sports events are organized throughout the world for able and disabled bodied men and/or women of all ages (Masterman, 2009). The benefits of hosting sports events are related to facility improvement and are indirectly related to an increased number of athletes.

In the disability sports events context, Sydney 2000 Olympic and Paralympic Games can be a good example of the success in accessibility legacy. The long-term

planning, organization and management of facilities and operations have been considered by the operational partnership between the Sydney Organising Committee for the Olympic Games (SOCOG), the Sydney Paralympic Organising Committee (SPOC), and the host city (Darcy, 2003; Darcy & Appleby, 2011). These organizations worked continuously together with the understanding of disability and accessibility issues. This concern was later supported by The Olympic Coordination Authority (OCA). The OCA produced Access Guide for the games and wrote a critical review of Games access operations (Darcy & Taylor, 2013). Since then, the knowledge-management processes included the importance of accessibility at venues. The issue of accessibility also leads to the events bidding consideration since International Paralympic Committee (IPC) and International Olympic Committee (IOC) have to ensure that bid cities have an understanding of accessibility requirement for Olympic and Paralympic experience (Darcy & Taylor, 2013).

From a service perspective, creating an accessible event for athletes, officials, volunteers, employees, spectators and tourists will become social legacies of the post-event as it will facilitate the use of the facilities to local residents and visitors who have access needs beyond the life of the event (IPC, 2007, 2015). The outcome can be presented as enhancing well-being, participation and inclusion across all areas of society; equality of opportunity and accessibility (Darcy & Dickson, 2009; Ostrom et al., 2010).

Disability sports events do not only affect tangible legacies, but it also affects social attitudes towards people with disabilities. After the Paralympic Games in London 2012, the report showed that the Games have improved attitudes of people towards those with disabilities because disability since the games had substantial coverage on television and other forms of media in order to promote awareness of disability (Department for Culture, Media and Sport: DCMS, 2013). Moreover, the games have provided new opportunities for disabled people to participate in society because the UK Government and the Mayor of London have raised awareness by committing to delivering a lasting legacy for disabled people in the society, promoting community engagement, and supporting opportunities to participate in sport and physical activity. This could be achieved by strengthening the Paralympic Movement, delivering accessible facilities, and maximizing media coverage (Gold & Gold, 2007).

Organizing sports event has been described to have an impact on number of athletes. Increasing the participation of sports, whether through new athletes or existing athletes is a key concern of sports development. This includes both increasing mass participation and developing elite sports athletes (Malcolm, 2008; Sotiriadou, Quick, & Shilbury, 2006; Sotiriadou, Shilbury, & Quick, 2008).

A sport development pyramid can be an example of how athletes have been increased. The pyramid represents mass participation as the foundation with players moving up the pyramid to excellence and elite performance (Shilbury, Deane, & Kellett, 2006; Sotiriadou et al., 2008; Woods, 2007). Woods (2007) explained this connection that watching elite sports can inspire general athletes and people to imitate performances and aspire elite participation. In this case elite sport events are presumed to have an inspirational role in sport development.

Additionally, Sotiriadou et al. (2008) described in further details, since the explanation of pyramid is too simple, that is increasing of athletes should involve multiple processes such as processes of attraction, retention and nurturing players. Some details in these processes are explained, for example, increasing awareness, participation and membership of general participants, and nourishing large numbers of young participants who may later become elite athletes.

In sum, an event is an excellent way to showcase the unique characteristics of the host environments and the games experience of athletes, spectators, and all participants. It is necessary for sports managers and others involved in planning process to ensure that events will be accessible to all members of society (Bowdin et al., 2006). Based on above evidences, it can be concluded that organizing an accessible sports event can leave legacies to the host, and it will increase an opportunity for local residents, visitors, especially disabled people for using such facilities. Promoting sports in a country cannot be achieved without sport events as it has been shown to be the key of increasing athletes (both disabled and non-disabled), developing elite sports people, retaining sports athletes, increasing sports awareness, and so on. These increased athletes and elite athletes can result in building a reputation for themselves, their city, and their country. The benefit summary of hosting the accessible sports event was shown in Figure 1.

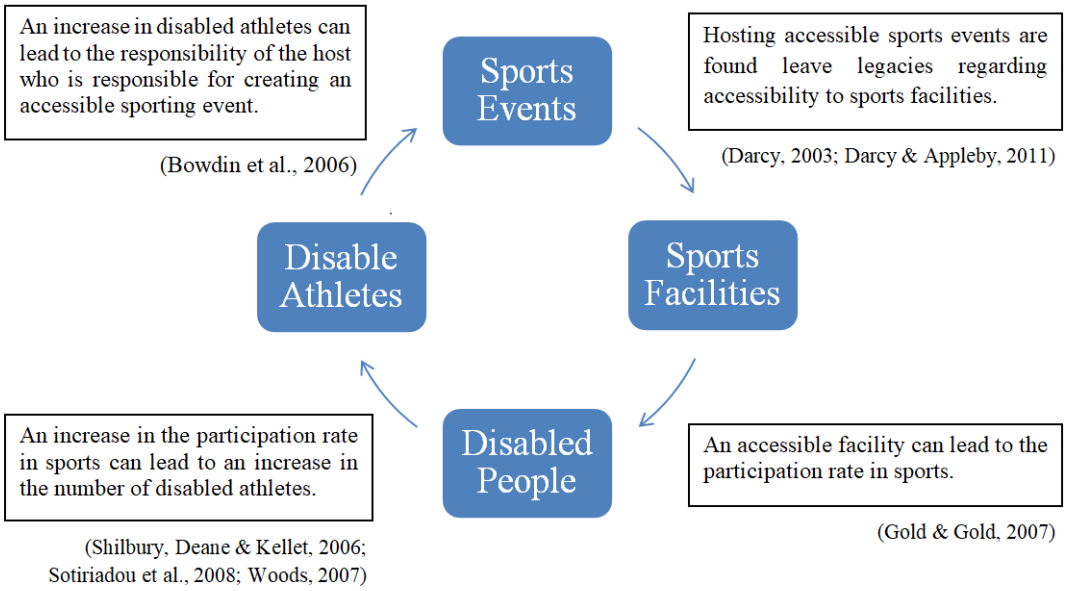


Figure 1 The benefit summary of hosting the accessible sports event

2.2.4 Accommodating Disability Sports

An event is an excellent way to showcase the unique characteristics of the host environments. However, host environments may be extremely delicate, and great care should be taken to protect them. Event managers should carefully consider the possible barriers of the event on the environment. Due to the fact that participants, spectators, visitors are the judges who ultimately vote for the success or failure of the event. The event manager must be mindful of their needs. This includes their physical needs as well as their needs for comfort, security, and especially safety (Bowdin et al., 2006).

In most developed countries, organizations are rightly being pressured to remove physical and social access barriers that have existed for many years and disadvantaged many groups of the population. The responsibility of an event manager consideration is to ensure that events are accessible to all members of society. Considering that over 10 million people within the UK and over 2 million people within Thailand have some form of disability. It makes business as well as in a legal sense to ensure that the facilities of events area accessible (Westerbeek et al., 2006). Therefore, service providers, including event managers, venues managers, and others involved in the events industry, must not treat PwD less favorably than non-disabled

people, but should make reasonable adjustments to services and premises so that PwD can access their places (Disability Rights Commission: DRC, 2004).

It is essential to establish those areas where disability sports access is required to ensure proper access. The case of sports chair can be a good example. Sports chairs, in some cases, require a design width of 1.2 m making it impractical to achieve this throughout the facility. Thereby, when considering how disabled people will use the facility, it is important to consider the following questions (Sport England, 2010): 1) How will they find it? 2) How will they reach it? 3) How will they use it? and 4) How will they leave the facility?

From the four questions, the accessibility of this study is initially categorized into eight stages (this study deemed question three as on-site using which was split into 5 stages) as shown in Figure 2.

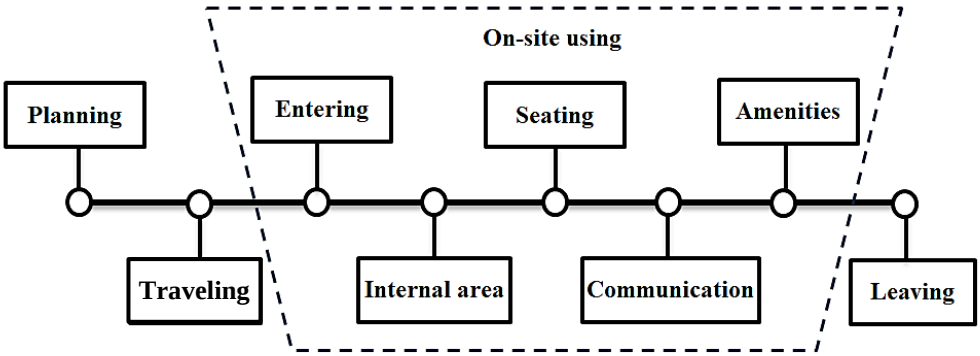


Figure 2 Initial dimensions of sports facilities' accessibility
(Adapted from Sport England, 2010)

1) Stage of Planning

Information about the accessibility of facilities and services plays a key role for PwD when planning their trip and choosing their accommodation. Customers in need of accessible surroundings usually know their requirements very well. Obtaining detailed and reliable information regarding the accessibility of venues and activities is an essential part of planning their travels (Westerbeek et al., 2006).

Accessibility information refers to any aspect of a destination that can impact users who are permanently or temporarily disabled, or persons who have any type of functional, sensory or cognitive impairment or restriction, due to age, body size, health condition or other factors. Accessibility information tells customers about services, physical design features, materials, technical infrastructure, layout, signage, furniture, and equipment that can affect their comfort, safety, and enjoyment of their surroundings.

Planning (5 items) includes 1.Information about accessible sports facilities via online media 2.Information about accessible sports facilities via telephone 3.Information about sport event 4.Information about public transportation and 5.Information about parking.

2) Stage of Traveling & External Area

It is the responsibility of the sports events/stadium managers to develop an access plan regarding transportation for people with disabilities. In most cases, PwD commute to the stadium via cars, accessible minibuses, and taxis due to an inaccessible public transport. Facilities should ensure that their disabled supporters, participants, customers, staff, and volunteers have accessible parking, accessible drop-off and pick-up points, and principal entrance to the facility via a safe route (UEFA, 2011).

Traveling & External Area (6 items) includes 1) Accessible transportation 2) Parking bays 3) Drop-off and pick-up points 4) External routes and Pathways 5) External ramps and 6) External signage and wayfinding.

3) Stage of On-site using (Entering, Internal Area, Seating, Communication, and Amenities

Hemmerling (1997) describes the criteria by which spectators judge an event: Their main focus is the content, location, substance and operation of the event itself. For them, the ease with which they can see the event activities, the program content, their access to food and drinks, amenities, toilets, access, and egress, etc., are the keys to their enjoyment. In this part, items of sports facilities' accessibility are split into five stages based on the guidelines described earlier.

Entering (the Stadium) (3 items) includes 1) Entrances and Exits 2) Information points and 3) Visitor reception.

Internal Area (6 items) includes 1) Corridors (a long passage in a building from which doors lead into rooms) 2) Concourse (a large open area inside or in front of a public building) 3) Internal doors 4) Internal ramps 5) Handrails and Handholds and 6) Safety rail.

Seating (3 items) includes 1) Sightlines 2) Seating in stadium and 3) Capacity in stadium.

Communication (4 items) includes 1) Signage and Wayfinding 2) Alarm systems 3) Scoreboard or video screen and 4) Competition schedule and Daily programs.

Amenities (11 items) includes 1) Accessible toilets 2) Changing room 3) Showers and bathrooms 4) Medical services 5) Retail outlets, Food & Beverage outlets and other commercial areas 6) Conference facilities 7) ATMs 8) Dustbin 9) Drinking water service 10) Surfaces, Paving and Finishes and 11) Furniture.

4) Stage of Leaving

Another concern which sports facilities have to plan is how to accommodate the people to leave the facility. The leaving stage of sports facilities can be divided into two modes: emergency evacuation and normal egress (Disability Sport NI, 2016).

First, the emergency evacuation of all spectators including people with disabilities (who may have a broad range of need and abilities) is essential to a successful stadium design and facility management. Accessible exit routes and egress design include features, such as fire signage and lighting, refuges (safe areas), horizontal and vertical means of escape, circulation routes, final points of exit, fire assembly points etc. Thus, safety procedures should be sufficient to avoid confusion between disabled people and non-disabled people.

Second, normal egress (means of leaving facilities) may simply be the reverse of the arrival route. Getting off sports facilities can affect the individual's experience (e.g., spectator) of attending sporting events.

In common with most major sports events and sports facilities, organizational policies and procedures related to the athletic competition venue, the training venue, the social area, the athlete, media, hotels, and the transport service were included in the incident and emergency plan. The details concerned in this stage are as follows:

Leaving (6 items) includes 1) Exit routes 2) Refuges area 3) Handrails 4) Exit arrows 5) Ramps and 6) Fire exit.

In sum, a total of forty-four accessibility items adapted from the guidelines were used to determine the construct of accessibility of this study since no one has formed the measurements of sports facilities' accessibility (SFA) in the aspect of people with physical disabilities before. Hence, the SFA questionnaire is newly developed.

2.2.5 Accessibility construct

Based on the accessibility literature, most studies capture accessibility in one stage – accessibility within the destination (Bodaghi & Zainab, 2012; Isa et al., 2016; Pratiwi et al., 2015; Rimmer et al., 2016; Sáa et al., 2012; Talib et al., 2016; Tutuncu, 2017). Our study argues that accessibility should be explored as a whole journey (multiple stages) starting from their home until leaving the sports facilities (Sport England, 2010). This is because the experience for disabled people attending a sporting event is not just about their seat. It starts as soon as they plan the trip. It also includes their journey to and from the gate to their seat when arriving to the ground, getting around the venue, experiencing the sporting event itself, and accessing toilets (DWP, 2015).

Research to date has pointed out that the studies exploring the accessibility of a whole stage journey have been found in two different contexts (i.e., national park and sports event). Chikuta, Plessis, &Saayman (2018) explored the expectations of people with disabilities when they visited national parks. A developed questionnaire covered the whole area of national park (e.g., transportation, water-based activities, trails/paths/walkways, restaurants, and bedrooms). It was then analyzed using exploratory factor analysis (EFA) which later identified three accessibility dimensions: accessing the national park, activities, and amenities. In the context of major-sport event, Dickson et al. (2016) came up with the service blueprint to examine the service dimensions of people with access needs in the FIFA Women World Cup Canada 2015. The service blueprint was developed based on access audit guideline – similar to a checklist – to highlight the different stages of access of

visitor's journey including the stage of planning, travel, arrival, event experience and return of the journey.

Although these two studies seem to fulfill the gap and broaden the accessibility literature since the former ones solely focused on an individual unit (accessibility within the destination), some limitations were found in these two studies. As for Chikuta et al.'s study (2018), the accessibility was explored in the context of national parks which is different from our sports facilities context. Moreover, the accessibility was evaluated by the important level, not the accessibility level. As for Dickson et al.'s study (2016), accessibility dimensions were limited only in Fan Zone. Besides, participants were not the ones who assess their accessibility because an observation, photos, and a checklist were chosen instead. Lastly, even though the service blueprint was developed based on an access audit guideline, the correlations, validity, and reliability of the items were not proved and tested by the statistical method.

Services are complex and often personalized (Ostrom et al., 2010). Thus, it is essential to enhance service design, to address the management for superior service experience and co-creation between the service provider and the customer(s) (Dickson et al., 2016). Due to the limitations of previous literature, it is necessary to explore the construct of accessibility specifically in the sports facilities context. This study is possibly one of the first studies which explore the various stages of accessibility in aspect of actual users (i.e., athletes). The various items of accessibility are adopted based on the following guidelines: DWP (2015), Disability Sport NI (2016), Interior Ministerial Regulation B.E. 2548 (2005), International Paralympic Committee (2013), Social Development and Human Security Ministerial Regulation B.E. 2555 (2012), Sports England (2010), the Americans with Disabilities Act, and UEFA (2011). Forty-four items are selected in total. The different stages of accessibility are constructed using Factor Analysis.

Factor analysis provides the tools for analyzing the structure of the interrelationships (correlations) among a large number of variables by defining sets of variables that are highly interrelated, known as factors (Hair, Black, Babin, & Anderson, 2014). Both Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) are combined. These tools can help when the researcher may have a

general idea or some expectations about how many factors might emerge, but the theory and/or prior data supporting these expectations might not be sufficiently developed. In this case, Factor analysis can specify the exact number of factors and make predictions on how each measured variable is influenced by the factors. This method can help to more fully develop the researcher's hypotheses (Fabrigar & Wegener, 2012).

In sum, factor analysis is suitable to construct the accessibility factors which lead to forming hypotheses in this study. Additionally, it leads to forming a new questionnaire/measurement of sports facilities' accessibility.

2.3 Satisfaction Principles

2.3.1 Satisfaction definition

Satisfaction is widely used and considered as a behavioral indicator. The reason is that satisfaction has been a primary determinant of long-term customer behavior and has been an identifier of a significant measure of future customers' actions (Jin et al., 2015). The first study on the origin of customer satisfaction was conducted by Cardozo (1965). The definition of satisfaction has been defined by many scholars during the past few decades. Satisfaction is defined as results when customers experience a service encounter and it compares favorably with their expectations (Oliver, 1980). Anderson et al. (1994) defined satisfaction as an overall evaluation based on the total purchase and consumption experience with a good or service over time. Similarly, Tse&Wilton (1988) and Oliver (1999) described that satisfaction is an evaluation of the perceived discrepancy between prior expectations and the actual performance of the product. Recently, the word satisfaction is defined as a personal, subjective evaluation of care (Hsu, 2018).

It can be concluded that the core meaning of satisfaction is similar since customer expectation and consumption experience are included as the main concept. This study defines satisfaction in the context of sports events as "an overall evaluation of expectation based on the individual's consumption experience regarding sports facilities' accessibility" (Anderson et al., 1994).

2.3.2 Importance of Satisfaction

Hospitality industries cannot survive without satisfied customers (Tutuncu, 2017). Customers' satisfactory consumption experiences can increase individuals' willingness to engage in favorable service/product (Oliver, 1997). For this reason, service managers are always attempting to satisfy a customer to get customer recommendations, developing customer revisit intention, and achieving a profitable enterprise (Drummond & Anderson, 2011). Petruzellis, D'Uggento, &Romanazzi (2006) explained that customers are satisfied when a service fits their expectations, very satisfied when the service exceeds their expectations, and completely satisfied when they receive more than they originally expected. Therefore, customer satisfaction is a tool that can be used to measure customer feelings and understand customer needs and expectations.

2.3.3 Concepts of satisfaction

Customer satisfaction can be determined with the use of two basic concepts: transaction-based satisfaction and cumulative satisfaction. Transaction based satisfaction is based on the evaluation of a specific purchase once the selection has been made and the product has been purchased. On the other hand, cumulative satisfaction is based on the overall experience after the purchase and use of the product/service over a certain period of time (Anderson et al., 1994). With respect to the definitions above, the latter is more suitable for this study because this research focuses on athlete satisfaction of the whole journey experience in the sports context. Various studies have suggested that customer satisfaction can be used as a measure to assess and evaluate the performance of services (Noe & Uysal, 1997; Ross & Iso-Ahola, 1991).

2.3.4 The Relationship between sport facilities' accessibility and satisfaction

Theoretically, the quality of services is regarded as one of the central factors to influence customer satisfaction (Lepkova, 2012). The influence of sports facilities' accessibility on satisfaction has been clarified by prior studies in various contexts. As mentioned earlier, the exact construct of sports facilities' accessibility is identified after analyzing exploratory factor analysis (EFA). Thereby, the sequence of the literature review is based on eight initial dimensions of accessibility, including Planning, Traveling & External Area, Entering, Internal Area, Seating, Communication, Amenities, and Leaving, (before EFA).

1) Stage of Planning

The particular informational needs and requirements of disabled people are identified in the tourism study Buhalis&Michopoulou (2011). In their study, objective and reliable information was found to be very important for the disabled in order to make a decision whether to go traveling or not. The technology was cited as it can be the enabler of destinations and tourism suppliers to support the information needs of the disabled/aging travelers. This was because the internet provides great opportunity to expand the detail provided with figures, photographs, maps, street views, videos and user generated content. Variety of sites including suppliers' official sites, information provided by disability organizations and blogs was used for searching information about accessibility before traveling.

However, disabled participants describe that although they are encouraged by the increasing availability of information, they are still frustrated with the fragmentation and unreliability of this information. Combining different accessible travel sources is necessary for cross referencing information (Israeli, 2002). Participants with disabilities emphasized the need for information provision of their 'door-to-door' experience. Accessibility information connecting the origin, the transit area and the destination should be provided, creating a door-to-door access map. Some participants also claim that "Sometimes it is not the accessibility of the facility or the destination that makes the trip difficult. It is until you get there. Even if one small part of the path is inaccessible a disabled person can suffer a considerable inconvenience, confidence loss, humiliation or even return back from the trip (Buhalis & Michopoulou, 2011).

Similarly, the result of Germany's Federal Ministry of Economics and Technology's study found that 70.6% of travelers with mobility limitations agreed that the organization of the trip (preparation, information, and booking) was very imperative. Access to information currently plays a major role in tourism industries and it could lead to the user satisfaction or dissatisfaction (World Tourism Organization (UNWTO), 2016). UNWTO (2016) also indicated that user dissatisfaction with planning travel was as high as dissatisfaction with other elements in the tourism services chain.

These concerns are consistent with the report of the Office for Disability Issues (ODI) and the Department for Culture, Media and Sport (DCMS). It was described that, before disabled spectators can make a decision whether they can go to a sporting event,

they need to know whether the stadium can cater for their requirements. A key concern when planning any trip is to know whether the ground is accessible. Some respondents explained that they had to telephone the club before they bought tickets to find out about parking, the distance between parking and the venue, and whether they would have to wait around at the end before being allowed to go back to their transport. This was a specific problem when attending the facilities they were not familiar with. A lack of quality information - about the facilities and having to contact grounds in advance to check, made planning more difficult (DWP, 2015).

Based on these evidences, destinations should be able to provide detailed, accurate and comprehensive information to empower individuals to make their own decisions for trade-off between facilities, location, or prices according to their ability and preference.

2) Stage of Traveling

The traveling stage of accessibility was found to be related with satisfaction. Melian, Prats, &Coromina (2016) reported the similar results that the perceived accessibility in multiple sectors, such as accommodation, transport, destination, hospitality services, religious sites and religious activities, positively influenced overall satisfaction of the disabled when they visited a religious destination in both disabled and non-disabled models. Moreover, it became clear that satisfaction positively influenced more loyalty among disabled people than among non-disable people. Another study done by DWP (2015) explained that spectators with disabilities would like to attend sporting events like football, rugby, cricket, tennis, athletics, swimming, and basketball. Some of them attended a sporting event if they wanted to; however, many of them were not able to attend any sporting event in the last two years due to several barriers they faced which prevented them. Those major problems were the difficulty traveling to and from venues, the distance from the drop off point, difficulty traveling to and from using public transport, inaccessible stations and transportation itself. This made them feel anxious, uncomfortable or worried about attending an event. The study focusing on the elderly also proved the link between perceived accessibility and travel satisfaction. It was clarified that perceived accessibility (evaluated by ease of travel, possibilities to travel, and access to

preferred activities) is significant to satisfaction with travel (Lättman, Olsson, Friman, & Fujii, 2019). Besides, Wakefield et al. (1996) investigated the relationship between the physical environment of the sports stadium and pleasure of spectators (Non-disabled people) by using the sportscape model. Stadium accessibility (refers to parking) is one of physical environment factors. The results indicated the relationship between stadium accessibility and pleasure in football sample. They described that the availability, proximity, and entry to stadium parking may enhance or detract from the spectators' pleasure. Most spectators do not want to have to spend excessive time searching for parking spaces or walking long distances from their cars to the stadium. A well-designed parking area will provide easy entrances and exits.

3) Stage of On-site using (which is divided into five stages)

Previous studies have investigated the relationship between facilities accessibility and satisfaction. One of those studies is Lee (2003) who studied the impact of leisure-sport facility design on spectator satisfaction at horse, dog, and motorsport racing facilities from a spectator's aspect. Layout accessibility was included as a part of facility factors and it was defined as the ease to access food service, seating, restrooms, and overall area. The results showed that the facility, including layout accessibility, had a positive effect on spectator satisfaction through perceived quality. Moreover, increased visitor satisfaction positively affected repatronage behavior and spectators' desire to remain in the facilities.

This is in alignment with Tutuncu (2017) who examined the effects of accessibility on the hotel satisfaction of People with physical disabilities (PwPD). With regard to the accessibility measurement, a survey for accessibility of hotels (SAH) was developed according to determined guidelines and standards. The developed survey contains five accessibility dimensions: accessibility of public areas (e.g., lobby, ramps, entrance, corridors, rest areas, reception, directional signage, and restrooms doors), rooms (e.g., alarms, tables in rooms, doors, and door handles), recreation and other areas (e.g., swimming pools, stairs, recreational areas, and balcony), baths in rooms (e.g., toilets and bathroom areas), and food and beverage areas (e.g., restaurants and bars). It was found that the accessibility of hotels was directly related to hotel satisfaction of PwPD.

On the contrary, difficulties in accessing the venue possibly lead to dissatisfaction as the services provided do not meet their needs. The overall experience of PwD in the UK regarding facilities around and inside the sport venue could be a great example. With regard to the concourse, many of them gave expression to unavailable lifts for ambulant disabled people, slippery floors, small ramps and poor level of circulation around the concourse and stadium. Concerning seating, many barriers were raised as follows; a lack of wheelchair user places, poor sight lines when watching or viewing the sporting event, and the lack of seating in the bars and refreshment areas. In the case of toilet facilities, problems raised included not having enough disabled toilets, poor cleanliness, restricting the use of disabled toilets and a lack of washing facilities (DWP, 2015).

4) Stage of Leaving

As for and Amenity and Leaving, the leaving stage of accessibility were found to have an impact on satisfaction. (Tutuncu, 2017) also found that the variables of conference rooms, tables, ramps, directional signage, surfaces and walkways, and exits had an effect on hotel satisfaction of PwPD. The result of another study focusing on the railway context also supported this explanation. This is in consonance with Fetchko, Roy, &Clow (2013) who indicated that parking lot, foodservice areas, and especially entrance/exit layouts play an important role in providing the experience of attending a sporting event which later created customer satisfaction. In addition, Givoni&Rietveld (2007) analyzed the effect of passengers' perception of the station and of the journey to the station on the overall perception of traveling by rail. The results showed that the egress journeys (leaving), or more the connection between them and the train, had a clear influence on the overall satisfaction from using the railway.

To summarize, accessibility factor has been clearly proved by previous studies to have an effect on satisfaction. However, those studies were examined in different contexts such as hotel, tourism, rail station, and sports facilities in non-disabled people aspect. It is still unknown whether there is a relationship between all sports facilities' accessibility and satisfaction since this relationship has not been discovered before in the context of disability sports events. Hence, it can be proposed:

H1: Sports facilities' accessibility positively and significantly influences satisfaction.

2.4 Behavioral intentions

Behavioral intentions could be described as “when customers praise the firm, express preference for the company over others, increase the volume of their purchases, or agreeably pay a price premium, they are indicating behaviorally that they are bonding with the company” (ZeithamI, Berry, & Parasuraman, 1996). Oliver (2010) explained behavioral intentions as an assertion of the likelihood of initiating a certain action. Since actual behavior is not easy to measure, behavioral intentions have often been used as a representative variable for predicting actual consumer behavior (Kim et al., 2018). Based on previous studies, behavioral intentions are often interchangeably used by the term of loyalty, and both of them include revisit intention and word-of-mouth intention as the key factors (Han, 2013; Kim, 2018; Meng & Han, 2018).

Furthermore, behavioral intentions can be described as a simple and convenient measure which can reflect future intention of customers (Oliver, 2010). This description can be a probable reason to explain why it has been widely used in research. In general, behavioral intentions comprise: 1) saying positive words, 2) recommending to other customers, 3) remaining loyal (repurchase/revisiting), 4) spending more, and 5) paying price premiums (Zeithaml et al., 2017). Among these factors, the most usual factors of behavioral intentions are an intention to revisit (RI) and intention to spread word-of-mouth (WOM) (Hutchinson et al., 2009; Kim et al., 2018; Qu, Kim, & Im, 2011). Due to their impact on customer purchase decision, new customers’ attention, and customers' repurchase probability, WOM and RI are nowadays regarded as an important trend in service literature (Richins & Root-Shaffer, 1988; Schiffman & Lazar, 2004; Zeithaml et al., 2017).

Most studies measure behavioral intention as a single construct (either word-of-mouth intention or revisit intention) (Ashton, 2018; Basri, Ahmad, Anuar, & Ismail, 2016; Graciola, Toni, Lima, & Milan, 2018; Han & Ryu, 2012; Hsu, 2018; Jahn, Cornwell, Drengnerc, & Gaus, 2018; F. Li, Wen, & Ying, 2018; Muzamil et al., 2018; Perovic et al., 2018; Rahman, Mohamad, Abdel-Fattah, & Aziz, 2014; Varga, Dlačić, & Vujičić, 2014; Yen & Tang, 2018) rather than a multi-dimensional construct. This study argues that the insight gained for revenue management is much richer if studies measured behavioral intention more extensively (WOM and RI). This is consistent with Chi & Qu (2008) as they explained that behavioral intentions are a

multi-dimensional construct, and it cannot be completely measured using the only construct of intention to recommend.

In order to investigate behavioral intentions, both word-of-mouth intention (WOM) and re-participation intention (RI) are incorporated as a crucial factor for this study. Additionally, investigating both variables together has been found in previous studies (Choudhury, 2014; Kim, 2018; Kim et al., 2018; Maxham, 2001; Meng & Han, 2018; Ong et al., 2018; Sharma & Nayak, 2018).

2.5 Word-of-mouth intention (WOM)

2.5.1 Definitions of word-of-mouth

Various definitions of Word-of-mouth (WOM) have been described. WOM is defined as "oral, person-to-person communication between a perceived non-commercial communicator and a receiver concerning a brand, product, or a service offered for sale" (Arndt, 1967b; Herr, Kardes, & Kim, 1991; Muzamil et al., 2018). Similar definition was found by Westbrook (1987) who defines WOM as a form of "informal communication directed at other consumers about the ownership, usage or characteristics of particular goods and services and/or their sellers", which is different from communication initiated by merchants and advertisers. Hennig-Thurau, Gwinner, Walsh, &Gremler (2004) describe more in detail of WOM definition. WOM is defined as any comments (positive or negative) received or spread by the actual, former or potential customer about any product or service. Lastly, Casidy&Shin (2015) and Jeong&Jang (2011) defines WOM as the process in which people share their experiences and views about any particular product (brand) or service which influences the consumer's buying behavior.

While WOM has always played an important role in the formation of consumer opinions, over the past decade it has become an even more powerful force. Due to recent developments in electronic communication technology, WOM has taken on an electronic form which is called electronic word-of-mouth (eWOM). eWOM has an enhanced effect on businesses as it can reach a broader audience with limited geographic and time barriers. eWOM can be spread via abundant communication channels, for example, e-mails, blogs, forums, chat rooms, online reviews sites, digital-virtual worlds, online e-retailers, company´s own brand and product sites and websites (Blal & Sturman, 2014;

Chu & Kim, 2011; Fan & Miao, 2012; Gvili & Levy, 2016; Mishra & M, 2016). Moreover, eWOM has become more admired with better use of online social network tools, such as Facebook and Twitter (Ho & Dempsey, 2010).

Some definitions of eWOM have been clearly defined. For example, Litvin, Goldsmith & Pan (2008) defines eWOM as all informal communications directed at consumers through Internet-based technology related to the usage or characteristics of particular goods and services. Steffes&Burgee (2009) and Abrantes, Seabra, Lages, &Jayawardhena (2013) defines eWOM as communicating and receiving information as well as advice on products and services within media outlets whereby communicator and recipient is separated in space and time.

For this study, traditional WOM is applied instead of eWOM and the explanations are described in the following section. Word-of-mouth is defined in this study as "a form of informal communication of people who share their experience and opinion about any specific product or service (this study refers to sports facilities' accessibility) after their consumption without commercial purpose"

2.5.2 The differences between WOM and eWOM

In marketing and management areas, WOM and eWOM have been chosen to be the main factors in various studies. Due to a slightly different meaning of these two factors, their characteristics should be clearly explained.

Firstly, eWOM is internet based while traditional WOM is non-internet based (Qvist, 2009). The traditional WOM cannot be able to create similar exponential growth while eWOM can provide a platform to accelerate in news groups chat rooms etc. via internet. Similarly, Cheung&Thadani (2012) stated that the main difference between traditional WOM and eWOM is the medium being used and the fact that WOM is local, but eWOM can be global. The eWOM provides the possibility to obtain information from all over the world from the people who have relevant experience with the product or service. Secondly, eWOM is not affected by the background of the participant, instead of spoken it is written. Lastly, eWOM is visible for larger audiences and longer time compared to traditional WOM, and it can be anonymous (Datta, Chowdhury, & Chakraborty, 2005).

However, some light must be shed on about the disadvantages of eWOM. eWOM is often perceived as less credible and influenced by a number of factors from on-line communication (Ye, Law, & Gu, 2009). As with traditional WOM messages, an information receiver establishes a sender's credibility by inferring the sender's reputation, experiences, and knowledge, as well as establishing how much the sender can be trusted in a given situation. In the case of eWOM messages, the receiver may not trust the sender's reliability and may need to estimate it within the message and its environment. Specifically, when the eWOM message was viewed on a website that sells the products, the positive source credibility effect might be diminished (Sen, 2008). This is consistent with the results of Brown, Broderick & Lee's study (2017) which showed that online communities or review websites could generate some kind of "authority", which would give any information on that site more weight. This website authoritativeness may influence eWOM differently compared to effects on traditional WOM (Brown et al., 2007). Finally, traditional view suggests that face-to-face WOM plays a major role in consumer buying decisions by influencing consumer choice (Arndt, 1967a).

To summarize, both WOM and eWOM have their own unique characteristics. eWOM seems to be more modern, but eWOM probably has some disadvantages about credibility. Due to some discrepancies, Ishida, Slevitch, &Siamionava (2016) compared the influence of WOM and eWOM. It was found that WOM has greater influence on visitors compared to eWOM in the decision-making stage. Thus, traditional WOM is based in this study and these two words can use interchangeably in the literature as their core meaning is the same.

2.5.3 Importance of word-of-mouth intention

Word-of-mouth (WOM) is an effective communication tool of modern marketing. WOM is regarded of one of the most powerful forces in the marketplace as it has been found to be very important in consumers' purchase decision making (Dobele & Ward, 2003; Silverman, 2011). The effectiveness of WOM has been reported by previous literature. The study by McKinsey showed that 20-50% of consumers consider WOM as a basic factor to decide for any products or services (Bughin, Doogan, & Vetvik, 2010). Besides, Arndt (1967c) and Sundaram, Mitra, &Webster (1998) explain that positive WOM can reduce the promotional expenditure as it can create favorable image of the company and its brands.

Dichter (1966) noted early on, advertising “can never replace the influence and the value of a personal recommendation”. Marketers are particularly interested in better understanding WOM because traditional forms of communication appear to be losing effectiveness (Nail, 2005). Since consumers are flooded with lots of information and persuasions in this new era, WOM works very seriously to motivate and provide learning about the products or services (Hossain et al., 2015). WOM, therefore, has been a frequent topic in the marketing literature for many years (Garnefeld, Helm, & Eggert, 2011). Indeed, there have been evidences showing that WOM seem to be more effective in influencing customers’ behavior than other marketing forms.

First, Trusov et al. (2009) measured the effects of WOM communications and compared WOM with other forms of traditional marketing (event marketing and media appearances). It was found that WOM referrals have a stronger impact on new customer acquisition than traditional marketing forms. Secondly, Katz&Lazarsfeld (1955) compared WOM with other traditional marketing forms. The similar results were found that WOM was two times more effective than radio advertisements, four times more than personal selling, and seven times more than print advertisements. Third, Hossain et al. (2015) evaluated the effectiveness of WOM and traditional advertising in medical service facilities. Traditional advertising included TV, newspaper, online site, and billboard while WOM included friends, colleagues, and relatives. Findings showed that people rely on WOM rather than traditional advertising and WOM provides more accurate information regarding medical facilities than traditional advertising. Finally, 328 marketers who have knowledge of the company’s marketing strategy in the USA were asked to respond a marketing survey. The result showed that WOM marketing is more effective than traditional marketing (Word of Mouth Marketing Association: WOMMA & American Marketing Association: AMA, 2014).

To sum up, WOM is clearly seen to create a great impact on consumer behaviour (Keller & Libai, 2009). Attention is drawn to the fact that there is no up-to-date study on the conduct of WOM in the context of sports facilities’ accessibility. Therefore, WOM is selected in the study as the main factor due to its unique and effectiveness among other forms of advertising.

2.5.4 Antecedents of word-of-mouth intention

Despite the fact that WOM intention has long been recognized to have an absolutely influence in the marketplace as explained above, WOM intention has just attracted remarkable attention in the marketing research in the last few decades (Neumann, 2015). The review of WOM literature has been categorized into two lines of research: the antecedents of WOM (refers to the reasons or factors to give WOM) and the consequences of WOM (in terms of the influence of WOM on consumers) (Cantallops & Salvi, 2014; Neumann, 2015). Generally, most literature focuses heavily on the consequences of WOM, while there is little research which focuses on the antecedents of WOM. To fulfill this gap, uncovering various antecedents of WOM literature is needed in order to develop WOM strategies (King, Racherla, & Bush, 2014).

In hospitality industry, the influence of WOM is particularly strong because the quality of services is often unidentified prior to consumption. For this reason, a lot of people seek out recommendation from other people before purchasing something (Attia et al., 2012). As Naz (2014) stated that, humans have constantly communicated with each other, sharing and talking about everything, everywhere any time. Therefore, people can easily explain their last experience about the product, and the distinction of the service. Various studies confirmed that WOM has an impact on customer purchase decision (Baur & Nyström, 2017; Eguchi, 2016; Elseidi & El-Baz, 2016; Herold, 2015; Khalid, Ahmed, & Ahmad, 2013; Li, Xue, Yang, & Li, 2016).

Due to its impact on customer purchase decision and its impact on the attention of new customers, business organizations are particularly interested in WOM (Richins & Root-Shaffer, 1988). This can explain why WOM becomes one of the strongest tools of communication (Allsop, Bassett, & Hoskins, 2007).

WOM direction, positive or negative, is one of the critical antecedents of WOM effects (Ishida et al., 2016). Negative WOM communication may ruin the business, on other hand, positive WOM communication may take the business to be a leader in its market segment (Muzamil et al., 2018). Positive WOM can reduce the promotional expenditure since it creates favorable image of the company and its

brands (Sundaram et al., 1998). According to Li & Yuan (2005), using a customer (patients) relationship network in WOM marketing is essential for gaining an advantageous position in a competitive hospital market. They recommended that hospitals should effectively use a customer relationship network to generate positive effects.

Therefore, realizing about antecedents of WOM (the factors behind spreading of WOM) is particularly important because it may increase customers' willingness to purchase and reduce the risk of purchasing (Dichter, 1966). Moreover, understanding these factors is helpful for service providers so that they can work on the factors in a way which is liked by customers leading towards positive WOM and resulting in more customers (Muzamil et al., 2018).

In fact, exploring the antecedents of WOM has been distributed in different areas, such as tourism, restaurants, bank, hotel, and hospital. Almost all of them belong to many types of services in hospitality industry, but it is still lacking in the context of sports. Especially, no individuals or groups devoted to finding out which factors of sports facilities' accessibility are more influential to spread WOM. Therefore, it would be helpful and useful for sports managers and owners to understand more in depth about antecedents of WOM in order to attract new participants and improve sports facilities' accessibility according to participants' perception.

2.5.5 The relationship between satisfaction & word-of-mouth intention

With regard to WOM literature, there are many factors driving customers to engage in WOM (antecedents of WOM), such as satisfaction, commitment, loyalty, trust, involvement, and incentives; however, satisfaction has received the most attention in WOM literature (Neumann, 2015). Satisfaction of customers with products and services is considered as one of the most important factors leading toward competitiveness and success (Hennig-Thurau & Klee, 1997). Several researchers have examined the link between satisfaction and WOM intention.

For example, in the context of sports events, a visitor who was satisfied with the destination were more likely to spread positive WOM (Yürük et al., 2017). Similarly, it was reported that satisfaction of golf travelers with their visit had an

effect on WOM intention (Hutchinson et al., 2009). As for service studies, a self-reported questionnaire from various types of service firms had been completed from customers. It was found that satisfaction was positively related to WOM communication (Hennig-Thurau et al., 2002). In the context of movies, post-consumption behavior of moviegoers showed that satisfaction had significant effects on the likelihood of WOM (I will talk to other people about this film) and positive WOM communications (I will recommend this film to other people) (Ladhari, 2007). The study of airline businesses revealed that passengers' satisfaction with service quality, including tangible factors i.e., the newness of the plane, seats, and air conditioning, was highly correlated with a positive WOM and revisit intention (Saha & Theingi, 2009). Lastly, the results of hospital study showed that satisfaction of patients with hospital experience (such as facilities, service personnel) was found to have an influence on WOM (Hsu, 2018).

Prior studies have demonstrated that there is a relationship between satisfaction and WOM intention. Hence, it can be proposed:

H2: Satisfaction positively and significantly influences word-of-mouth intention.

2.6 Re-participation intention (RI)

2.6.1 Definitions of re-participation intention

In the context of sports events, re-participation intention refers to the intention of sport event participants (e.g., volunteers and athletes) to repeat participation in future sporting events (Lee, Kim, & Koo, 2016). Prior literature shows that re-participation intention can be called differently, such as revisit, repatronage, and repurchase intention depending on each context (e.g., retail stores, brands, tourism, facilities, and events). However, the core meaning of these words is the same. For example, Revisit intention refers to the likelihood of a visitor repeating an activity or revisiting a destination (Baker & Crompton, 2000). Repatronage intention is described in the retail store context as the emotional attachment of the customer, which reveal in customer devotion to continue visiting the particular retail store (Donovan & Rossiter, 1982). Repatronage reflects the likelihood that a customer will shop at particular retail store again and again (Oliver, 1997). Yang&Chang (2011) defines repatronage as consumers' desire to make repeat purchase. Similarly, repurchase intention is defined

as ‘the individual’s judgment about buying a designated service from the same company again, taking into account his or her current situation and likely circumstance’s (Hellier, Geursen, Carr, & Rickard, 2003). Repurchase intention is described as the consumer's possibility to buy again the same product/service they already bought and used (Jones & Suh, 2000).

It can be said that these words can be used interchangeably. In this study, the word “Re-participation intention (RI)” is selected since this word is properly used in the sports events context. This study defines re-participation intention as the participant’s desire to repeat an activity or participate in future sports events (Baker & Crompton, 2000; Lee et al., 2016).

2.6.2 Importance of re-participation intention

Many firms/organizations are more successful because of developing and creating loyal customers (Reichheld, 2001). Customer loyalty can be explored through repurchase/revisit/re-participation intention (Jones & Taylor, 2007). Re-participation intention is a very important consideration for marketers. It can be said that the cost of retaining an existing customer is less expensive than catching for a new customer (Spreng et al., 1995). RI can be interpreted as the probability that the consumers will plan or be willing to patronize a particular service in the future. When there is an increase in RI, it will contribute to an increase in the customers purchasing probability (Schiffman & Lazar, 2004). Therefore, revisit/reparticipation intention is likely to be an essential indicator to predict consumer behavior as a subjective attachment to the product/service.

2.6.3 Antecedents of re-participation intention

Re-participation intention has been a key research topic in marketing literature because it can help service providers in marketing plan (Li et al., 2018). For example, in the tourism context, the knowledge of tourist behavior can help in planning, marketing, and service and product development which can increase tourist numbers to a destination (Vuuren & Slabbert, 2011). Many tourism studies have focused on the antecedents of revisit intention in order to understand how tourists would like to revisit the same destination (Meleddu, Paci, & Pulina, 2015). Um, Chon, &Ro (2006)

explored factors affecting revisit intentions of tourists in Hongkong. The findings provided an understanding of how to retain tourists as repeaters by providing diverse opportunities to experience Hong Kong in many different ways. In festival study, Kim, Duncan, &Chung (2015) explored what factors affect tourists' revisit intention (antecedents of revisit intention). It was found that perceived value, satisfaction, and involvement were factors affecting tourists' intention to revisit festivals. In terms of sports management, the relationship between physical environment of the sports stadium and repatronage (revisit) of spectators was discovered (Wakefield et al., 1996). One of the most significant results showed that comfortable seats are likely to frustrate spectators, who will then be less likely to want to stay at the game and less likely to return to future games. This study provides the guide to stadium owners and managers in the effective management of the facility for spectators. Moreover, a restaurant study done by Han, Back, &Barrett (2009) revealed that emotion was the most important factor influencing restaurant customers' revisit intention.

Based on these benefits of RI, it is essential to consider re-participation intention as a key factor of this study. This is because the study investigating re-participation intention in terms of sports facilities' accessibility is still limited. Considering re-participation intention factor can help sports industry to determine accessibility for improving sports facilities.

2.6.4 The relationship between satisfaction and re-participation intention

Previous literature proved that re-participation intention could be affected by customer satisfaction (Kitapci, Adkogan, & Dortyol, 2014; Rust & Zahorik, 1993). Both factors are recognized as an important concept in service industries to achieve the firms' market share and increase its revenue, as well as, bringing down the cost of getting and holding back customers (Oliver, 1997; Rahman et al., 2014). For this reason, service managers are always attempting to satisfy a customer to get customer recommendations and customer revisit intention (Drummond & Anderson, 2011). Chi & Qu (2008) noted that companies use customer satisfaction data to determine service/product quality and to increase customer retention. A customer who is satisfied with the service providers will be likely to make a repeat purchase (Wang & Wu, 2012).

The relationship between satisfaction and revisit intention has been extensively explored in various contexts. However, the relationship between both factors has not been uncovered in terms of sports facilities' accessibility before particularly for PwD. Thus, applying literature about facilities, physical environments, and customer experiences from other contexts is necessary for this study.

In the sporting event context, Kaplanidou&Gibson (2010) investigated whether the satisfaction of sport tourists (athletes) would predict intentions to participate in the sporting events again. It appeared that satisfaction with the event, including sports facilities, was particularly powerful in predicting that an athlete would take part in future events again.

In the tourism context, satisfaction of Chinese tourists when traveling to Jeju Island was found to have a significant positive effect on revisit intention (Moon & Han, 2018). In their study, accessibility was included as one attribute of destination attributes; however, the form and items of accessibility are different from our study as they captured accessibility of non-disabled people. Likewise, Kim et al. (2013) revealed that tourists' satisfaction has a direct positive effect on intention to revisit the destination. The similar result was seen in Jin et al.'s study (2015) as they discovered that satisfaction of water park customers had a positive effect on behavioral intention (revisit & WOM intentions).

In the shopping store context, customer satisfaction of hedonic shopping values (defined as acquiring the joy and excitement of shopping embedded with product and services) was found to influence their revisit intention in hypermarket retail stores (Atulkar & Kesari, 2017). An attractive store environment (e.g., physical aspects: store appearance and convenience of store layout) was appeared to lead to customer loyalty (Yuen & Chan, 2010). Additionally, Donovan&Rossiter (1982) proved that satisfaction of store environments (e.g., novelty, variety, and size) influenced customer revisit intentions.

In conclusion, previous studies have proved that there is a relationship between satisfaction and re-participation intention (Atulkar & Kesari, 2017; Jin et al., 2015; Kaplanidou & Gibson, 2010; Kim et al., 2013). Hence, it can be proposed:

H3: Satisfaction positively and significantly influences re-participation intention.

2.7 Motivation Principles

Theoretically, motivation is defined as "an internal factor that arouses, directs, and integrates a person's behavior" (Murray, 1964). The linkage between motivation and satisfaction was explained by Crompton&McKay (1997) who described that motivation occurs before the experience and satisfaction comes later. In other words, if needs are fulfilled, then satisfaction will result. In order to observe satisfaction, there should be knowledge of the motives which people are seeking to satisfy. Therefore, it makes little sense to study satisfaction alone without motivation in our study.

Not only sports facilities' accessibility may affect athletes' re-participation intention, but also sport motivation has been described to contribute to athletes' sports participation. Because motivation refers to the why of behavior (McClelland, 1985), the reasons for doing an activity are generally perceived as indicative of the person's motivation toward a given activity (Vallerand & Losier, 1999). This is consistent with Ajzen (1991) who explained that intention can capture the motivational factors that influence a behavior and indicate how much a person would attempt to perform the behavior. This implies that motivation is related to behavioral intention.

Previous literatures revealed that athletes may be motivated out of two main types of motivation: intrinsic motivation and extrinsic motivation (Vallerand & Losier, 1999). Intrinsic motivation is defined as behavior engaged in for itself and for the pleasure, satisfaction and sake (Deci, 1971). When intrinsically motivated a person is moved to act for the fun or challenge rather than because of external actuations, pressures, or rewards (Ryan & Deci, 2000). However, extrinsic motivation is defined as when individual performs the activity merely as a means to an end Weinberg&Jackson (1979). There may be different types of reasons for which athletes take part in sport. On the one hand, athletes may be intrinsically motivated to engage in sport activities in order to seek new sensations, attempt to master complex skills, or conquer challenges, improve their performance, have the pleasure and have fun. On the other hand, they may be extrinsically motivated to participate in sports in order to derive tangible benefits such as material (e.g., trophies, medals, money, and prizes) or social (e.g., prestige) rewards (Vallerand & Losier, 1999; Weinberg & Jackson, 1979).

Apart from two main types of motivation (intrinsic and extrinsic motivation), other factors motivating athletes to participate in sports activities/competitions have been reviewed. Some of the motivational factors motivating athletes includes pushing their limits, obtaining physical benefits, personal motive, self-esteem, and social aspects (Fotiadis & Vassiliadis, 2012; Ogles & Masters, 2003), personal challenge (Getz & McConnell, 2014), the experience and type of event (Getz & Andersson, 2010; Green & Chalip, 1998), developing their abilities, seeking competition, experiencing unique and/or famous places, developing identity (Higham & Hinch, 2009), opportunity to improve one's skills, desire to win (Robinson & Gammon, 2004), and escaping from the daily routine (Adler & Adler, 1999).

2.7.1 The relationship between motivation and re-participation intention

There have been limited literatures exploring the association between motivation and re-participation intention. However, some empirical studies, in the sports context, have been found to explain this relationship. Previously, Chang & Tsai (2016) demonstrated the relationship of the mutual effect between participant motivation, participant experience, tourism attractiveness, and participant revisit intentions in the context of sports tourism participation. Six outdoor activities, including surfing, sailing, river trekking, bungee jumping, canoeing, and mountain climbing were selected. It turned out that participant motivation, which was comprised of goal achievement, relaxation, skill learning, socializing with people with the same interests, and fitness maintenance, significantly influenced revisit intentions (refers to re-participation intention). Another sport study of Funk et al. (2007) confirmed that sports motivation, travel motives, and destination image were prominent motivation factors motivating participants to participate in a foreign sporting event again. In the study, sport motivation was comprised of two constructs, running involvement and strength of motivation. Travel motives included social interaction, escape, prestige, relaxation, cultural experience, knowledge exploration, and cultural learning inventory. Destination image was comprised of feelings toward the destination and beliefs about destination (Funk et al., 2007). Moreover, Chang (2008) pointed out that the windsurfers' motivation influenced their intention to participate; in other words, the greater motivation a windsurfer has, the greater his/her

intention to participate becomes. In terms of tourism, Thammadee (2015) found that travel motivation of foreign tourists (i.e. novelty, shopping, and relaxation) was the powerful factor driving tourists' revisit intention to Thailand. The similar findings were exposed by Huang&Hsu (2009) who examined the effects of mainland Chinese visitors' travel motivation and attitude on their intention of revisiting Hong Kong. The findings indicated that travel motivation (i.e. shopping) positively affected visitors' revisit intention, showing that mainland visitors who had strong motivation for shopping tended to have high intentions to revisit Hong Kong. Additionally, the other two motivational factors in their study, being novelty and relaxation, appeared to have an impact on revisit intention, but through the factor of attitude. Lin, Lin, &Zhao (2006) also found that various types of sightseeing activity (i.e. bicycle-riding and religious sightseeing) increases tourist motivation and participation intention, further leading to increased participation.

Focusing on motivation can lead to a better understanding of needs and decision processes of athletes, which is a necessity for effectively improving elements of an event (i.e. sports event). If those needs are not understood, then the event element might be presented in a suboptimal way. Since the elements may be designed to meet different needs, it is important to identify athletes' needs so a sporting event design can be tailored to meet them (Crompton & McKay, 1997). Thus, maintenance and enhancement of participant' motivations should be the primary priority of event managers (Iso-Ahola, 1980). If motives are identified, practical settings can be amended to facilitate fulfillment of them. Based on preceding motivation literature, investigating sport event motivation is required in this study since athletes' participation in sports events can be influenced by motivation factor. Therefore, it could be proposed:

H4: Motivation positively and significantly influences re-participation intention.

2.8 Mediating effect of satisfaction

2.8.1 Mediating effect of satisfaction on the relationship between sports facilities' accessibility and WOM intention

Previous WOM studies indicated that satisfaction can efficiently work as a mediator on the relationship between customer experience and WOM intention (Maeng & Park, 2015; Meng & Han, 2018; Saha & Theingi, 2009; Tanford & Jung, 2017). As

noted in the earlier section, relevant research studies in service industries (e.g. restaurants and tourism) focusing on customer experience and physical environment aspect are used to be based on, since the study of sports facilities' accessibility has been insufficient in WOM literature.

In the tourism context, Meng & Han (2018) explored the role of working-holiday tourism (WHT) attributes and satisfaction in generating WH travelers' behavioral intentions (revisiting and WOM). The results indicated that all WHT attributes (immersion of the destination, economy of the trip, experience of working, and self-fulfillment) positively and significantly influenced satisfaction with the destination, and satisfaction had a significant mediating impact in determining WOM and revisit intention. The result is consistent with Tanford & Jung's study (2017) as they indicated that when travelers were satisfied with their specific travel experiences, they were likely to spread positive WOM and participate in this kind of travel again.

With regard to airline literature, Maeng & Park (2015) identified the effect of the in-flight physical environment on perceived quality and customer loyalty. Their study deemed loyalty as the intention to revisit and the presence of positive word-of-mouth intention for acquaintances. It appeared that physical environment factors such as spatiality, amenity, aesthetics and entertainingness had a positive impact on positive WOM through satisfaction. The similar result was found by Saha & Theingi (2009) who discovered that the dimensions of service quality (tangible features, schedules, services of staff) had an indirect influence on those of behavioral intentions (WOM, revisit intention, and customers' feedback) through passenger satisfaction.

Based on the existing literature, WOM has not yet been uncovered in aspect of sports facilities' accessibility. Hence, examining the impact of accessibility factors in creation of WOM is imperative and reasonable to broaden the literature. It can be assumed that satisfaction is one of prominent factors in mediating the linkage between customer experience and WOM. Hence, it can be proposed:

H5: Satisfaction mediates the relationship between sports facilities' accessibility and word-of-mouth intention.

2.8.2 Mediating effect of satisfaction on the relationship between sports facilities' accessibility and re-participation intention

Accessibility issue has been increasingly focused in service literature since customer experience has become a significant part of service delivery for every member in society especially PwD who have access needs. Previously, most research studies investigated behavioral intentions (WOM amd RI) in the context of customer experience; however, few studies have put an emphasis on accessibility aspect, and none of those studies has focused on accessibility of disabled people. Thus, the current study fulfills this gap by exploring accessibility factor more deeply, and applying it into the literature.

Based on previous literature, satisfaction has been found to be a key mediating constructs in forming behavioral intentions (Kim, 2018; Lee, 2003; Meng & Han, 2018; Saha & Theingi, 2009; Sharma & Nayak, 2018; Tanford & Jung, 2017; Wakefield et al., 1996). Thereby, satisfaction may work as a mediator between customer experience/service encounter and re-participation intention. Mediating effect of satisfaction on the relationship between customer experiences (this study refers to sports facilities' accessibility) and re-participation intention has been widely discovered.

In line with sports and facilities aspect, a previous study by Wakefield et al. (1996) demonstrated that the pleasure with the physical environment (e.g., stadium accessibility, layout accessibility) in sports facilities was shown to strongly influence spectators desire to stay and revisit the stadium in the future. The result is also consistent with a study of Lee (2003) who examined the similar model. Bitner (1992) revealed that customers with positive experiences in a service facility were more likely to remain in the facility for longer periods of time, and exhibit revisit intentions. On the other hand, customers who initially visit a facility because of interest in the primary attraction may not revisit again if they were not satisfied with the physical surroundings.

In the tourism context, Perovic et al. (2018) proved that that both tangible (e.g., transport, accommodations, and signs) and intangible (e.g., politeness, communication, and security) elements affected tourist satisfaction which led to influence tourist revisit intention. This is consistent with Kim (2018) who discovered that tourism experiences and destination image had an effect on revisit intention directly and through tourist

satisfaction. Additionally, Sharma & Nayak (2018) found that tourists' emotions positively influenced satisfaction and that satisfaction positively influenced intention to revisit.

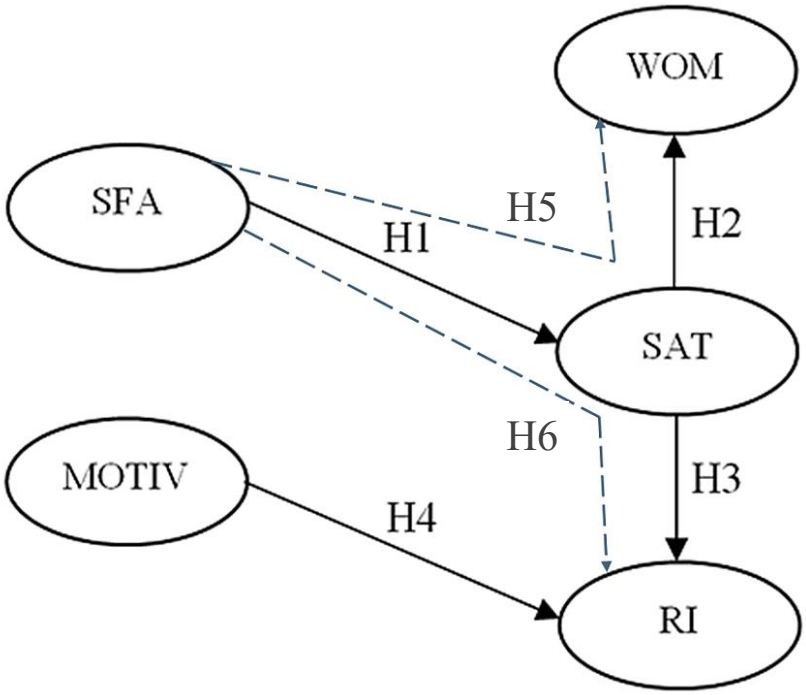
As for event study, Pope, Isely, &Agbetunsin (2017) indicated that quality of venue and other factors (i.e. overall experience performers and ticket prices) were found to have impact on the level of satisfaction and as a result, they intended to return to the comedy festival in the Midwest.

Similar results were found in the studies of restaurants and shopping stores. In examining the determinants of restaurant customers' loyalty intentions, Kim&Han (2008) indicated that satisfaction and trust had significant mediating effects in generating future intentions. The relationship between hedonic shopping values (refers to perceiving values of sensual and emotional satisfaction during shopping process) and revisit intention were found to be related through satisfaction (Atulkar & Kesari, 2017).

In sum, satisfaction has been clearly found to have a mediating effect on the relationship between customer experiences (sports facilities' accessibility) and re-participation intention. Hence, it can be proposed:

H6: Satisfaction mediates the relationship between sports facilities' accessibility and re-participation intention.

2.9 Conceptual Framework



Note: ——→ Direct effect hypotheses

– – – –→ Mediating effect hypotheses

Figure 3 Conceptual Framework

CHAPTER 3
METHODOLOGY

A quantitative research was applied in this study. This study consisted of four objectives: (1) to find out the dimension of sports facilities' accessibility and motivation, (2) to examine the effect of sports facilities' accessibility on word-of-mouth and re-participation intentions through satisfaction, (3) to explore the effect of motivation on re-participation intention, and (4) to evaluate accessibility within sports facilities using the compliance list of accessibility requirements.

Hypotheses were proposed and tested by statistical methods. The data are conducted in various disability sports events in Thailand. A self-administered questionnaire was newly developed to evaluate sports facilities' accessibility (SFA). Modified questionnaires from previously developed scales are used to measure motivation (MOTIV), satisfaction (SAT), word-of-mouth intention (WOM), and re-participation intention (RI). The compliance list of accessibility requirements is developed based on two relevant ministerial regulations of Thailand.

In this chapter, the methodological approaches were described including: 1) Population 2) Sampling technique and method 3) Research tools 4) Data collection 5) Data analysis.

3.1 Population

The population of the present study was athletes with physical disabilities. In this case, athletes who participated in determined disability sports events were selected. The researcher had contacted the Disabled Sports Association of Thailand, who is in charge of 21 physical disability sports (including para-table tennis, wheelchair basketball, wheelchair tennis, wheelchair fencing, wheelchair rugby, wheelchair racing, athletics, swimming, para-badminton, lawn bowls, para-bowling, weightlifting, chess, taekwondo, petanque, sepak takraw, shooting sports, para-archery, cycling, sitting volleyball, and rowing), and had contacted sports authority of Thailand to ask for a number of athletes with physical disabilities in Thailand. It was found that this kind of data had not been yet in the database. Therefore, the sample size was set based on the criteria of factor analysis.

3.2 Sampling Technique and Method

As described earlier, the exact number of athletes with physical disabilities is less possible to know. In this case, the criteria of factor analysis were applied. As a general rule of factor analysis, the ratio of 5 (sample):1 (variable) was acceptable (Hair et al, 2014). In total, sixty-seven variables (44 variables from sports facilities' accessibility; 3 variables from satisfaction; 3 variables from words-of mouth-intentions; 3 variables from re-participation intentions; 13 variables from motivation) were calculated. As a result, the sample size of this study was 330 samples. This number is acceptable in statistic method since exploratory factor analysis (EFA), confirmatory factor analysis (CFA), and structural equation model (SEM) require minimum sample size of 100 (Hair et al, 2014). This is common in disability research due to the fact that disabled people are the difficult-to-reach population (Chikuta et al., 2018). Moreover, the use of 210 questionnaires for exploratory factor analysis was found in a disability study of Chikuta et al. (2018).

Qualifications of participants were required. First, the participants were athletes with physical disabilities who were over 18 years old including men and women. Second, the participants were athletes with physical disabilities who participated in disability sports events. Lastly, the participants must be able to read, write and communicate clearly in Thai.

A non-probability sampling technique was necessary for this study. Four sampling techniques were applied. First, Purposive selection sampling technique was selected since the researcher specified athletes with physical disabilities as a sample. Then, Quota sampling technique was used. 330 samples of this study were divided by 22 (the number of disability sports event). As a result, 15 samples of each event were collected equally in each disability sports event. Next, Accidental sampling technique was applied. The samples were asked to complete the questionnaire at disability sports events. Finally, Snowball sampling technique was used when potential participants were hard to find. We would ask participants to recruit other samples.

3.3 Research Tools

The following section describes how the variables were measured by a questionnaire with validity and reliability. In order to validate the measurement tools, two procedures were required: (1) item development and (2) questionnaire administration.

3.3.1 Item development

1) The questionnaire

The notions of disabled people, sports facility and event management, accessibility, motivation, satisfaction, word-of-mouth intention, and re-participation intention, were reviewed through previous literature. To achieve the study objectives, a self-administered questionnaire (subjective measurement) was newly developed to evaluate sports facilities' accessibility. Various items of accessibility were adapted based on eight accessibility guidelines: DWP (2015), Disability Sport NI (2016), Interior Ministerial Regulation B.E. 2548 (2005), International Paralympic Committee (2013), Social Development and Human Security Ministerial Regulation B.E. 2555 (2012), Sports England (2010), the Americans with Disabilities Act, and UEFA (2011). In total, forty-four items were selected. Sports facilities' accessibility was rated ranging from completely accessible to completely inaccessible (Tutuncu, 2017). In addition, existing measurements were adopted. Satisfaction measurement was adopted from Chi & Gursoy (2009). Word-of-mouth intention measurement was adopted from Choudhury (2014). Re-participation intention was adopted from Kim (2018), and Moon & Han (2018). Motivation was adopted from Fotiadis et al. (2016) by including the suggestion from Sports Association for the Disabled of Thailand (2019). All adopted measurements were modified to the disability sports events context. The respondents completed items on a five-point Likert-type scale. Due to the differences in detail, each section is separately explained.

First section: The demographic characteristics of people with physical disabilities were asked. The type of questions was a checklist and/or explanation.

Second section: Sports facilities' accessibility comprising of statements were rated. The scores meanings were represented ranging from (5) 'completely accessible' (4) 'accessible' (3) 'partially accessible' (2) 'inaccessible' to (1) 'completely inaccessible'.

Third section: Satisfaction comprising of statements were rated. The scores meanings were represented ranging from (5) ‘strongly agree’ (4) ‘agree’ (3) ‘neither agree nor disagree’ (2) ‘disagree’ to (1) ‘strongly disagree’.

Fourth section: Re-participation intention comprising of statements were rated. The scores meanings were represented ranging from (5) ‘strongly agree’ (4) ‘agree’ (3) ‘neither agree nor disagree’ (2) ‘disagree’ to (1) ‘strongly disagree’.

Fifth section: Word-of-mouth intention comprising of statements were rated. The scores meanings were represented ranging from (5) ‘strongly agree’ (4) ‘agree’ (3) ‘neither agree nor disagree’ (2) ‘disagree’ to (1) ‘strongly disagree’.

Sixth Section: Motivation comprising of statements were rated. The scores meanings were represented ranging from (5) ‘strongly agree’ (4) ‘agree’ (3) ‘neither agree nor disagree’ (2) ‘disagree’ to (1) ‘strongly disagree’.

Seventh Section: The open-ended questions were asked for further comments and suggestions from participants.

2) The compliance list of accessibility requirements

The compliance list of accessibility requirements was created (objective measurement). Various items of accessibility were adopted based on two Thai regulations regarding persons with disabilities: 1) Interior Ministerial Regulation B.E. 2548 and 2) Social Development and Human Security Ministerial Regulation B.E. 2555. In total, 12 sections were included.

The items of the list were completed using observation method by the researcher. Each section comprises a set of accessibility items that should be observed to assure unrestricted access for people with physical disabilities. The procedures for assessing compliance with the criteria were as follows:

(1) Mark ‘N/A’ in the ‘Result box’, if that accessibility item did not exist.

(2) As for the item described with description, mark ‘X’ in the ‘Result box’, if that accessibility did not comply with the criteria.

(3) As for the item described with description, mark ‘√’ in the ‘Result box’, if that accessibility item complies with the criteria.

(4) As for the item described with numeric value, insert ‘Actual numeric value’ in the ‘Result box’.

3.3.2 Questionnaire administration

The second step of research tools development was to administer the questionnaire. In this study, respondents answered the questions in Thai language. The questionnaire was translated into Thai by professional bilingual translators, who were fluent in both English and Thai.

After generating a list of items in Thai, these items were assessed for content validity. The Thai questionnaire was vetted by five experts in the field of sports management. The purpose of assessing content validity was to further examine the definition of each construct. The list of sample items was reviewed by the five experts who indicated whether the item should be revised, retained or deleted and whether any new items should be added.

The results were consolidated and evaluated based on clarity of the comments as well as any overlaps in items being indicated for revision and deletion. The experts completed items on a scale ranging from (-1) 'disagree' (0) 'neither agree nor disagree' to (1) 'agree'. The results were calculated for the index of item objective congruence (IOC). The IOC formula is described as follows:

$$\text{IOC} = \frac{\sum R}{N}$$

IOC is the Index of Item-Objective Congruence. ∑R represents the summary of the specialist score. N represents the total number of the experts. If the IOC score ranges from 0.5 to 1.00, meaning that the item has good content validity. In contrast, if the IOC score is lower than 0.5, meaning that the items should be revised or deleted (Hair et al., 2014). After completing the IOC process, the IOC index score was computed. The IOC score result appeared at 0.89 which met the criteria.

The revised questionnaire was incorporated and transformed into the pilot instrument in order to measure the reliability (internal consistency). The pilot study involved two steps. First, the questionnaire was conducted from 30 representatives, who were not the actual samples. Second, the data collecting from a preliminary sample were taken to the Cronbach's Alpha Coefficient calculation using SPSS software. After pilot study process, 30 questionnaires were computed. The Cronbach's Alpha Coefficient score turned out at 0.974, which met the criteria of the reliability (≥ 0.70). It can be summarized that the questionnaire was reliable enough to use with the actual sample.

3.4 Data Collection

This quantitative research was conducted from June to November 2019 (6 months). The questionnaire was distributed to athletes with physical disabilities in 22 disability sports events, which was held from June to November 2019. Two research assistants were required. The assistants were students who studied master degree majoring in sports management. They understood clearly regarding the objectives of the research, the process of data collection, and all details of the questionnaire. The roles of the assistants were to hand out the questionnaire, to collect the questionnaire when it was returned, give the souvenir (i.e., a handkerchief) to participants, and to help the researcher measure items of sports facilities' accessibility using the compliance list of accessibility requirements.

Pertaining to the questionnaire, 11 sports locations were selected due to the fact that all 22 events from June to November 2019 were held at these sports locations. These events were the national and international competitions which were certified by the Sports Association for the Disabled of Thailand and/or International Sports Federations of that sport. Hence, the selection of these eleven sports venues was appropriate.

Each questionnaire was approximately taken 30 minutes to complete. The respondents were asked to complete the questionnaire during the day after their competition was finished. The researcher firstly informed the purpose of the study. Then, the research team waited for respondents to fill in the questionnaire. The research team was available for help, if they had any questions about the questionnaire. After the completed questionnaires were returned, souvenirs were handed to them.

The compliance list of accessibility requirements was evaluated by the researcher from 21 disability sports events in 10 sports locations. These ten sports locations allowed the researcher to collect the data. The events that used the same venue were counted as one. In total, 12 venues were evaluated using the compliance list of accessibility requirements.

3.5 Data Analysis

After data collection, the researcher carefully checked the completeness of all data. The statistics computer programs (SPSS and LISREL 8.72) were used for the data analysis. The results were shown in the form of a table. The procedures of data interpretation were further explained.

First, all data of demographic characteristics were analyzed by frequency and percentage. The results were presented in a tabular format with messages.

Second, all data of sports facilities' accessibility, satisfaction, word-of-mouth intention, re-participation intention, and motivation were analyzed by Mean ($\bar{X}$) and Standard Deviation (S.D.). The dimensions of sports facilities' accessibility and motivation were constructed using exploratory factor analysis (EFA). Confirmatory factor analysis (CFA) was applied to test the fit of all measurement models.

Third, the relationships among sports facilities' accessibility, satisfaction, word-of-mouth intention, re-participation intention, and motivation both direct and indirect effects were tested using structural equation modeling (SEM).

Fourth, all data of the open-ended questions regarding comments and suggestions from participants were analyzed by frequency. The results were presented in a tabular format with messages.

Finally, the data obtained from the compliance list of accessibility requirements were analyzed by comparing actual numeric value with the criterion. The results were presented in the form of table with messages.

3.5.1 Factor analysis and Structural Equation Model (SEM)

Factor Analysis was applied in this study as it can analyze the structure of the interrelationships among a large number of variables by defining sets of variables that were highly interrelated (Hair et al., 2014). Both exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were combined to test the fit of the measurement models.

1) Exploratory Factor Analysis (EFA)

In order to identify the number of accessibility and motivation dimension, we first analyzed 44 accessibility items and 12 motivation items using exploratory factor analysis (EFA). The new factors were re-constructed after analyzing EFA and these factors were set as independent variables and proposed in hypotheses. The five steps of EFA were explained as follows:

1.1) Checking the suitability of data

1.1.1) Factorability of the correlation matrix

A correlation matrix was used in the EFA process displaying the relationships between individual variables. Tabachnick&Fidell (2007) recommended inspecting the correlation matrix (often termed Factorability of *R*) for correlation coefficients over 0.30.

1.1.2) Kaiser-Meyer-Olkin (KMO) Measure of Sampling Adequacy/Bartlett's Test of Sphericity

Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's test of sphericity were used to test the suitability of the data. The KMO index ranges from 0 to 1, with 0.50 considered suitable for factor analysis. The Bartlett's Test of Sphericity should be significant ($p < .05$) for factor analysis to be suitable.

1.2) Extraction methods

Maximum likelihood was selected for factors extraction.

1.3) Criterion for determining factor extraction

The aim of the data extraction was to reduce a large number of items into factors. In order to find the number of factors extracted in exploratory factor analysis, the percentage of variance criteria was determined to carry out on the data, 70 percent cumulative variance was chosen as the satisfactory level. Thus, the factors extracted must reach a satisfactory level at 70 percent.

1.4) Selection of Rotational Method

Then, a principal component analysis with orthogonal (varimax) rotation technique was determined to identify underlying dimensions.

1.5) Interpretation

After the variables were grouped as a factor, the researcher was involved for the interpretation method to give a name or theme of the factors.

2) Confirmatory Factor Analysis (CFA)

Before evaluating the proposed structural model, confirmatory factor analysis (CFA) was applied to estimate the reliability and validity of all measurement models, and to evaluate the fit of the measurement models. Five CFA measurement models were run separately, including sports facilities' accessibility, motivation, satisfaction, word-of-mouth intention, and re-participation intention. CFA was used to provide a confirmatory test of our measurement theory. A measurement theory specifies how measured variables

logically and systematically represent constructs involved in a theoretical model. In other words, CFA is a tool that enables us to know either “confirm” or “reject” the preconceived theory. CFA was carried out using LISREL 8.72 software.

First, the standardized factor loading was used to confirm the convergent validity. If the average variance extracted (AVE) of all of the constructs was found to be higher than the 0.50 threshold, indicating that the convergent validity was confirmed (Hair et al., 2014).

Second, the reliability of the dimensions and the overall scales was confirmed using the Cronbach’s alpha and composite reliability (CR). If the Cronbach’s alpha is 0.70 or higher and composite reliability (CR) of all the latent variables was 0.70 or higher (Carmines & Zeller, 1988), suggesting that the reliability was confirmed (Hair et al., 2014).

Third, discriminant validity was verified. If AVE values were above the square of the correlation between the two factors, it indicated good discriminant validity (Hair et al., 2014).

Finally, the use of several fit indices was used to determine the fit of a model, including the p - value of chi-square (χ^2) should be greater than 0.05, Normed Chi-square (χ^2/df) should be less than 3, Root mean square error of approximation (RMSEA) should be less than .08, Root Mean Square Residual (RMR) should be less than .05, Parsimony Normed Fit Index (PNFI) should be greater than .05, and the set of Incremental Fit Indices, including Comparative Fit -Index (CFI), Normed Fit Index (NFI), and Non - Normed Fit Index (NNFI) should exceed .90 (Hair et al., 2014; Kline, 2011).

3) Structural Equation Model (SEM)

Structural Equation Model (SEM) was used to assess hypothesized linkages within the proposed conceptual framework. The proposed model was analyzed by path analysis performed by LISREL 8.72. Maximum likelihood (ML) technique was selected in examining the structural properties of the model. SEM permits a statistical test of the goodness-of-fit for the proposed confirmatory factor solution, which is particularly useful in validating scales for the measurement of specific constructs. SEM is efficient for modeling involving multiple independent and dependent variables, and it

is useful for testing mediation and moderation (Hair et al. 2014). The overall model fit measures were used to evaluate the fit of the structural model.

The hypothesized model was tested using various indices. The criteria concerning the fit indices included: the p - value of chi-square (χ^2) should be greater than 0.05, Normed Chi-square (χ^2/df) should be less than 3, Root mean square error of approximation (RMSEA) should be less than .08, Root Mean Square Residual (RMR) should be less than .05, Parsimony Normed Fit Index (PNFI) should be greater than .05, and the set of Incremental Fit Indices, including Comparative Fit -Index (CFI), Normed Fit Index (NFI), and Non - Normed Fit Index (NNFI) should exceed .90 (Hair et al., 2014; Kline, 2011).

3.5.2 Data Interpretation

The values of Mean were taken to compare with the interpretation criterion of accessibility, satisfaction, word-of-mouth intention, re-participation intention, and motivation levels. The width of the interval class was calculated by the following procedures (Vanichbuncha, 2011).

$$\text{Width of the interval class} = \frac{\textit{The highest score} - \textit{The lowest score}}{\textit{The number of class}}$$

$$= \frac{5 - 1}{5}$$

$$= 0.8$$

The output from interval class calculation is shown at 0.8. This was applied to define the interpretation criterion of accessibility, satisfaction, re-participation intention, and word-of-mouth intention levels. The criterion is described as follows:

The average between	4.21 – 5.00	=	completely accessible/strongly agree
The average between	3.41 – 4.20	=	accessible/agree
The average between	2.61 – 3.40	=	partially accessible/ neither agree nor disagree
The average between	1.81 – 2.60	=	inaccessible/disagree
The average between	1.00 – 1.80	=	completely inaccessible/strongly disagree

CHAPTER 4
RESULTS

In chapter 4, the data, gained from the questionnaires were statistically analyzed. The results were presented in the following eight sections.

Section 1: Distribution of demographic characteristics and transportation mode

Section 2: Data analysis results

2.1 Data analysis results of sports facilities' accessibility

2.2 Data analysis results of motivation

2.3 Data analysis results of satisfaction

2.4 Data analysis results of re-participation intention

2.5 Data analysis results of word-of-mouth intention

Section 3: Exploratory factor analysis results (EFA)

3.1 Exploratory factor analysis results of sports facilities' accessibility

3.2 Exploratory factor analysis results of motivation

Section 4: Confirmatory factor analysis results (CFA)

4.1 Confirmatory factor analysis results of satisfaction model

4.2 Confirmatory factor analysis results of word-of- mouth intention model

4.3 Confirmatory factor analysis results of re-participation intention model

Section 5: The second-order confirmatory factor analysis results of sports facilities' accessibility model

Section 6: The second-order confirmatory factor analysis results of motivation model

Section 7: Path analysis results

Section 8: Data analysis results of comments and suggestions from participants

Section 9: Data analysis results of the compliance list of accessibility requirements for people with physical disabilities

Statistical symbols and abbreviations

$\bar{X}$	Mean
S.D.	Standard Deviation
SK	Skewness
Ku	Kurtosis
C.V.	Coefficient of Variation
Min	The Minimum value
Max	The Maximum value
r	The Pearson Product-Moment Correlation Coefficient
R^2	The Squared Multiple Correlation
χ^2	The Chi-Square
df	Degrees of Freedom
P-value	Probability value
b	Unstandardized Coefficient
β	Standardized Coefficient; Beta
S. E.	Standard Error
RMSEA	Root Mean Square Error of Approximation
RMR	Root Mean Square Residual
CFI	Comparative Fit Index
NFI	Normed Fit Index
NNFI	Non - Normed Fit Index
PNFI	Parsimony Normed Fit Index
DE	Direct Effect
IE	Indirect Effect
TE	Total Effect
SFA/ AC	Sports facilities' Accessibility
PLAN	Planning
TRAVEL	Traveling & External Area
INAREA	Internal Area
SAFE	Safety
VIEW	Sports Viewing
SANIT	Sanitary Facilities
AMENI	Amenities & Leaving
MOTIV	Motivation
PERSONAL	Personal Motivation
INCENTI	Incentive & Social Motivation
UNIQUE	Uniqueness Motivation
WOM	Word-of-Mouth Intention
SAT	Satisfaction
RI	Re-participation Intention

Section 1 Distribution of demographic characteristics and transportation mode

Table 1 Distribution of demographic characteristics and transportation mode by frequency and percentage

Variable	Frequency	Percentage
1. Gender		
Male	247	74.8
Female	83	25.2
Total	330	100.0
2. Age		
18 – 24	76	23.0
25 – 34	98	29.7
35 – 44	100	30.3
45 – 54	46	13.9
55 and older	10	3.0
Total	330	100.0
3. Education Level		
Primary school or lower	28	8.5
Middle school or equivalent	49	14.8
High school or equivalent	130	39.4
Associate's Degree or equivalent	21	6.4
Bachelor's Degree	93	28.2
Postgraduate	7	2.1
Others	2	0.6
Total	330	100.0

Variable	Frequency	Percentage
4. Occupation		
Government official	17	5.2
Company employee	61	18.5
Business owner	40	12.1
Freelance	59	17.9
Student	35	10.6
Professional Athlete	101	30.6
Others	17	5.2
Total	330	100.0
5. Assistive Devices (multiple answers are optional)*		
Crutch	26	7.4
Cane	7	2.0
Wheelchair	174	49.7
Power-chair	3	0.9
Prosthetic arm	7	2.0
Prosthetic leg	65	18.6
Walker	2	0.6
Scooter	0	0.0
No devices	60	17.1
Others	6	1.7
Total	350*	100.0

Note: Multiple answers are optional for respondents in item number 5 (Assistive Devices).

Variable	Frequency	Percentage
6. The main transportation mode to the stadium		
Private car	203	61.5
Coach	18	5.5
Bus	19	5.8
Train	3	.9
Taxi	17	5.2
Vehicle provided by the competition organizer	38	11.5
Others	32	9.7
Total	330	100.0

As shown in Table 1, it was found that most of the respondents were male (74.80 %, n=247). 30.30 % of the respondents were aged 35 – 44 yeas (n=100). Most of them graduated from high school or equivalent (39.40 %, n=100). The majority of them were professional athlete (30.60 %, n=101). Wheelchairs were the most commonly used device for them (52.70 %, n=174). Most of them selected private cars as the main transportation mode to the stadium (61.5 %, n=203).

Section 2 Data analysis results

Section 2.1 Data analysis results of sports facilities' accessibility

Table 2 Data analysis results of sports facilities' accessibility by mean ($\bar{X}$), standard deviation (S.D), and level of accessibility

No.	Item	$\bar{X}$	S.D.	Level of Accessibility
1	(AC12) Entrances and exits	4.22	.731	Completely accessible
2	(AC17) Internal doors	4.22	.821	Completely accessible
3	(AC16) Concourse	4.13	.789	Accessible
4	(AC18) Internal ramps	4.07	.851	Accessible
5	(AC15) Corridors	4.06	.777	Accessible
6	(AC21) Sightlines	4.01	.856	Accessible
7	(AC27) Competition schedule and Daily programs	3.99	.845	Accessible
8	(AC39) Exit routes	3.98	.847	Accessible
9	(AC3) Information about the sport event	3.97	.808	Accessible
10	(AC7) Parking bays	3.96	.873	Accessible
11	(AC43) Ramps in the exit area	3.90	.859	Accessible
12	(AC36) Drinking water service	3.90	.940	Accessible
13	(AC23) Capacity in stadium	3.89	.894	Accessible
14	(AC5) Information about parking	3.89	.903	Accessible
15	(AC37) Surfaces, Paving and Finishes	3.88	.915	Accessible
16	(AC19) Handrails and Handholds	3.88	.935	Accessible
17	(AC28) Accessible toilets for wheelchair and non-wheelchair users	3.88	.948	Accessible

No.	Item	$\bar{X}$	S.D.	Level of Accessibility
18	(AC10) External ramps	3.87	.930	Accessible
19	(AC13) Information points	3.85	.872	Accessible
20	(AC9) External routes and Pathways	3.84	.922	Accessible
21	(AC11) External signage and Wayfinding	3.81	.906	Accessible
22	(AC31) Medical services/ First Aid rooms	3.81	.947	Accessible
23	(AC14) Visitor reception	3.79	.832	Accessible
24	(AC8) Drop-off and pick-up points	3.77	.953	Accessible
25	(AC24) Signage and Wayfinding	3.76	.854	Accessible
26	(AC35) Dustbin	3.75	.899	Accessible
27	(AC20) Safety rail	3.75	.978	Accessible
28	(AC22) Seating in stadium	3.75	.995	Accessible
29	(AC26) Scoreboard or video screen	3.72	.984	Accessible
30	(AC29) Changing room	3.71	.919	Accessible
31	(AC42) Exit arrows	3.70	.927	Accessible
32	(AC1) Information about accessible facilities via online media	3.69	.886	Accessible
33	(AC44) Fire exit	3.67	.960	Accessible
34	(AC2) Information about accessible facilities via telephone inquiries	3.66	.872	Accessible
35	(AC40) Refuges area	3.66	.913	Accessible
36	(AC33) Conference facilities	3.65	.884	Accessible
37	(AC6) Accessible transportation	3.65	1.073	Accessible
38	(AC4) Information about public transportation	3.61	.962	Accessible

No.	Item	$\bar{X}$	S.D.	Level of Accessibility
39	(AC41) Handrails in the exit area	3.60	.982	Accessible
40	(AC30) Showers and bathrooms	3.58	1.026	Accessible
41	(AC25) Alarm systems	3.52	.886	Accessible
42	(AC38) Furniture, Counters and Service Areas	3.51	.987	Accessible
43	(AC32) Retail outlets, Food and Beverage outlets, and other commercial areas	3.28	1.038	Partially accessible
44	(AC34) Automated Teller Machine (ATMs)	3.01	1.154	Partially accessible

Table 2 shows the values of mean ($\bar{X}$) of sports facilities' accessibility variables were ranged from 3.01 to 4.22. The values of standard deviation (S.D) of sports facilities' accessibility variables were found from .731 to 1.154. Most of sports facilities' accessibility variables were found at an accessible level. The highest values of mean were No.1 Entrances and exits ($\bar{X}$= 4.22) and No.2 Internal doors ($\bar{X}$= 4.22) which showed at a completely accessible level. The lowest values of mean were No. 44 Automated Teller Machine ($\bar{X}$= 3.01) and No.43 Retail outlets, Food and Beverage outlets, and other commercial areas ($\bar{X}$= 3.28) which showed at a neutral level.

Section 2.2 Data analysis results of motivation

Table 3 Data analysis results of motivation by mean (**$\bar{X}$**), standard deviation (S.D), and level of agreement

Item	$\bar{X}$	S.D.	Level of agreement
(MOTIV1) To challenge myself.	4.54	.629	Strongly agree
(MOTIV2) To improve my athletic ability.	4.60	.612	Strongly agree
(MOTIV3) To win prize, such as money, medals, or trophies.	4.25	.778	Strongly agree
(MOTIV4) To be with my family or spouse.	3.78	1.008	Agree

Item	$\bar{X}$	S.D.	Level of agreement
(MOTIV5) To be with my friends.	4.39	.712	Strongly agree
(MOTIV6) To participate in famous events.	4.28	.742	Strongly agree
(MOTIV7) To participate in events in a famous city or area.	4.26	.725	Strongly agree
(MOTIV8) To travel to interesting places.	4.24	.740	Strongly agree
(MOTIV9) To do something unusual.	4.36	.694	Strongly agree
(MOTIV10) To prove to others that I can do it	4.56	.627	Strongly agree
(MOTIV11) To earn rankings.	4.56	.627	Strongly agree
(MOTIV12) To earn points.	4.34	.727	Strongly agree
(MOTIV13) To be a representative of my club, province, or country.	4.53	.643	Strongly agree

Table 3 shows that overall agreement levels of motivation were found at a strongly agree level, except "to be with my family or spouse" which shows at an agree level.

Section 2.3 Data analysis results of satisfaction

Table 4 Data analysis results of satisfaction by mean ($\bar{X}$), standard deviation (S.D), and level of agreement

Item	$\bar{X}$	S.D.	Level of agreement
(SAT1) I am very satisfied with my participation in this sport event.	4.26	.772	Strongly agree
(SAT2) I am delighted with the accessibility that sport event provider offers.	4.15	.755	Agree
(SAT3) This sport event exceeded my expectations.	3.89	.874	Agree

Table 4 shows that overall agreement levels of satisfaction were found at an agree level, except "I am very satisfied with my participation in this sport event" which shows at a strongly agree level.

Section 2.4 Data analysis results of re-participation intention

Table 5 Data analysis results of re-participation intention by mean ($\bar{X}$), standard deviation (S.D), and level of agreement

Item	$\bar{X}$	S.D.	Level of agreement
(RI1) I am planning to re-participate in this sport event in the near future.	4.48	.667	Strongly agree
(RI2) I will make an effort to participate in this sport event again in the near future.	4.47	.619	Strongly agree
(RI3) I am willing to participate in this sport event again in the near future.	4.52	.667	Strongly agree

Table 5 shows that overall agreement levels of re-participation intention were found at a strongly agree level.

Section 2.5 Data analysis results of word-of-mouth intention

Table 6 Data analysis results of word-of-mouth intention by mean ($\bar{X}$), standard deviation (S.D), and level of agreement

Item	$\bar{X}$	S.D.	Level of agreement
(WOM1) I will say positive things about this sport event to others.	4.38	.671	Strongly agree
(WOM2) I will recommend this sport event to someone who seeks my advice.	4.38	.666	Strongly agree
(WOM3) I will encourage friends and relatives to participate in this sport event.	4.42	.681	Strongly agree

Table 6 shows that overall agreement levels of word-of-mouth intention were found at a strongly agree level.

Section 3 Exploratory factor analysis results of sports facilities' accessibility and motivation

Section 3.1 Exploratory factor analysis results of sports facilities' accessibility

In order to develop the measurement of Sports facilities' accessibility**,** the notions of disabled people, sports facility, event management, and accessibility were reviewed through previous literature. A self-administered questionnaire (subjective measurement) was newly developed to evaluate sports facilities' accessibility using a five-point Likert-type scale. Exploratory factor analysis (EFA) was applied to reduce a large number of items into factors, and to identify the number of accessibility factors (components). Principal Component Analysis (PCA) was selected for factors extraction method together with Varimax Orthogonal Rotation method. Eigenvalue greater than 1 was used to be the criteria for extracting such factors (components).

The factor loading value of variables greater than 0.50 in each factor was set as a suitable criterion (Hair et al., 2014). After 44 variables were analyzed, 7 factors (components) were extracted. The results were presented in Table 7.

Table 7 Exploratory factor analysis results of sports facilities' accessibility

Factor	Number of Variable	Variance	% of Variance	% Cumulative Variance
1. Planning	3	6.584	14.963	14.963
2. Traveling and External Area	8	4.986	11.332	26.295
3. Internal Area	5	4.667	10.608	36.903
4. Safety	3	3.469	7.885	44.788
5. Sports Viewing	5	2.988	6.790	51.578
6. Sanitary Facilities	3	2.581	5.866	57.444
7. Amenities and Leaving	12	2.387	5.425	62.869
Total	44	-	62.869	62.869
Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .947				
Bartlett's Test of Sphericity at the significant level of .01				

As shown in Table 7, the EFA results showed that sports facilities' accessibility variables could be extracted into 7 components, which accounted for 62.869 percent of variance explained. The value of Kaiser-Meyer-Olkin Measure of Sampling Adequacy was at 0.947, which was greater than 0.60, indicating that the data was appropriate to be analyzed in factor analysis (Kaiser, 1974). Bartlett's Test of Sphericity was found to be significant at .01 indicating that the correlation matrix was not an identity matrix and variables were related therefore suitable for factor analysis.

Table 8 Factor 1: Planning

Variable	**Variable**	**Factor Loadings**
AC1	Information about accessible facilities via online media	.775
AC2	Information about accessible facilities via telephone inquiries	.769
AC3	Information about sport event	.561
3 variables	Eigenvalue	6.584
	Total variance explained, %	14.963

As shown in Table 8, "Planning", which contains three variables, was labeled as the name of factor 1. The values of factor loadings were ranged from 0.561 to 0.775. The variables with the highest factor loading were Information about accessible facilities via online media (AC1) and Information about accessible facilities via telephone inquiries (AC2) respectively. The variable with the lowest factor loading was Information about sport event (AC3). The eigenvalue was found at 6.584, which accounted for 14.963 percent of variance explained.

Table 9 Factor 2: Traveling & External Area

Variable	Variable	Factor Loadings
AC4	Information about public transportation	.644
AC5	Information about parking	.557
AC6	Accessible transportation	.734
AC7	Parking (bays)	.688
AC8	Drop-off and pick-up points	.818
AC9	External routes and pathways	.683
AC10	External ramps	.665
AC11	External signage and wayfinding	.527
8 variables	Eigenvalue	4.986
	Total variance explained, %	11.332

As shown in Table 9, “Traveling & External Area”, which contained eight variables, was labeled as the name of factor 2. The values of factor loadings were found from 0.527 to 0.818. The variables with the highest factor loading were drop-off and pick-up points (AC8) and accessible transportation (AC6) respectively. The variable with the lowest factor loading was external signage and wayfinding (AC11). The eigenvalue was found at 4.986, which accounted for 11.332 percent of variance explained.

Table 10 Factor 3: Internal Area

Variable	Variable	Factor Loadings
AC12	Entrances and exits	.561
AC15	Corridors	.725
AC16	Concourse	.667
AC17	Internal doors	.739
AC18	Internal ramps	.675
5 variables	Eigenvalue	4.667
	Total variance explained, %	10.608

As shown in Table 10, "Internal Area", which contained five variables, was labeled as the name of factor 3. The values of factor loadings were found from 0.561 to 0.739. The variables with the highest factor loading were internal doors (AC17) and corridors (AC15) respectively. The variable with the lowest factor loading was Entrances and exits (AC12). The eigenvalue was found at 4.667, which accounted for 10.608 percent of variance explained.

Table 11 Factor 4: Safety

Variable	Variable	Factor Loadings
AC19	Handrails and handholds	.615
AC20	Safety rail	.672
AC25	Alarm systems	.606
3 variables	Eigenvalue	3.469
	Total variance explained, %	7.885

As shown in table 11, “Safety”, which contains three variables, was labeled as the name of factor 4. The values of factor loadings were found from 0.606 to 0.672. The variables with the highest factor loading were safety rail (AC20) and handrails and handholds (AC19) respectively. The variable with the lowest factor loading was Alarm systems (AC25). The eigenvalue was found at 3.469, which accounted for 7.885 percent of variance explained.

Table 12 Factor 5: Sports Viewing

Variable	**Variable**	**Factor Loadings**
AC21	Sightlines	.540
AC22	Seating in stadium	.607
AC23	Capacity in stadium	.697
AC26	Scoreboard or video screen	.648
AC27	Competition schedule and Daily programs	.661
5 variables	Eigenvalue	2.988
	Total variance explained, %	6.790

As shown in Table 12, “Sports Viewing”, which contained five variables, was labeled as the name of factor 5. The values of factor loadings were found from 0.540 to 0.697. The variables with the highest factor loading were capacity in stadium (AC23) and competition schedule and daily programs (AC27) respectively. The variable with the lowest factor loading was sightlines (AC21). The eigenvalue was found at 2.988, which accounted for 6.790 percent of variance explained.

Table 13 Factor 6: Sanitary Facilities

Variable	Variable	Factor Loadings
AC28	Accessible toilets for wheelchair and non-wheelchair users	.752
AC29	Changing room	.753
AC30	Showers and bathrooms	.758
3 variables	Eigenvalue	2.581
	Total variance explained, %	5.866

As shown in Table 13, “Sanitary Facilities”, which contained three variables, was labeled as the name of factor 6. The values of factor loadings were ranged from 0.752 to 0.758. The variables with the highest factor loading were showers and bathrooms (AC30) and changing room (AC29) respectively. The variable with the lowest factor loading was accessible toilets for wheelchair and non-wheelchair users (AC28). The eigenvalue was found at 2.581, which accounted for 5.866 percent of variance explained.

Table 14 Factor 7: Amenities & Leaving

Variables	Variables	Factor Loadings
AC33	Conference facilities	.583
AC34	Automated Teller Machine (ATMs)	.561
AC35	Dustbin	.648
AC36	Drinking water service	.629
AC37	Surfaces, Paving and Finishes	.594
AC38	Furniture, Counters and Service Areas	.646

Variable	Variable	Factor Loadings
AC39	Exit routes	.643
AC40	Refuges area	.645
AC41	Handrails in the exit area	.650
AC42	Exit arrows	.705
AC43	Ramps in the exit area	.670
AC44	Fire exit	.593
12 variables	Eigenvalue	2.387
	Total variance explained, %	5.425

As shown in Table 14, "Amenities & Leaving", which contains twelve variables, was labeled as the name of factor 7. The values of factor loadings were found ranged 0.561 to 0.705. The variables with the highest factor loading were exit arrows (AC42) and ramps (AC43) respectively. The variable with the lowest factor loading was automated teller machine (ATMs) (AC34). The eigenvalue was found at 2.387, which accounted for 5.425 percent of variance explained.

Based on the results of exploratory factor analysis (EFA), it became clear that sports facilities' accessibility variables could be extracted into 7 components. The construct validity of these components was later confirmed by confirmatory factor analysis (CFA) with LISREL 8.72 Program. The results of CFA were applied in forming the model of this study. The CFA analysis of sports facilities' accessibility is presented in Section 5.

Section 3.2 Exploratory factor analysis results of motivation

In order to develop the measurement of motivation, the notions of motivation were reviewed through previous literature. A self-administered questionnaire (subjective measurement) was newly developed to evaluate motivation using a five-point Likert-type scale. Exploratory factor analysis (EFA) was applied to reduce a large number of items into factors and to identify the number of accessibility factors (components). Principal Component Analysis (PCA) was selected for factor extraction method together with Varimax Orthogonal Rotation method. Eigenvalue greater than 1 was used to be the criteria for extracting such factors (components). The factor loading value of variables greater than 0.50 in each factor was set as a suitable criterion (Hair et al., 2014).

After 13 variables were analyzed, 3 factors (components) were extracted. The results were presented in Table 15.

Table 15 Exploratory factor analysis results of motivation

Factor	Number of Variable	Variance	% of Variance	% Cumulative Variance
1. Personal motivation	7	3.870	29.769	29.769
2. Incentive & social motivation	3	2.809	21.605	51.374
3. Uniqueness motivation	3	1.930	14.844	66.218
Total	13	-	66.218	66.218
Kaiser-Meyer-Olkin Measure of Sampling Adequacy = .899				
Bartlett's Test of Sphericity at the significant level of .01				

As shown in Table 15, the EFA results showed that motivation variables could be extracted into 3 components, which accounted for 66.218 percent of variance explained. The value of Kaiser-Meyer-Olkin Measure of Sampling Adequacy was at 0.899, which was greater than 0.60, indicating that the data was appropriate to be analyzed in factor analysis (Kaiser, 1974). Bartlett's Test of Sphericity was also found to be significant at .01 indicating that the correlation matrix was not an identity matrix and variables were related therefore suitable for factor analysis.

Table 16 Factor 1: Personal motivation

Variable	Variable	Factor Loadings
MOTIV1	To challenge myself	.631
MOTIV2	To improve my athletic ability	.648
MOTIV9	To do something unusual	.566
MOTIV10	To prove to others that I can do it	.809
MOTIV11	To earn rankings	.817
MOTIV12	To earn points	.550
MOTIV13	To be a representative of my club, province, or country	.756
7 variables	Eigenvalue	3.870
	Total variance explained, %	29.769

As shown in Table 16, "Personal motivation", which contained seven variables, was labeled as the name of factor 1. The values of factor loadings were found ranged 0.550 to 0.817. The variables with the highest factor loading were "To earn rankings" (MOTIV11) and "To prove to others that I can do it" (MOTIV10) respectively. The variable with the lowest factor loading was "To earn points" (MOTIV12). The eigenvalue was found at 3.870, which accounted for 29.769 percent of variance explained.

Table 17 Factor 2: Incentive & Social motivation

Variable	**Variable**	**Factor Loadings**
MOTIV3	To win prize, such as money, medals, or trophies	.543
MOTIV4	To be with my family or spouse	.828
MOTIV5	To be with my friends	.644
3 variables	Eigenvalue	2.809
	Total variance explained, %	21.605

As shown in Table 17, “Incentive & Social motivation”, which contained three variables, was labeled as the name of factor 2. The values of factor loadings were ranged from 0.543 to 0.828. The variables with the highest factor loading were “To be with my family or spouse” (MOTIV4) and “To be with my friends” (MOTIV5) respectively. The variable with the lowest factor loading was “To win prize, such as money, medals, or trophies” (MOTIV3). The eigenvalue was found at 2.809, which accounted for 21.605 percent of variance explained.

Table 18 Factor 3: Uniqueness motivation

Variable	Variable	Factor Loadings
MOTIV6	To participate in famous events	.860
MOTIV7	To participate in events in a famous city or area	.840
MOTIV8	To travel to interesting places	.712
3 variables	Eigenvalue	1.930
	Total variance explained, %	14.844

As shown in Table 18, "Uniqueness Motivation", which contained three variables, was labeled as the name of factor 3. The values of factor loadings were ranged from 0.712 to 0.860. The variables with the highest factor loading were "To participate in famous events" (MOTIV6) and "To participate in events in a famous city or area" (MOTIV7) respectively. The variable with the lowest factor loading was "To travel to interesting places" (MOTIV8). The eigenvalue was found at 1.930, which accounted for 14.844 percent of variance explained.

Based on the results of exploratory factor analysis (EFA), it became clear that motivation variables could be extracted into 3 components. The construct validity of these components was later confirmed by Confirmatory Factor Analysis (CFA) with LISREL 8.72 Program. The results of CFA would be applied in forming the model of this study. The CFA analysis of motivation is presented in Section 6.

Section 4 Confirmatory factor analysis results (CFA)

4.1 Confirmatory factor analysis results of satisfaction

Table 19 represents Pearson's correlation of observed variables. It was found that all variables indicating satisfaction were statistically significant ($p < 0.1$). The values of correlation coefficient were ranged from 0.654 to 0.683. The highest values of correlation coefficient were found between SAT1 and SAT2, which was 0.683, followed by SAT2 and SAT3, which was 0.678. The lowest value of correlation coefficient was found between SAT1 and SAT3, which was 0.654. As for Bartlett's test of sphericity (Bartlett's test of sphericity tests the hypothesis whether the correlation matrix is an identity matrix), the result shows that the Chi Square value was 451.320 with a significant value of $p < .000$, indicating that the correlation matrix was not an identity matrix and the variables were interrelated. This is consistent with the analysis result of Kaiser-Meyer-Olkin measures of sampling adequacy (KMO) which shows the value of 0.735 (close to 1). The values of Bartlett's test of sphericity and KMO obtained indicated that the data was feasible for factor analysis. The results were presented in Table 19.

Table 19 Mean, Standard Deviation, Pearson's correlation coefficient of Satisfaction factor

Variable	SAT1	SAT2	SAT3
SAT1	1.000		
SAT2	.683**	1.000	
SAT3	.654**	.678**	1.000
Mean	4.26	4.15	3.89
S.D.	.772	.755	.874
Bartlett's Test of Sphericity = 451.320		df = 3	p = .000
KMO = .735			

**Note: **** $p < .01$

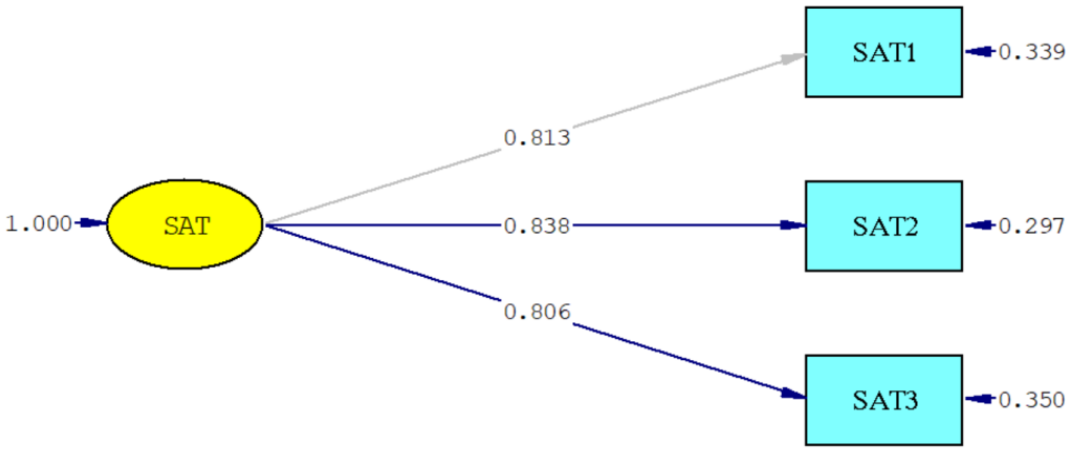
Table 20 and Figure 4 show the confirmatory factor analysis of satisfaction model. The goodness of fit indices of satisfaction model confirmed the suitability of the model Chi-square (χ^2 = 0.0198, p-value = 0.888, df = 1), Normed Chi-square: χ^2/df = 0.02 (lower than 3), RMSEA = 0.00 (lower than 0.8), RMR = 0.0007 (lower than 0.05), CFI = 1.00, NFI = 1.00, NNFI = 1.00 (greater than 0.9 or equal 1.00), and PNFI = 0.333 (greater than 0.5). These results indicated that the model fit a set of data well.

Table 20 Confirmatory factor analysis results of satisfaction model

Variable	Factor Loadings b(SE)	Factor Loadings β	t-value	R2	Factor Score Coefficient
SAT1	0.628	0.813	<--->	0.661	0.433
SAT2	0.634(0.038)	0.838	16.527	0.703	0.520
SAT3	0.705(0.048)	0.806	14.834	0.650	0.368
Chi-square = 0.0198	df = 1	P = 0.888	χ^2/df = 0.02	RMSEA = 0.00	
CFI = 1.00	NFI = 1.00	NNFI = 1.00	PNFI = 0.333	RMR = 0.0007	

Note: ***Significant at $p < 0.001$, <---> Constrained parameters (SE and t) are not reported.

Table 20 shows that the standardized factor loadings of observed variables of satisfaction model were ranged from 0.806 to 0.838. All of the variables were statistically significant at the level of $p < .001$. Factor loadings show the variance explained by the variable on satisfaction factor of approximately 65.0 percent to 70.3 percent. The most significant variables were “I am delighted with the accessibility that sport event provider offers” (SAT2), “I am very satisfied with my participation in this sport event” (SAT1), and “This sport event exceeded my expectations” (SAT3) respectively. It could be summarized that these 3 variables were significant indicators indicating satisfaction factor.



Chi-Square=0.02, df=1, P-value=0.88822, RMSEA=0.000

Figure 4 The confirmatory factor analysis of satisfaction model

4.2 Confirmatory factor analysis results of word-of-mouth intention model

Table 21 represents Pearson's correlation of observed variables. It was found that all variables indicating word-of-mouth intention were statistically significant ($p <$ 0.1). The values of correlation coefficient were ranged from 0.754 to 0.799. The highest values of correlation coefficient were found between WOM1 and WOM2, which was 0.799, followed by WOM1 and WOM3, which was 0.786. The lowest value of correlation coefficient was found between WOM2 and WOM3, which was 0.754. As for Bartlett's test of sphericity (Bartlett's test of sphericity tests the hypothesis whether the correlation matrix is an identity matrix), the result showed that the Chi Square value was 687.624 with a significant value of $p < .000$, indicating that the correlation matrix was not an identity matrix and the variables are interrelated. This is consistent with the analysis result of Kaiser-Meyer-Olkin measures of sampling adequacy (KMO) which shows the value of 0.756 (close to 1). The values of Bartlett's test of sphericity and KMO obtained indicated that the data was feasible for factor analysis.

Table 21 Mean, Standard Deviation, Pearson's correlation coefficient of Word-of-mouth intention factor

Variable	WOM1	WOM2	WOM3
WOM1	1.000		
WOM2	.799**	1.000	
WOM3	.786**	.754**	1.000
Mean	4.38	4.38	4.42
S.D.	.671	.666	.681
Bartlett's Test of Sphericity = 687.624		df = 3	p = .000
KMO = .756			

**Note: ******p* < .01

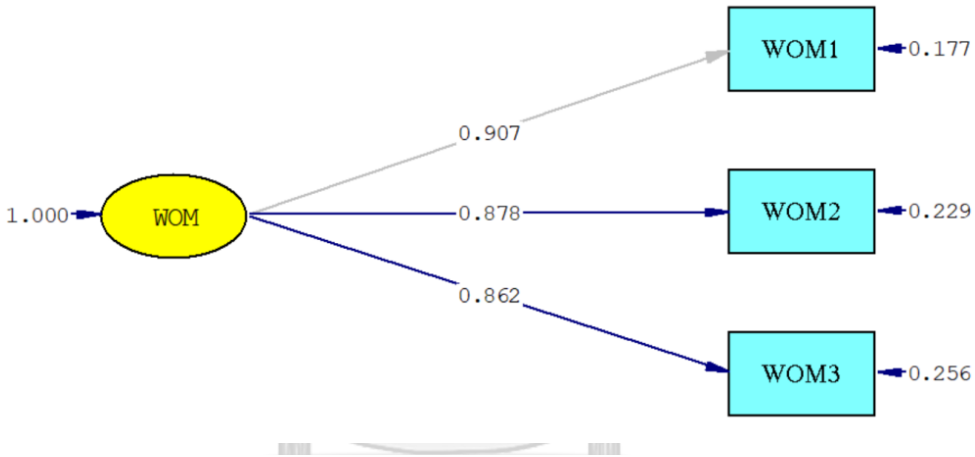
Table 22 and Figure 5 show the confirmatory factor analysis of word-of-mouth intention model. The goodness of fit indices of word-of-mouth intention model confirmed the suitability of the model Chi-square (χ^2 = 0.153, p-value = 0.696, df = 1), χ^2/df = 0.15 (lower than 3), RMSEA = 0.00 (lower than 0.8), RMR = 0.0009 (lower than 0.05), CFI = 1.00, NFI = 1.00, NNFI = 1.00 (greater than 0.9 or equal 1.00), and PNFI = 0.333 (greater than 0.5). These results indicated that the model fit a set of observations well.

Table 22 Confirmatory factor analysis results of word-of-mouth intention model

Variable	**Factor Loadings**		**t-value**	**R2**	**Factor Score Coefficient**
	b(SE)	**β**			
WOM1	0.610	0.907	<--->	0.823	0.640
WOM2	0.585(0.025)	0.878	23.496	0.771	0.483
WOM3	0.587(0.026)	0.862	22.621	0.744	0.415
Chi-square = 0.153	df = 1	P = 0.696	χ^2/df = 0.15	RMSEA = 0.00	
CFI = 1.00	NFI = 1.00	NNFI = 1.00	PNFI = 0.333	RMR = 0.0009	

Note: ***Significant at $p < 0.001$, <---> Constrained parameters (SE and t) are not reported.

Table 22 shows the standardized factor loadings of observed variables of word-of-mouth intention model were found ranged 0.862 to 0.907. All of the variables were statistically significant at the level of $p < .001$. Factor loadings showed the variance explained by the variable on word-of-mouth intention factor of approximately 74.4 percent to 82.3 percent. The most significant variables were "I will say positive things about this sport event to others" (WOM1), "I will recommend this sport event to someone who seeks my advice" (WOM2), and "I will encourage friends and relatives to participate in this sport event" (WOM3) respectively. It could be summarized that these 3 variables were significant indicators indicating word-of-mouth intention factor.



Chi-Square=0.15, df=1, P-value=0.69577, RMSEA=0.000

Figure 5 The confirmatory factor analysis of word-of-mouth intention model

4.3. Confirmatory factor analysis results of re-participation intention model

Table 23 represents Pearson's correlation of observed variables. It was found that all variables indicating re-participation intention are statistically significant ($p <$ 0.1). The values of correlation coefficient were ranged from 0.732 to 0.808. The highest values of correlation coefficient were found between RI2 and RI3, which was 0.808, followed by RI1 and RI2, which was 0.793. The lowest value of correlation coefficient was found between RI1 and RI3, which was 0.732. As for Bartlett's test of sphericity (Bartlett's test of sphericity tests the hypothesis whether the correlation

matrix is an identity matrix), the result showed that the Chi Square value was 692.114 with significant value of $p < .000$, indicating that the correlation matrix was not an identity matrix and the variables were interrelated. This is consistent with the analysis result of Kaiser-Meyer-Olkin measures of sampling adequacy (KMO) which showedthe value of 0.747 (close to 1). The values of Bartlett's test of sphericity and KMO obtained indicated that the data was feasible for factor analysis.

Table 23 Mean, Standard Deviation, Pearson's correlation coefficient of Re-participation intention factor

Variable	RI1	RI2	RI3
RI1	1.000		
RI2	.793**	1.000	
RI3	.732**	.808**	1.000
Mean	4.48	4.47	4.52
S.D.	.667	.619	.667
Bartlett's Test of Sphericity = 692.114		df = 3	p = .000
KMO = .747			

Note: ***p* < .01

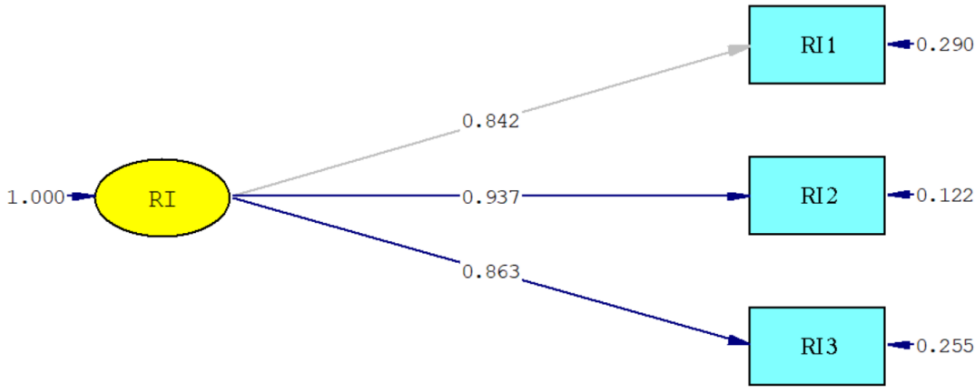
Table 24 and Figure 6 show the confirmatory factor analysis of re-participation intention model. The goodness of fit indices of re-participation intention model confirmed the suitability of the model Chi-square ($\chi^2 = 0.146$, p-value = 0.702, df = 1), $\chi^2/df = 0.15$ (lower than 3), RMSEA = 0.00 (lower than 0.8), RMR = 0.0013 (lower than 0.05), CFI = 1.00, NFI = 1.00, NNFI = 1.00 (greater than 0.9 or equal 1.00), and PNFI = 0.333 (greater than 0.5). These results indicated that the model fit a set of observations well.

Table 24 Confirmatory factor analysis results of re-participation intention model

Variable	Factor Loadings		t-value	R2	Factor Score Coefficient
	b(SE)	β			
RI1	0.564	0.842	<--->	0.710	0.320
RI2	0.580(0.026)	0.937	22.070	0.878	0.914
RI3	0.576(0.029)	0.863	19.826	0.745	0.375
Chi-square = 0.146	df = 1	P = 0.702	χ^2/df = 0.15	RMSEA = 0.00	
CFI = 1.00	NFI = 1.00	NNFI = 1.00	PNFI = 0.333	RMR = 0.0013	

Note: ***Significant at $p < 0.001$, <---> Constrained parameters (SE and t) are not reported.

Table 24 shows the standardized factor loadings of observed variables of re-participation intention model were ranged from 0.842 to 0.937. All of the variables were statistically significant at the level of $p < .001$. Factor loadings showed the variance explained by the variable on re-participation intention factor of approximately 71.0 percent to 87.8 percent. The most significant variables were “I will make an effort to participate in this sport event again in the near future” (RI2), “I am willing to participate in this sport event again in the near future” (RI3), and “I am planning to re-participate in this sport event in the near future” (RI1) respectively. It could be summarized that these 3 variables were significant indicators indicating re-participation intention factor.



Chi-Square=0.15, df=1, P-value=0.70193, RMSEA=0.000

Figure 6 The confirmatory factor analysis of re-participation intention model

Section 5 The second-order confirmatory factor analysis results of sports facilities' accessibility model

Section 5.1 Test of statistical assumptions and Pearson's correlation coefficient of observed variables

This section presented test of statistical assumptions and Pearson's correlation coefficient of observed variables from seven latent variables including planning, traveling & external area, internal area, safety, sports viewing, sanitary facilities, and amenities & leaving. Mean, Standard Deviation, Pearson's correlation coefficient were also analyzed and shown in order to check the data suitability for confirmatory factor analysis. The normality of distribution was tested by Minimum, Maximum, Range, Skewness, and Kurtosis and the results are shown in Section 5.3 (Table 27).

Pearson's correlation coefficient presented in Table 25 contained 39 observed variables of seven latent variables including planning, traveling & external area, internal area, safety, sports viewing, sanitary facilities, and amenities & leaving. The results showed that the correlation coefficients were ranged from 0.115 to 0.796. The correlation coefficient of variables included 741 pairs in total, 739 pairs with statistical significance ($p < .01$), and 2 pairs with statistical significance ($p < .05$). The correlation coefficients of all

741 pairs were found to be positive. The highest correlation coefficient of variables with statistical significance was found between AC19 and AC20. The lowest correlation coefficient of variables with statistical significance was found between AC15 and AC34.

As shown in Table 25, the result of Bartlett's test of sphericity showed that the Chi Square value was 8897.902 with a significant value of $p < .000$, indicating that the correlation matrix was not an identity matrix and the variables were interrelated. This was consistent with the analysis result of Kaiser-Meyer-Olkin measures of sampling adequacy (KMO) which showed the value of 0.946 (close to 1). The values of Bartlett's test of sphericity and KMO obtained indicated that the data was feasible for factor analysis.

Table 25 Mean ($\bar{X}$), Deviation (S.D), and Pearson's correlation coefficient of variables in confirmatory factor analysis model of sports facilities' accessibility

ตัวแปร	AC1	AC2	AC3	AC4	AC5	AC6	AC7	AC8	AC9	AC10	AC11	AC12	AC15	AC16	AC17	AC18	AC19	AC20	AC25	AC21	AC22	AC23	AC26	AC27	AC28	AC29	AC30	AC33	AC34	AC35	AC36	AC37	AC38	AC39	AC40	AC41	AC42	AC43	AC44
AC1	1.000																																						
AC2	.749**	1.000																																					
AC3	.498**	.492**	1.000																																				
AC4	.503**	.505**	.424**	1.000																																			
AC5	.463**	.405**	.396**	.458**	1.000																																		
AC6	.481**	.458**	.357**	.648**	.409**	1.000																																	
AC7	.409**	.410**	.348**	.449**	.616**	.560**	1.000																																
AC8	.423**	.356**	.304**	.588**	.515**	.685**	.655**	1.000																															
AC9	.379**	.383**	.308**	.441**	.472**	.522**	.529**	.585**	1.000																														
AC10	.406**	.408**	.367**	.491**	.421**	.504**	.529**	.526**	.689**	1.000																													
AC11	.450**	.419**	.375**	.442**	.376**	.404**	.467**	.499**	.452**	.541**	1.000																												
AC12	.342**	.363**	.386**	.293**	.354**	.321**	.480**	.377**	.411**	.398**	.414**	1.000																											
AC15	.363**	.367**	.361**	.296**	.395**	.295**	.443**	.392**	.467**	.435**	.305**	.614**	1.000																										
AC16	.448**	.417**	.392**	.322**	.404**	.354**	.453**	.375**	.433**	.391**	.365**	.627**	.691**	1.000																									
AC17	.296**	.276**	.339**	.238**	.360**	.303**	.449**	.316**	.398**	.382**	.295**	.576**	.651**	.671**	1.000																								
AC18	.376**	.369**	.339**	.306**	.386**	.351**	.421**	.351**	.452**	.492**	.380**	.551**	.646**	.607**	.669**	1.000																							
AC19	.397**	.373**	.269**	.298**	.306**	.351**	.326**	.356**	.476**	.472**	.351**	.428**	.537**	.548**	.531**	.664**	1.000																						
AC20	.358**	.316**	.276**	.294**	.271**	.298**	.280**	.306**	.400**	.419**	.316**	.336**	.492**	.460**	.451**	.577**	.796**	1.000																					
AC25	.326**	.336**	.309**	.364**	.276**	.361**	.337**	.395**	.350**	.354**	.368**	.371**	.409**	.388**	.389**	.425**	.513**	.543**	1.000																				
AC21	.324**	.326**	.339**	.277**	.348**	.321**	.428**	.361**	.398**	.311**	.296**	.468**	.415**	.462**	.521**	.533**	.419**	.348**	.322**	1.000																			
AC22	.244**	.274**	.313**	.279**	.349**	.312**	.409**	.347**	.375**	.347**	.353**	.463**	.401**	.393**	.412**	.452**	.423**	.366**	.402**	.652**	1.000																		
AC23	.244**	.318**	.324**	.302**	.354**	.298**	.462**	.352**	.369**	.330**	.270**	.488**	.469**	.460**	.497**	.478**	.392**	.322**	.488**	.589**	.673**	1.000																	
AC26	.224**	.274**	.281**	.268**	.256**	.264**	.309**	.229**	.292**	.319**	.298**	.389**	.376**	.379**	.357**	.391**	.338**	.352**	.496**	.407**	.443**	.503**	1.000																
AC27	.236**	.243**	.365**	.254**	.250**	.211**	.321**	.194**	.287**	.289**	.307**	.426**	.376**	.348**	.340**	.436**	.264**	.240**	.396**	.458**	.417**	.526**	.684**	1.000															
AC28	.287**	.273**	.333**	.214**	.234**	.199**	.274**	.250**	.376**	.335**	.265**	.382**	.356**	.349**	.407**	.470**	.475**	.411**	.238**	.447**	.434**	.318**	.252**	.268**	1.000														
AC29	.357**	.367**	.321**	.316**	.248**	.336**	.316**	.337**	.366**	.362**	.329**	.323**	.335**	.340**	.365**	.427**	.481**	.463**	.353**	.417**	.497**	.408**	.347**	.251**	.684**	1.000													
AC30	.350**	.304**	.287**	.316**	.250**	.318**	.260**	.250**	.336**	.327**	.298**	.298**	.257**	.246**	.258**	.341**	.387**	.370**	.349**	.299**	.372**	.310**	.281**	.227**	.607**	.702**	1.000												
AC33	.319**	.310**	.412**	.367**	.321**	.364**	.352**	.362**	.312**	.356**	.334**	.465**	.420**	.461**	.385**	.438**	.385**	.388**	.452**	.366**	.429**	.511**	.504**	.443**	.369**	.451**	.398**	1.000											
AC34	.231**	.205**	.264**	.270**	.208**	.269**	.178**	.214**	.218**	.196**	.277**	.189**	.115*	.196**	.133*	.185**	.282**	.333**	.321**	.225**	.322**	.287**	.261**	.246**	.267**	.389**	.369**	.443**	1.000										
AC35	.299**	.306**	.350**	.308**	.329**	.318**	.336**	.376**	.326**	.292**	.311**	.406**	.361**	.392**	.366**	.362**	.359**	.338**	.306**	.307**	.368**	.400**	.349**	.341**	.351**	.398**	.318**	.573**	.406**	1.000									
AC36	.338**	.261**	.393**	.332**	.384**	.356**	.303**	.344**	.304**	.322**	.348**	.364**	.362**	.346**	.348**	.374**	.263**	.253**	.269**	.311**	.343**	.341**	.320**	.416**	.290**	.321**	.324**	.490**	.368**	.541**	1.000								
AC37	.254**	.261**	.337**	.250**	.348**	.276**	.333**	.271**	.403**	.407**	.302**	.458**	.515**	.439**	.472**	.539**	.428**	.380**	.359**	.436**	.455**	.426**	.468**	.494**	.468**	.465**	.361**	.511**	.323**	.502**	.562**	1.000							
AC38	.303**	.273**	.403**	.266**	.285**	.301**	.285**	.278**	.289**	.326**	.339**	.386**	.387**	.392**	.370**	.404**	.446**	.441**	.465**	.387**	.461**	.417**	.465**	.396**	.434**	.522**	.511**	.569**	.486**	.464**	.477**	.621**	1.000						
AC39	.345**	.325**	.417**	.323**	.395**	.324**	.406**	.349**	.370**	.352**	.312**	.498**	.487**	.481**	.456**	.449**	.370**	.376**	.430**	.449**	.482**	.527**	.457**	.403**	.406**	.458**	.376**	.548**	.339**	.481**	.479**	.562**	.626**	1.000					
AC40	.385**	.382**	.400**	.371**	.364**	.382**	.407**	.385**	.352**	.371**	.364**	.401**	.398**	.432**	.370**	.349**	.431**	.472**	.528**	.378**	.449**	.453**	.435**	.394**	.383**	.532**	.453**	.567**	.438**	.496**	.470**	.490**	.545**	.649**	1.000				
AC41	.380**	.326**	.361**	.335**	.375**	.380**	.375**	.427**	.426**	.426**	.365**	.396**	.422**	.427**	.376**	.413**	.605**	.580**	.584**	.330**	.410**	.392**	.448**	.310**	.365**	.437**	.410**	.554**	.445**	.497**	.403**	.477**	.640**	.601**	.671**	1.000			
AC42	.332**	.341**	.330**	.258**	.317**	.281**	.346**	.328**	.293**	.308**	.356**	.395**	.388**	.418**	.360**	.405**	.490**	.496**	.537**	.356**	.421**	.389**	.464**	.412**	.369**	.460**	.410**	.547**	.445**	.464**	.425**	.524**	.615**	.636**	.667**	.759**	1.000		
AC43	.389**	.376**	.447**	.352**	.397**	.377**	.429**	.421**	.379**	.421**	.350**	.500**	.465**	.518**	.484**	.539**	.477**	.421**	.486**	.448**	.465**	.476**	.430**	.397**	.449**	.479**	.400**	.589**	.396**	.517**	.495**	.623**	.601**	.658**	.619**	.653**	.710**	1.000	
AC44	.401**	.389**	.404**	.373**	.334**	.354**	.337**	.385**	.350**	.372**	.390**	.405**	.385**	.397**	.330**	.398**	.476**	.483**	.503**	.403**	.391**	.371**	.416**	.412**	.372**	.499**	.401**	.482**	.403**	.449**	.367**	.508**	.548**	.572**	.670**	.652**	.685**	.652**	1.000
Mean	3.69	3.66	3.97	3.61	3.89	3.65	3.96	3.77	3.84	3.87	3.81	4.22	4.06	4.13	4.22	4.07	3.88	3.75	3.52	4.01	3.75	3.89	3.72	3.99	3.88	3.71	3.58	3.65	3.01	3.75	3.9	3.88	3.51	3.98	3.66	3.6	3.7	3.9	3.67
S.D.	0.89	0.87	0.81	0.96	0.9	1.07	0.87	0.95	0.92	0.93	0.91	0.73	0.78	0.79	0.82	0.85	0.94	0.98	0.89	0.86	1	0.89	0.98	0.85	0.95	0.92	1.03	0.88	1.15	0.9	0.94	0.92	0.99	0.85	0.91	0.98	0.93	0.86	0.96

Bartlett's Test of Sphericity = 8897.902 df = 741 p = .000

Kaiser-Meyer-Olkin measures of sampling adequacy (KMO) = .946

Section 5.2 The second-order confirmatory factor analysis results of sports facilities' accessibility model

In this section, the measurement model of sports facilities' accessibility was analyzed by the second-order confirmatory factor analysis in order to measure if the proposed model fits the data. The results of the analysis would indicate suitable indicators reflecting sports facilities' accessibility.

The second-order confirmatory factor analysis results of sports facilities' accessibility model found that the model fit the data well. The statistical test and Goodness-of-fit test showed that Chi-square (χ^2 = 1262.223, df = 661, p = 0.00), Normed Chi-square (χ^2/df = 1.91) (lower than 3), Comparative Fit Index (CFI = 0.985), Normed Fit Index (NFI = 0.969), Non - Normed Fit Index (NNFI = 0.983) (greater than 0.9 or equal 1.00), Root Mean Square Residual (RMR = 0.0466) (lower than 0.05), Root mean square error of approximation (RMSEA = 0.0526) (lower than 0.8), Parsimony Normed Fit Index (PNFI = 0.793) (greater than 0.5). Regarding the fit indices, the p-value for the chi-square (χ^2) statistic was 0.00, which could mean that the model did not adjust properly to the data given. In this case, alternative fit indices were complemented to make a judgment of the model fit. The reason is that the statistical test or resulting p-value can be affected as sample sizes become large or the number of observed variables becomes large (Hair et al., 2014). The results indicated that the model fit a set of data well. Table 26 and Figure 7 show the standardized factor loadings of observed variables of sports facilities' accessibility model were found to be statistically significant at the level of $p < .001$.

Table 26 presents the second-order confirmatory factor analysis results including factor loadings (b), standardized factor loadings (**β**), Standard Error (SE), Factor Score Coefficient (FS), and The Squared Multiple Correlation (R^2).

The first-order confirmatory factor analysis results of sports facilities' accessibility model, which presented the correlation among seven components including planning, traveling & external area, internal area, safety, sports viewing, sanitary facilities, and amenities & leaving, showed that the standardized factor loadings of 39 observed variables were found to be statistically significant at the level of $p < .001$ indicating that all 39 observed variables were significant indicators of those seven components (factors).

The standardized factor loadings of observed variables were found from 0.529 to 0.881. The most significant variables were AC29 and AC16 respectively, and the least significant variable was AC34. The results explained are shown in the table below.

Table 25 The second-order confirmatory factor analysis results of sports facilities' accessibility model

Variable	Factor Loadings		t-value	R2	Factor Score
	b(SE)	β			Coefficient
First-order confirmatory factor analysis					
Factor 1: Planning					
AC1	0.624	0.704	<--->	0.496	0.194
AC2	0.608(0.0501)	0.698	14.883	0.487	0.185
AC3	0.570(0.0732)	0.705	9.549	0.498	0.316
Factor 2: Traveling and External Area					
AC4	0.692	0.716	<--->	0.513	0.251
AC5	0.582(0.0521)	0.644	10.722	0.415	0.067
AC6	0.757(0.0529)	0.707	13.719	0.499	0.024
AC7	0.681(0.0564)	0.780	11.593	0.609	0.299
AC8	0.766(0.0556)	0.804	13.215	0.646	0.233
AC9	0.669(0.0574)	0.726	11.190	0.528	0.201
AC10	0.639(0.0537)	0.687	11.434	0.472	0.050
AC11	0.565(0.0517)	0.623	10.476	0.388	0.104
Factor 3: Internal Area					
AC12	0.542	0.741	<--->	0.549	0.169
AC15	0.628(0.0424)	0.807	14.809	0.652	0.225
AC16	0.661(0.0437)	0.839	15.138	0.703	0.369
AC17	0.651(0.0448)	0.794	14.530	0.630	0.196
AC18	0.659(0.0462)	0.790	14.260	0.625	0.317

Variable	Factor Loadings		t-value	R2	Factor Score Coefficient
	b(SE)	β			
Factor 4: Safety					
AC19	0.734	0.788	<--->	0.621	0.444
AC20	0.701(0.0474)	0.719	16.921	0.517	0.084
AC25	0.676(0.0666)	0.758	11.616	0.575	0.369
Factor 5: Sports Viewing					
AC21	0.623	0.728	<--->	0.529	0.220
AC22	0.724(0.0547)	0.729	13.628	0.531	0.119
AC23	0.705(0.0568)	0.789	12.770	0.622	0.296
AC26	0.623(0.0613)	0.633	10.465	0.401	0.103
AC27	0.535(0.0526)	0.633	10.462	0.401	0.119
Factor 6: Sanitary Facilities					
AC28	0.729	0.775	<--->	0.601	0.261
AC29	0.810(0.0512)	0.881	15.939	0.777	0.495
AC30	0.809(0.0558)	0.789	14.622	0.623	0.235
Factor 7: Amenities & Leaving					
AC33	0.639	0.722	<--->	0.522	0.098
AC34	0.611(0.0653)	0.529	9.309	0.279	0.046
AC35	0.574(0.0452)	0.639	12.622	0.409	0.048
AC36	0.569(0.0526)	0.607	10.750	0.369	0.053
AC37	0.641(0.0510)	0.702	12.502	0.493	0.086
AC38	0.742(0.0551)	0.750	13.387	0.563	0.079
AC39	0.673(0.0471)	0.794	14.210	0.631	0.177

Variable	Factor Loadings		t-value	R2	Factor Score Coefficient
	b(SE)	β			
AC40	0.720(0.0508)	0.789	14.098	0.622	0.127
AC41	0.785(0.0539)	0.805	14.464	0.649	0.153
AC42	0.733(0.0517)	0.792	14.096	0.627	0.063
AC43	0.706(0.0475)	0.823	14.775	0.678	0.178
AC44	0.723(0.0535)	0.755	13.450	0.570	0.098
Second-order confirmatory factor analysis					
Composite indicator of sports facilities' accessibility					
PLAN	0.782(0.0607)	0.782	10.502	0.612	
TRAVEL	0.750(0.0699)	0.750	11.181	0.563	
INAREA	0.844(0.0646)	0.844	13.077	0.712	
SAFE	0.853(0.0555)	0.853	13.444	0.728	
VIEW	0.862(0.0672)	0.862	12.458	0.743	
SANIT	0.708(0.0625)	0.708	11.238	0.501	
AMENI	0.865(0.0663)	0.865	13.111	0.747	
Chi-square = 1262.223	df = 661	P = 0.0	χ^2/df = 1.91	RMSEA = 0.0526	
CFI = 0.985	NFI = 0.969	NNFI= 0.983	PNFI = 0.864	RMR = 0.0466	

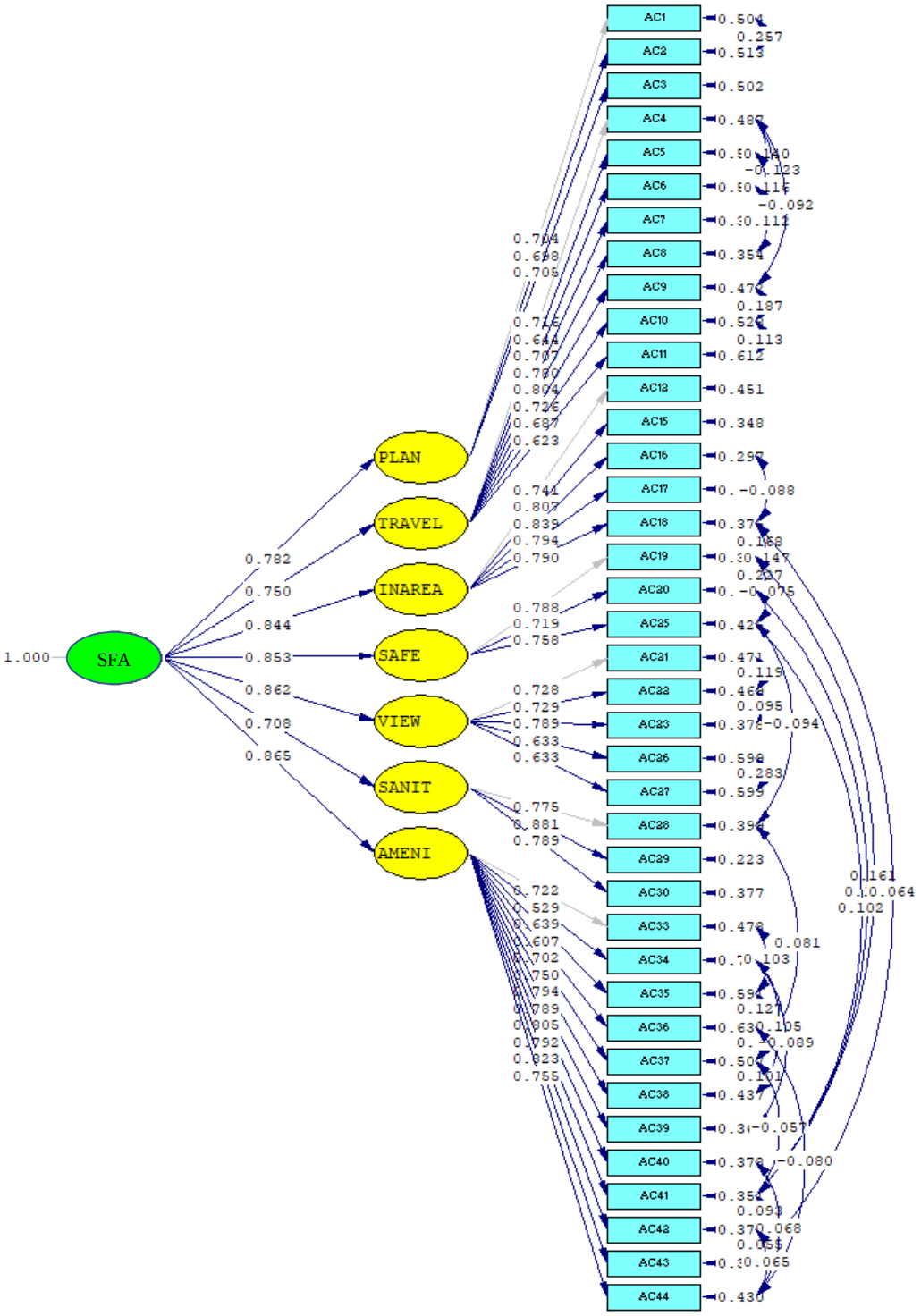
Correlation matrix of latent variables

	PLAN	TRAVEL	INAREA	SAFE	VIEW	SANIT	AMENI	SFA
PLAN	1.000							
TRAVEL	0.587***	1.000						
INAREA	0.660***	0.633***	1.000					
SAFE	0.667***	0.640***	0.720***	1.000				
VIEW	0.674***	0.646***	0.727***	0.735***	1.000			
SANIT	0.554***	0.531***	0.598***	0.604***	0.610***	1.000		
AMENI	0.676***	0.648***	0.730***	0.738***	0.745***	0.612***	1.000	
SFA	0.782***	0.750***	0.844***	0.853***	0.862***	0.708***	0.865***	1.000

Note: ***Significant at $p < 0.001$; Standard errors in parentheses.
<---> Constrained parameters (SE and t) are not reported.

As for the planning factor, the results (Table 26) showed that the standardized factor loadings of all 3 variables (indicators) were found to be statistically significant ($p < .001$) as a dimension of the latent factors. The most significant variable was AC3, followed by AC1 and AC2 respectively, which show the variance explained by the variable on planning factor of approximately 48.7 percent to 49.8 percent.

As for the traveling & external area factor, the results (Table 26) showed that the standardized factor loadings of all 8 variables were found to be statistically significant ($p < .001$) as a dimension of the latent factors. The most significant variables were AC8 and AC7 respectively, which showed the variance explained by the variable on traveling & external area factor of approximately 64.6 percent and 60.9 percent respectively. They were followed by AC9, AC4, AC6, AC10, AC5, and AC11 respectively, which showed the variance explained by the variable on traveling & external area factor of approximately 38.8 percent to 52.8 percent.



Chi-Square=1262.22, df=661, P-value=0.00000, RMSEA=0.053

Figure 7 The second-order confirmatory factor analysis of sports facilities' accessibility model

As for the internal area factor, the results (Table 26) showed that the standardized factor loadings of all 5 variables were found to be statistically significant ($p < .001$) as a dimension of the latent factors. The most significant variable was AC16, which showed the variance explained by the variable on internal area factor of approximately 70.3 percent. It was followed by AC15, AC17, AC18, and AC12 respectively, which showed the variance explained by the variable on internal area factor of approximately 54.9 percent to 65.2 percent.

As for the safety factor, the results (Table 26) showed that the standardized factor loadings of all 3 variables were found to be statistically significant ($p < .001$) as a dimension of the latent factors. The most significant variable was AC19, which showed the variance explained by the variable on safety factor of approximately 62.1 percent. It was followed by AC25 and AC20 respectively, which showed the variance explained by the variable on safety factor of approximately 51.7 percent to 57.5 percent.

As for the sports viewing factor, the results (Table 26) showed the standardized factor loadings of all 5 variables were found to be statistically significant ($p < .001$) as a dimension of the latent factors. The most significant variable was AC23, which showed the variance explained by the variable on sports viewing factor of approximately 62.2 percent. It was followed by AC22 and AC21 respectively, which showed the variance explained by the variable sports viewing factor of approximately 52.9 percent to 53.1 percent. The least significant variables were AC26 and AC27, which showed the equal variance explained by the variable on sports viewing factor of approximately 40.1 percent.

As for the sanitary facilities factor, the results (Table 26) showed that the standardized factor loadings of all 3 variables were found to be statistically significant ($p < .001$) as a dimension of the latent factors. The most significant variable was AC29, which showed the variance explained by the variable on sanitary facilities factor of approximately 77.7 percent. It was followed by AC30 and AC28 respectively, which showed the variance explained by the variable on sanitary facilities factor of approximately 60.1 percent to 62.3 percent.

As for the amenities & leaving factor, the results (Table 26) showed that the standardized factor loadings of all 12 variables were found to be statistically significant (p <.001) as a dimension of the latent factors. The most significant variables were AC43, AC41, AC39, AC42, and AC40 respectively, which showed the variance explained by the variable on amenities & leaving factor of approximately 62.2 percent to 67.8 percent. They were followed by AC44, AC38, AC33, AC37, AC35, and AC36 respectively, which showed the variance explained by the variable amenities & leaving factor of approximately 36.9 percent to 57 percent. The least significant variable was AC34, which showed the equal variance explained by the variable on amenities & leaving factor of approximately 27.9 percent.

Based on the results, it can be summarized that all variables indicating the proposed model of sports facilities' accessibility were found to be statistically significant (p < .001). The standardized factor loadings of all variables were positive. This indicated that a high level of these variable attributes could lead to an increased level of sports facilities' accessibility, which in this case means more accessibility for people with physical disabilities.

The second-order confirmatory factor analysis results, which presented the correlation between sports facilities' accessibility factor (second-order) and seven components (first-order) including planning, traveling & external area, internal area, safety, sports viewing, sanitary facilities, and amenities & leaving, showed that the standardized factor loadings of 7 components were found to be statistically significant at the level of p < .001 indicating that all 7 components were significant indicators of sports facilities' accessibility factor. The most significant components reflecting sports facilities' accessibility factor was amenities & leaving (AMENI), followed by sports viewing (VIEW), safety (SAFE), internal area (INAREA), planning (PLAN), traveling & external area (TRAVEL), and sanitary facilities (SANIT) respectively, which showed the variance explained on sports facilities' accessibility factor from approximately 50.1 percent to 74.7 percent.

The correlation coefficients of these factors were found to be positive. The values of correlation coefficient were ranged from 0.531 to 0.865, indicating that the components of planning, traveling & external area, internal area, safety, sports viewing, sanitary facilities, amenities & leaving, and sports facilities' accessibility

factor were correlated. This can be interpreted that a high level of attributes of the seven components could lead to an increased level of overall sports facilities' accessibility.

Section 5.3 The results of the scale development for sports facilities' accessibility

After the second-order confirmatory factor analysis, the factor score coefficient of each variable (indicator) was used to develop a factor scale (also known as composite indicator/index). This included composite indicators of planning (PLAN), traveling & external area (TRAVEL), internal area (INAREA), safety (SAFE), sports viewing (VIEW), sanitary facilities (SANIT), amenities & leaving (AMENI), and composite indicator of sports facilities' accessibility (SFA).

First, raw data were used to develop these composite indicators. Then, the developed indicators were used to analyze statistical assumptions using SPSS. The results were shown in Table 27. The following part presents the equation used for composite indicators development.

The equation used for composite indicators development of sports facilities' accessibility

Composite indicator of planning

PLAN = 0.194***(AC1) + 0.185***(AC2) + 0.316***(AC3)

Composite indicator of traveling & external area

TRAVEL = 0.251***(AC4) + 0.067***(AC5) + 0.024***(AC6) + 0.299***(AC7) + 0.233***(AC8) + 0.201***(AC9) + 0.050***(AC10) + 0.104***(AC11)

Composite indicator of internal area

INAREA = 0.169***(AC12) + 0.225***(AC15) + 0.369***(AC16) + 0.196***(AC17) + 0.317***(AC18)

Composite indicator of safety

SAFE = 0.444***(AC19) + 0.084***(AC20) + 0.369***(AC25)

Composite indicator of sports viewing

VIEW = 0.220***(AC21) + 0.119***(AC22) + 0.296***(AC23) + 0.103***(AC26) + 0.119***(AC27)

Composite indicator of sanitary facilities

SANIT = 0.261***(AC28) + 0.495***(AC29) + 0.235***(AC30)

Composite indicator of amenities & leaving

LEAVE = 0.098***(AC33) + 0.046***(AC34) + 0.048***(AC35) + 0.053***(AC36) + 0.086***(AC37) + 0.079*** (AC38) + 0.177***(AC39) + 0.127***(AC40) + 0.153***(AC41) + 0.063***(AC42) + 0.178***(AC43) + 0.098***(AC44)

Composite indicator of sports facilities' accessibility

SFA = 0.194***(AC1) + 0.185***(AC2) + 0.316***(AC3) + 0.251***(AC4) + 0.067***(AC5) + 0.024***(AC6) + 0.299***(AC7) + 0.233***(AC8) + 0.201***(AC9) + 0.050***(AC10) + 0.104***(AC11) + 0.169***(AC12) + 0.225***(AC15) + 0.369***(AC16) + 0.196***(AC17) + 0.317***(AC18) + 0.444***(AC19) + 0.084***(AC20) + 0.369***(AC25) + 0.220***(AC21) + 0.119***(AC22) + 0.296***(AC23) + 0.103***(AC26) + 0.119***(AC27) + 0.261***(AC28) + 0.495***(AC29) + 0.235***(AC30) + 0.098***(AC33) + 0.046***(AC34) + 0.048***(AC35) + 0.053***(AC36) + 0.086***(AC37) + 0.079*** (AC38) + 0.177***(AC39) + 0.127***(AC40) + 0.153***(AC41) + 0.063***(AC42) + 0.178***(AC43) + 0.098***(AC44)

**Note: ***Significant at $p < 0.001$

Test of statistical assumptions of sport facilities' accessibility composite indicators derived from the results of the scale development for sports facilities' accessibility is shown in Table 27.

Table 26 Test of statistical assumptions of sport facilities' accessibility composite indicator

Composite Indicator	Mean	SD	CV%	Min	Max	Range	Sk	Ku
Planning (PLAN)	2.6486	0.49646	18.744	1.20	3.48	2.28	-0.209	-0.423
Traveling & external area (TRAVEL)	4.6792	0.88731	18.963	1.84	6.15	4.30	-0.281	-0.353
Internal area (INAREA)	5.2662	0.86292	16.386	1.81	6.38	4.57	-0.526	-0.197
Safety (SAFE)	3.3388	0.71322	21.362	0.90	4.49	3.59	-0.510	0.316
Sports viewing (VIEW)	3.3371	0.62624	18.766	0.98	4.29	3.31	-0.350	-0.100
Sanitary facilities (SANIT)	3.6939	0.84044	22.752	0.99	4.96	3.96	-0.297	-0.297
Amenities & leaving (AMENI)	4.4999	0.86652	19.256	1.29	6.03	4.74	-0.193	-0.294
Sports facilities' accessibility (SFA)	27.4638	4.17266	15.193	11.08	35.76	24.67	-0.313	0.007

Table 27 shows the statistical assumption results of composite indicators of planning (PLAN), traveling & external area (TRAVEL), internal area (INAREA), safety (SAFE) , sports viewing (VIEW), sanitary facilities (SANIT), amenities & leaving (AMENI), and sports facilities' accessibility (SFA) found that the distributions of these composite indicators were negatively skewed. The Skewness values were found from -0.526 to -0.193, indicating that the majority of the samples had the level of planning, traveling & external area, internal area, safety, sports viewing, sanitary facilities, amenities & leaving, and sports facilities' accessibility above average.

Moreover, the results show that 6 composite indicators have a distribution with a negative kurtosis value. The kurtosis values were ranged from -0.423 to -0.100, indicating that the distribution has lighter tails and a flatter peak than the normal distribution (curve). It could be interpreted that the distribution of the data, including amenities & leaving (AMENI), traveling & external area (TRAVEL), internal area

(INAREA), sports viewing (VIEW), sanitary facilities (SANIT), and planning (PLAN), was highly distributed. This is consistent with the high coefficient of variation of these indicators.

The other two composite indicators have a distribution with a positive kurtosis value. The kurtosis values were ranged from 0.007 to 0.316, indicating that the distribution had heavier tails than the normal distribution (curve). It could be interpreted that the data distribution of safety (SAFE) and sports facilities' accessibility (SFA) was relatively small.

Section 6 The second-order confirmatory factor analysis results of motivation model

Section 6.1 Test of statistical assumptions and Pearson's correlation coefficient of (observed variables) Personal, Incentive & Social, and Uniqueness

This section presents test of statistical assumptions and Pearson's correlation coefficient of observed variables from three latent variables including personal, incentive & social, and uniqueness. Mean, Standard Deviation, and Pearson's correlation coefficient were also analyzed and shown in order to check the data suitability for confirmatory factor analysis. The normality of distribution was tested by Minimum, Maximum, Range, Skewness, and Kurtosis and the results are shown in Section 5 (Table 30).

Pearson's correlation coefficient presented in Table 28 contained 13 observed variables of three latent variables including Personal, Incentive & Social, and uniqueness. The results show that the correlation coefficient ranged from 0.160 to 0.851. The correlation coefficient with statistical significance ($p < .01$) of variables contained 78 pairs. The correlation coefficients of all 78 pairs were found to be positive. The highest correlation coefficient of variables with statistical significance was found between MOTIV6 and MOTIV7. The lowest correlation coefficient of variables with statistical significance was found between MOTIV10 and MOTIV4.

As shown in Table 28, the result of Bartlett's test of sphericity showed that the Chi Square value was 2334.200 with significant value of $p < .000$, indicating that the correlation matrix was not an identity matrix and the variables are interrelated. This is consistent with the analysis result of Kaiser-Meyer-Olkin measures of sampling adequacy (KMO) which shows the value of 0.899 (close to 1). The values of Bartlett's test of sphericity and KMO obtained indicated that the data was feasible for factor analysis.

Table 27 Mean ($\bar{X}$), Standard Deviation (S.D), and Pearson's correlation coefficient of variables in confirmatory factor analysis of motivation model

ตัวแปร	MOTIV1	MOTIV2	MOTIV9	MOTIV10	MOTIV11	MOTIV12	MOTIV13	MOTIV 3	MOTIV 4	MOTIV 5	MOTIV 6	MOTIV 7	MOTIV 8
MOTIV1	1.000												
MOTIV2	.626**	1.000											
MOTIV9	.395**	.396**	1.000										
MOTIV10	.530**	.503**	.522**	1.000									
MOTIV11	.488**	.546**	.555**	.741**	1.000								
MOTIV12	.356**	.388**	.426**	.399**	.497**	1.000							
MOTIV13	.467**	.544**	.520**	.579**	.651**	.554**	1.000						
MOTIV3	.333**	.457**	.324**	.303**	.339**	.354**	.346**	1.000					
MOTIV4	.300**	.241**	.266**	.160**	.205**	.217**	.202**	.421**	1.000				
MOTIV5	.504**	.484**	.466**	.396**	.448**	.395**	.432**	.363**	.442**	1.000			
MOTIV6	.408**	.441**	.489**	.427**	.458**	.414**	.447**	.479**	.311**	.362**	1.000		
MOTIV7	.449**	.467**	.472**	.417**	.489**	.418**	.494**	.480**	.335**	.386**	.851**	1.000	
MOTIV8	.403**	.422**	.552**	.463**	.475**	.404**	.435**	.447**	.356**	.421**	.634**	.655**	1.000
Mean	4.54	4.6	4.36	4.56	4.56	4.34	4.53	4.25	3.78	4.39	4.28	4.26	4.24
S.D.	0.629	0.612	0.694	0.627	0.627	0.727	0.643	0.778	1.008	0.712	0.742	0.725	0.74
Bartlett's Test of Sphericity = 2334.200				df = 78		p = .000							
KMO = .899													

Note: ** $p < .01$

Section 6.2 The second-order confirmatory factor analysis results of motivation model

In this section, the measurement model of motivation was analyzed by the second-order confirmatory factor analysis in order to measure if the proposed model fits the data. The results of the analysis would indicate suitable indicators reflecting motivation.

The second-order confirmatory factor analysis results of motivation model showed that the model fits the data well. The statistical test and Goodness-of-fit test showed that Chi-square ($\chi^2 = 100.750$, df = 55, p = 0.000166), Normed Chi-square ($\chi^2/df = 1.83$) (lower than 3), Comparative Fit Index (CFI = 0.990), Normed Fit Index (NFI = 0.979), Non - Normed Fit Index (NNFI = 0.985) (greater than 0.9 or equal 1.00), Root Mean Square Residual (RMR = 0.0221) (lower than 0.05), Root mean square error of approximation (RMSEA = 0.0503) (lower than 0.8), Parsimony Normed Fit Index (PNFI = 0.691) (greater than 0.5). The results indicated that the model fit a set of data well. Table 29 and Figure 8 show the standardized factor loadings of observed variables of motivation model were found to be statistically significant at the level of $p < .001$.

Table 29 presents the second-order confirmatory factor analysis results including factor loadings (b), standardized factor loadings (**β**), Standard Error (SE), Factor Score Coefficient (FS), and The Squared Multiple Correlation (R^2).

The first-order confirmatory factor analysis results of motivation model, which presents the correlation among three components including personal, incentive & social, and uniqueness, showed that the standardized factor loadings of 13 observed variables were found to be statistically significant at the level of $p < .001$ indicating that all 13 observed variables were significant indicators of those three components (factors). The standardized factor loadings of observed variables were found from 0.529 to 0.839. The most significant variables were “To be with my friends” (MOTIV5) and “To participate in events in a famous city or area” (MOTIV7) respectively, and the least significant variable was “To be with my family or spouse” (MOTIV4). The results explained are shown in the table below.

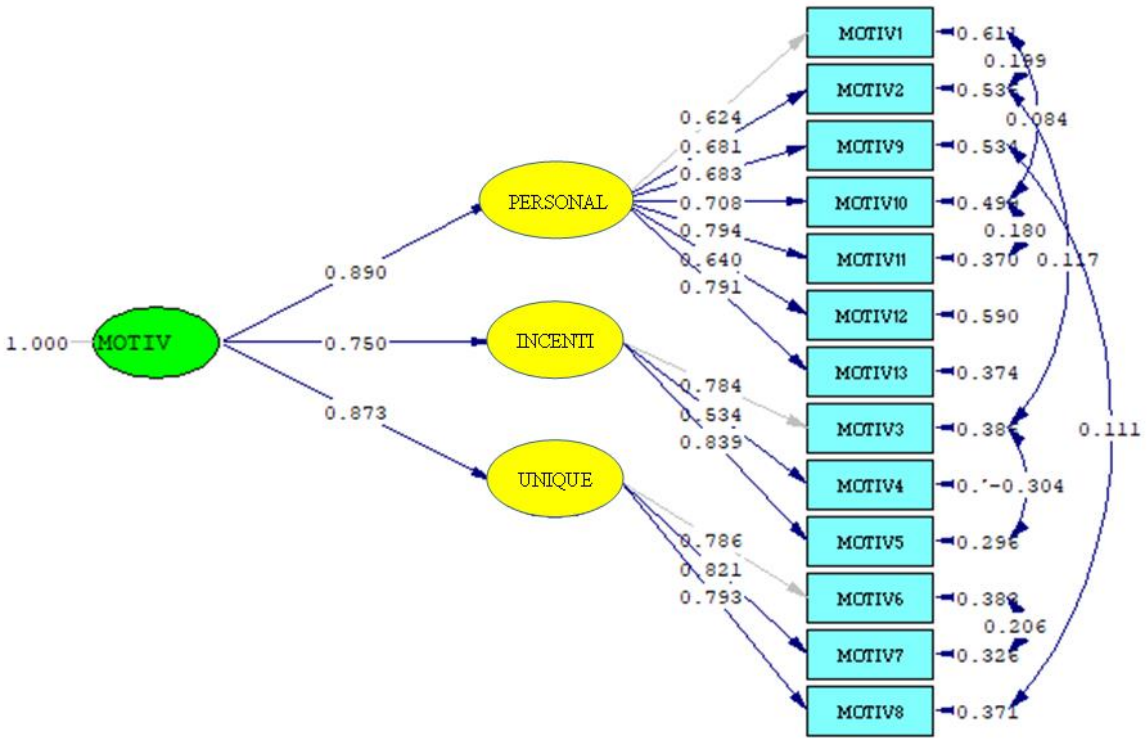
Table 28 The second-order confirmatory factor analysis results of motivation model

Variable	Factor Loadings		t-value	R2	Factor Score Coefficient
	b(SE)	β			
First-order confirmatory factor analysis					
Factor 1: Personal Motivation					
MOTIV1	0.392	0.624	<--->	0.389	0.110
MOTIV2	0.419(0.0353)	0.681	12.593	0.464	0.175
MOTIV9	0.474(0.0496)	0.683	10.155	0.466	0.197
MOTIV10	0.444(0.0421)	0.708	11.212	0.501	0.117
MOTIV11	0.497(0.0469)	0.794	11.281	0.630	0.325
MOTIV12	0.465(0.0512)	0.640	9.660	0.410	0.167
MOTIV13	0.509(0.0480)	0.791	11.276	0.626	0.367
Factor 2: Incentive & Social Motivation					
MOTIV3	0.610	0.784	<--->	0.614	0.887
MOTIV4	0.538(0.0638)	0.534	6.934	0.285	0.014
MOTIV5	0.598(0.0515)	0.839	9.527	0.704	1.075
Factor 3: place					
MOTIV6	0.583	0.786	<--->	0.617	0.191
MOTIV7	0.596(0.0297)	0.821	23.137	0.674	0.344
MOTIV8	0.584(0.0526)	0.793	12.795	0.629	0.401
Second-order confirmatory factor analysis					
Composite indicator of motivation					
PERSONAL	0.890(0.0786)	0.890	10.649	0.792	
INCENTI	0.750(0.0832)	0.750	10.963	0.562	
UNIQUE	0.873(0.0591)	0.873	12.819	0.762	
Chi-square = 100.750	df = 55	P = 0.000166	χ^2/df = 1.83	RMSEA = 0.0503	
CFI = 0.990	NFI = 0.979	NNFI = 0.985	PNFI = 0.691	RMR = 0.0221	

Correlation matrix of latent variables	PERSONAL	INCENTI	UNIQUE	MOTIV
PERSONAL	1.000			
INCENTI	0.667	1.000		
UNIQUE	0.777	0.654	1.000	
MOTIV	0.890	0.750	0.873	1.000

Note: ***Significant at $p < 0.001$; Standard errors in parentheses.
<---> Constrained parameters (SE and t) were not reported

.



Chi-Square=100.75, df=55, P-value=0.00017, RMSEA=0.050

Figure 8 The second-order confirmatory factor analysis of motivation model

As for the personal motivation factor, the results (Table 29) showed the standardized factor loadings of all 7 variables were found to be statistically significant ($p < .001$) as a dimension of the latent factors. The most significant variables were

MOTIV11 and MOTIVE13 respectively, which showed the variance explained by the variable on personal motivation factor of approximately 63 percent and 62.6 percent respectively, followed by MOTIV10, MOTIV9, MOTIV2, MOTIV12, and MOTIV1 respectively, which showed the variance explained by the variable on personal motivation factor of approximately 38.9 percent to 50.1 percent.

As for the incentive & social factor, the results (Table 29) showed the standardized factor loadings of all 3 variables were found to be statistically significant ($p < .001$) as a dimension of the latent factors. The most significant variables were MOTIV5 and MOTIV3 which showed the variance explained by the variable on incentive & social factor of approximately 70.4 percent and 61.4 percent respectively. They were followed by MOTIV4, which showed the variance explained by the variable on incentive & social factor of approximately 28.5 percent.

As for the uniqueness factor, the results (Table 29) showed the standardized factor loadings of all 3 variables were found to be statistically significant ($p < .001$) as a dimension of the latent factors. The most significant variable was MOTIV7, followed by MOTIV8 and MOTIV6 respectively. The variances explained by the variables on uniqueness factor were approximately 61.7 percent to 67.4 percent.

Based on the results, it can be summarized that all variables indicating the proposed model of motivation were found to be statistically significant ($p < .001$). The standardized factor loadings of all variables were positive. This can be interpreted that a high level of these motivational variables of a person can increase the level of their overall motivation.

The second-order confirmatory factor analysis results, which presented the correlation between motivation factor (second-order) and three components (first-order) including personal motivation, incentive & social motivation, and uniqueness motivation, showed that the standardized factor loadings of 3 components were found to be statistically significant at the level of $p < .001$ indicating that all 3 components were significant indicators of motivation factor. The most significant component reflecting motivation factors was personal motivation (PERSONAL), followed by uniqueness motivation (UNIQUE) and incentive & social motivation (INCENTI) respectively, which showed the variance explained on motivation factor from approximately 56.2 percent to 79.2 percent.

The correlation coefficients of these factors were found to be positive. The values of correlation coefficient were found from 0.654 to 0.890, indicating that the components of personal motivation, incentive & social factor, uniqueness factor and overall motivation factor were correlated. This can be interpreted that a high level of these three motivational factors of a person is more likely to increase the level of their overall motivation.

Section 6.3 The results of the scale development for motivation

After the second-order confirmatory factor analysis, the factor score coefficient of each variable (indicator) was used to develop a factor scale (also known as composite indicator/index). This includes the composite indicators of personal motivation (PERSONAL), incentive & social motivation (INCENTI), and uniqueness motivation (UNIQUE), and composite indicator of motivation (MOTIV).

First, raw data were used to develop these composite indicators. Then, the developed indicators were used to analyze statistical assumptions using SPSS. The results are shown in Table 30. The following part presents the equation used for the composite indicators development.

<u>The equation used for composite indicators development of motivation</u>

Composite indicator of personal

PERSONAL = 0.110***(MOTIV1) + 0.175***(MOTIV2) + 0.197***(MOTIV9) + 0.117***(MOTIV10) + 0.325***(MOTIV11) + 0.167***(MOTIV12) + .367***(MOTIV13)

Composite indicator of incentive & social motivation

INCENTI = 0.887***(MOTIV3) + 0.014***(MOTIV4) + 1.075***(MOTIV5)

Composite indicator of uniqueness motivation

UNIQUE = 0.191***(MOTIV6) + 0.344***(MOTIV7) + 0.401***(MOTIV8)

Composite indicator of motivation

MOTIV = 0.110***(MOTIV1) + 0.175***(MOTIV2) + 0.197***(MOTIV9) + 0.117***(MOTIV10) + 0.325***(MOTIV11) + 0.167***(MOTIV12) + 0.367***(MOTIV13) + 0.887***(MOTIV3) + 0.014***(MOTIV4) + 1.075***(MOTIV5) + 0.191***(MOTIV6) + 0.344***(MOTIV7) + 0.401***(MOTIV8)

Note: *** p <.001

Test of statistical assumptions of motivation composite indicators, derived from the results of the scale development for motivation, are shown in Table 30.

Table 29 Test of statistical assumptions of motivation composite indicator

Composite indicator	Mean	SD	CV%	Min	Max	Range	Sk	Ku
Personal motivation (PERSONAL)	6.5667	.73999	11.269	4.30	7.29	2.99	-0.969	0.275
Incentive & Social motivation (INCENTI)	8.5421	1.20957	14.160	4.82	9.88	5.06	-0.659	-0.222
Uniqueness motivation (UNIQUE)	3.9830	0.61717	15.495	0.94	4.68	3.74	-0.894	1.474
Composite indicator of motivation (MOTIV)	19.0918	2.22748	11.667	12.17	21.85	9.68	-0.694	-0.134

Table 30 shows the statistical assumption results of composite indicators of personal motivation (PERSONAL), incentive & social motivation (INCENTI), and uniqueness motivation (UNIQUE), and composite indicator of motivation (MOTIV) found that the distributions of these composite indicators were negatively skewed. The Skewness values were found from -0.969 to -0.659, indicating that the majority of the samples had the level of personal motivation, incentive & social motivation, and uniqueness motivation, and composite indicator of motivation above average.

Moreover, the results show that two composite indicators have a distribution with a negative kurtosis value. The kurtosis values were found from -0.222 to -0.134, indicating that the distribution has lighter tails and a flatter peak than the normal distribution (curve). It could be interpreted that the distribution of the data, including incentive & social motivation (INCENTI) and motivation (MOTIV), was highly distributed. This is consistent with the high coefficient of variation of these indicators.

The other two composite indicators have a distribution with a positive kurtosis value. The kurtosis values were found from 0.275 to 1.474, indicating that the distribution has heavier tails than the normal distribution (curve). It could be interpreted that the data distribution of personal motivation (PERSONAL) and uniqueness motivation (UNIQUE) was relatively small.

Section 7 Path analysis results

This section investigates whether sports facilities' accessibility, motivation, and satisfaction have an effect on word-of-mouth and re-participation intentions based on the proposed model presented in Figure 9. The proposed model was comprised of two exogenous variables, namely sports facilities' accessibility (SFA) and motivation (MOTIV), one mediating variable, namely satisfaction (SAT), and two endogenous variables, namely word-of-mouth Intentions (WOM) and re-participation (RI).

Path analysis results of the model using structural equation modeling (SEM) with LISREL 8.72 found that the initial model does not fit the data. For this reason, the step of model modification was applied for improving the fit of the model. This was achieved by allowing or constraining correlations among measurement errors and changing the path and/or the items to improve the fit between data and a theoretical model. The results of parameter estimation and path coefficient showing direct effect, indirect effect, total effect, and other statistical indices were presented in Table 31 and Figure 9.

Table 31 and Figure 9 indicate that, after the modification, the model of the influence of sports facilities' accessibility, satisfaction, and motivation on re-participation and word-of-mouth intentions fit the data well. The statistical test and Goodness-of-fit test showed that Chi-square (χ^2 =377.675, df = 140, p = 0.00), Normed Chi-square (χ^2/df = 2.70) (lower than 3), Comparative Fit Index (CFI = 0.980), Normed Fit Index (NFI = 0.969), Non - Normed Fit Index (NNFI = 0.975) (greater than 0.9 or equal 1.00), Root Mean Square Residual (RMR = 0.05) (lower than 0.05), Root mean square error of approximation (RMSEA = 0.0718) (lower than 0.8), Parsimony Normed Fit Index (PNFI = 0.793) (greater than 0.5). Regarding the fit indices, the p-value for the chi-square (χ^2) statistic was 0.00, which could mean that the model did not adjust properly to the data given. In this case, alternative fit indices are complemented to make a judgment of the model fit. The reason is that the statistical test or resulting p-value can be affected as sample sizes become large or the number of observed variables becomes large (Hair et al., 2014). The results indicated that the model fit a set of data well.

Table 30 Parameter Estimates

Independent variable → Dependent variable	Parameter Estimates		SE	t-value
	Unstandardized Coefficients	Standardized Coefficients		
Measurement model				
Matrix LX (LAMBDA X: Factor loadings of observed exogenous variables)				
SFA				
PLAN	0.318	0.641	0.0257	12.375***
TRAVEL	0.611	0.689	0.0449	13.610***
INAREA	0.683	0.791	0.0413	16.548***
SAFE	0.483	0.675	0.0371	13.002***
VIEW	0.485	0.774	0.0302	16.026***
SANIT	0.505	0.601	0.0447	11.307***
AMENI	0.713	0.823	0.0407	17.523***
MOTIV				
PERSONAL	0.709	0.958	0.0409	17.334***
INCENTI	1.025	0.847	0.0715	14.326***
UNIQUE	0.421	0.682	0.0335	12.585***
Matrix LY (LAMBDA Y: Factor loadings of observed endogenous variables)				
WOM				
WOM1	0.612	0.912	<--->	<--->
WOM2	0.582	0.874	0.0258	22.573***
WOM3	0.588	0.864	0.0266	22.094***
SAT				
SAT1	0.632	0.819	<--->	<--->
SAT2	0.627	0.830	0.0373	16.893***
SAT3	0.689	0.789	0.0438	15.809***

Independent variable → Dependent variable	Parameter Estimates		SE	t-value
	Unstandardized Coefficients	Standardized Coefficients		
Measurement model				
Matrix LY (Factor loadings of Observed endogenous variables)				
RI				
RI1	0.510	0.778	<--->	<--->
RI2	0.520	0.857	0.0265	21.068***
RI3	0.606	0.931	0.0393	16.562***
Structural Equation Model				
Matrix GA (GAMMA)				
SFA → SAT	0.796	0.799	0.059	13.412***
MOTIV → RI	0.330	0.354	0.051	6.529***
Matrix BE (Beta)				
SAT → RI	0.514	0.550	0.057	8.998***
SAT → WOM	0.720	0.717	0.056	12.762***

Note: ***Significant at $p < 0.001$, <---> Constrained parameters (SE and t) are not reported.

Table 31 Path analysis results of the model

Dependent variable / Independent variable	SAT			RI			WOM		
	Total Effect	Indirect Effect	Direct Effect	Total Effect	Indirect Effect	Direct Effect	Total Effect	Indirect Effect	Direct Effect
SFA	0.796	-	0.796	0.410	0.410	-	0.573	0.573	-
	(0.059)	-	(0.059)	(0.049)	(0.049)	-	(0.052)	(0.052)	-
	0.799	-	**0.799**	**0.440**	**0.440**	-	**0.573**	**0.573**	-
MOTIV	-	-	-	0.330	-	0.330	-	-	-
	-	-	-	(0.051)	-	(0.051)	-	-	-
	-	-	-	**0.354**	-	**0.354**	-	-	-
SAT	-	-	-	0.514	-	0.514	0.720	-	0.720
	-	-	-	(0.057)	-	(0.057)	(0.056)	-	(0.056)
	-	-	-	**0.550**	-	**0.550**	**0.717**	-	**0.717**

Chi-square = 377.675 df = 140 P = 0.00 χ^2/df = 2.70 RMSEA = 0.0718

RMR = 0.05 CFI = 0.980 NFI = 0.969 NNFI = 0.975 PNFI = 0.793

Variable	PLAN	TRAVEL	INAREA	SAFE	VIEW
R-Squared	0.411	0.474	0.626	0.456	0.599
Variable	SANIT	AMENI	PERSONAL	INCENTI	UNIQUE
R-Squared	0.361	0.677	0.918	0.718	0.465
Variable	WOM1	WOM2	WOM3	SAT1	SAT2
R-Squared	0.832	0.764	0.746	0.671	0.689
Variable	SAT3	RI1	RI2	RI3	
R-Squared	0.622	0.606	0.735	0.866	

Construct	WOM	SAT	RI
R-squared	0.514	0.639	0.599

Correlation Matrix	WOM	SAT	RI	SFA	MOTIV
WOM	1.000				
SAT	0.717	1.000			
RI	0.506	0.706	1.000		
SFA	0.573	0.799	0.635	1.000	
MOTIV	0.315	0.440	0.596	0.550	1.000

Note: ***Significant at $p < 0.001$; Standardized coefficients in **bold**; Standard errors in parentheses.

Table 32 shows the squared multiple correlation (R^2) of each observed variable. It was found that most of observed variables represented a high value of R-squared (from 0.599 to 0.918), except some variables including SANIT ($R^2 = 0.361$), PLAN ($R^2 = 0.411$), SAFE ($R^2 = 0.456$), and TRAVEL ($R^2 = 0.474$) which had a low value of R-squared. In sum, the R-squared values of all observed variables were acceptable.

Table 32 also shows the squared multiple correlation (R^2) of latent variables including SAT ($R^2 = 0.639$), WOM ($R^2 = 0.514$), RI ($R^2 = 0.599$). It could be explained that 63.9 % of the variance in satisfaction (SAT) was explained by sports facilities' accessibility (SFA) (predictor variable). 51.4 % of the variance in word-of-mouth intention (WOM) was explained by satisfaction (SAT) (predictor variable). 59.9 % of the variance in re-participation intention (RI) was explained by satisfaction (SAT) (predictor variable). The interpretation of path coefficient analysis between latent variables is explained below.

Hypotheses testing

Table 32 and Figure 9 show the path coefficient results of the proposed model.

Hypothesis 1: the influence of sports facilities' accessibility on satisfaction was tested. Results showed that facilities' accessibility had a positive direct effect on satisfaction ($\beta = .799$, $p < .001$, t-value = 13.412). Thus, H1 was supported.

Hypothesis 2: the influence of satisfaction on word of mouth intention was tested. Results showed that satisfaction positively and significantly influenced word of mouth intention ($\beta = .717$, $p < .001$, t-value = 12.762). Thus, H2 was supported.

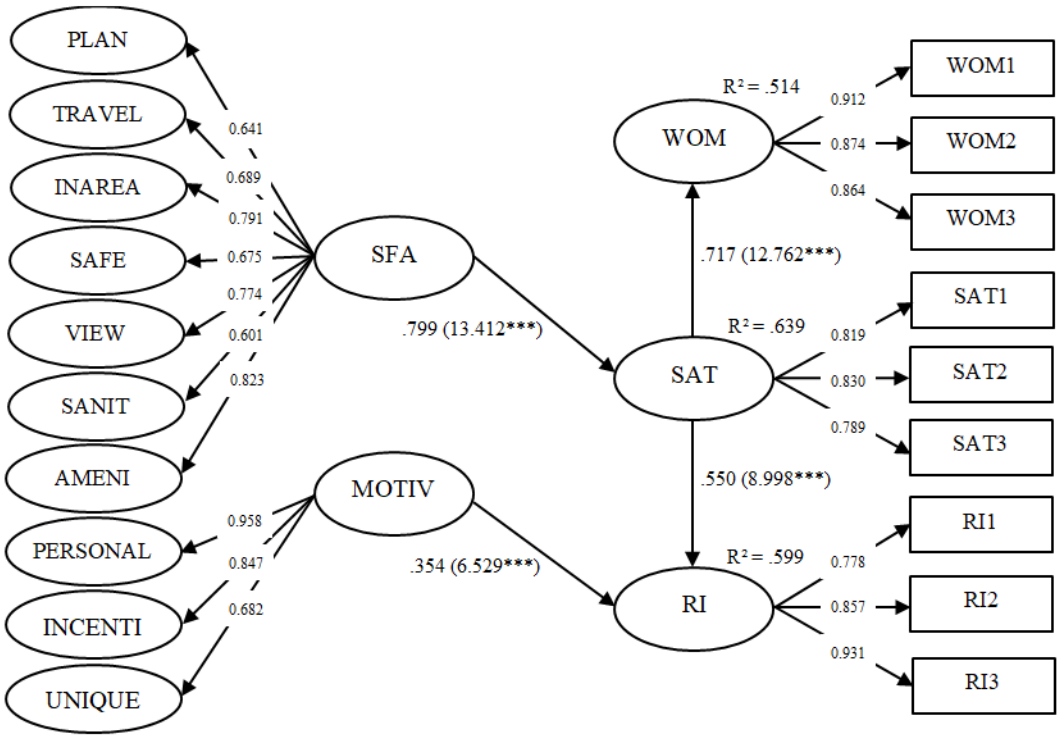
Hypothesis 3: the influence of satisfaction on re-participation intention was tested. Results showed that satisfaction positively and significantly influenced re-participation intention (β = .550, $p < .001$, t-value = 8.998). Thus, H3 was supported.

Hypothesis 4: the influence of motivation on re-participation intention was tested. Results showed that satisfaction positively and significantly influenced re-participation intention (β = .354, $p < .001$, t-value = 6.529). Thus, H4 was supported.

Hypothesis 5: the results revealed that sports facilities' accessibility had an indirect effect (IE) on word of mouth intention (β = .573, p < .001, t-value = 11.086), indicating that satisfaction mediated the relationship between sports facilities' accessibility and word of mouth intention. Thus, H5 was supported.

Hypothesis 6: the results revealed that sports facilities' accessibility had an indirect effect (IE) on re-participation intention (β = .573, p < .001, t-value = 8.282), meaning that satisfaction mediated the relationship between sports facilities' accessibility and re-participation intention. Thus, was supported.

In sum, all of the hypothesized relationships were supported. The findings from H5 and H6 implied that satisfaction played an important role as a significant mediator in the proposed conceptual framework.



Note: ***Significant at $p < 0.001$

Chi-Square = 377.67, df = 140, P-value = 0.00000, RMSEA = 0.072

Figure 9 The model of the influence of sports facilities' accessibility, motivation, and satisfaction on word-of-mouth and re-participation intentions of athletes with physical disabilities

Section 8 Data analysis results of comments and suggestions from participants

Table 32 Data analysis results of comments and suggestions from participants by frequency

Comments and suggestions from participants	Frequency
1. Suggestions for the improvement of the event	
1) Toilet facilities should be fixed and improved to meet the requirements.	9
2) The food quality provided should be improved.	9
3) There should be more advertising and publicity.	8
4) The travel expenses should be covered.	4
5) The allowance should be supported.	4
6) The clarity of event details from the organizer should be improved.	1
7) Prize money should be given.	1
8) Medical services should be provided at the event.	1
9) The accommodation should be close to the event.	1
10) A retail store should be close to the event.	1
11) There should be a parking lot for people with disabilities.	1
12) The event date should not be close to other events.	1
2. Problems found from the events	
1) There is inadequate public transportation, especially for people with physical disabilities.	4
2) There are not enough seats for the disabled.	4
3) There is an inappropriate lighting system.	4
4) There are not enough toilets.	2
5) There is a small number of participants.	2
6) The elevator is not suitable for people with disabilities.	1
3. Other comments	
1) The event should be held every year as it is good for athletes.	8
2) The event is well-organized.	8
Total	74

Section 9 Data analysis results of the compliance list of accessibility requirements for people with physical disabilities

Table 33 Data analysis results of the compliance list of accessibility requirements by frequency and percentage

Items	Compliance of requirements		
	Criteria	**Frequency**	**Percentage**
1. Seat or wheelchair area for people with disabilities			
1.1 Accessible seats shall be provided and there shall be enough space for wheelchairs.	-	12	100.0
1.2 The handrail is made with a material that is stable and strong.	-	5	41.7
2. Ramp			
2.1 The ramp surface material shall be non-slippery	-	11	91.7
2.2 The minimum clear width shall be	≥ 90 cm	12	100.0
2.3 The clear width of a space in front of a ramp shall not be less than	≥ 150 cm	12	100.0
2.4 The maximum slope of a ramp shall be	≤ 1:12	4	33.3
2.5 The maximum length of each run shall be * If the ramp is greater than 600 cm in length, a landing of 150 cm minimum in width shall be provided.	≤ 600 cm	11	91.7
3. Safety rail			
3.1 The height from the floor shall be	≥ 110 cm	3	25.00
3.2 A safety rail shall have gap diameter of	≤ 15 cm	6	50.00
4. Movable dustbin			
4.1 The flip cover facing to the walkway shall be provided.	-	11	91.70
4.2 The height from the floor shall be	≥ 70 ≤ 90 cm	6	50.0

Items	Compliance of requirements		
	Criteria	**Frequency**	**Percentage**
5. Reception area			
5.1 It is located in a location where people can easily access.	-	12	100.0
5.2 The height of the counter shall be	≤ 80 cm	10	83.3
5.3 There is enough space under the counter for wheelchair.			
5.3.1 The height of the space under the counter shall be	≥ 70 cm	10	83.3
5.3.2 The width of the space under the counter shall be	≥ 40 cm	11	91.7
6. Drinking water service (dispenser/fountain/cooler)			
6.1 Space for drinking water service area shall be	≥ 150 x 150 cm	12	100.
6.2 Water dispenser equipment			
6.2.1 A lever tap /automatic system shall be applied.	-	0	0.0
6.2.1 The height from the floor shall be	≥ 85 cm	0	0.0
6.2.2 The height of the space under the water dispenser/fountain/cooler shall be	≥ 70 ≤ 75 cm	0	0.0
7. Door			
7.1 The height of a threshold shall not exceed	≤ 2 cm	10	83.30
7.2 The doorway must have a minimum clear width of	≥ 90 cm	10	83.30
7.3 Vertical bar handle			
7.3.1 The height from the floor to the top of the handle shall be	≥ 100 cm	9	75.00
7.3.2 The height from the floor to the bottom of the handle shall be	≤ 80 cm	2	16.70
7.4 A sign or color band shall be provided on the glass door.	-	9	75.00

Items	Compliance of requirements		
	Criteria	**Frequency**	**Percentage**
8. Toilet (room)			
8.1 The diameter of the wheelchair turning space shall be	≥ 150 cm	8	66.7
8.2 Toilet door			
8.2.1 There shall be a sliding door with a minimum opening of	≥ 90 cm	4	33.3
8.2.2 There shall be an outward swing door with a minimum opening of	≥ 90 degrees	7	58.3
8.3 The floor material must be non-slippery.	-	11	91.7
8.4 On the side wall adjacent to the toilet bowl			
8.4.1 A horizontal handrail shall be mounted above the floor at	≥ 65 ≤ 70 cm	3	25.0
8.4.2 A handrail shall extend beyond the tip of a toilet bowl of	≥ 25 ≤ 30 cm	2	16.7
8.5 On the other side of the toilet, the horizontal swing away handrail shall be away from the side rim of the toilet bowl	≥ 15 ≤ 20 cm	0	0.0
* If the fixed handrail is provided instead, it shall be away from the side rim of the toilet bowl	≥ 15 ≤ 20 cm	3	25.0
8.6 Other handrails aiding other sanitary products inside the toilet room shall be installed at the height of	≥ 80 ≤ 90 cm	2	16.7
8.7 There shall be a light and audible signal system inside the toilet room in case of emergency.	-	0	0.0
8.8 A washbasin			
8.8.1 The minimum distance between the edge of the washbasin and a side wall shall be mounted at	≥ 45 cm	7	58.3
8.8.2 The height from the floor to the top edge of the basin shall be	≥ 75 ≤ 80 cm	9	75.0
8.8.3 The free space under the basin shall have the height of	≥ 70 cm	2	16.7
8.8.4 The flip-up horizontal handrails on both sides shall be mounted.	-	0	0.0
* The non flip-up horizontal handrails on both sides shall be mounted.	-	2	16.7

Items	Compliance of requirements		
	Criteria	**Frequency**	**Percentage**
8.8.5 A tap operated by pulling, pressing, or turning the lever or sensor operated shall be installed.	-	10	83.3
9. Accessible parking			
9.1 At least 1 accessible parking lot is required, in the case of having 10 parking lots or more but less than 50 lots.	50:1	1	8.3
9.2 Accessible parking shall be located as close as possible to the entrance of a building.	-	12	100.0
9.3 Symbol of access shall be provided on the ground,			
9.3.1 with the width of	≥ 90 cm	1	8.3
9.3.2 with the length of	≥ 90 cm	1	8.3
9.4 The signage of parking shall be provided,			
9.4.1 with the width of	≥ 30 cm	0	0.0
9.4.2 with the length of	≥ 30 cm	0	0.0
9.4.3 It shall be installed at a height of	≥ 200 cm	0	0.0
9.5 The accessible parking lot shall be rectangular,			
9.5.1 with the width of	≥ 240 cm	7	58.3
9.5.2 with the length of	≥ 600 cm	7	58.3
10. Accessible facility sign			
10.1 Symbol of access and directional signage to accessible facilities shall be in white on blue background or blue on white background.	-	2	16.7
10.2 Accessible facility sign must be square and clear.	-	2	16.7

Items	Compliance of requirements		
	Criteria	**Frequency**	**Percentage**
11. Evacuation area			
11.1 There shall be enough space for a wheelchair, and it shall be located in an area where people with disabilities can easily leave the place when an emergency occurs.	-	12	100.0
12. Building entrance, passageways, and walkways between buildings			
12.1 The walking surface must be smooth and non-slippery.	-	9	75.0
12.2 The walking surface must be clear without any barrier.	-	11	91.7
12.3 It shall be provided with a minimum width of	≥ 150 cm	11	91.7
12.4 If there are floor drain pipes or drainage, drain covers must be provided. If such covers are gratings, it shall have gaps or hole diameter of	≤ 1.3 cm	0	0.0
12.5 Signage or any other hanging signs above the walkway shall be placed at the height of	≥ 200 cm	12	100.0

The accessibility items of sports facilities were evaluated in 10 sports locations from 21 disability sports events. The events that used the same venues were counted as one. In total, 12 venues were evaluated using the compliance list of accessibility requirements.

Table 33 shows the results gained after evaluating accessibility within sports facilities using the compliance list of accessibility requirements. The list, including 12 mains sections with 55 items, was described. Among 55 items, only 8 items were found to perfectly comply with the criteria (100%), including 1) accessible seats and space for wheelchairs 2) width of a ramp 3) width of a space in front of a ramp 4) parking close to entrance 5) clear space for drinking water service 6) convenient

location of the reception 7) suitable height of signage 8) accessible evacuation area. These items can be good examples reflecting thoughtfulness of the facilities.

However, many non-compliant items were found after the assessment. Out of 55 items, only 31 items were found to comply with the criteria at least 50 %. It became apparent that the lack of awareness of the barrier-free, accessibility standards, and legal requirements provided by government sector and sports facilities providers still could be seen. This indicated an inappropriate level of accessibility for people with physical disabilities, particularly wheelchair users.

Furthermore, 9 items were found to be perfectly non-compliant with the criteria. Three items were from item number 6.2 (drinking water dispenser equipment); including 6.2.1 a lever tap/automatic system shall be applied, 6.2.1 the height from the floor, and 6.2.2 the height of the space under the counter. Some of the reasons were that most of the event organizers gave out bottled water to athletes instead of setting up a drinking water cooler/fountain. One item was about the type of handrail (horizontal swing away handrail) which presented in item number 8.5. Similarly, one item regarding the type of handrail (flip-up horizontal handrails) was found in item number 8.8.4. Three items were from number 9.4 (the signage of parking); including 9.4.1 the width, 9.4.2 the length, and 9.4.3 the height. Lastly, drain covers of all sports facilities (item number 12.4) were perfectly non-compliant with the criteria.

CHAPTER 5
DISCUSSION AND CONCLUSION

5.1 DISCUSSION

First, the result showed that sports facilities' accessibility had a direct effect on satisfaction, which supported hypothesis 1 of this study. It became clear that satisfaction may be caused by all experiences gained from every part of service environment. This is consistent with DWP, (2015) who describes that every step of PwPD, when they access sports facilities, is like the experience derived from service environment. It starts as soon as they plan the trip, travel to the stadium, arrive at the stadium, get around the stadium, and access function within the stadium until they leave the facility. Furthermore, the accessibility experience gained from the facility could as well indicate the quality of products/services, which could lead to customer satisfaction. Theoretically, the association between the quality of products/services and customer satisfaction is very clear and strong. The quality of facility is regarded as the physical quality which relates to the tangible aspects of a service. Quality is often known as an attitude, while a customer's evaluation of a service and their satisfaction is considered to be the evaluation of a transaction. In other words, quality is the main construct forming satisfaction and making the background of customer's perceived value.

The results of former studies which proved the link between accessibility and satisfaction in both people with disabilities and without disabilities contexts were revealed to confirm our findings (Buhalis & Michopoulou, 2011; Lee, 2003; Melian, Prats & Coromina, 2016; Tutuncu, 2017; Wakefield, Blodgett & Sloan, 1996).

In terms of planning, DWP (2015) reported that it is essential for people with disabilities (PwD) to know if the venue can cater for their requirements before leaving their house, for example, transportation, parking information, venue maps and venue' s facilities. A lack of information about the facilities available and a lack of information quality are accounted to their concerns when planning the trip, which later can lead to dissatisfaction and can prevent disabled people attending sporting events. The report is in alignment with the tourism study of Buhalis & Michopoulou

(2011) who revealed that objective and reliable information was very important for PwD when making a decision whether to go traveling or not since many difficulties were still existent. Even if one small part of the path was inaccessible, a disabled person could suffer a confidence loss, considerable inconvenience, humiliation or even return back from the trip. Thus, accessibility information connecting the origin, the transit area, and the destination should be provided to making the planning stage easier. In addition, the result of Germany's Federal Ministry of Economics and Technology's study found that 70.6% of travelers with mobility limitations agreed that planning the trip (preparation, information, and booking) was very imperative, and it could lead to user satisfaction (UNWTO, 2016). In brief, planning the trip is one of key concerns for PWD, which sport providers should pay more attention to.

As for traveling, Melian, Prats & Coromina (2016) reported similar results that the perceived accessibility in multiple sectors, such as accommodation, transport, destination, hospitality services, religious sites, and religious activities, positively influenced overall satisfaction of the disabled when they visited a religious destination, and overall satisfaction positively influenced loyalty. The result also showed that satisfaction created more loyalty among disabled people than among non-disabled people. Another study done by DWP (2015) explained that spectators with disabilities would like to attend various kinds of sporting events; however, many of them were not able to attend any sporting event due to several barriers that they faced. Those major problems included difficulty traveling to and from venues, the distance from the drop off point, difficulty traveling to and from using public transport, and inaccessible stations and transportation itself. These concerns made them feel anxious, uncomfortable or worried about attending a sporting event. Similarly, the study focusing on the elderly proved that perceived accessibility (ease of travel, possibilities to travel, and access to preferred activities) was significant to satisfaction with travel (Lättman et al., 2019). Besides, Wakefield, Blodgett & Sloan (1996) found that the traveling stage of accessibility was related to satisfaction as they indicated that stadium accessibility (refers to parking) had the relationship with pleasure of spectators. This was because the availability, proximity, and entry to stadium parking may enhance or detract from spectators' pleasure.

With regard to internal area, safety, sports viewing, and sanitary facilities, the study of Tutuncu (2017) proved that the accessibility of hotels, including accessibility of public areas (lobby, ramps, entrance, corridors, rest areas, reception, directional signage & restrooms doors), rooms (alarms), and baths (toilets & bathroom areas) had an effect on hotel satisfaction of PwPD (it should be noted that all of the elements mentioned were included in our study). In addition, the findings are in alignment with the results of sport facility study as the facility layout accessibility, including the ease to access food service, seating, restrooms, and overall area, at horse, dog, and motor sport racing facilities was found to have a positive effect on spectator satisfaction. Moreover, increased customer satisfaction positively affected re-patronage behavior and customers' desire to remain in the facilities (Lee, 2003). On the contrary, difficulties in accessing the venue, such as unavailable lifts, slippery floors, small ramps, a lack of disabled toilets and washing facilities, a lack of wheelchair user places, poor sight lines when watching the sporting event, and the lack of seating possibly led to dissatisfaction of PwD as the services provided did not meet their needs (DWP, 2015).

As for amenities and leaving, the leaving stage of accessibility was found to have an impact on satisfaction. Fetchko, Roy & Clow (2019) described that the elements of facilities, including parking lot, restrooms, seating, foodservice areas, and especially entrance/exit layouts, played an important role in providing the experience of attending a sporting event which could create customer satisfaction. This is consistent with Tutuncu (2017) who revealed that the variables of conference rooms, tables, ramps, directional signage, surfaces and walkways, and exits had an effect on hotel satisfaction of PwPD. In the railway context, Givoni & Rietveld (2007) proved that the egress journeys (leaving), or more the connection between them and the train, had a clear influence on the overall satisfaction of passengers from using the railway.

Based on the literature, accessibility factor was clearly proved to have an effect on satisfaction of PwPD. For this reason, hypothesis 1 was confirmed. This study further extends the previous literature as those studies examined the relationship between these two factors in different contexts, such as hotel, tourism, transportation, and daily travel (Buhalis & Michopoulou, 2011; Lee, 2003; Melian, Prats & Coromina, 2016; Tutuncu, 2017; Wakefield, Blodgett & Sloan, 1996). Even though,

there are some studies focusing on the sports context, the research gaps have not been fulfilled (e.g., sports facilities/events for PwD and accessibility of a whole journey). Satisfaction factor can be used to understand people's feelings, needs, and expectations. In terms of marketing, customers' satisfactory consumption experiences could increase individuals' willingness to engage in favorable services/products (Oliver, 1997). Hence, exploring the association between accessibility and satisfaction is necessary. Sport providers should take into account that the quality of sports facilities' accessibility can satisfy their customers. A good facility is likely to impact highly satisfied and loyal customers, whereas dissatisfied customers are more likely to tell many other people of their unfortunate experience (Lepkova, 2012).

Second, the finding results showed that satisfaction positively and significantly influenced word-of-mouth intention, which supported hypothesis 2 of this study. It may be interpreted that when athletes with physical disabilities are satisfied with the accessibility of sports events/facilities, they are more likely to create positive word-of-mouth. Several researchers have examined the link between satisfaction and WOM intention.

For example, in the context of sports, a visitor who was satisfied with the destination was more likely to spread positive WOM (Yürük et al., 2017). Moreover, Hutchinson, Lai & Wang (2009) proved that satisfaction of golf travelers with their visit had an effect on WOM intention. In the service context, satisfaction of customers in various types of service businesses was positively related to WOM communication (Hennig-Thurau, Gwinner, & Gremler, 2002). The study of airline business revealed that passengers' satisfaction with service quality, including tangible factors i.e., the newness of the plane, seats, and air conditioning, is highly correlated with a positive WOM and revisit intention (Saha & Theingi, 2009). Similarly, satisfaction of patients with hospital experience (such as facilities, service personnel) was found to have an influence on WOM (Hsu, 2018).

Third, the results indicated that satisfaction positively and significantly influenced re-participation intention, which supported hypothesis 3 of this study. It could be clarified that when athletes with physical disabilities are satisfied with accessibility of sports events/facilities, they possibly participate in the sports events

again in the future. The link between satisfaction and re-participation intention has been explored in various contexts.

In the sports events context, it appeared that satisfaction with the sport event, including the registration process, the overall event experience, administration of each sport, overall event organization, and particularly quality of sports facilities, was powerful in predicting athletes' participation in future events again (Kaplanidou & Gibson, 2010). A similar result can be seen in tourism studies. Moon & Han (2018) reported that satisfaction of Chinese tourists with destination attributes (e.g., accessibility) when traveling to Jeju Island has a significant positive effect on revisit intention. Moreover, the visitors' satisfaction of water park was found to have a positive effect on behavioral intention (i.e., revisit and WOM intentions) (Jin et al., 2015). Likewise, it was revealed that tourists were more likely to revisit the destination if they were satisfied with their trip (Kim, Holland, & Han, 2013). In terms of shopping store, the result of Yuen & Chan' study (2010) indicated that physical aspects of a store (i.e., store appearance and convenience of store layout) could lead to customer loyalty. Similarly, satisfaction of store environments (e.g., novelty, variety, and size) was found to influence customer revisit intentions (Donovan & Rossiter, 1982).

Fourth, the results show that satisfaction mediates the relationship between sports facilities' accessibility and word-of-mouth intention, which supports hypothesis 4 of this study. It could be explained that a good accessibility of sports events/facilities can lead to satisfaction and positive word-of-mouth intention of athletes with physical disabilities. Our findings are in line with previous studies (Melian, Prats & Coromina, 2016; Meng & Han, 2018; Saha & Theingi, 2009;Tanford & Jung's study, 2017).

In the tourism context, overall satisfaction appeared to effectively mediate the effect of perceived accessibility on loyalty (recommend, encourage, return) of the disabled when they visited a religious destination (Melian, Prats & Coromina, 2016). Moreover, working-holiday tourism (WHT) attributes was proved to positively influence satisfaction with the destination, and satisfaction then had a significant mediating impact in determining WOM intention. The result is consistent with Tanford & Jung's study (2017) as their study indicated that when travelers were satisfied with their specific travel experiences, they were likely to spread positive WOM and participate in this kind of

travel again. With regard to airline literature, it was found that physical environment factors such as spatiality, amenity, aesthetics and entertainingness had a positive impact on positive WOM through satisfaction (Meng & Han, 2018). A similar result was found by Saha & Theingi (2009) who revealed that the dimensions of service quality (i.e., tangible features, schedules, and services of staff) had an indirect influence on those of behavioral intentions (i.e., WOM, revisit intention, and customers' feedback) through passenger satisfaction.

Fifth, the results showed that satisfaction mediated the relationship between sports facilities' accessibility and re-participation intention, which supported hypothesis 5 of this study. It can be accounted that a good accessibility of sports events/facilities may increase athletes with physical disabilities' satisfaction which results in enhancing re-participation intention. Previous literature proved that satisfaction can work as a factor mediating the relationship between customer experience (i.e., sports facilities' accessibility) and re-participation intention.

Customers with positive experiences of environmental conditions (e.g., space, function, sign, symbols, and ambient conditions) in a service facility are more likely to remain in the facility for longer periods of time, and exhibit revisit intentions. On the other hand, customers who initially visit a facility because of interest in the primary attraction may not revisit again if they are not satisfied with the physical surroundings (Bitner, 1992). As for sports study, the pleasure with the physical environment (e.g., stadium accessibility and layout accessibility) in sports facilities was found to strongly influence spectators desire to stay and revisit the stadium in the future (Lee, 2003; Wakefield et al., 1996). The result is also consistent with some tourism studies. Perovic et al. (2018) proved that both tangible (e.g., transport, accommodations, and signs) and intangible (e.g., politeness, communication and security) elements affected tourist satisfaction which led to influence tourist revisit intention. In addition, tourism experience and destination image (e.g., quality of service, quality of accommodations, local transportation, and architectures/buildings) were revealed to have a direct effect on revisit intention and through tourist satisfaction (Kim, 2018). As for events study, Pope et al. (2017) confirmed that quality of venue and other factors were found to have the impact on level of satisfaction and consequently their intention to return to a comedy festival in the Midwest.

The preceding behavioral intention literature (word-of-mouth and re-participation) has been raised to confirm that satisfaction had a direct effect on both word-of-mouth and re-participation intentions. Besides, sports facilities' accessibility was found to have a positive effect on word-of-mouth and re-participation intentions through satisfaction. Our study results broaden past literature of sports, together with marketing since behavioral intention factors (WOM and RI) have been extensively investigated in different contexts; however, these factors have not been uncovered before in aspects of sports facilities' accessibility especially people with disabilities.

It can be said that satisfaction is one of prominent factors in mediating the linkage between customer experience and behavioral intentions (WOM and RI). Based on previous literatures, satisfaction has been found to be a key mediating constructs in forming behavioral intentions (Kim, 2018; Lee, 2003; Meng & Han, 2018; Saha & Theingi, 2009; Sharma & Nayak, 2018; Tanford & Jung, 2017; Wakefield et al., 1996). This can be explained by the fact that Individuals' satisfactory consumption experiences can increase individuals' willingness to engage in favorable service/product (Oliver, 1997). Likewise, a visitor who is satisfied with the service providers will be possible to revisit (Lee, 2003) and will be more likely to spread positive WOM (Hutchinson, Lai & Wang, 2009). For this reason, satisfaction of customers with products and services is considered as one of the most important factors leading toward competitiveness and success (Hennig-Thurau & Klee, 1997). In order to get participant recommendations, develop participant revisit intention, and achieve a profitable enterprise, satisfying them is the top priority of service providers, especially sport providers (Drummond & Anderson, 2011).

The present study applied the concept of marketing (i.e. behavioral intentions) into the world of sports facilities, especially accessibility. Behavioral intentions are described as a simply and convenient measure which can reflect future intention of customers (Oliver, 2010). Word-of-mouth and re-participation intentions have been regarded as the most usual factors and important trend in service literatures (Hutchinson et al., 2009; Kim et al., 2018; Qu et al., 2011; Zeithaml et al., 2017). Thus, the role of these marketing tools (i.e., WOM and RI) is properly used in order to help sports providers retain existing participants and attract more participants (Lee, 2003; Richins & Root-Shaffer, 1988).

In terms of sports, using marketing tools does not only create an economic impact, but also greatly creates a social impact (Theodorakis et al., 2015).

Interestingly, previous research has rather neglected the importance of social outcomes for organizations, focusing merely on investigating the economic outcomes (i.e., intentions to repurchase) of the event (Brady et al., 2006; Clemes et al., 2011; Koo et al., 2008; Theodorakis et al., 2013; Tsuji, Bennett, & Zhang, 2007; Yoshida & James, 2010). As for the social impact, it can be said that highly satisfied sports event participants can be happier with their life through the means in which they invest their leisure time and resources (Theodorakis, Kaplanidou & Karabaxoglou, 2015). Specifically, various benefits of PwPD participating in sports have been evidently clarified, such as improving quality of life, health (physical and psychological functioning), social inclusion, self-esteem, and sports performance (Johnson, 2009; Lee & Park, 2010; Mauerberg-deCastro et al., 2016; Shapiro & Malone, 2016; Yazicioglu et al., 2012).

Combining the results of this study, past studies, and beneficial outcomes, improving sports facilities based on participants' perception is necessary for sports providers since sports facilities' accessibility is found to have a great impact on WOM and RI intentions through satisfaction. Seven accessibility dimensions, including planning, traveling, internal area, safety, sports viewing, sanitary facilities, and amenities and leaving, are revealed to be suitable constructs reflecting sports facilities' accessibility very well. It indicates that when measuring accessibility of sports facilities, all seven constructs should be included. This can be seen as the important guideline for sports providers (e.g., sports organization, facility manager, event manager, and government sector) to service PwPD more deeply in holistic way.

Sixth, the results showed that motivation factor, including personal, incentive & social, and uniqueness, positively and significantly influenced re-participation intention, which supported hypothesis 6 of this study. It might be interpreted that athletes with a high level of motivation were more likely to re-participate in the future sports events. Not only prior studies have indicated that accessibility may affect athletes' re-participation intention, but also sports motivation has been found to contribute to athletes' sports participation. Due to the fact that motivation refers to the why of behavior (McClelland, 1985), the reasons for doing an activity are generally perceived as indicative of the person's motivation towards a given activity (Vallerand & Losier, 1999). This is consistent with Ajzen (1991) who explains that intention can

capture the motivational factors that influence a behavior and indicate how much a person would attempt to perform the behavior. This implies that motivation is related to behavioral intention.

According to past motivation literature, athletes would participate in sports activities/competitions based on the following types and categories of motivation factors. Vallerand & Losier (1999) explained that athletes may be motivated out of two main types of motivation: 1) intrinsic motivation (i.e., seeking new sensations, attempting to master complex skills, or conquering challenges, improving their performance, having the pleasure and fun); and 2) extrinsic motivation (i.e., tangible benefits, such as trophies, medals, money, prizes and/or social rewards, such as prestige) (Vallerand & Losier, 1999; Weinberg & Jackson, 1979).

Many scholars have suggested that motivation factors motivating athletes can include pushing their limits, obtaining physical benefits, personal motive, self-esteem, and social (Fotiadis & Vassiliadis, 2012; Ogles & Masters, 2003) , personal challenge (Getz & McConnell, 2014), the experience and type of event (Getz & Andersson, 2010; Green & Chalip, 1998), developing their abilities, seeking competition, experiencing unique and/or famous places, developing identity (Higham & Hinch, 2009), opportunity to improve one's skills, desire to win (Robinson & Gammon, 2004), escaping from daily routines (Adler & Adler, 1999), physical, interpersonal or social, and personal (Getz, 1991).

Similar results have been confirmed by some previous studies although those studies may classify motivational factors in different categories. In the sports tourism context, Chang & Tsai (2016) proved that participant motivation, which was comprised of goal achievement, relaxation, skill learning, socializing with people with the same interests, and fitness maintenance, significantly influence re-participation intentions in outdoor activities. The result is consistent with Funk et al. (2007) who confirmed that sports motivation, travel motives, and destination image were prominent motivational factors motivating participants to participate in a foreign sporting event again. Moreover, Chang (2008) pointed out that the windsurfers' motivation influenced their intention to participate. In terms of tourism, the result of Thammadee' study (2015) showed that travel motivation (i.e. novelty, shopping, relaxation) was a powerful factor driving foreign tourists' revisit intention to Thailand. The similar findings were exposed by Huang & Hsu (2009) as they

indicated that mainland Chinese visitors' travel motivation (i.e. shopping) positively affects visitors' revisit intention to Hong Kong. Additionally, Lin et al. (2006) exposed that various types of sightseeing activities (i.e. bicycle-riding and religious sightseeing) increases tourist motivation and participation intention, further leading to increased participation.

Based on the results of our study and previous findings, it can be concluded that the motivation factor was clearly found to have an effect on re-participation intention of athletes with physical disabilities. Besides, personal, incentive & social, and uniqueness motivations were found to be good dimensions reflecting the motivation factor in this study. This was consistent with Getz (1991), and Ogles & Masters (2003) who included personal motive as an important part of the motivation factor, with Weinberg & Jackson (1979), Vallerand & Losier (1999), Ogles & Masters, (2003), and Fotiadis & Vassiliadis (2012) who defined rewards and society as dimensions of the motivation factor, and with Higham&Hinch (2009) who included unique place as prominent motivational factors motivating athletes to participate in sports events.

The results obtained from the compliance list of accessibility requirements including 12 sections with various items were discussed. Eight items were found to perfectly comply with the criteria, including 1) accessible seats and space for wheelchairs 2) width of a ramp 3) width of a space in front of a ramp 4) parking close to entrance 5) clear space for drinking water service 6) convenient location of the reception 7) suitable height of a signage 8) accessible evacuation area. These items can be good examples reflecting thoughtfulness of the facilities. However, many non-compliant items were found after the assessment. This pointed to that the lack of awareness of the barrier-free, accessibility standards, and legal requirements provided by government sector and sports facilities providers still can be seen. This indicates an inappropriate level of accessibility for people with physical disabilities, particularly wheelchair users.

The social model of disability theory can be applied in this study since the social model views that a huge problem stems from the environmental barriers (Brittain, 2010; Morris, 1991). The model describes that many of the problems associated with disability will disappear if people's attitudes are to change, and there is a strict public policy that legislates the environmental barriers.

Similar results were found in previous studies. In Portugal, Sáa et al. (2012) evaluated the accessibility of 11 public sports facilities using a checklist. The findings showed that the non-compliances were found in sports facilities, proving that many barriers that prevent the sports participation of people with reduced mobility still exists. Similarly, Dickson et al. (2016) assessed different accessibility stages of Fan Zone experience of a major-sport event in Canada including the stage of planning, travel, arrival, event experience, and return of the journey. The findings demonstrated that each area had problems identified for one or more dimensions that needed some improvement. In hospital study, the observational results of Talib et al.' study (2016) from three hospitals in Malaysia showed that most of the hospitals provided disabled facilities; however, there were still some parts for improvement regarding specifications and the provision. In terms of transportation, the compliance of disabled facilities provided at eight electronic train services (ETS) railway station is identified. The results indicated that majority of the facilities comply with the standard, but inaccessibility was found in some stations mainly due to poor planning, poor design, poor maintenance, and lack of enforcement on guidelines provided (Isa et al., 2016). This is consistent with the finding of Alagappan et al. (2017) who revealed that the overall accessibility compliance had only 42% which was evident by low accessibility level in the bus terminal of Vijayawada, India.

In order to increase the re-participation intention (RI) of the athletes, all factors of sports facilities' accessibility (SFA) and motivation (MOTIV) were prioritized to offer a sports provider (e.g., sports event organizers and sports facility owners/managers). Based on the path analysis results (see appendix D), the most influential factors affecting the re-participation intention was amenities & leaving (AMENI), followed by internal area (INAREA), sports viewing (VIEW), Personal motivation (PERSONAL), Traveling & external area (TRAVEL), Incentive & Social motivation (INCENTI), Safety (SAFE), Sanitary facilities (SANIT), planning (PLAN), and uniqueness motivation (UNIQUE) respectively.

The most four influential factors of sports facilities' accessibility (SFA) were the factor of amenities & leaving, internal area, sports viewing, and traveling & external area. These four factors were in a high rank as it might be very imperative for athletes/people with physical disabilities. Twelve variables from these four factors,

including parking bays (AC7), external routes and pathways (AC9), external ramps (AC10), external signage and wayfinding (AC11), entrances and exits (AC12), internal doors (AC17), seating in stadium (AC22), dustbin (AC35), drinking water service (AC36), surfaces, paving and finishes (AC37), furniture, counters and service Areas (AC38), and fire exit (AC44), were similar to the items of the compliance list. Based on the results obtained from the compliance list, most of the items regarding these variables were found to comply with the criteria at least 50 % except for some items which included the dispenser equipment for drinking water service (fountains/coolers), the height of the door handle, the presence of a handrail near an accessible seat, the absence of accessible parking, the symbol of accessible parking on the ground, the signage of accessible parking, the diameter of the drain cover near the external pathways, the accessible facility sign, and the slope of a ramp.

Based on the research results, it is important for sport providers (e.g., government, private, and relevant sports sectors) to ensure that sports facilities are accessible to all members of society (Bowdin et al., 2006). Besides, the legislation and regulation regarding facilities must be seriously implemented in order to serve all people in society, not only people with disabilities but also other groups of people, for instance, carers, parents pushing baby strollers, persons using other mobility devices, walkers or delivery carts, physically injured persons, short people, large people, and elderly people (WHO, 2011).

5.2 LIMITATIONS OF SUDY

As for the sampling technique, a non-probability sampling technique was used in the present study including purposive selection sampling technique, quota sampling technique, accidental sampling technique, and snowball sampling technique. This indicates that the sample of the present study could not accurately represent the population and this kind of sample selection may lead to bias since it based on the subjective judgment of the researcher. In order to minimize any bias in the sampling, probability sampling should be applied instead.

Besides, there are many types of disability, such as physical disabilities, intellectual disability, deaf or hard of hearing, visual impairments or blindness, and mental disabilities, only people with physical disabilities were selected to be the sample

of the present study. Therefore, the results could not be applied for other types of disability. In order to improve the service/accessibility of a facility, the study on different groups' satisfaction with the sports facilities' accessibility, would be beneficial.

Since the sample of this study was limited only for Thais, athletes with physical disabilities from others countries who visited the same sports facilities could not be involved. Furthermore, the data collection was limited specifically in Thailand. This limitation is an issue that can be addressed in future research by examining in other countries. This can be an opportunity in order to broaden the range of sample size and gain more perception from various countries.

Due to the limitation of time period (6 months), only 22 disability sports events were selected. Longer periods of time could lead to an increased number of sports events which may cover and reflect more sports facilities in Thailand resulting in the strength of our results.

5.3 RECOMMENDATIONS FOR FUTURE RESEARCH

The present study investigated the influence of sports facilities' accessibility, motivation, and satisfaction on word-of-mouth and re-participation intentions of people with physical disabilities in the sports events context. It is possible for future research to apply this model in order to fulfill the gap in different contexts since the literature on accessibility currently still limited. Moreover, sports fans with disabilities could also be an interesting target sample groups to be considered in future research: however, only athletes with physical disabilities were selected as the samples in this study.

As for the measurement scale, the questionnaire of sports facilities' accessibility of the whole journey was developed for the first time based on various accessibility regulations. In order to re-confirm the construct validity, this study suggests that future research should apply this developed questionnaire to investigate and compare with other similar samples in different groups.

As for the dependent variables, only re-participation intention and word-of-mouth intention factors were chosen to reflect behavioral intentions. The researcher suggests that other behavioral intention factors, for example, the intention to stay longer (spend more) and intention to remain loyal, should be included.

As for the mediating variables, satisfaction alone is selected to be the mediating variables in the present study. Other mediating variables that have been proved to mediate the relationship between customer experience and behavioral intentions should also be included for future research, for instance, perceived quality, service value, engagement, and trust.

The present study emphasized the influence of sports facilities' accessibility on behavioral intentions (WOM and RI) in the context of sports events. It would gain a more holistic view if other possible factors affecting WOM and RI could be explored, for example, facility factors (e.g., sound, light, cleanliness, air flow, and layout) and sports events factors (e.g., food, drink, and staff). This issue should be addressed in future research by including these important factors.

Comparing the results by demographic characteristics was excluded in the present study. It could be an area for future research to compare the results, for instance, between groups of gender, groups of age, and types of assistive devices.

The present study collected data from athletes during sports events are held. Therefore, some external factors, such as the result of the competition, environment, and noise disturbance possibly affected their attention and emotion, which may affect the process of completing the questionnaire. In this case, the researcher controlled all these factors by waiting for the right time when communicating with participants (i.e., break-time and the end of the day). Future research should not overlook these factors when conducting data.

5.4 MANAGERIAL IMPLICATIONS

First, the present study has expanded the understanding of sports facility/event management and sports marketing and raises awareness of accessibility issue for sports providers (e.g. sports managers, facility owners, and government sector). The value of our study is that the level of accessibility of a whole journey is evaluated by people with physical disabilities (PwPD) who are the experts of their situation. This study points out that exploring accessibility in a holistic way can broaden the knowledge which later leads to a better management and performance of sports events and facilities for PwPD.

Second, the sports facilities' accessibility (SFA) questionnaire, which is newly developed, is expected to be useful for other researchers and anyone who studies about sports management, sports facilities/events, sports marketing, and accessibility.

Third, the results of this study indicate that sports facilities' accessibility has a positive effect on word-of-mouth and re-participation intentions though satisfaction. For this reason, considering the variables provided in sports facilities' accessibility measurement are essential to improve the accessibility of sports facilities for people with physical disabilities.

Fourth, the motivation factor, including personal, incentive & social, and uniqueness motivations, is found to have an effect on re-participation intention. Focusing on motivation can lead to a better understanding of needs and decision processes of participants (refers to athletes), which is a necessity for effectively improving elements of an event (i.e. sports event), and marketing them. The event element might be presented in a suboptimal way if those motivations are not understood (Crompton & McKay, 1997). Thus, maintenance and enhancement of disabled participants' motivation should be the primary priority of event managers (Iso-Ahola, 1980). If motives are identified, practical settings can be amended to facilitate fulfillment of them.

Fifth, the compliance list of accessibility requirements is proposed by our study. Covering the main 12 sections could be one among other lists, offering to society, in order to apply when evaluating how accessible of their facilities, and is hopefully aimed to help every kind of facility for improving their sites.

Last, sports providers can apply marketing strategies to increase the sports participation rate of PwPD since this study has clarified what accessibility attributes would predict satisfaction, word-of-mouth intention, and re-participation intention of participants. Moreover, it might be useful for other kinds of facilities and events when applying the implications of this work. (e.g., concerts, recreations, arts, tourism destinations, transportations, shopping malls, commercial facilities, and hospitals).

5.5 CONCLUSION

The present study was consisted of four objectives. First, this study aimed to find out the dimensions of sports facilities' accessibility and motivation. The results of EFA showed that sports facilities' accessibility variables were categorized into seven accessibility dimensions, including planning, traveling, internal area, safety, sports viewing, sanitary facilities, and amenities and leaving. These seven dimensions were revealed to reflect sports facilities' accessibility very well, indicating that when measuring accessibility of sports facilities, all seven constructs should be included. Moreover, the results of EFA showed that the motivation factor could be categorized into three dimensions, including personal, incentive & social, and uniqueness motivations. It indicated that when improving elements of an event in order to better understand needs and decision processes of participants, these three dimensions should be considered.

Second, the present study aimed to examine the effects of sports facilities' accessibility on re-participation and word-of-mouth intentions through satisfaction. The results showed that sports facilities' accessibility positively and significantly influenced satisfaction. Moreover, satisfaction was found to be the key factor mediating the relationships between: (1) sports facilities' accessibility and word-of-mouth intention and (2) between sports facilities' accessibility and re-participation intention. It could be clarified that when athletes with physical disabilities are satisfied with accessibility that sports events/facilities provide, they are more likely to participate in such sports events again in the future, and they are more likely to create word-of-mouth. The present study broadens the past literature of sports and marketing since most previous studies investigate behavioral intentions (WOM and RI) in the context of customer experience; however, none of these studies has focused on sports facilities' accessibility of people with disabilities. Thus, the current study fulfills this gap by exploring accessibility factor more deeply, and firstly applying it into the world of marketing.

Third, this study aimed to examine the effects of motivation on re-participation intention. Investigating sports events motivation is required since athletes' participation in sports events can be clearly influenced by motivation factor. This study expands former motivation literature, because the relationship between motivation and re-participation intention of athletes with physical disabilities has not yet been proved. The findings show

that the motivation factor is clearly found to have an effect on re-participation intention of athletes with physical disabilities. It can be interpreted that athletes with a high level of motivation are more likely to re-participate in the future sports events. Thus, the maintenance and enhancement of disabled participants' motivation should be the primary priority of event managers (Iso-Ahola 1980). If motives are identified, practical settings can be amended to facilitate the fulfillment of them.

Fourth, the present study aimed to evaluate accessibility within sports facilities using the compliance list. A number of non-compliant items were found after the assessment. It becomes apparent that the lack of awareness of the barrier-free, accessibility standards, and legal requirements provided by government sector and sports facilities providers can still be seen. This indicates an inappropriate level of accessibility for people with physical disabilities, particularly wheelchair users. Hence, it is important for sports providers to ensure that sports facilities would be accessible to all members of society (Bowdin et al., 2006). Besides, the legislation and regulation regarding facilities must be pragmatically implemented in order to serve all people in society.

To summarize, the linkages between sports facilities' accessibility, motivation, satisfaction, word-of-mouth intention, and re-participation intention were clearly proved in this study. The results of this study could be beneficial for future research to understand the role of these factors and extend the knowledge of the field. Based on previous literature, adopting the marketing concept into the sports context is suitable when sports marketers need to retain existing participants and attract more participants. Besides, the results of this study are expected to help sports providers in relevant sectors to provide the best experience regarding the accessibility of facilities/events for their visitors/participants, particularly athletes/people with physical disabilities.

APPENDIX

APPENDIX A

THE QUESTIONNAIRE

แบบสอบถามเพื่อการวิจัย

งสนามกีฬา ความพึงพอใจ และแรงจูงใจ ที่มีต่อความตั้งใจในการกลับมาเข้าร่วม และความตั้งใจในการบอกต่อ ของคนพิการทางการเคลื่อนไหว ในบริบทของการ แข่งขันกีฬา

คำชี้แจง

1. แบบสอบถามชุดนี้สร้างขึ้นเพื่อใช้ในการเก็บรวบรวมข้อมูลประกอบการทำวิทยานิพนธ์ ตามหลักสูตรวิทยาศาสตรดุษฎีบัณฑิต แขนงวิชาการจัดการการกีฬา สาขาวิชาวิทยาศาสตร์การกีฬา คณะวิทยาศาสตร์การกีฬา จุฬาลงกรณ์มหาวิทยาลัย

2. แบบสอบถามชุดนี้แบ่งออกเป็น 7 ตอนดังนี้

ตอนที่ 1 แบบสอบถามเกี่ยวกับลักษณะทางประชากรศาสตร์ และข้อมูลเกี่ยวกับยานพาหนะที่ใช้ในการเดินทาง มีจำนวน 6 ข้อ

ตอนที่ 2 แบบสอบถามเกี่ยวกับการเข้าถึงสนามกีฬา มีจำนวน 44 ข้อ

ตอนที่ 3 แบบสอบถามเกี่ยวกับความพึงพอใจ มีจำนวน 3 ข้อ

ตอนที่ 4 แบบสอบถามเกี่ยวกับความตั้งใจในการกลับมาเข้าร่วม มีจำนวน 3 ข้อ

ตอนที่ 5 แบบสอบถามเกี่ยวกับความตั้งใจที่จะบอกต่อ มีจำนวน 3 ข้อ

ตอนที่ 6 แบบสอบถามเกี่ยวกับแรงจูงใจ มีจำนวน 13 ข้อ

ตอนที่ 7 ความคิดเห็นและข้อเสนอแนะอื่นๆ เพิ่มเติม

3. ในการวิจัยครั้งนี้ ผู้วิจัยใคร่ขอความกรุณาจากท่าน ได้โปรดพิจารณาตอบคำถามทุกข้อของแบบสอบถามตามความเป็นจริง เพราะคำตอบของท่านทุกข้อจะเป็นประโยชน์ในทางวิชาการและในทางปฏิบัติ คำตอบของท่านจะถูกเก็บไว้เป็นความลับ ผู้วิจัยจะนำเสนอผลการวิเคราะห์เป็นภาพรวม เท่านั้น

4. กรุณาตรวจสอบว่าท่านได้ตอบคำถามครบทุกข้อก่อนส่งแบบสอบถามกลับคืน และผู้วิจัยใคร่ขอขอบพระคุณสำหรับความอนุเคราะห์ของท่านในครั้งนี้

เลขที่โครงการวิจัย 113-1/62
วันที่รับรอง 24 มิ.ย. 2562
วันหมดอายุ 23 มิ.ย. 2563

ตอนที่ 1 แบบสอบถามเกี่ยวกับลักษณะทางประชากรศาสตร์ และข้อมูลเกี่ยวกับยานพาหนะที่ใช้ในการเดินทาง มีจำนวน 6 ข้อ

คำชี้แจง: โปรดเขียนเครื่องหมาย ✓ ลงใน ☐ และ/หรือ เติมคำหรือข้อความ ลงในช่องว่างให้ตรงกับความเป็นจริง

1. เพศ

☐ ชาย ☐ หญิง

2. อายุ

☐ 18 - 24 ปี ☐ 25 - 34 ปี
☐ 35 - 44 ปี ☐ 45 - 54 ปี
☐ 55 ปีขึ้นไป

3. ระดับการศึกษาสูงสุด

☐ ประถมศึกษาหรือต่ำกว่า ☐ มัธยมศึกษาตอนต้นหรือเทียบเท่า
☐ มัธยมศึกษาตอนปลายหรือเทียบเท่า ☐ อนุปริญญาหรือเทียบเท่า
☐ ปริญญาตรี ☐ สูงกว่าปริญญาตรี
☐ อื่นๆโปรดระบุ.....

4. อาชีพ

☐ รับราชการ ☐ พนักงานบริษัทเอกชน
☐ ธุรกิจส่วนตัว/ค้าขาย ☐ อาชีพอิสระ
☐ นิสิต/นักศึกษา ☐ นักกีฬาอาชีพ
☐ อื่นๆโปรดระบุ.....

5. อุปกรณ์ช่วยในการเคลื่อนไหวของท่าน (ตอบได้มากกว่า 1 ข้อ)

☐ ไม้ค้ำยัน ☐ ไม้เท้า
☐ รถเข็นคนพิการ ☐ รถเข็นคนพิการไฟฟ้า
☐ แขนเทียม ☐ ขาเทียม
☐ อุปกรณ์ช่วยเดิน (วอร์คเกอร์) ☐ สกู๊ตเตอร์
☐ ไม่ได้ใช้อุปกรณ์ ☐ อื่นๆ โปรดระบุ .....

6. ท่านใช้ยานพาหนะใดเป็นหลัก ในการเดินทางมายังสนามกีฬาครั้งนี้

☐ รถยนต์ส่วนตัว ☐ รถทัวร์
☐ รถโดยสารประจำทาง ☐ รถไฟ
☐ รถยนต์รับจ้างสาธารณะ ☐ รถโดยสารที่ผู้จัดการแข่งขันได้เตรียมไว้ให้
☐ อื่นๆ โปรดระบุ .....

ตอนที่ 2 แบบสอบถามเกี่ยวกับการเข้าถึงสนามกีฬาของคนพิการทางการ มีจำนวน 44 ข้อ

คำชี้แจง: โปรดพิจารณาว่า ท่านมีระดับการเข้าถึงสิ่งอำนวยความสะดวกต่างๆ ของสนามกีฬาระดับใดใน 5 ระดับ ดังนี้ **เลือก (5)** เข้าถึงได้อย่างสมบูรณ์, **เลือก (4)** เข้าถึงได้, **เลือก (3)** เข้าถึงได้ปานกลาง, **เลือก (2)** เข้าถึงไม่ได้, และ **เลือก (1)** เข้าถึงไม่ได้อย่างสิ้นเชิง

โดยเขียนเครื่องหมาย ✓ ลงในช่องระดับการเข้าถึง รายละเอียดของการตอบแบบสอบถามมีดังนี้

รายการ	ระดับการเข้าถึง				
	เข้าถึงได้อย่างสมบูรณ์ (5)	เข้าถึงได้ (4)	เข้าถึงได้ปานกลาง (3)	เข้าถึงไม่ได้ (2)	เข้าถึงไม่ได้อย่างสิ้นเชิง (1)
ตอนที่ 2 การเข้าถึงสนามกีฬา					
ขั้นที่ 1: การวางแผน					
1) ข้อมูลเกี่ยวกับสิ่งอำนวยความสะดวกของสนามกีฬา ผ่านสื่อออนไลน์					
2) ข้อมูลเกี่ยวกับสิ่งอำนวยความสะดวกของสนามกีฬา ผ่านการโทรสอบถามทางโทรศัพท์					
3) ข้อมูลเกี่ยวกับการจัดการแข่งขันกีฬา					
4) ข้อมูลเกี่ยวกับการเดินทางโดยระบบขนส่งสาธารณะ					
5) ข้อมูลเกี่ยวกับสถานที่จอดรถ					
ขั้นที่ 2: การเดินทาง และบริเวณภายนอกสนามกีฬา					
6) ระบบขนส่งสาธารณะที่เอื้อต่อคนพิการ					
7) สถานที่จอดรถ					
8) จุดรับ-ส่ง ผู้โดยสาร					
9) ทางเดินภายนอกสนามกีฬา					
10) ทางลาดภายนอกสนามกีฬา					
11) ป้ายบอกทางภายนอกสนามกีฬา					

เลขที่โครงการวิจัย 113.1/62

วันที่รับรอง 24 มิ.ย. 2562

วันหมดอายุ 23 มิ.ย. 2563

รายการ	ระดับการเข้าถึง				
	เข้าถึงได้อย่างสมบูรณ์ (5)	เข้าถึงได้ (4)	เข้าถึงได้ปานกลาง (3)	เข้าถึงไม่ได้ (2)	เข้าถึงไม่ได้อย่างสิ้นเชิง (1)
ขั้นที่ 3: บริเวณทางเข้าสนามกีฬา					
12) ทางเข้า-ออก					
13) จุดประชาสัมพันธ์เกี่ยวกับการแข่งขัน					
14) จุดต้อนรับแขก					
ขั้นที่ 4: บริเวณภายในสนามกีฬา					
15) ช่องทางเดินภายใน					
16) โถงหรือลานกว้าง					
17) ประตูภายในตัวอาคาร มีความกว้างเพียงพอ และใช้งานสะดวก					
18) ทางลาดภายในตัวอาคาร					
19) ราวจับหรือที่ยึดจับ					
20) ราวกันตก					
ขั้นที่ 5: ที่นั่ง					
21) มุมมองในการชมการแข่งขัน					
22) ที่นั่งชมการแข่งขันที่เอื้อต่อคนพิการ					
23) จำนวนที่นั่งเพียงพอ					
ขั้นที่ 6: การสื่อสาร					
24) สัญลักษณ์และป้ายบอกทาง					
25) ระบบสัญญาณเตือนภัย					
26) กระดานบอกคะแนน หรือจอภาพวีดิทัศน์					
27) ตารางการแข่งขันและรายการแข่งขันประจำวัน					

5

รายการ	ระดับการเข้าถึง				
	เข้าถึงได้อย่างสมบูรณ์ (5)	เข้าถึงได้ (4)	เข้าถึงได้ปานกลาง (3)	เข้าถึงไม่ได้ (2)	เข้าถึงไม่ได้อย่างสิ้นเชิง (1)
ขั้นที่ 7: สิ่งอำนวยความสะดวก					
28) ห้องสุขาที่เอื้อต่อคนพิการ					
29) ห้องเปลี่ยนเครื่องแต่งกาย					
30) ห้องอาบน้ำ					
31) การบริการด้านการแพทย์					
32) ร้านค้าปลีก ร้านขายอาหารและเครื่องดื่ม และร้านเชิงพาณิชย์อื่นๆ					
33) สถานที่และอุปกรณ์ในการประชุม					
34) ตู้กดเงินสด (ตู้เอทีเอ็ม)					
35) ถังขยะ					
36) จุดบริการน้ำดื่ม					
37) ทางเดินที่ปูพื้นเรียบ และไม่ลื่น					
38) เฟอร์นิเจอร์ที่เอื้อต่อคนพิการ					
ขั้นที่ 8: การออกจากสนามกีฬา					
39) เส้นทางออกจากสนามกีฬา					
40) พื้นที่หลบภัย (กรณีเกิดเหตุฉุกเฉิน เช่น เหตุเพลิงไหม้ เป็นจุดพักเพื่อรอความช่วยเหลือ)					
41) ราวจับบริเวณทางออก					
42) ลูกศรชี้ทางออก					
43) ทางลาดบริเวณทางออก					
44) ทางหนีไฟ					

เลขที่โครงการวิจัย 113.1/62
วันที่รับรอง 24 มิ.ย. 2562
วันหมดอายุ 23 มิ.ย. 2563

ตอนที่ 3 แบบสอบถามเกี่ยวกับความพึงพอใจ มีจำนวน 3 ข้อ

คำชี้แจง: โปรดพิจารณาว่า ท่านมีระดับความคิดเห็นต่อข้อความระดับใดใน 5 ระดับ ดังนี้ **เลือก (5)** เห็นด้วยอย่างยิ่ง, **เลือก (4)** เห็นด้วย, **เลือก (3)** ไม่แน่ใจ, **เลือก (2)** ไม่เห็นด้วย, และ **เลือก (1)** ไม่เห็นด้วยอย่างยิ่ง

โดยเขียนเครื่องหมาย ✓ ลงในช่องระดับความคิดเห็น รายละเอียดของการตอบแบบสอบถามมีดังนี้

รายการ	ระดับความคิดเห็น				
	เห็นด้วยอย่างยิ่ง (5)	เห็นด้วย (4)	ไม่แน่ใจ (3)	ไม่เห็นด้วย (2)	ไม่เห็นด้วยอย่างยิ่ง (1)
ตอนที่ 3 ความพึงพอใจ					
1) ฉัน ***รู้สึกพึงพอใจ*** ในการเข้าร่วมการแข่งขันกีฬาครั้งนี้					
2) ฉัน ***รู้สึกดี*** เกี่ยวกับการเข้าถึงสิ่งอำนวยความสะดวก ที่ผู้จัดการแข่งขันได้เตรียมไว้					
3) การจัดการแข่งขันกีฬาครั้งนี้ ***ดีเกินกว่าที่ฉันคาดหวังไว้***					

ตอนที่ 4 แบบสอบถามเกี่ยวกับความตั้งใจในการกลับมาเข้าร่วม มีจำนวน 3 ข้อ

คำชี้แจง: โปรดพิจารณาว่า ท่านมีระดับความคิดเห็นต่อข้อความระดับใดใน 5 ระดับ ดังนี้ **เลือก (5)** เห็นด้วยอย่างยิ่ง, **เลือก (4)** เห็นด้วย, **เลือก (3)** ไม่แน่ใจ, **เลือก (2)** ไม่เห็นด้วย, และ **เลือก (1)** ไม่เห็นด้วยอย่างยิ่ง

โดยเขียนเครื่องหมาย ✓ ลงในช่องระดับความคิดเห็น รายละเอียดของการตอบแบบสอบถามมีดังนี้

รายการ	ระดับความคิดเห็น				
	เห็นด้วยอย่างยิ่ง (5)	เห็นด้วย (4)	ไม่แน่ใจ (3)	ไม่เห็นด้วย (2)	ไม่เห็นด้วยอย่างยิ่ง (1)
ตอนที่ 4 ความตั้งใจในการกลับมาเข้าร่วม					
1) ฉัน ***ตั้งใจ*** ที่จะเข้าร่วมการแข่งขันกีฬานี้อีกครั้ง หากมีการจัดการแข่งขันในอนาคต					
2) ฉัน ***จะพยายามหาโอกาส*** เข้าร่วมการแข่งขันกีฬานี้อีกครั้ง หากมีการจัดการแข่งขันในอนาคต					
3) ฉัน ***เต็มใจ*** ที่จะเข้าร่วมกิจกรรมแข่งขันกีฬานี้อีกครั้ง หากมีการจัดการแข่งขันในอนาคต					

ตอนที่ 5 แบบสอบถามเกี่ยวกับความตั้งใจที่จะบอกต่อ มีจำนวน 3 ข้อ

คำชี้แจง: โปรดพิจารณาว่า ท่านมีระดับความคิดเห็นต่อข้อความระดับใดใน 5 ระดับ ดังนี้ **เลือก (5)** เห็นด้วยอย่างยิ่ง, **เลือก (4)** เห็นด้วย, **เลือก (3)** ไม่แน่ใจ, **เลือก (2)** ไม่เห็นด้วย, และ **เลือก (1)** ไม่เห็นด้วยอย่างยิ่ง

โดยเขียนเครื่องหมาย ✓ ลงในช่องระดับความคิดเห็น รายละเอียดของการตอบแบบสอบถามมีดังนี้

รายการ	ระดับความคิดเห็น				
	เห็นด้วยอย่างยิ่ง (5)	เห็นด้วย (4)	ไม่แน่ใจ (3)	ไม่เห็นด้วย (2)	ไม่เห็นด้วยอย่างยิ่ง (1)
ตอนที่ 5 ความตั้งใจที่จะบอกต่อ					
1) ฉัน ***จะบอกกล่าว*** ถึงสิ่งดีๆ ของการแข่งขันกีฬาครั้งนี้ให้ผู้อื่นทราบ					
2) ฉัน ***จะแนะนำ*** การแข่งขันกีฬาครั้งนี้ เมื่อมีคนมาขอคำปรึกษาเกี่ยวกับการแข่งขันกีฬา					
3) ฉัน ***จะชักชวนเพื่อน ๆ*** ให้มาเข้าร่วมการแข่งขันกีฬานี้					

ตอนที่ 6 แบบสอบถามเกี่ยวกับแรงจูงใจ มีจำนวน 13 ข้อ

คำชี้แจง: โปรดพิจารณาว่า ท่านมีระดับความคิดเห็นต่อข้อความระดับใดใน 5 ระดับ ดังนี้ **เลือก (5)** เห็นด้วยอย่างยิ่ง, **เลือก (4)** เห็นด้วย, **เลือก (3)** ไม่แน่ใจ, **เลือก (2)** ไม่เห็นด้วย, และ **เลือก (1)** ไม่เห็นด้วยอย่างยิ่ง

โดยเขียนเครื่องหมาย ✓ ลงในช่องระดับความคิดเห็น รายละเอียดของการตอบแบบสอบถามมีดังนี้

รายการ	ระดับความคิดเห็น				
	เห็นด้วยอย่างยิ่ง (5)	เห็นด้วย (4)	ไม่แน่ใจ (3)	ไม่เห็นด้วย (2)	ไม่เห็นด้วยอย่างยิ่ง (1)
ตอนที่ 6 แรงจูงใจ (ในการเข้าร่วมแข่งขันกีฬา)					
1) เพื่อท้าท้ายตนเอง					
2) เพื่อพัฒนาความสามารถทางด้านกีฬา					
3) เพื่อชิงรางวัล เช่น เงิน เหรียญรางวัล หรือ ถ้วยรางวัล					
4) เพื่อที่จะใช้เวลาร่วมกับครอบครัวหรือคู่สมรส					
5) เพื่อที่จะใช้เวลาร่วมกับเพื่อน					

8

รายการ	ระดับความคิดเห็น				
	เห็นด้วยอย่างยิ่ง (5)	เห็นด้วย (4)	ไม่แน่ใจ (3)	ไม่เห็นด้วย (2)	ไม่เห็นด้วยอย่างยิ่ง (1)
6) เพื่อเข้าร่วมรายการแข่งขันที่มีชื่อเสียง					
7) เพื่อเข้าร่วมการแข่งขันในเมืองหรือสถานที่ที่มีชื่อเสียง					
8) เพื่อเดินทางไปยังสถานที่ที่น่าสนใจ					
9) เพื่อทำในสิ่งที่แตกต่าง					
10) เพื่อพิสูจน์ให้ผู้อื่นเห็นว่าท่านมีความสามารถ					
11) เพื่อพัฒนาอันดับให้ดียิ่งขึ้น					
12) เพื่อสะสมคะแนน					
13) เพื่อเป็นตัวแทนของ สังกัด จังหวัด หรือประเทศ					

ตอนที่ 7 ความคิดเห็นและข้อเสนอแนะอื่นๆ เพิ่มเติม

.....

.....

.....

.....

เลขที่โครงการวิจัย 113.1/62

วันที่รับรอง 24 มิ.ย. 2562

วันหมดอายุ 23 มิ.ย. 2563

APPENDIX B

THE COMPLIANCE LIST OF ACCESSIBILITY REQUIREMENTS

แบบรายการตรวจสอบสิ่งอำนวยความสะดวกสำหรับคนพิการทางการเคลื่อนไหว เพื่อการวิจัยเรื่อง อิทธิพลของการเข้าถึงสนามกีฬา แรงจูงใจ และความพึงพอใจ ที่มีต่อความตั้งใจในการบอกต่อและความตั้งใจในการกลับมาเข้าร่วมแข่งขัน ของนักกีฬาคนพิการทางการเคลื่อนไหว

คำชี้แจง

1. แบบรายการตรวจสอบชุดนี้สร้างขึ้นเพื่อใช้ในการเก็บรวบรวมข้อมูลประกอบการทำวิทยานิพนธ์ ตามหลักสูตรวิทยาศาสตรดุษฎีบัณฑิต แขนงวิชาการจัดการการกีฬา สาขาวิชาวิทยาศาสตร์การกีฬา คณะวิทยาศาสตร์การกีฬา จุฬาลงกรณ์มหาวิทยาลัย

2. แบบรายการตรวจสอบชุดนี้ ประยุกต์มาจาก กฎกระทรวงมหาดไทย: กำหนดสิ่งอำนวยความสะดวกในอาคารสำหรับผู้พิการหรือทุพพลภาพและคนชรา พ.ศ. 2548 และ กฎกระทรวงการพัฒนาสังคมและความมั่นคงของมนุษย์: กำหนดลักษณะ หรือการจัดให้มีอุปกรณ์ สิ่งอำนวยความสะดวก หรือบริการในอาคาร สถานที่ หรือบริการสาธารณะอื่น เพื่อให้คนพิการสามารถเข้าถึงและใช้ประโยชน์ได้ พ.ศ. 2555

3. แบบรายการตรวจสอบชุดนี้ แบ่งสิ่งอำนวยความสะดวกด้านการเข้าถึงออกเป็น 12 ส่วน ได้แก่ 1) ที่นั่งสำหรับคนพิการหรือพื้นที่สำหรับจอดรถเข็นคนพิการ 2) ทางลาด 3) ราวกันตกหรือผนังกันตก 4) ถังขยะแบบยกเคลื่อนที่ได้ 5) สถานที่ติดต่อหรือประชาสัมพันธ์สำหรับคนพิการ 6) จุดบริการน้ำดื่มสำหรับคนพิการ 7) ประตูสำหรับคนพิการ 8) ห้องน้ำสำหรับคนพิการ 9) ที่จอดรถสำหรับคนพิการ 10) ป้ายแสดงอุปกรณ์หรือสิ่งอำนวยความสะดวกสำหรับคนพิการ 11) พื้นที่สำหรับหนีภัยของคนพิการ 12) ทางเข้าอาคาร ทางเดินระหว่างอาคาร และทางเชื่อมระหว่างอาคาร

4. แบบรายการตรวจสอบชุดนี้ มีวิธีการประเมินการปฏิบัติตามเกณฑ์ โดยผู้วิจัย ดังนี้

(1) ทำสัญลักษณ์ **'N/A'** ลงในช่อง **'ผลการสำรวจ'** หากตรวจสอบ ***ไม่พบ*** สิ่งอำนวยความสะดวกในข้อนั้น ๆ

(2) สำหรับข้อที่มีเกณฑ์เป็นคำบรรยาย ให้ทำสัญลักษณ์ **'X'** ลงในช่อง **'ผลการสำรวจ'** หากตรวจสอบพบสิ่งอำนวยความสะดวกในข้อนั้น ๆ แต่ ***ไม่ตรงตามเกณฑ์***

(3) สำหรับข้อที่มีเกณฑ์เป็นคำบรรยาย ให้ทำสัญลักษณ์ **'√'** ลงในช่อง **'ผลการสำรวจ'** หากตรวจสอบพบสิ่งอำนวยความสะดวกในข้อนั้น ๆ ***ตรงตามเกณฑ์***

(4) สำหรับข้อที่มีเกณฑ์เป็นค่าตัวเลขชัดเจน ให้ใส่ **'ค่าตัวเลขที่วัดได้จริง'** ลงในช่อง **'ผลการสำรวจ'** ในรายการสิ่งอำนวยความสะดวกข้อนั้น ๆ

รายการ	การปฏิบัติตามเกณฑ์	
	เกณฑ์	ผลการสำรวจ
1. ที่นั่งสำหรับคนพิการหรือพื้นที่สำหรับจอดรถเข็นคนพิการ		
1.1 มีที่นั่งสำหรับคนพิการ และมีพื้นที่กว้างเพียงพอ สำหรับการจอดรถเข็นคนพิการ	-	
1.2 มีราวจับทำด้วยวัสดุที่มีความมั่นคงและแข็งแรง	-	
2. ทางลาด		
2.1 พื้นผิวทางลาดต้องเป็นวัสดุที่ไม่ลื่น	-	
2.2 ความกว้าง	≥ 90 ซม.	
2.3 พื้นที่หน้าทางลาดเป็นที่ว่าง มีความยาว	≥ 150 ซม.	
2.4 ความลาดชัน	≤ 1:12	
2.5 ความยาวช่วงละ	≤ 600 ซม.	
2.6 กรณีที่ทางลาดยาวเกิน 600 ซม. ต้องมีชานพักคั่นแต่ละช่วงยาว	≥ 150 ซม.	
3. ราวกันตกหรือผนังกันตก		
3.1 ความสูงจากพื้น	≥ 110 ซม.	
3.2 ระยะห่างของช่องว่างระหว่างราวกันตก	10 - 15 ซม.	
4. ถังขยะแบบยกเคลื่อนที่ได้		
4.1 ฝาหรือช่องเปิดหันหน้าเข้าทางเดิน และเป็นแบบฝาพลิก	-	
4.2 ความสูงจากพื้น	≥ 70 ≤ 90 ซม.	

รายการ	การปฏิบัติตามเกณฑ์	
	เกณฑ์	ผลการสำรวจ
5. สถานที่ติดต่อหรือประชาสัมพันธ์สำหรับคนพิการ		
5.1 อยู่ในตำแหน่งที่คนพิการสามารถเข้าถึงได้โดยสะดวก	-	
5.2 ความสูงของโต๊ะหรือเคาน์เตอร์ให้บริการมีความสูง	≤ 80 ซม.	
5.3 พื้นที่ว่างใต้โต๊ะ เพียงพอสำหรับรถเข็นคนพิการเข้าไปได้	-	
5.3.1 ความสูงจากพื้น	≥ 70 ซม.	
5.3.2 ความกว้าง	≥ 40 ซม.	
6. จุดบริการน้ำดื่มสำหรับคนพิการ		
6.1 พื้นที่ว่างบริเวณจุดบริการน้ำดื่ม	≥150 x 150 ซม.	
6.2 อุปกรณ์ในการจ่ายน้ำ	-	
6.2.1 เป็นแบบก้านโยก หรือเป็นระบบอัตโนมัติ	-	
6.2.2 ความสูงจากพื้น	≥ 85 ซม.	
6.2.3 พื้นที่ว่างข้างใต้ มีความสูง	≥ 70 ≤ 75 ซม.	
7. ประตูสำหรับคนพิการ		
7.1 ความสูงของธรณีประตู	≤ 2 ซม.	
7.2 ความกว้างช่องประตู	≥ 90 ซม.	
7.3 มือจับประตูแนวดิ่ง	-	
7.3.1 ความสูงมือจับด้านบนวัดจากพื้น	≥ 100 ซม.	
7.3.2 ความสูงมือจับด้านล่างวัดจากพื้น	≤ 80 ซม.	
7.4 ประตูที่เป็นกระจก ติดเครื่องหมายหรือแถบสีที่เห็นได้ชัด	-	

รายการ	การปฏิบัติตามเกณฑ์	
	เกณฑ์	ผลการสำรวจ
8. ห้องน้ำสำหรับคนพิการ		
8.1 พื้นที่ว่างภายในห้องน้ำเพื่อให้รถเข็นคนพิการสามารถหมุนตัวกลับได้ มีเส้นผ่านศูนย์กลาง	≥ 150 ซม.	
8.2 ประตูของห้องน้ำ	-	
8.2.1 เป็นแบบบานเลื่อน	≥ 90 ซม.	
8.2.2 บานเปิดออกสู่ภายนอก ต้องเปิดค้างได้	≥ 90 องศา	
8.3 วัสดุปูพื้นต้องไม่ลื่น	-	
8.4 ราวจับบริเวณโถสุขภัณฑ์ด้านที่ชิดผนัง	-	
8.4.1 ความสูงราวจับในแนวนอนจากพื้น	≥ 65 ≤ 70 ซม.	
8.4.2 ราวจับที่ยื่นล้ำออกมาจากด้านหน้าโถสุขภัณฑ์ มีความยาว	≥ 25 ≤ 30 ซม.	
8.5 ด้านที่ไม่ชิดผนัง มีราวจับติดผนังแบบพับเก็บได้ในแนวราบ มีระยะห่างจากขอบโถสุขภัณฑ์	≥ 15 ≤ 20 ซม.	
8.6 ความสูงจากพื้นของราวจับ เพื่อนำไปสู่สุขภัณฑ์อื่น ๆ ในห้องน้ำ	≥ 80 ≤ 90 ซม.	
8.7 มีสัญญาณเสียงและสัญญาณแสงขอความช่วยเหลือ	-	
8.8 อ่างล้างมือ	-	
8.8.1 ใต้อ่างล้างมือเป็นที่ว่างให้รถเข็นคนพิการสามารถสอดเข้าไปได้ โดยขอบอ่างมีระยะห่างจากผนัง	≥ 45 ซม.	
8.8.2 ความสูงจากพื้นถึงขอบบนของอ่าง	≥ 75 ≤ 80 ซม.	
8.8.3 พื้นที่ว่างข้างใต้ มีความสูง	≥ 70	
8.8.4 มีราวจับในแนวนอนแบบพับเก็บได้ในแนวดิ่งทั้งสองข้างของอ่าง	-	
8.8.5 ก๊อกน้ำเป็นชนิดก้านโยกหรือก้านกดหรือก้านหมุนหรือระบบอัตโนมัติ	-	

รายการ	การปฏิบัติตามเกณฑ์	
	เกณฑ์	ผลการสำรวจ
9. ที่จอดรถสำหรับคนพิการ		
9.1 จำนวนที่จอดรถ ตั้งแต่สิบคันแต่ไม่เกินห้าสิบคัน ให้มีที่จอดรถสำหรับคนพิการอย่างน้อยหนึ่งคัน	50:1 คัน	
9.2 จัดไว้ใกล้ทางเข้าออกอาคารมากที่สุด	-	
9.3 สัญลักษณ์รูปผู้พิการนั่งรถเข็นอยู่บนพื้นของที่จอดรถ	-	
9.3.1 ความกว้าง	≥ 90 ซม.	
9.3.2 ความยาว	≥ 90 ซม.	
9.4 ป้ายที่จอดรถคนพิการ	-	
9.4.1 ความกว้าง	≥ 30 ซม.	
9.4.2 ความยาว	≥ 30 ซม.	
9.4.3 ติดที่ความสูงจากพื้น	≥ 200 ซม.	
9.5 ที่จอดรถเป็นพื้นที่สี่เหลี่ยมผืนผ้า	-	
9.5.1 ความกว้าง	≥ 240 ซม.	
9.5.2 ความยาว	≥ 600 ซม.	
10.ป้ายแสดงอุปกรณ์หรือสิ่งอำนวยความสะดวกสำหรับคนพิการ		
10.1 มีสัญลักษณ์รูปคนพิการ เครื่องหมายแสดงทางไปสู่อุปกรณ์หรือสิ่งอำนวยความสะดวก โดยมี สีขาวและพื้นป้ายเป็นสีน้ำเงิน หรือมีสีน้ำเงินและพื้นป้ายเป็นสีขาว	-	
10.2 ป้ายเป็นรูปสี่เหลี่ยมจัตุรัส มีความชัดเจนมองเห็นได้ง่าย	-	

รายการ	การปฏิบัติตามเกณฑ์	
	เกณฑ์	ผลการสำรวจ
11. พื้นที่สำหรับหนีภัยของคนพิการ		
11.1 มีพื้นที่กว้างเพียงพอสำหรับรถเข็นคนพิการ และอยู่ในบริเวณที่คนพิการสามารถออกจากสถานที่ได้สะดวกเมื่อเกิดเหตุฉุกเฉิน	-	
12. ทางเข้าอาคาร ทางเดินและทางเชื่อมระหว่างอาคาร		
12.1 พื้นทางเดินเรียบ ไม่ลื่น	-	
12.2 ไม่มีสิ่งกีดขวาง หรือส่วนของอาคารยื่นล้ำออกมาเป็นอุปสรรค	-	
12.3 ความกว้าง	≥ 150 ซม.	
12.4 เส้นผ่านศูนย์กลางของรูหรือช่องตะแกรงของท่อระบายน้ำ	≤ 1.3 ซม.	
12.5 ความสูงจากพื้น ของป้ายหรือสิ่งอื่นใดที่แขวนอยู่เหนือทางเดิน	≥ 200 ซม.	

APPENDIX C

PATH ANALYSIS RESULTS (PRINTOUT)

DATE: 12/10/2020
TIME: 17:30

L I S R E L 8.72

BY

Karl G. Jöreskog & Dag Sörbom

This program is published exclusively by
Scientific Software International, Inc.
7383 N. Lincoln Avenue, Suite 100
Lincolnwood, IL 60712, U.S.A.
Phone: (800)247-6113, (847)675-0720, Fax: (847)675-2140

TI

Covariance Matrix

	WOM1	WOM2	WOM3	SAT1	SAT2	SAT3
WOM1	0.450					
WOM2	0.357	0.443				
WOM3	0.359	0.342	0.464			
SAT1	0.281	0.258	0.268	0.596		
SAT2	0.238	0.226	0.241	0.398	0.571	
SAT3	0.302	0.256	0.285	0.441	0.447	0.764
RI1	0.257	0.255	0.250	0.291	0.212	0.272
RI2	0.248	0.262	0.245	0.278	0.210	0.259
RI3	0.282	0.287	0.283	0.300	0.260	0.326
PLAN	0.120	0.113	0.110	0.164	0.172	0.204
TRAVEL	0.179	0.173	0.181	0.286	0.320	0.298
INAREA	0.212	0.241	0.241	0.306	0.379	0.290
SAFE	0.129	0.140	0.145	0.195	0.280	0.221
VIEW	0.161	0.166	0.173	0.224	0.260	0.219
SANIT	0.166	0.182	0.159	0.224	0.277	0.259
AMENI	0.271	0.254	0.252	0.333	0.404	0.406
PERSONAL	0.260	0.287	0.273	0.296	0.257	0.256
INCENTI	0.405	0.411	0.432	0.380	0.397	0.439
UNIQUE	0.191	0.200	0.179	0.196	0.180	0.206

Covariance Matrix

	RI1	RI2	RI3	PLAN	TRAVEL	INAREA
RI1	0.445					

RI2	0.327	0.383				
RI3	0.326	0.334	0.445			
PLAN	0.090	0.097	0.117	0.246		
TRAVEL	0.144	0.151	0.163	0.264	0.787	
INAREA	0.182	0.193	0.228	0.221	0.443	0.745
SAFE	0.096	0.112	0.146	0.159	0.331	0.410
VIEW	0.151	0.137	0.158	0.136	0.294	0.351
SANIT	0.097	0.112	0.136	0.180	0.325	0.338
AMENI	0.219	0.197	0.247	0.234	0.441	0.473
PERSONAL	0.248	0.255	0.293	0.101	0.214	0.272
INCENTI	0.319	0.337	0.410	0.194	0.336	0.377
UNIQUE	0.155	0.151	0.166	0.077	0.157	0.160

Covariance Matrix

	SAFE	VIEW	SANIT	AMENI	PERSONAL	INCENTI
SAFE	0.509					
VIEW	0.250	0.392				
SANIT	0.311	0.263	0.706			
AMENI	0.410	0.356	0.447	0.751		
PERSONAL	0.160	0.175	0.126	0.223	0.548	
INCENTI	0.275	0.234	0.280	0.412	0.554	1.463
UNIQUE	0.102	0.125	0.130	0.198	0.298	0.433

Covariance Matrix

	UNIQUE
UNIQUE	0.381

TI

Initial Estimates (TSLS)

Measurement Equations

WOM1 = 0.612*WOM, Errorvar.= 0.0755, R^2 = 0.832

WOM2 = 0.582*WOM, Errorvar.= 0.105, R^2 = 0.764

WOM3 = 0.588*WOM, Errorvar.= 0.118, R^2 = 0.746

SAT1 = 0.635*SAT, Errorvar.= 0.196, R^2 = 0.670

SAT2 = 0.631*SAT, Errorvar.= 0.176, R^2 = 0.691

SAT3 = 0.693*SAT, Errorvar.= 0.288, R^2 = 0.623

RI1 = 0.548*RI, Errorvar.= 0.170, R^2 = 0.603

RI2 = 0.559*RI, Errorvar.= 0.0977, R^2 = 0.733

RI3 = 0.651*RI, Errorvar.= 0.0564, R^2 = 0.866

PLAN = 0.319*SFA, Errorvar.= 0.145, R^2 = 0.413

TRAVEL = 0.615*SFA, Errorvar.= 0.412, R^2 = 0.479

INAREA = 0.684*SFA, Errorvar.= 0.281, R^2 = 0.625

SAFE = 0.502*SFA, Errorvar.= 0.260, R^2 = 0.492

VIEW = 0.487*SFA, Errorvar.= 0.157, R^2 = 0.601

SANIT = 0.521*SFA, Errorvar.= 0.437, R^2 = 0.384

AMENI = 0.722*SFA, Errorvar.= 0.231, R^2 = 0.693

PERSONAL = 0.710*MOTIV, Errorvar.= 0.0431, R^2 = 0.921

INCENTI = 1.028*MOTIV, Errorvar.= 0.406, R^2 = 0.723

UNIQUE = 0.420*MOTIV, Errorvar.= 0.205, R^2 = 0.463

Error Covariance for RI2 and RI1 = 0.0472
(0.0)

Error Covariance for TRAVEL and PLAN = 0.0694
(0.0)

Error Covariance for SAFE and INAREA = 0.0728
(0.0)

Error Covariance for SANIT and SAFE = 0.0679
(0.0)

Error Covariance for AMENI and SAFE = 0.0467
(0.0)

Error Covariance for AMENI and SANIT = 0.0633
(0.0)

Error Covariance for INCENTI and PERSONAL = -0.176
(0.0)

Structural Equations

WOM = 0.719*SAT, Errorvar.= 0.488, R^2 = 0.512

SAT = 0.789*SFA, Errorvar.= 0.368, R^2 = 0.628

RI = 0.513*SAT + 0.331*MOTIV, Errorvar.= 0.348, R^2 = 0.594

Reduced Form Equations

WOM = 0.567*SFA + 0.0*MOTIV, Errorvar.= 0.678, R^2 = 0.322

SAT = 0.789*SFA + 0.0*MOTIV, Errorvar.= 0.368, R^2 = 0.628

RI = 0.405*SFA + 0.331*MOTIV, Errorvar.= 0.445, R^2 = 0.481

Correlation Matrix of Independent Variables

	SFA	MOTIV
SFA	1.000	
MOTIV	0.520	1.000

Covariance Matrix of Latent Variables

	WOM	SAT	RI	SFA	MOTIV
WOM	1.000				
SAT	0.712	0.991			
RI	0.463	0.644	0.858		
SFA	0.567	0.789	0.577	1.000	
MOTIV	0.295	0.410	0.541	0.520	1.000

Behavior under Minimization Iterations

Iter	Try	Abscissa	Slope	Function
1	0	0.00000000D+00	-0.99418638D-02	0.59066127D+00
	1	0.10000000D+01	-0.54740805D-03	0.58536267D+00
2	0	0.00000000D+00	-0.24340340D-03	0.58536267D+00
	1	0.10000000D+01	-0.20296108D-04	0.58523075D+00
3	0	0.00000000D+00	-0.13996987D-04	0.58523075D+00
	1	0.10000000D+01	-0.85582338D-06	0.58522333D+00
4	0	0.00000000D+00	-0.39884334D-06	0.58522333D+00
	1	0.10000000D+01	-0.21211708D-07	0.58522312D+00
5	0	0.00000000D+00	-0.13512159D-07	0.58522312D+00
	1	0.10000000D+01	-0.91103644D-10	0.58522311D+00
6	0	0.00000000D+00	-0.35902449D-09	0.58522311D+00
	1	0.10000000D+01	-0.41085904D-11	0.58522311D+00
7	0	0.00000000D+00	-0.12273427D-10	0.58522311D+00
	1	0.10000000D+01	-0.29999939D-11	0.58522311D+00
	2	0.20000000D+01	0.62734497D-11	0.58522311D+00
	3	0.13235038D+01	-0.10988454D-17	0.58522311D+00
8	0	0.00000000D+00	-0.95180944D-12	0.58522311D+00
	1	0.13235038D+01	0.29179426D-13	0.58522311D+00

TI

Number of Iterations = 8

LISREL Estimates (Maximum Likelihood)

Measurement Equations

WOM1 = 0.612*WOM, Errorvar.= 0.0756 , R^2 = 0.832

(0.0107)
7.081

WOM2 = 0.582*WOM, Errorvar.= 0.105 , R^2 = 0.764
(0.0258) (0.0116)
22.573 9.016

WOM3 = 0.588*WOM, Errorvar.= 0.118 , R^2 = 0.746
(0.0266) (0.0125)
22.094 9.399

SAT1 = 0.635*SAT, Errorvar.= 0.196 , R^2 = 0.671
(0.0202)
9.714

SAT2 = 0.630*SAT, Errorvar.= 0.177 , R^2 = 0.689
(0.0373) (0.0188)
16.893 9.442

SAT3 = 0.692*SAT, Errorvar.= 0.289 , R^2 = 0.622
(0.0438) (0.0280)
15.809 10.328

RI1 = 0.548*RI, Errorvar.= 0.169 , R^2 = 0.606
(0.0171)
9.901

RI2 = 0.559*RI, Errorvar.= 0.0975 , R^2 = 0.735
(0.0265) (0.0123)
21.068 7.896

RI3 = 0.651*RI, Errorvar.= 0.0567 , R^2 = 0.866
(0.0393) (0.0135)
16.562 4.192

PLAN = 0.318*SFA, Errorvar.= 0.145 , R^2 = 0.411
(0.0257) (0.0124)
12.375 11.672

TRAVEL = 0.611*SFA, Errorvar.= 0.414 , R^2 = 0.474
(0.0449) (0.0364)
13.610 11.366

INAREA = 0.683*SFA, Errorvar.= 0.279 , R^2 = 0.626
(0.0413) (0.0273)
16.548 10.201

SAFE = 0.483*SFA, Errorvar.= 0.278 , R^2 = 0.456
(0.0371) (0.0248)
13.002 11.222

VIEW = 0.485*SFA, Errorvar.= 0.157 , R^2 = 0.599
(0.0302) (0.0150)
16.026 10.492

SANIT = 0.505*SFA, Errorvar.= 0.451 , R^2 = 0.361
(0.0447) (0.0385)
11.307 11.733

AMENI = 0.713*SFA, Errorvar.= 0.242 , R^2 = 0.677
(0.0407) (0.0256)
17.523 9.473

PERSONAL = 0.709*MOTIV, Errorvar.= 0.0452 , R^2 = 0.918
(0.0409) (0.0395)
17.334 1.142

INCENTI = 1.025*MOTIV, Errorvar.= 0.413 , R^2 = 0.718
(0.0715) (0.103)
14.326 4.024

UNIQUE = 0.421*MOTIV, Errorvar.= 0.204 , R^2 = 0.465
(0.0335) (0.0204)
12.585 9.984

Error Covariance for RI2 and RI1 = 0.0469
(0.0121)
3.887

Error Covariance for TRAVEL and PLAN = 0.0698
(0.0160)
4.365

Error Covariance for SAFE and INAREA = 0.0847
(0.0184)
4.593

Error Covariance for SANIT and SAFE = 0.0690
(0.0208)
3.313

Error Covariance for AMENI and SAFE = 0.0698
(0.0178)
3.924

Error Covariance for AMENI and SANIT = 0.0873
(0.0236)
3.696

Error Covariance for INCENTI and PERSONAL = -0.172
(0.0548)
-3.140

Structural Equations

WOM = 0.720*SAT, Errorvar.= 0.485 , R^2 = 0.514
(0.0564) (0.0548)
12.762 8.867

SAT = 0.796*SFA, Errorvar.= 0.358 , R^2 = 0.639
(0.0594) (0.0529)
13.412 6.770

RI = 0.514*SAT + 0.330*MOTIV, Errorvar.= 0.348 , R^2 = 0.599
(0.0572) (0.0505) (0.0484)
8.998 6.529 7.177

Reduced Form Equations

WOM = 0.573*SFA + 0.0*MOTIV, Errorvar.= 0.671, R^2 = 0.329
(0.0517)
11.086

SAT = 0.796*SFA + 0.0*MOTIV, Errorvar.= 0.358, R^2 = 0.639
(0.0594)
13.412

RI = 0.410*SFA + 0.330*MOTIV, Errorvar.= 0.442, R^2 = 0.490
(0.0495) (0.0505)
8.282 6.529

Correlation Matrix of Independent Variables

	SFA	MOTIV
SFA	1.000	
MOTIV	0.550	1.000
	(0.046)	
	11.913	

Covariance Matrix of Latent Variables

	WOM	SAT	RI	SFA	MOTIV
WOM	1.000				
SAT	0.714	0.992			
RI	0.471	0.655	0.868		
SFA	0.573	0.796	0.591	1.000	
MOTIV	0.315	0.438	0.555	0.550	1.000

Goodness of Fit Statistics

Degrees of Freedom = 140
Minimum Fit Function Chi-Square = 385.077 (P = 0.0)
Normal Theory Weighted Least Squares Chi-Square = 377.675 (P = 0.0)
Chi-Square Difference with 1 Degree of Freedom = 15.782 (P = 0.000)
Estimated Non-centrality Parameter (NCP) = 237.675
90 Percent Confidence Interval for NCP = (183.760 ; 299.253)

Minimum Fit Function Value = 1.170
Population Discrepancy Function Value (F0) = 0.722
90 Percent Confidence Interval for F0 = (0.559 ; 0.910)
Root Mean Square Error of Approximation (RMSEA) = 0.0718
90 Percent Confidence Interval for RMSEA = (0.0632 ; 0.0806)
P-Value for Test of Close Fit (RMSEA < 0.05) = 0.000

Expected Cross-Validation Index (ECVI) = 1.452
90 Percent Confidence Interval for ECVI = (1.288 ; 1.639)
ECVI for Saturated Model = 1.155
ECVI for Independence Model = 37.763

Chi-Square for Independence Model with 171 Degrees of Freedom = 12386.081

Independence AIC = 12424.081
Model AIC = 477.675
Saturated AIC = 380.000
Independence CAIC = 12515.264
Model CAIC = 717.630
Saturated CAIC = 1291.828

Normed Fit Index (NFI) = 0.969
Non-Normed Fit Index (NNFI) = 0.975
Parsimony Normed Fit Index (PNFI) = 0.793
Comparative Fit Index (CFI) = 0.980
Incremental Fit Index (IFI) = 0.980
Relative Fit Index (RFI) = 0.962

Critical N (CN) = 156.360

Root Mean Square Residual (RMR) = 0.0524
Standardized RMR = 0.0949
Goodness of Fit Index (GFI) = 0.892
Adjusted Goodness of Fit Index (AGFI) = 0.854
Parsimony Goodness of Fit Index (PGFI) = 0.657

TI

Fitted Covariance Matrix

	WOM1	WOM2	WOM3	SAT1	SAT2	SAT3
WOM1	0.450					
WOM2	0.356	0.443				
WOM3	0.360	0.342	0.464			
SAT1	0.278	0.264	0.267	0.596		
SAT2	0.275	0.262	0.265	0.397	0.571	
SAT3	0.303	0.288	0.291	0.436	0.432	0.764
RI1	0.158	0.150	0.152	0.228	0.226	0.248
RI2	0.161	0.153	0.155	0.232	0.230	0.253
RI3	0.188	0.179	0.180	0.271	0.268	0.295
PLAN	0.112	0.106	0.107	0.161	0.160	0.175
TRAVEL	0.214	0.204	0.206	0.309	0.306	0.337
INAREA	0.240	0.228	0.230	0.345	0.342	0.376
SAFE	0.169	0.161	0.163	0.244	0.242	0.266
VIEW	0.170	0.162	0.163	0.245	0.243	0.267
SANIT	0.177	0.169	0.170	0.255	0.253	0.278
AMENI	0.250	0.238	0.240	0.361	0.358	0.393
PERSONAL	0.137	0.130	0.131	0.197	0.196	0.215
INCENTI	0.198	0.188	0.190	0.285	0.283	0.311
UNIQUE	0.081	0.077	0.078	0.117	0.116	0.128

Fitted Covariance Matrix

	RI1	RI2	RI3	PLAN	TRAVEL	INAREA
RI1	0.430					
RI2	0.313	0.368				
RI3	0.309	0.315	0.424			
PLAN	0.103	0.105	0.122	0.246		
TRAVEL	0.198	0.202	0.235	0.264	0.787	
INAREA	0.221	0.225	0.263	0.217	0.417	0.745
SAFE	0.156	0.159	0.186	0.154	0.295	0.414

VIEW	0.157	0.160	0.186	0.154	0.296	0.331
SANIT	0.164	0.167	0.194	0.161	0.309	0.345
AMENI	0.231	0.235	0.274	0.227	0.436	0.487
PERSONAL	0.216	0.220	0.256	0.124	0.238	0.266
INCENTI	0.312	0.318	0.370	0.179	0.344	0.385
UNIQUE	0.128	0.131	0.152	0.074	0.142	0.158

Fitted Covariance Matrix

	SAFE	VIEW	SANIT	AMENI	PERSONAL	INCENTI
SAFE	0.511					
VIEW	0.234	0.392				
SANIT	0.313	0.245	0.706			
AMENI	0.414	0.346	0.447	0.751		
PERSONAL	0.188	0.189	0.197	0.278	0.548	
INCENTI	0.272	0.273	0.285	0.402	0.554	1.463
UNIQUE	0.112	0.112	0.117	0.165	0.298	0.431

Fitted Covariance Matrix

	UNIQUE
UNIQUE	0.381

Fitted Residuals

	WOM1	WOM2	WOM3	SAT1	SAT2	SAT3
WOM1	0.000					
WOM2	0.001	0.000				
WOM3	-0.001	0.000	0.000			
SAT1	0.004	-0.006	0.001	0.000		
SAT2	-0.038	-0.036	-0.024	0.002	0.000	
SAT3	0.000	-0.031	-0.005	0.005	0.015	0.000
RI1	0.099	0.105	0.098	0.063	-0.014	0.024
RI2	0.087	0.109	0.090	0.046	-0.020	0.006
RI3	0.094	0.108	0.102	0.029	-0.009	0.031
PLAN	0.008	0.007	0.002	0.003	0.012	0.029
TRAVEL	-0.036	-0.031	-0.025	-0.023	0.013	-0.039
INAREA	-0.028	0.013	0.011	-0.039	0.037	-0.086
SAFE	-0.041	-0.022	-0.018	-0.049	0.038	-0.045
VIEW	-0.009	0.004	0.010	-0.021	0.017	-0.048
SANIT	-0.011	0.013	-0.011	-0.032	0.024	-0.019
AMENI	0.021	0.016	0.012	-0.027	0.047	0.013
PERSONAL	0.123	0.157	0.142	0.099	0.062	0.041
INCENTI	0.207	0.223	0.242	0.095	0.114	0.128
UNIQUE	0.110	0.123	0.101	0.079	0.064	0.078

Fitted Residuals

	RI1	RI2	RI3	PLAN	TRAVEL	INAREA
RI1	0.015					
RI2	0.015	0.015				
RI3	0.016	0.018	0.021			
PLAN	-0.013	-0.008	-0.005	0.000		
TRAVEL	-0.054	-0.051	-0.072	0.000	0.000	
INAREA	-0.039	-0.032	-0.034	0.004	0.026	0.000
SAFE	-0.061	-0.048	-0.040	0.005	0.036	-0.004

VIEW	-0.006	-0.023	-0.028	-0.018	-0.002	0.020
SANIT	-0.067	-0.054	-0.059	0.020	0.016	-0.007
AMENI	-0.012	-0.038	-0.027	0.007	0.005	-0.013
PERSONAL	0.032	0.035	0.036	-0.023	-0.024	0.005
INCENTI	0.007	0.020	0.040	0.015	-0.009	-0.008
UNIQUE	0.027	0.020	0.014	0.003	0.015	0.002

Fitted Residuals

	SAFE	VIEW	SANIT	AMENI	PERSONAL	INCENTI
SAFE	-0.002					
VIEW	0.016	0.000				
SANIT	-0.002	0.018	0.000			
AMENI	-0.004	0.010	0.000	0.000		
PERSONAL	-0.028	-0.014	-0.071	-0.055	0.000	
INCENTI	0.002	-0.039	-0.005	0.010	0.000	0.000
UNIQUE	-0.010	0.013	0.013	0.033	0.000	0.001

Fitted Residuals

	UNIQUE
UNIQUE	0.000

Summary Statistics for Fitted Residuals

Smallest Fitted Residual = -0.086
Median Fitted Residual = 0.001
Largest Fitted Residual = 0.242

Stemleaf Plot

```
- 8|6
- 6|2171
- 4|95441988510
- 2|999988664221188877544333210
- 0|9884433211099988766555442221000000000000000000000000
 0|11122223344455556777800012233333345555556666788
 2|00001144679912356678
 4|0167
 6|23489
 8|7045899
10|1258904
12|338
14|27
16|
18|
20|7
22|3
24|2
```

Standardized Residuals

	WOM1	WOM2	WOM3	SAT1	SAT2	SAT3
WOM1	- -					
WOM2	0.663	- -				
WOM3	-0.583	-0.064	- -			
SAT1	0.327	-0.514	0.075	- -		

SAT2	-3.671	-3.109	-1.955	0.271	- -	
SAT3	-0.017	-2.116	-0.355	0.611	1.826	- -
RI1	6.262	6.460	5.859	4.337	-1.023	1.401
RI2	6.546	7.838	6.284	4.017	-1.875	0.453
RI3	7.169	7.818	7.123	2.777	-0.867	2.389
PLAN	0.641	0.544	0.175	0.274	1.083	2.077
TRAVEL	-1.669	-1.395	-1.087	-1.167	0.714	-1.667
INAREA	-1.506	0.660	0.544	-2.400	2.394	-4.417
SAFE	-2.354	-1.208	-0.983	-3.131	2.543	-2.419
VIEW	-0.667	0.308	0.658	-1.731	1.455	-3.305
SANIT	-0.522	0.602	-0.485	-1.559	1.215	-0.783
AMENI	1.159	0.853	0.609	-1.808	3.256	0.692
PERSONAL	6.047	7.553	6.653	4.977	3.210	1.762
INCENTI	5.866	6.242	6.603	2.661	3.297	3.075
UNIQUE	5.892	6.527	5.229	4.114	3.459	3.526

Standardized Residuals

	RI1	RI2	RI3	PLAN	TRAVEL	INAREA
RI1	6.907					
RI2	6.907	6.907				
RI3	5.455	6.865	6.907			
PLAN	-0.991	-0.703	-0.464	- -		
TRAVEL	-2.451	-2.700	-3.800	- -	- -	
INAREA	-1.993	-1.960	-2.120	0.452	1.722	- -
SAFE	-3.415	-3.123	-2.632	0.533	2.292	-1.359
VIEW	-0.423	-1.920	-2.347	-2.644	-0.154	2.360
SANIT	-3.028	-2.845	-3.041	1.540	0.775	-0.443
AMENI	-0.622	-2.440	-1.741	0.925	0.383	-1.406
PERSONAL	2.460	3.589	4.420	-1.793	-1.139	0.310
INCENTI	0.272	0.988	2.171	0.645	-0.224	-0.241
UNIQUE	2.094	2.040	1.632	0.262	0.717	0.085

Standardized Residuals

	SAFE	VIEW	SANIT	AMENI	PERSONAL	INCENTI
SAFE	-1.359					
VIEW	1.800	- -				
SANIT	-0.443	1.488	- -			
AMENI	-1.406	1.385	- -	- -		
PERSONAL	-1.646	-1.098	-3.180	-3.484	- -	
INCENTI	0.075	-1.566	-0.118	0.324	- -	- -
UNIQUE	-0.559	0.996	0.602	1.959	-0.041	0.118

Standardized Residuals

	UNIQUE
UNIQUE	- -

Summary Statistics for Standardized Residuals

Smallest Standardized Residual = -4.417
Median Standardized Residual = 0.102
Largest Standardized Residual = 7.838

Stemleaf Plot

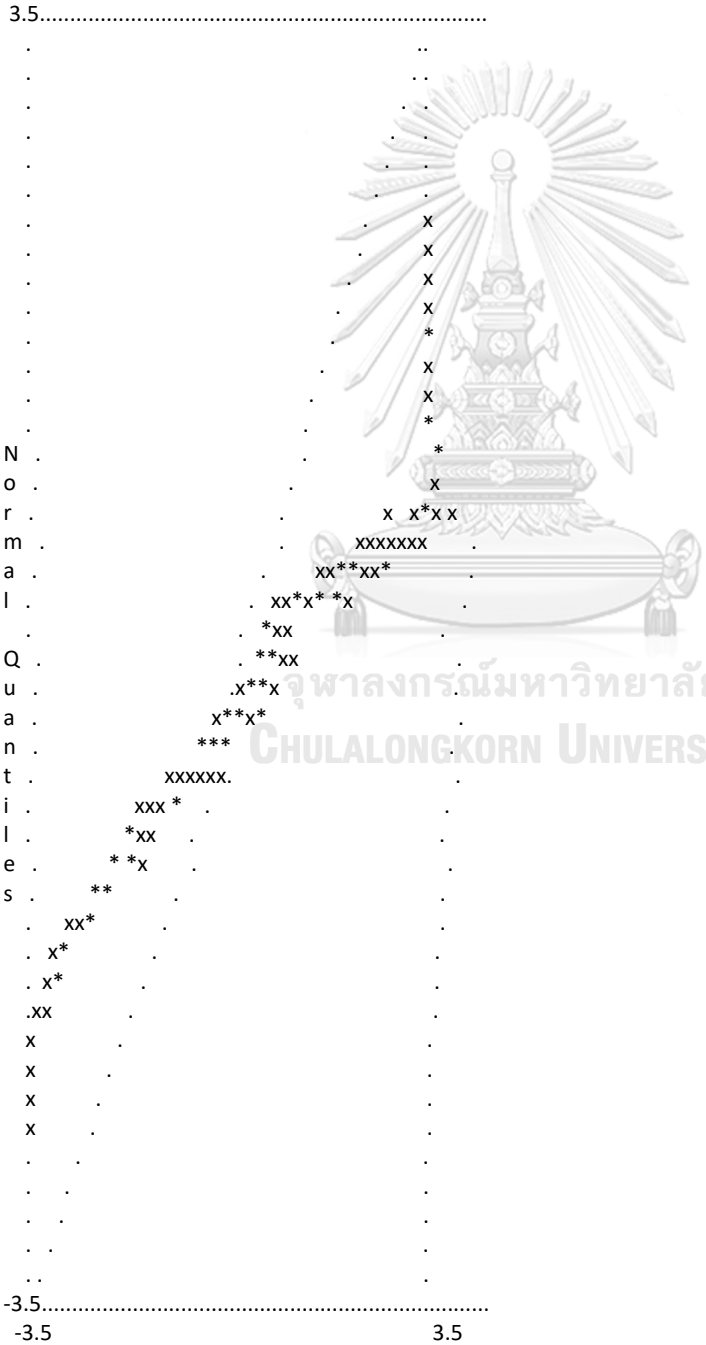
- 4|4
- 3|87543211100
- 2|876654444311000
- 1|998877776665444442211l000
- 0|9877666555544442221100000000000000000000
  0|111123333333345555566666777777899
  1|001224455567888
  2|0011234445578
  3|1233556
  4|0134
  5|025999
  6|02335556799999
  7|12688

Largest Negative Standardized Residuals
Residual for SAT2 and WOM1 -3.671
Residual for SAT2 and WOM2 -3.109
Residual for TRAVEL and RI2 -2.700
Residual for TRAVEL and RI3 -3.800
Residual for INAREA and SAT3 -4.417
Residual for SAFE and SAT1 -3.131
Residual for SAFE and RI1 -3.415
Residual for SAFE and RI2 -3.123
Residual for SAFE and RI3 -2.632
Residual for VIEW and SAT3 -3.305
Residual for VIEW and PLAN -2.644
Residual for SANIT and RI1 -3.028
Residual for SANIT and RI2 -2.845
Residual for SANIT and RI3 -3.041
Residual for PERSONAL and SANIT -3.180
Residual for PERSONAL and AMENI -3.484
Largest Positive Standardized Residuals
Residual for RI1 and WOM1 6.262
Residual for RI1 and WOM2 6.460
Residual for RI1 and WOM3 5.859
Residual for RI1 and SAT1 4.337
Residual for RI1 and RI1 6.907
Residual for RI2 and WOM1 6.546
Residual for RI2 and WOM2 7.838
Residual for RI2 and WOM3 6.284
Residual for RI2 and SAT1 4.017
Residual for RI2 and RI1 6.907
Residual for RI2 and RI2 6.907
Residual for RI3 and WOM1 7.169
Residual for RI3 and WOM2 7.818
Residual for RI3 and WOM3 7.123
Residual for RI3 and SAT1 2.777
Residual for RI3 and RI1 5.455
Residual for RI3 and RI2 6.865
Residual for RI3 and RI3 6.907
Residual for AMENI and SAT2 3.256
Residual for PERSONAL and WOM1 6.047
Residual for PERSONAL and WOM2 7.553
Residual for PERSONAL and WOM3 6.653
Residual for PERSONAL and SAT1 4.977
Residual for PERSONAL and SAT2 3.210
Residual for PERSONAL and RI2 3.589
Residual for PERSONAL and RI3 4.420
Residual for INCENTI and WOM1 5.866
Residual for INCENTI and WOM2 6.242
Residual for INCENTI and WOM3 6.603

Residual for INCENTI and SAT1 2.661
Residual for INCENTI and SAT2 3.297
Residual for INCENTI and SAT3 3.075
Residual for UNIQUE and WOM1 5.892
Residual for UNIQUE and WOM2 6.527
Residual for UNIQUE and WOM3 5.229
Residual for UNIQUE and SAT1 4.114
Residual for UNIQUE and SAT2 3.459
Residual for UNIQUE and SAT3 3.526

TI

Qplot of Standardized Residuals



Standardized Residuals

The Modification Indices Suggest to Add the

Path to	from	Decrease in Chi-Square	New Estimate
WOM2	RI	9.6	0.09
SAT2	WOM	17.7	-0.20
SAT2	RI	13.1	-0.18
UNIQUE	SFA	9.9	0.16
WOM	RI	83.5	0.72
SAT	RI	40.9	0.59
RI	WOM	39.2	0.40
WOM	MOTIV	46.3	0.34
SAT	MOTIV	47.7	0.36
RI	SFA	8.9	-0.27

The Modification Indices Suggest to Add an Error Covariance

Between	and	Decrease in Chi-Square	New Estimate
RI	WOM	39.2	0.19
RI	SAT	8.9	0.12
PLAN	SAT3	9.1	0.04
INAREA	SAT3	11.2	-0.06
PERSONAL	SAT1	8.8	0.04
PERSONAL	AMENI	11.4	-0.05

Covariance Matrix of Parameter Estimates

	LY 2,1	LY 3,1	LY 5,2	LY 6,2	LY 8,3	LY 9,3
LY 2,1	0.001					
LY 3,1	0.000	0.001				
LY 5,2	0.000	0.000	0.001			
LY 6,2	0.000	0.000	0.001	0.002		
LY 8,3	0.000	0.000	0.000	0.000	0.001	
LY 9,3	0.000	0.000	0.000	0.000	0.001	0.002
LX 1,1	0.000	0.000	0.000	0.000	0.000	0.000
LX 2,1	0.000	0.000	0.000	0.000	0.000	0.000
LX 3,1	0.000	0.000	0.000	0.000	0.000	0.000
LX 4,1	0.000	0.000	0.000	0.000	0.000	0.000
LX 5,1	0.000	0.000	0.000	0.000	0.000	0.000
LX 6,1	0.000	0.000	0.000	0.000	0.000	0.000
LX 7,1	0.000	0.000	0.000	0.000	0.000	0.000
LX 8,2	0.000	0.000	0.000	0.000	0.000	0.000
LX 9,2	0.000	0.000	0.000	0.000	0.000	0.000
LX 10,2	0.000	0.000	0.000	0.000	0.000	0.000
BE 1,2	0.000	0.000	0.001	0.001	0.000	0.000
BE 3,2	0.000	0.000	0.001	0.001	0.000	-0.001
GA 2,1	0.000	0.000	-0.001	-0.001	0.000	0.000
GA 3,2	0.000	0.000	0.000	0.000	0.000	-0.001
PH 2,1	0.000	0.000	0.000	0.000	0.000	0.000
PS 1,1	0.000	0.000	0.000	0.000	0.000	0.000
PS 2,2	0.000	0.000	-0.001	-0.001	0.000	0.000
PS 3,3	0.000	0.000	0.000	0.000	-0.001	-0.001
TE 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TE 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TE 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TE 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TE 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TE 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TE 8,7	0.000	0.000	0.000	0.000	0.000	0.000

TE 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TD 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TD 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 10,10	0.000	0.000	0.000	0.000	0.000	0.000

Covariance Matrix of Parameter Estimates

	LX 1,1	LX 2,1	LX 3,1	LX 4,1	LX 5,1	LX 6,1
LX 1,1	0.001					
LX 2,1	0.001	0.002				
LX 3,1	0.000	0.001	0.002			
LX 4,1	0.000	0.000	0.001	0.001		
LX 5,1	0.000	0.000	0.000	0.000	0.001	
LX 6,1	0.000	0.000	0.001	0.001	0.000	0.002
LX 7,1	0.000	0.001	0.001	0.001	0.001	0.001
LX 8,2	0.000	0.000	0.000	0.000	0.000	0.000
LX 9,2	0.000	0.000	0.000	0.000	0.000	0.000
LX 10,2	0.000	0.000	0.000	0.000	0.000	0.000
BE 1,2	0.000	0.000	0.000	0.000	0.000	0.000
BE 3,2	0.000	0.000	0.000	0.000	0.000	0.000
GA 2,1	0.000	0.001	0.001	0.001	0.001	0.001
GA 3,2	0.000	0.000	0.000	0.000	0.000	0.000
PH 2,1	0.000	0.000	0.000	0.000	0.000	0.000
PS 1,1	0.000	0.000	0.000	0.000	0.000	0.000
PS 2,2	0.000	0.000	0.000	0.000	0.000	0.000
PS 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TE 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TE 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TE 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TE 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TE 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TE 8,7	0.000	0.000	0.000	0.000	0.000	0.000
TE 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TD 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,6	0.000	0.000	0.000	0.000	0.000	0.000

TD 7,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TD 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 10,10	0.000	0.000	0.000	0.000	0.000	0.000

Covariance Matrix of Parameter Estimates

	LX 7,1	LX 8,2	LX 9,2	LX 10,2	BE 1,2	BE 3,2
LX 7,1	0.002					
LX 8,2	0.000	0.002				
LX 9,2	0.000	0.001	0.005			
LX 10,2	0.000	0.000	0.000	0.001		
BE 1,2	0.000	0.000	0.000	0.000	0.003	
BE 3,2	0.000	0.000	0.001	0.000	0.001	0.003
GA 2,1	0.001	0.000	0.000	0.000	-0.001	-0.001
GA 3,2	0.000	0.000	0.000	0.001	0.000	-0.001
PH 2,1	0.000	0.000	0.000	0.001	0.000	0.000
PS 1,1	0.000	0.000	0.000	0.000	0.000	0.000
PS 2,2	0.000	0.000	0.000	0.000	-0.001	-0.001
PS 3,3	0.000	0.000	0.000	0.000	0.000	0.001
TE 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TE 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TE 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TE 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TE 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TE 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TE 8,7	0.000	0.000	0.000	0.000	0.000	0.000
TE 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TD 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TD 8,8	0.000	-0.001	-0.001	0.001	0.000	-0.001
TD 9,8	0.000	-0.001	-0.002	0.001	0.000	-0.001
TD 9,9	0.000	-0.001	-0.005	0.001	0.000	-0.001
TD 10,10	0.000	0.000	0.000	0.000	0.000	0.000

Covariance Matrix of Parameter Estimates

	GA 2,1	GA 3,2	PH 2,1	PS 1,1	PS 2,2	PS 3,3
GA 2,1	0.004					
GA 3,2	0.000	0.003				
PH 2,1	0.000	0.001	0.002			
PS 1,1	0.000	0.000	0.000	0.003		
PS 2,2	0.000	0.000	0.000	0.000	0.003	

PS 3,3	0.000	0.000	0.000	0.000	0.000	0.002
TE 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TE 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TE 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TE 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TE 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TE 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TE 8,7	0.000	0.000	0.000	0.000	0.000	0.000
TE 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TD 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TD 8,8	0.000	0.001	0.001	0.000	0.000	0.000
TD 9,8	0.000	0.001	0.001	0.000	0.000	0.000
TD 9,9	0.000	0.001	0.002	0.000	0.000	-0.001
TD 10,10	0.000	0.000	0.000	0.000	0.000	0.000

Covariance Matrix of Parameter Estimates

	TE 1,1	TE 2,2	TE 3,3	TE 4,4	TE 5,5	TE 6,6
TE 1,1	0.000					
TE 2,2	0.000	0.000				
TE 3,3	0.000	0.000	0.000			
TE 4,4	0.000	0.000	0.000	0.000		
TE 5,5	0.000	0.000	0.000	0.000	0.000	
TE 6,6	0.000	0.000	0.000	0.000	0.000	0.001
TE 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TE 8,7	0.000	0.000	0.000	0.000	0.000	0.000
TE 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TD 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TD 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 10,10	0.000	0.000	0.000	0.000	0.000	0.000

Covariance Matrix of Parameter Estimates

	TE 7,7	TE 8,7	TE 8,8	TE 9,9	TD 1,1	TD 2,1
TE 7,7	0.000					
TE 8,7	0.000	0.000				
TE 8,8	0.000	0.000	0.000			
TE 9,9	0.000	0.000	0.000	0.000		
TD 1,1	0.000	0.000	0.000	0.000	0.000	
TD 2,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TD 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TD 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 10,10	0.000	0.000	0.000	0.000	0.000	0.000

Covariance Matrix of Parameter Estimates

	TD 2,2	TD 3,3	TD 4,3	TD 4,4	TD 5,5	TD 6,4
TD 2,2	0.001					
TD 3,3	0.000	0.001				
TD 4,3	0.000	0.000	0.000			
TD 4,4	0.000	0.000	0.000	0.001		
TD 5,5	0.000	0.000	0.000	0.000	0.000	
TD 6,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TD 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 10,10	0.000	0.000	0.000	0.000	0.000	0.000

Covariance Matrix of Parameter Estimates

	TD 6,6	TD 7,4	TD 7,6	TD 7,7	TD 8,8	TD 9,8
TD 6,6	0.001					
TD 7,4	0.000	0.000				
TD 7,6	0.000	0.000	0.001			
TD 7,7	0.000	0.000	0.000	0.001		
TD 8,8	0.000	0.000	0.000	0.000	0.002	
TD 9,8	0.000	0.000	0.000	0.000	0.002	0.003
TD 9,9	0.000	0.000	0.000	0.000	0.002	0.004
TD 10,10	0.000	0.000	0.000	0.000	0.000	-0.001

Covariance Matrix of Parameter Estimates

	TD 9,9	TD 10,10

TD 9,9	0.011	
TD 10,10	-0.001	0.000

TI

Correlation Matrix of Parameter Estimates

	LY 2,1	LY 3,1	LY 5,2	LY 6,2	LY 8,3	LY 9,3
LY 2,1	1.000					
LY 3,1	0.422	1.000				
LY 5,2	0.000	0.000	1.000			
LY 6,2	0.000	0.000	0.484	1.000		
LY 8,3	0.000	0.000	0.000	0.000	1.000	
LY 9,3	0.000	0.000	0.000	0.000	0.567	1.000
LX 1,1	0.000	0.000	0.000	0.000	0.000	0.000
LX 2,1	0.000	0.000	0.000	0.000	0.000	0.000
LX 3,1	0.000	0.000	0.000	0.000	0.000	0.000
LX 4,1	0.000	0.000	0.000	0.000	0.000	0.000
LX 5,1	0.000	0.000	0.000	0.000	0.000	0.000
LX 6,1	0.000	0.000	0.000	0.000	0.000	0.000
LX 7,1	0.000	0.000	0.000	0.000	0.000	0.000
LX 8,2	0.000	0.000	0.000	0.000	0.000	0.000
LX 9,2	0.000	0.000	0.000	0.000	0.000	0.000
LX 10,2	0.000	0.000	0.000	0.000	0.000	0.000
BE 1,2	-0.228	-0.222	0.391	0.365	0.000	0.000
BE 3,2	0.000	0.000	0.275	0.258	-0.308	-0.420
GA 2,1	0.000	0.000	-0.412	-0.381	0.000	0.000
GA 3,2	0.000	0.000	0.001	-0.001	-0.223	-0.305
PH 2,1	0.000	0.000	0.000	0.000	0.000	0.000
PS 1,1	-0.334	-0.325	0.001	-0.002	0.000	0.000
PS 2,2	0.000	0.000	-0.414	-0.389	0.000	0.000
PS 3,3	0.000	0.000	0.000	-0.001	-0.491	-0.565
TE 1,1	0.317	0.302	0.000	0.000	0.000	0.000
TE 2,2	-0.274	-0.051	0.000	0.000	0.000	0.000
TE 3,3	-0.042	-0.250	0.000	0.000	0.000	0.000
TE 4,4	0.000	0.000	0.220	0.198	0.000	0.000
TE 5,5	0.000	0.000	-0.225	-0.006	0.000	0.000
TE 6,6	0.000	0.000	0.002	-0.188	0.000	0.000
TE 7,7	0.000	0.000	0.000	0.000	0.118	0.336
TE 8,7	0.000	0.000	0.000	0.000	0.052	0.418
TE 8,8	0.000	0.000	0.000	0.000	-0.066	0.350
TE 9,9	0.000	0.000	0.000	0.000	0.000	-0.480
TD 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TD 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TD 8,8	0.000	0.000	0.000	-0.001	0.000	0.000
TD 9,8	0.000	0.000	0.000	-0.001	0.000	0.000
TD 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 10,10	0.000	0.000	0.000	0.000	0.000	0.000

Correlation Matrix of Parameter Estimates

	LX 1,1	LX 2,1	LX 3,1	LX 4,1	LX 5,1	LX 6,1
LX 1,1	1.000					
LX 2,1	0.472	1.000				
LX 3,1	0.303	0.334	1.000			
LX 4,1	0.237	0.261	0.519	1.000		
LX 5,1	0.294	0.324	0.392	0.306	1.000	
LX 6,1	0.206	0.226	0.274	0.371	0.266	1.000
LX 7,1	0.319	0.351	0.424	0.510	0.412	0.481
LX 8,2	0.099	0.109	0.132	0.104	0.128	0.090
LX 9,2	0.082	0.090	0.109	0.086	0.106	0.075
LX 10,2	0.072	0.079	0.096	0.075	0.093	0.065
BE 1,2	0.000	0.000	0.000	0.000	0.000	0.000
BE 3,2	-0.001	-0.001	-0.001	-0.001	-0.001	-0.001
GA 2,1	0.247	0.271	0.329	0.257	0.319	0.223
GA 3,2	0.038	0.042	0.052	0.041	0.050	0.036
PH 2,1	0.152	0.168	0.203	0.158	0.197	0.137
PS 1,1	0.000	0.000	0.000	0.000	0.000	0.000
PS 2,2	0.010	0.011	0.015	0.015	0.014	0.014
PS 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TE 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TE 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TE 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TE 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TE 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TE 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TE 8,7	0.000	0.000	0.000	0.000	0.000	0.000
TE 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	-0.131	-0.043	0.010	0.010	0.009	0.009
TD 2,1	-0.127	-0.116	0.015	0.015	0.014	0.014
TD 2,2	-0.049	-0.142	0.013	0.013	0.012	0.011
TD 3,3	0.016	0.018	-0.178	-0.050	0.023	0.022
TD 4,3	0.010	0.011	-0.090	-0.180	0.014	0.010
TD 4,4	0.007	0.008	-0.018	-0.177	0.010	-0.018
TD 5,5	0.014	0.015	0.022	0.021	-0.169	0.019
TD 6,4	0.009	0.009	0.011	-0.123	0.012	-0.092
TD 6,6	0.008	0.009	0.013	-0.025	0.011	-0.139
TD 7,4	0.014	0.016	0.018	-0.197	0.020	-0.059
TD 7,6	0.019	0.020	0.029	-0.049	0.026	-0.189
TD 7,7	0.024	0.027	0.038	-0.054	0.034	-0.077
TD 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 10,10	0.000	0.000	0.000	0.000	0.000	0.000

Correlation Matrix of Parameter Estimates

	LX 7,1	LX 8,2	LX 9,2	LX 10,2	BE 1,2	BE 3,2
LX 7,1	1.000					
LX 8,2	0.140	1.000				
LX 9,2	0.116	0.414	1.000			
LX 10,2	0.101	0.039	0.032	1.000		
BE 1,2	0.000	0.001	0.001	-0.001	1.000	
BE 3,2	-0.001	0.167	0.138	-0.125	0.208	1.000
GA 2,1	0.345	0.115	0.095	0.072	-0.305	-0.201

GA 3,2	0.055	-0.066	-0.055	0.302	-0.002	-0.276
PH 2,1	0.213	-0.064	-0.053	0.369	0.000	-0.105
PS 1,1	0.000	0.002	0.002	-0.002	-0.017	0.001
PS 2,2	0.021	-0.021	-0.017	0.016	-0.314	-0.256
PS 3,3	0.000	0.090	0.075	-0.067	-0.001	0.204
TE 1,1	0.000	0.000	0.000	0.000	-0.098	0.000
TE 2,2	0.000	0.000	0.000	0.000	0.053	0.000
TE 3,3	0.000	0.000	0.000	0.000	0.045	0.000
TE 4,4	0.000	0.007	0.006	-0.005	0.155	0.119
TE 5,5	0.000	0.008	0.006	-0.006	-0.010	0.004
TE 6,6	0.000	0.005	0.004	-0.004	-0.007	0.002
TE 7,7	0.000	0.000	0.000	0.000	0.000	-0.134
TE 8,7	0.000	0.000	0.000	0.000	0.000	-0.157
TE 8,8	0.000	0.000	0.000	0.000	0.000	-0.120
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.174
TD 1,1	0.014	0.000	0.000	0.000	0.000	0.001
TD 2,1	0.021	0.000	0.000	0.000	0.000	0.001
TD 2,2	0.018	0.000	0.000	0.000	0.000	0.001
TD 3,3	0.034	0.000	0.000	0.000	0.000	0.002
TD 4,3	0.016	0.000	0.000	0.000	0.000	0.001
TD 4,4	-0.021	0.000	0.000	0.000	0.000	0.001
TD 5,5	0.030	0.000	0.000	0.000	0.000	0.002
TD 6,4	-0.047	0.000	0.000	0.000	0.000	0.001
TD 6,6	-0.040	0.000	0.000	0.000	0.000	0.001
TD 7,4	-0.100	0.000	0.000	0.000	0.000	0.002
TD 7,6	-0.123	0.000	0.000	0.000	0.000	0.002
TD 7,7	-0.200	0.000	0.000	0.000	0.000	0.003
TD 8,8	0.000	-0.676	-0.315	0.430	-0.001	-0.245
TD 9,8	0.000	-0.551	-0.573	0.448	-0.001	-0.256
TD 9,9	0.000	-0.307	-0.632	0.346	-0.001	-0.197
TD 10,10	0.000	0.405	0.335	-0.285	0.001	0.172

Correlation Matrix of Parameter Estimates

	GA 2,1	GA 3,2	PH 2,1	PS 1,1	PS 2,2	PS 3,3
GA 2,1	1.000					
GA 3,2	0.014	1.000				
PH 2,1	0.160	0.233	1.000			
PS 1,1	0.016	-0.007	-0.001	1.000		
PS 2,2	0.117	0.068	0.020	-0.003	1.000	
PS 3,3	0.009	0.182	-0.067	-0.004	-0.002	1.000
TE 1,1	0.000	0.000	0.000	-0.217	0.000	0.000
TE 2,2	0.000	0.000	0.000	0.048	0.000	0.000
TE 3,3	0.000	0.000	0.000	0.041	0.000	0.000
TE 4,4	-0.122	-0.021	-0.004	-0.026	-0.185	-0.014
TE 5,5	0.058	-0.025	-0.005	-0.030	-0.013	-0.016
TE 6,6	0.037	-0.016	-0.003	-0.019	-0.008	-0.010
TE 7,7	0.000	-0.097	0.000	0.000	0.000	-0.156
TE 8,7	0.000	-0.114	0.000	0.000	0.000	-0.167
TE 8,8	0.000	-0.087	0.000	0.000	0.000	-0.109
TE 9,9	0.000	0.126	0.000	0.000	0.000	0.034
TD 1,1	0.007	-0.002	0.005	0.000	-0.013	0.000
TD 2,1	0.011	-0.002	0.008	0.000	-0.019	0.000
TD 2,2	0.009	-0.002	0.006	0.000	-0.016	0.000
TD 3,3	0.018	-0.004	0.012	0.000	-0.032	0.000
TD 4,3	0.011	-0.002	0.007	0.000	-0.019	0.000
TD 4,4	0.008	-0.002	0.005	0.000	-0.014	0.000
TD 5,5	0.015	-0.003	0.011	0.000	-0.027	0.000
TD 6,4	0.009	-0.002	0.007	0.000	-0.017	0.000

TD 6,6	0.009	-0.002	0.006	0.000	-0.016	0.000
TD 7,4	0.016	-0.003	0.011	0.000	-0.028	0.000
TD 7,6	0.021	-0.004	0.014	0.000	-0.037	0.000
TD 7,7	0.027	-0.006	0.019	0.000	-0.048	0.000
TD 8,8	-0.012	0.349	0.414	-0.003	0.031	-0.133
TD 9,8	-0.012	0.364	0.432	-0.003	0.032	-0.138
TD 9,9	-0.010	0.281	0.333	-0.002	0.025	-0.107
TD 10,10	0.008	-0.245	-0.291	0.002	-0.022	0.093

Correlation Matrix of Parameter Estimates

	TE 1,1	TE 2,2	TE 3,3	TE 4,4	TE 5,5	TE 6,6
TE 1,1	1.000					
TE 2,2	-0.242	1.000				
TE 3,3	-0.207	-0.064	1.000			
TE 4,4	0.000	0.000	0.000	1.000		
TE 5,5	0.000	0.000	0.000	-0.096	1.000	
TE 6,6	0.000	0.000	0.000	-0.061	-0.070	1.000
TE 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TE 8,7	0.000	0.000	0.000	0.000	0.000	0.000
TE 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TE 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 1,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,1	0.000	0.000	0.000	0.000	0.000	0.000
TD 2,2	0.000	0.000	0.000	0.000	0.000	0.000
TD 3,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,3	0.000	0.000	0.000	0.000	0.000	0.000
TD 4,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 5,5	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 6,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,4	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,6	0.000	0.000	0.000	0.000	0.000	0.000
TD 7,7	0.000	0.000	0.000	0.000	0.000	0.000
TD 8,8	0.000	0.000	0.000	-0.010	-0.011	-0.007
TD 9,8	0.000	0.000	0.000	-0.010	-0.012	-0.007
TD 9,9	0.000	0.000	0.000	-0.008	-0.009	-0.006
TD 10,10	0.000	0.000	0.000	0.007	0.008	0.005

Correlation Matrix of Parameter Estimates

	TE 7,7	TE 8,7	TE 8,8	TE 9,9	TD 1,1	TD 2,1
TE 7,7	1.000					
TE 8,7	0.694	1.000				
TE 8,8	0.399	0.740	1.000			
TE 9,9	-0.381	-0.550	-0.549	1.000		
TD 1,1	0.000	0.000	0.000	0.000	1.000	
TD 2,1	0.000	0.000	0.000	0.000	0.476	1.000
TD 2,2	0.000	0.000	0.000	0.000	0.130	0.477
TD 3,3	0.000	0.000	0.000	0.000	-0.021	-0.032
TD 4,3	0.000	0.000	0.000	0.000	-0.013	-0.019
TD 4,4	0.000	0.000	0.000	0.000	-0.009	-0.013
TD 5,5	0.000	0.000	0.000	0.000	-0.018	-0.027
TD 6,4	0.000	0.000	0.000	0.000	-0.011	-0.017
TD 6,6	0.000	0.000	0.000	0.000	-0.011	-0.016
TD 7,4	0.000	0.000	0.000	0.000	-0.019	-0.028
TD 7,6	0.000	0.000	0.000	0.000	-0.024	-0.037
TD 7,7	0.000	0.000	0.000	0.000	-0.032	-0.048

TD 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 10,10	0.000	0.000	0.000	0.000	0.000	0.000

Correlation Matrix of Parameter Estimates

	TD 2,2	TD 3,3	TD 4,3	TD 4,4	TD 5,5	TD 6,4
TD 2,2	1.000					
TD 3,3	-0.027	1.000				
TD 4,3	-0.016	0.470	1.000			
TD 4,4	-0.011	0.102	0.528	1.000		
TD 5,5	-0.023	-0.044	-0.027	-0.019	1.000	
TD 6,4	-0.014	-0.023	0.129	0.370	-0.024	1.000
TD 6,6	-0.013	-0.026	-0.012	0.052	-0.022	0.345
TD 7,4	-0.024	-0.038	0.213	0.510	-0.039	0.438
TD 7,6	-0.031	-0.060	-0.027	0.093	-0.051	0.397
TD 7,7	-0.040	-0.078	-0.036	0.094	-0.067	0.175
TD 8,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,8	0.000	0.000	0.000	0.000	0.000	0.000
TD 9,9	0.000	0.000	0.000	0.000	0.000	0.000
TD 10,10	0.000	0.000	0.000	0.000	0.000	0.000

Correlation Matrix of Parameter Estimates

	TD 6,6	TD 7,4	TD 7,6	TD 7,7	TD 8,8	TD 9,8
TD 6,6	1.000					
TD 7,4	0.122	1.000				
TD 7,6	0.486	0.331	1.000			
TD 7,7	0.138	0.452	0.491	1.000		
TD 8,8	0.000	0.000	0.000	0.001	1.000	
TD 9,8	0.000	0.000	0.000	0.001	0.787	1.000
TD 9,9	0.000	0.000	0.000	0.000	0.495	0.742
TD 10,10	0.000	0.000	0.000	0.000	-0.594	-0.618

Correlation Matrix of Parameter Estimates

	TD 9,9	TD 10,10
TD 9,9	1.000	
TD 10,10	-0.477	1.000

TI

Covariances

Y - ETA

	WOM1	WOM2	WOM3	SAT1	SAT2	SAT3
WOM	0.612	0.582	0.588	0.453	0.450	0.494
SAT	0.437	0.416	0.420	0.630	0.625	0.687
RI	0.289	0.274	0.277	0.416	0.412	0.453

Y - ETA

	RI1	RI2	RI3

WOM 0.258 0.263 0.307
SAT 0.359 0.366 0.426
RI 0.475 0.485 0.565

Y - KSI

	WOM1	WOM2	WOM3	SAT1	SAT2	SAT3
SFA	0.351	0.334	0.337	0.506	0.501	0.551
MOTIV	0.193	0.184	0.186	0.278	0.276	0.303

Y - KSI

	RI1	RI2	RI3
SFA	0.324	0.330	0.385
MOTIV	0.304	0.310	0.361

X - ETA

	PLAN	TRAVEL	INAREA	SAFE	VIEW	SANIT
WOM	0.182	0.350	0.391	0.277	0.278	0.290
SAT	0.253	0.487	0.544	0.384	0.386	0.402
RI	0.188	0.361	0.404	0.285	0.286	0.299

X - ETA

	AMENI	PERSONAL	INCENTI	UNIQUE
WOM	0.409	0.223	0.323	0.133
SAT	0.568	0.310	0.449	0.184
RI	0.421	0.393	0.569	0.234

X - KSI

	PLAN	TRAVEL	INAREA	SAFE	VIEW	SANIT
SFA	0.318	0.611	0.683	0.483	0.485	0.505
MOTIV	0.175	0.336	0.376	0.266	0.267	0.278

X - KSI

	AMENI	PERSONAL	INCENTI	UNIQUE
SFA	0.713	0.390	0.564	0.232
MOTIV	0.392	0.709	1.025	0.421

TI

Factor Scores Regressions

ETA

	WOM1	WOM2	WOM3	SAT1	SAT2	SAT3
WOM	0.625	0.428	0.385	0.037	0.041	0.028
SAT	0.093	0.064	0.058	0.332	0.364	0.246
RI	0.010	0.007	0.006	0.035	0.038	0.026

ETA

	RI1	RI2	RI3	PLAN	TRAVEL	INAREA
WOM	0.002	0.006	0.014	0.004	0.003	0.006
SAT	0.021	0.052	0.124	0.037	0.028	0.055
RI	0.137	0.347	0.827	0.004	0.003	0.006

ETA

	SAFE	VIEW	SANIT	AMENI	PERSONAL	INCENTI
WOM	0.001	0.008	0.001	0.007	-0.002	-0.001
SAT	0.004	0.071	0.013	0.062	-0.021	-0.008
RI	0.000	0.007	0.001	0.006	0.064	0.023

ETA

	UNIQUE
WOM	0.000
SAT	0.001
RI	-0.003

KSI

	WOM1	WOM2	WOM3	SAT1	SAT2	SAT3
SFA	0.021	0.014	0.013	0.075	0.082	0.055
MOTIV	0.000	0.000	0.000	0.002	0.002	0.001

KSI

	RI1	RI2	RI3	PLAN	TRAVEL	INAREA
SFA	0.004	0.011	0.027	0.171	0.128	0.254
MOTIV	-0.003	-0.007	-0.017	-0.003	-0.002	-0.004

KSI

	SAFE	VIEW	SANIT	AMENI	PERSONAL	INCENTI
SFA	0.021	0.328	0.061	0.285	0.074	0.026
MOTIV	0.000	-0.005	-0.001	-0.005	0.982	0.352

KSI

	UNIQUE
SFA	-0.004
MOTIV	-0.048

TI

Standardized Solution

LAMBDA-Y

	WOM	SAT	RI

WOM1	0.612	- -	- -
WOM2	0.582	- -	- -
WOM3	0.588	- -	- -
SAT1	- -	0.632	- -
SAT2	- -	0.627	- -
SAT3	- -	0.689	- -
RI1	- -	- -	0.510
RI2	- -	- -	0.520
RI3	- -	- -	0.606

LAMBDA-X

	SFA	MOTIV
PLAN	0.318	- -
TRAVEL	0.611	- -
INAREA	0.683	- -
SAFE	0.483	- -
VIEW	0.485	- -
SANIT	0.505	- -
AMENI	0.713	- -
PERSONAL	- -	0.709
INCENTI	- -	1.025
UNIQUE	- -	0.421

BETA

	WOM	SAT	RI
WOM	- -	0.717	- -
SAT	- -	- -	- -
RI	- -	0.550	- -

GAMMA

	SFA	MOTIV
WOM	- -	- -
SAT	0.799	- -
RI	- -	0.354

Correlation Matrix of ETA and KSI

	WOM	SAT	RI	SFA	MOTIV
WOM	1.000				
SAT	0.717	1.000			
RI	0.506	0.706	1.000		
SFA	0.573	0.799	0.635	1.000	
MOTIV	0.315	0.440	0.596	0.550	1.000

PSI

Note: This matrix is diagonal.

WOM	SAT	RI
0.486	0.361	0.401

Regression Matrix ETA on KSI (Standardized)

	SFA	MOTIV
WOM	0.573	- -
SAT	0.799	- -
RI	0.440	0.354

TI

Completely Standardized Solution

LAMBDA-Y

	WOM	SAT	RI
WOM1	0.912	- -	- -
WOM2	0.874	- -	- -
WOM3	0.864	- -	- -
SAT1	- -	0.819	- -
SAT2	- -	0.830	- -
SAT3	- -	0.789	- -
RI1	- -	- -	0.778
RI2	- -	- -	0.857
RI3	- -	- -	0.931

LAMBDA-X

	SFA	MOTIV
PLAN	0.641	- -
TRAVEL	0.689	- -
INAREA	0.791	- -
SAFE	0.675	- -
VIEW	0.774	- -
SANIT	0.601	- -
AMENI	0.823	- -
PERSONAL	- -	0.958
INCENTI	- -	0.847
UNIQUE	- -	0.682

BETA

	WOM	SAT	RI
WOM	- -	0.717	- -
SAT	- -	- -	- -
RI	- -	0.550	- -

GAMMA

	SFA	MOTIV
WOM	- -	- -
SAT	0.799	- -
RI	- -	0.354

Correlation Matrix of ETA and KSI

	WOM	SAT	RI	SFA	MOTIV
WOM	1.000				

SAT 0.717 1.000
RI 0.506 0.706 1.000
SFA 0.573 0.799 0.635 1.000
MOTIV 0.315 0.440 0.596 0.550 1.000

PSI
Note: This matrix is diagonal.

WOM	SAT	RI
0.486	0.361	0.401

THETA-EPS

	WOM1	WOM2	WOM3	SAT1	SAT2	SAT3
WOM1	0.168					
WOM2	- -	0.236				
WOM3	- -	- -	0.254			
SAT1	- -	- -	- -	0.329		
SAT2	- -	- -	- -	- -	0.311	
SAT3	- -	- -	- -	- -	- -	0.378
RI1	- -	- -	- -	- -	- -	- -
RI2	- -	- -	- -	- -	- -	- -
RI3	- -	- -	- -	- -	- -	- -

THETA-EPS

	RI1	RI2	RI3
RI1	0.394		
RI2	0.118	0.265	
RI3	- -	- -	0.134

THETA-DELTA

	PLAN	TRAVEL	INAREA	SAFE	VIEW	SANIT
PLAN	0.589					
TRAVEL	0.159	0.526				
INAREA	- -	- -	0.374			
SAFE	- -	- -	0.137	0.544		
VIEW	- -	- -	- -	- -	0.401	
SANIT	- -	- -	- -	0.115	- -	0.639
AMENI	- -	- -	- -	0.113	- -	0.120
PERSONAL	- -	- -	- -	- -	- -	- -
INCENTI	- -	- -	- -	- -	- -	- -
UNIQUE	- -	- -	- -	- -	- -	- -

THETA-DELTA

	AMENI	PERSONAL	INCENTI	UNIQUE
AMENI	0.323			
PERSONAL	- -	0.082		
INCENTI	- -	-0.192	0.282	
UNIQUE	- -	- -	- -	0.535

Regression Matrix ETA on KSI (Standardized)

	SFA	MOTIV
WOM	0.573	- -
SAT	0.799	- -
RI	0.440	0.354

TI

Total and Indirect Effects

Total Effects of KSI on ETA

	SFA	MOTIV
WOM	0.573	- -
	(0.052)	
	11.086	
SAT	0.796	- -
	(0.059)	
	13.412	
RI	0.410	0.330
	(0.049)	(0.051)
	8.282	6.529

Indirect Effects of KSI on ETA

	SFA	MOTIV
WOM	0.573	- -
	(0.052)	
	11.086	
SAT	- -	- -
RI	0.410	- -
	(0.049)	
	8.282	

Total Effects of ETA on ETA

	WOM	SAT	RI
WOM	- -	0.720	- -
		(0.056)	
		12.762	
SAT	- -	- -	- -
RI	- -	0.514	- -
		(0.057)	
		8.998	

Largest Eigenvalue of B*B' (Stability Index) is 0.783

Total Effects of ETA on Y

	WOM	SAT	RI
WOM1	0.612	0.441	- -
	(0.035)		
	12.762		
WOM2	0.582	0.419	- -
	(0.026)	(0.034)	
	22.573	12.388	
WOM3	0.588	0.423	- -
	(0.027)	(0.034)	
	22.094	12.294	
SAT1	- -	0.635	- -
SAT2	- -	0.630	- -
	(0.037)		
	16.893		
SAT3	- -	0.692	- -
	(0.044)		
	15.809		
RI1	- -	0.282	0.548
	(0.031)		
	8.998		
RI2	- -	0.287	0.559
	(0.031)	(0.027)	
	9.385	21.068	
RI3	- -	0.335	0.651
	(0.034)	(0.039)	
	9.828	16.562	

Indirect Effects of ETA on Y

	WOM	SAT	RI
WOM1	- -	0.441	- -
	(0.035)		
	12.762		
WOM2	- -	0.419	- -
	(0.034)		
	12.388		
WOM3	- -	0.423	- -
	(0.034)		
	12.294		
SAT1	- -	- -	- -
SAT2	- -	- -	- -
SAT3	- -	- -	- -

RI1 - - 0.282 - -
(0.031)
8.998

RI2 - - 0.287 - -
(0.031)
9.385

RI3 - - 0.335 - -
(0.034)
9.828

Total Effects of KSI on Y

	SFA	MOTIV
WOM1	0.351	- -
	(0.032)	
	11.086	
WOM2	0.334	- -
	(0.031)	
	10.838	
WOM3	0.337	- -
	(0.031)	
	10.775	
SAT1	0.506	- -
	(0.038)	
	13.412	
SAT2	0.501	- -
	(0.037)	
	13.580	
SAT3	0.551	- -
	(0.043)	
	12.950	
RI1	0.225	0.181
	(0.027)	(0.028)
	8.282	6.529
RI2	0.229	0.184
	(0.027)	(0.028)
	8.580	6.672
RI3	0.267	0.215
	(0.030)	(0.031)
	8.915	6.826

TI

Standardized Total and Indirect Effects

Standardized Total Effects of KSI on ETA

	SFA	MOTIV
WOM	0.573	- -
SAT	0.799	- -
RI	0.440	0.354

Standardized Indirect Effects of KSI on ETA

	SFA	MOTIV
WOM	0.573	- -
SAT	- -	- -
RI	0.440	- -

Standardized Total Effects of ETA on ETA

	WOM	SAT	RI
WOM	- -	0.717	- -
SAT	- -	- -	- -
RI	- -	0.550	- -

Standardized Total Effects of ETA on Y

	WOM	SAT	RI
WOM1	0.612	0.439	- -
WOM2	0.582	0.417	- -
WOM3	0.588	0.422	- -
SAT1	- -	0.632	- -
SAT2	- -	0.627	- -
SAT3	- -	0.689	- -
RI1	- -	0.281	0.510
RI2	- -	0.286	0.520
RI3	- -	0.334	0.606

Completely Standardized Total Effects of ETA on Y

	WOM	SAT	RI
WOM1	0.912	0.654	- -
WOM2	0.874	0.627	- -
WOM3	0.864	0.619	- -
SAT1	- -	0.819	- -
SAT2	- -	0.830	- -
SAT3	- -	0.789	- -
RI1	- -	0.428	0.778
RI2	- -	0.472	0.857
RI3	- -	0.512	0.931

Standardized Indirect Effects of ETA on Y

	WOM	SAT	RI
WOM1	- -	0.439	- -
WOM2	- -	0.417	- -
WOM3	- -	0.422	- -
SAT1	- -	- -	- -
SAT2	- -	- -	- -
SAT3	- -	- -	- -

RI1	- -	0.281	- -
RI2	- -	0.286	- -
RI3	- -	0.334	- -

Completely Standardized Indirect Effects of ETA on Y

	WOM	SAT	RI
WOM1	- -	0.654	- -
WOM2	- -	0.627	- -
WOM3	- -	0.619	- -
SAT1	- -	- -	- -
SAT2	- -	- -	- -
SAT3	- -	- -	- -
RI1	- -	0.428	- -
RI2	- -	0.472	- -
RI3	- -	0.512	- -

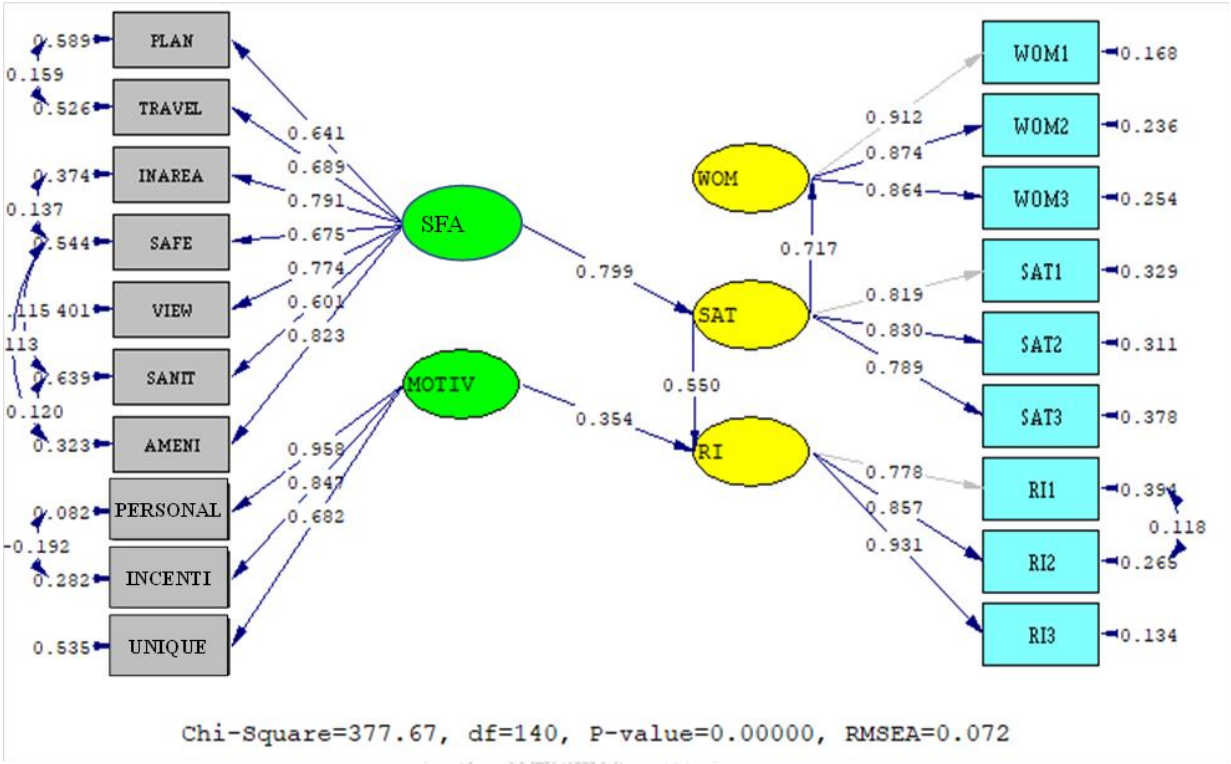
Standardized Total Effects of KSI on Y

	SFA	MOTIV
WOM1	0.351	- -
WOM2	0.334	- -
WOM3	0.337	- -
SAT1	0.506	- -
SAT2	0.501	- -
SAT3	0.551	- -
RI1	0.225	0.181
RI2	0.229	0.184
RI3	0.267	0.215

Completely Standardized Total Effects of KSI on Y

	SFA	MOTIV
WOM1	0.523	- -
WOM2	0.501	- -
WOM3	0.495	- -
SAT1	0.655	- -
SAT2	0.664	- -
SAT3	0.631	- -
RI1	0.342	0.276
RI2	0.377	0.304
RI3	0.409	0.330

Time used: 0.063 Seconds



The model of the influence of sports facilities' accessibility, motivation, and satisfaction on word-of-mouth and re-participation intentions of athletes with physical disabilities

APPENDIX D

THE CALCULATION OF OATH COEFFICIENTS FOR THE REPARTICIPATION INTENTION (RI)

Variable	Parameter Estimates (Standardized Coefficients)					Total	Rank
	SFA (Matrix LAMBDA)	→	SAT (Matrix GAMMA)	→	RI (Matrix Beta)		
Plan	0.641	x	0.799	x	0.550	0.282	9
Travel	0.689	x	0.799	x	0.550	0.303	5
Inarea	0.791	x	0.799	x	0.550	0.348	2
Safe	0.675	x	0.799	x	0.550	0.297	7
View	0.774	x	0.799	x	0.550	0.340	3
Sanit	0.601	x	0.799	x	0.550	0.264	8
Ameni	0.823	x	0.799	x	0.550	0.362	1
Personal	0.958	x	0.354			0.339	4
Incenti	0.847	x	0.354			0.300	6
Unique	0.682	x	0.354			0.241	10

APPENDIX E

INVITATION LETTER

บันทึกข้อความ

ส่วนงาน หน่วยจัดการศึกษา กลุ่มภารกิจวิชาการ คณะวิทยาศาสตร์การกีฬา โทร. ๘๑๐๔๐
ที่ ศธ ๐๕๑๒.๒๔(วช)/๒๑๔ **วันที่** ๕ มีนาคม ๒๕๖๒
เรื่อง ขอเรียนเชิญเป็นผู้ทรงคุณวุฒิตรวจเครื่องมือการวิจัย

เรียน อาจารย์ ว่าที่ร้อยตรี ดร.กวีพงษ์ เลิศวัชรา

สิ่งที่ส่งมาด้วย ๑. โครงร่างวิทยานิพนธ์
๒. แบบสอบถาม

ด้วย นายธีร์ ตรงจิตพิทักษ์ นิสิตระดับปริญญาดุษฎีบัณฑิต ชั้นปีที่ ๓ แขนงวิชาการจัดการการกีฬา คณะวิทยาศาสตร์การกีฬา จุฬาลงกรณ์มหาวิทยาลัย ซึ่งได้รับอนุมัติหัวข้อวิทยานิพนธ์เรื่อง ผลของการเข้าถึงการแข่งขันกีฬาของคนพิการทางการเคลื่อนไหวที่มีต่อความตั้งใจในการกลับมาเข้าร่วมและความตั้งใจที่จะบอกต่อโดยมีความพึงพอใจเป็นตัวแปรคั่นกลาง (THE IMPACT OF SPORTS EVENT ACCESSIBILITY OF PEOPLE WITH PHYSICAL DISABILITIES ON RE-PARTICIPATE AND WORD OF MOUTH INTENTIONS: THE MEDIATING EFFECTS OF SATISFACTION) ซึ่งเป็นส่วนหนึ่งของการศึกษาตามหลักสูตรวิทยาศาสตรดุษฎีบัณฑิต สาขาวิชาวิทยาศาสตร์การกีฬา ภายใต้การควบคุมของ รองศาสตราจารย์เทพประสิทธิ์ กุลธวัชวิชัย อาจารย์ที่ปรึกษาวิทยานิพนธ์

เพื่อให้วิทยานิพนธ์มีความถูกต้องและสมบูรณ์ตามวัตถุประสงค์ที่ตั้งไว้ ในการนี้ คณะกรรมการบริหารหลักสูตรวิทยาศาสตรดุษฎีบัณฑิต ใคร่ขอความอนุเคราะห์เรียนเชิญท่านเป็นผู้ทรงคุณวุฒิพิจารณาเครื่องมือการวิจัยดังกล่าว

จึงเรียนมาเพื่อโปรดพิจารณาให้ความอนุเคราะห์เป็นผู้ทรงคุณวุฒิตรวจเครื่องมือการวิจัยด้วย จักเป็นพระคุณยิ่ง

(ผู้ช่วยศาสตราจารย์ ดร.สิทธา พงษ์พิบูลย์)
ประธานกรรมการบริหารหลักสูตรวิทยาศาสตรดุษฎีบัณฑิต

บันทึกข้อความ

ส่วนงาน หน่วยจัดการศึกษา กลุ่มภารกิจวิชาการ คณะวิทยาศาสตร์การกีฬา โทร. ๘๑๐๔๐
ที่ ศธ ๐๕๑๒.๒๔(วช)/๒๑๔ **วันที่** ๕ มีนาคม ๒๕๖๒
เรื่อง ขอเรียนเชิญเป็นผู้ทรงคุณวุฒิตรวจเครื่องมือการวิจัย

เรียน อาจารย์ ดร.กุลพิชญ์ โภไคยอุดม

สิ่งที่สิ่งมาด้วย ๑. โครงร่างวิทยานิพนธ์
๒. แบบสอบถาม

ด้วย นายธีร์ ตรงจิตพิทักษ์ นิสิตระดับปริญญาดุษฎีบัณฑิต ชั้นปีที่ ๓ แขนงวิชาการจัดการการกีฬา คณะวิทยาศาสตร์การกีฬา จุฬาลงกรณ์มหาวิทยาลัย ซึ่งได้รับอนุมัติหัวข้อวิทยานิพนธ์เรื่อง ผลของการเข้าถึงการแข่งขันกีฬาของคนพิการทางการเคลื่อนไหวที่มีต่อความตั้งใจในการกลับมาเข้าร่วมและความตั้งใจที่จะบอกต่อโดยมีความพึงพอใจเป็นตัวแปรคั่นกลาง (THE IMPACT OF SPORTS EVENT ACCESSIBILITY OF PEOPLE WITH PHYSICAL DISABILITIES ON RE-PARTICIPATE AND WORD OF MOUTH INTENTIONS: THE MEDIATING EFFECTS OF SATISFACTION) ซึ่งเป็นส่วนหนึ่งของการศึกษาตามหลักสูตรวิทยาศาสตรดุษฎีบัณฑิต สาขาวิชาวิทยาศาสตร์การกีฬา ภายใต้การควบคุมของ รองศาสตราจารย์เทพประสิทธิ์ กุลธวัชวิชัย อาจารย์ที่ปรึกษาวิทยานิพนธ์

เพื่อให้วิทยานิพนธ์มีความถูกต้องและสมบูรณ์ตามวัตถุประสงค์ที่ตั้งไว้ ในการนี้ คณะกรรมการบริหารหลักสูตรวิทยาศาสตรดุษฎีบัณฑิต ใคร่ขอความอนุเคราะห์เรียนเชิญท่านเป็นผู้ทรงคุณวุฒิพิจารณาเครื่องมือการวิจัยดังกล่าว

จึงเรียนมาเพื่อโปรดพิจารณาให้ความอนุเคราะห์เป็นผู้ทรงคุณวุฒิตรวจเครื่องมือการวิจัยด้วย จักเป็นพระคุณยิ่ง

(ผู้ช่วยศาสตราจารย์ ดร.สิทธา พงษ์พิบูลย์)
ประธานกรรมการบริหารหลักสูตรวิทยาศาสตรดุษฎีบัณฑิต

ที่ ศธ ๐๕๑๒.๒๔/๐๒๒๒

คณะวิทยาศาสตร์การกีฬา
จุฬาลงกรณ์มหาวิทยาลัย
ถนนพระราม ๑ แขวงวังใหม่ กทม. ๑๐๓๓๐

๕ มีนาคม ๒๕๖๒

เรื่อง ขอเรียนเชิญเป็นผู้ทรงคุณวุฒิตรวจเครื่องมือการวิจัย

เรียน อาจารย์ ดร.จุฑา ติงศภัทิย์

สิ่งที่ส่งมาด้วย ๑. โครงร่างวิทยานิพนธ์
๒. แบบสอบถาม

ด้วย นายธีร์ ตรงจิตพิทักษ์ นิสิตระดับปริญญาดุษฎีบัณฑิต ชั้นปีที่ ๓ แขนงวิชาการจัดการการกีฬา คณะวิทยาศาสตร์การกีฬา จุฬาลงกรณ์มหาวิทยาลัย ซึ่งได้รับอนุมัติหัวข้อวิทยานิพนธ์เรื่อง ผลของการเข้าถึงการแข่งขันกีฬาของคนพิการทางการเคลื่อนไหวที่มีต่อความตั้งใจในการกลับมาเข้าร่วม และความตั้งใจที่จะบอกต่อ โดยมีความพึงพอใจเป็นตัวแปรคั่นกลาง (THE IMPACT OF SPORTS EVENT ACCESSIBILITY OF PEOPLE WITH PHYSICAL DISABILITIES ON RE-PARTICIPATE AND WORD OF MOUTH INTENTIONS: THE MEDIATING EFFECTS OF SATISFACTION) ซึ่งเป็นส่วนหนึ่งของการศึกษาตามหลักสูตรวิทยาศาสตรดุษฎีบัณฑิต สาขาวิชาวิทยาศาสตร์การกีฬา ภายใต้การควบคุมของ รองศาสตราจารย์เทพประสิทธิ์ กุลธวัชวิชัย อาจารย์ที่ปรึกษาวิทยานิพนธ์

เพื่อให้วิทยานิพนธ์มีความถูกต้องและสมบูรณ์ตามวัตถุประสงค์ที่ตั้งไว้ ในการนี้ คณะวิทยาศาสตร์การกีฬาใคร่ขอความอนุเคราะห์เรียนเชิญท่านเป็นผู้ทรงคุณวุฒิพิจารณาเครื่องมือการวิจัยดังกล่าว

จึงเรียนมาเพื่อโปรดพิจารณาให้ความอนุเคราะห์เป็นผู้ทรงคุณวุฒิตรวจเครื่องมือการวิจัยด้วย จักเป็นพระคุณยิ่ง และขอขอบคุณมาในโอกาสนี้

ขอแสดงความนับถือ

(ผู้ช่วยศาสตราจารย์ ดร.สิทธา พงษ์พิบูลย์)
คณบดี

หน่วยจัดการศึกษา กลุ่มภารกิจวิชาการ
โทร.๐-๒๒๑๘-๑๐๔๗
โทรสาร ๐-๒๒๑๘-๑๐๔๐

ที่ ศธ ๐๕๑๒.๒๔/๐๒๒๒

คณะวิทยาศาสตร์การกีฬา
จุฬาลงกรณ์มหาวิทยาลัย
ถนนพระราม ๑ แขวงวังใหม่ กทม. ๑๐๓๓๐

๒๗ มีนาคม ๒๕๖๒

เรื่อง ขอเรียนเชิญเป็นผู้ทรงคุณวุฒิตรวจเครื่องมือการวิจัย

เรียน ผู้ช่วยศาสตราจารย์ ดร.พราม อินพรม

สิ่งที่ส่งมาด้วย ๑. โครงร่างวิทยานิพนธ์
๒. แบบสอบถาม

ด้วย นายธีร์ ตรงจิตพิทักษ์ นิสิตระดับปริญญาดุษฎีบัณฑิต ชั้นปีที่ ๓ แขนงวิชาการจัดการการกีฬา คณะวิทยาศาสตร์การกีฬา จุฬาลงกรณ์มหาวิทยาลัย ซึ่งได้รับอนุมัติหัวข้อวิทยานิพนธ์เรื่อง ผลของการเข้าถึงการแข่งขันกีฬาของคนพิการทางการเคลื่อนไหวที่มีต่อความตั้งใจในการกลับมาเข้าร่วม และความตั้งใจที่จะบอกต่อ โดยมีความพึงพอใจเป็นตัวแปรคั่นกลาง (THE IMPACT OF SPORTS EVENT ACCESSIBILITY OF PEOPLE WITH PHYSICAL DISABILITIES ON RE-PARTICIPATE AND WORD OF MOUTH INTENTIONS: THE MEDIATING EFFECTS OF SATISFACTION) ซึ่งเป็นส่วนหนึ่งของการศึกษาตามหลักสูตรวิทยาศาสตรดุษฎีบัณฑิต สาขาวิชาวิทยาศาสตร์การกีฬา ภายใต้การควบคุมของ รองศาสตราจารย์เทพประสิทธิ์ กุลธวัชวิชัย อาจารย์ที่ปรึกษาวิทยานิพนธ์

เพื่อให้วิทยานิพนธ์มีความถูกต้องและสมบูรณ์ตามวัตถุประสงค์ที่ตั้งไว้ ในการนี้ คณะวิทยาศาสตร์การกีฬาใคร่ขอความอนุเคราะห์เรียนเชิญท่านเป็นผู้ทรงคุณวุฒิพิจารณาเครื่องมือการวิจัยดังกล่าว

จึงเรียนมาเพื่อโปรดพิจารณาให้ความอนุเคราะห์เป็นผู้ทรงคุณวุฒิตรวจเครื่องมือการวิจัยด้วย จักเป็นพระคุณยิ่ง และขอขอบคุณมาในโอกาสนี้

ขอแสดงความนับถือ

(ผู้ช่วยศาสตราจารย์ ดร.สิทธา พงษ์พิบูลย์)
คณบดี

หน่วยจัดการศึกษา กลุ่มภารกิจวิชาการ
โทร.๐-๒๒๑๘-๑๐๔๗
โทรสาร ๐-๒๒๑๘-๑๐๔๐

ที่ ศธ ๐๕๑๒.๒๔/๐๒๒๒

คณะวิทยาศาสตร์การกีฬา
จุฬาลงกรณ์มหาวิทยาลัย
ถนนพระราม ๑ แขวงวังใหม่ กทม. ๑๐๓๓๐

๕ มีนาคม ๒๕๖๒

เรื่อง ขอเรียนเชิญเป็นผู้ทรงคุณวุฒิตรวจเครื่องมือการวิจัย

เรียน อาจารย์ ดร.อิษฎี กุฏอินทร์

สิ่งที่ส่งมาด้วย ๑. โครงร่างวิทยานิพนธ์
๒. แบบสอบถาม

ด้วย นายธีร์ ตรงจิตพิทักษ์ นิสิตระดับปริญญาดุษฎีบัณฑิต ชั้นปีที่ ๓ แขนงวิชาการจัดการการกีฬา คณะวิทยาศาสตร์การกีฬา จุฬาลงกรณ์มหาวิทยาลัย ซึ่งได้รับอนุมัติหัวข้อวิทยานิพนธ์เรื่อง ผลของการเข้าถึงการแข่งขันกีฬาของคนพิการทางการเคลื่อนไหวที่มีต่อความตั้งใจในการกลับมาเข้าร่วมและความตั้งใจที่จะบอกต่อโดยมีความพึงพอใจเป็นตัวแปรคั่นกลาง (THE IMPACT OF SPORTS EVENT ACCESSIBILITY OF PEOPLE WITH PHYSICAL DISABILITIES ON RE-PARTICIPATE AND WORD OF MOUTH INTENTIONS: THE MEDIATING EFFECTS OF SATISFACTION) ซึ่งเป็นส่วนหนึ่งของการศึกษาตามหลักสูตรวิทยาศาสตรดุษฎีบัณฑิต สาขาวิชาวิทยาศาสตร์การกีฬา ภายใต้การควบคุมของ รองศาสตราจารย์เทพประสิทธิ์ กุลธวัชวิชัย อาจารย์ที่ปรึกษาวิทยานิพนธ์

เพื่อให้วิทยานิพนธ์มีความถูกต้องและสมบูรณ์ตามวัตถุประสงค์ที่ตั้งไว้ ในการนี้ คณะวิทยาศาสตร์การกีฬาใคร่ขอความอนุเคราะห์เรียนเชิญท่านเป็นผู้ทรงคุณวุฒิพิจารณาเครื่องมือการวิจัยดังกล่าว

จึงเรียนมาเพื่อโปรดพิจารณาให้ความอนุเคราะห์เป็นผู้ทรงคุณวุฒิตรวจเครื่องมือการวิจัยด้วย จักเป็นพระคุณยิ่ง และขอขอบคุณมาในโอกาสนี้

ขอแสดงความนับถือ

(ผู้ช่วยศาสตราจารย์ ดร.สิทธา พงษ์พิบูลย์)
คณบดี

หน่วยจัดการศึกษา กลุ่มภารกิจวิชาการ
โทร.๐-๒๒๑๘-๑๐๔๗
โทรสาร ๐-๒๒๑๘-๑๐๔๐

APPENDIX G

INVITATION LETTER FOR COMMITTEE

ที่ อว ๖๔.๒๔/๐๗๖๓

คณะวิทยาศาสตร์การกีฬา
จุฬาลงกรณ์มหาวิทยาลัย
ถนนพระราม ๑ ปทุมวัน กทม. ๑๐๓๓๐

๒๒ ตุลาคม ๒๕๖๓

เรื่อง ขอเรียนเชิญเป็นกรรมการสอบวิทยานิพนธ์

เรียน ผู้ช่วยศาสตราจารย์ ดร.วันชัย บุญรอด

ตามที่ คณะวิทยาศาสตร์การกีฬา ได้แต่งตั้งท่านเป็นประธานกรรมการสอบวิทยานิพนธ์ของ นายธีร์ ตรงจิตพิทักษ์ นิสิตระดับปริญญาดุษฎีบัณฑิต แขนงวิชาการจัดการการกีฬา หลักสูตรวิทยาศาสตรดุษฎีบัณฑิต สาขาวิชาวิทยาศาสตร์การกีฬา ซึ่งทำวิทยานิพนธ์เรื่อง ผลของการเข้าถึงสนามกีฬา ความพึงพอใจ และแรงจูงใจ ที่มีต่อความตั้งใจในการกลับมาเข้าร่วม และความตั้งใจในการบอกต่อ ของคนพิการทางการเคลื่อนไหว ในบริบทของการแข่งขันกีฬา (THE IMPACT OF SPORTS FACILITIES' ACCESSIBILITY, SATISFACTION, AND MOTIVATION ON RE-PARTICIPATION AND WORD OF MOUTH INTENTIONS FOR PEOPLE WITH MOBILITY IMPAIRMENTS: THE SPORT EVENTS CONTEXT) นั้น บัดนี้ ได้กำหนดวันสอบวิทยานิพนธ์ **ในวันที่ ๒๗ พฤศจิกายน ๒๕๖๓ ระหว่างเวลา ๑๓.๐๐ - ๑๖.๐๐ น.** ห้องประชุม ๑ อาคารจุฬาพัฒน์ ๗ คณะวิทยาศาสตร์การกีฬา ทั้งนี้ ขอความกรุณาท่านโปรดทำการประเมินลงในแบบประเมินก่อนสอบวิทยานิพนธ์ที่แนบมาพร้อมนี้ เพื่อนำไปประกอบการประเมินผลในวันสอบวิทยานิพนธ์ดังกล่าว

จึงเรียนมาเพื่อทราบและขอเรียนเชิญท่านเป็นกรรมการสอบวิทยานิพนธ์ให้กับ นายธีร์ ตรงจิตพิทักษ์ ตามวัน เวลา และสถานที่ดังกล่าวด้วย จักเป็นพระคุณยิ่ง

ขอแสดงความนับถือ

(ผู้ช่วยศาสตราจารย์ ดร.สิทธา พงษ์พิบูลย์)
คณบดี

หน่วยจัดการศึกษา กลุ่มภารกิจวิชาการ
โทร.๐-๒๒๑๘-๑๐๔๗
โทรสาร ๐-๒๒๑๘-๑๐๔๐

บันทึกข้อความ

ส่วนงาน หน่วยจัดการศึกษา กลุ่มภารกิจวิชาการ คณะวิทยาศาสตร์การกีฬา โทร. ๘๑๐๔๗
ที่ อว ๖๔.๒๔(วข)/ว.๕๔๘ **วันที่** ๒๒ ตุลาคม ๒๕๖๓
เรื่อง ขอเรียนเชิญเป็นกรรมการสอบวิทยานิพนธ์

เรียน รองศาสตราจารย์เทพประสิทธ์ กุลธวัชวิชัย

ตามที่ คณะวิทยาศาสตร์การกีฬา ได้แต่งตั้งท่านเป็นอาจารย์ที่ปรึกษาวิทยานิพนธ์หลักของ นายธีร์ ตรงจิตพิทักษ์ นิสิตระดับปริญญาดุษฎีบัณฑิต แขนงวิชาการจัดการการกีฬา หลักสูตรวิทยาศาสตรดุษฎีบัณฑิต สาขาวิชาวิทยาศาสตร์การกีฬา ซึ่งทำวิทยานิพนธ์เรื่อง ผลของการเข้าถึงสนามกีฬา ความพึงพอใจ และแรงจูงใจที่มีต่อความตั้งใจในการกลับมาเข้าร่วม และความตั้งใจในการบอกต่อ ของคนพิการทางการเคลื่อนไหว ในบริบทของการแข่งขันกีฬา (THE IMPACT OF SPORTS FACILITIES' ACCESSIBILITY, SATISFACTION, AND MOTIVATION ON RE-PARTICIPATION AND WORD OF MOUTH INTENTIONS FOR PEOPLE WITH MOBILITY IMPAIRMENTS: THE SPORT EVENTS CONTEXT) นั้น บัดนี้ ได้กำหนดวันสอบวิทยานิพนธ์ **ในวันที่ ๒๗ พฤศจิกายน ๒๕๖๓ ระหว่างเวลา ๑๓.๐๐ - ๑๖.๐๐ น.** ห้องประชุม ๑ อาคารจุฬาพัฒน์ ๗ คณะวิทยาศาสตร์การกีฬา ทั้งนี้ ขอความกรุณาท่านโปรดทำการประเมินลงในแบบประเมินก่อนสอบวิทยานิพนธ์ที่แนบมาพร้อมนี้ เพื่อนำไปประกอบการประเมินผลในวันสอบวิทยานิพนธ์ดังกล่าว

จึงเรียนมาเพื่อทราบและขอเรียนเชิญท่านเป็นกรรมการสอบวิทยานิพนธ์ให้กับ นายธีร์ ตรงจิตพิทักษ์ ตามวันเวลา และสถานที่ดังกล่าวด้วย จักเป็นพระคุณยิ่ง

(ผู้ช่วยศาสตราจารย์ ดร.สิทธา พงษ์พิบูลย์)
ประธานกรรมการบริหารหลักสูตรวิทยาศาสตรดุษฎีบัณฑิต

ที่ อว ๖๔.๒๔/๐๗๖๔

คณะวิทยาศาสตร์การกีฬา
จุฬาลงกรณ์มหาวิทยาลัย
ถนนพระราม ๑ ปทุมวัน กทม. ๑๐๓๓๐

๒๒ ตุลาคม ๒๕๖๓

เรื่อง ขอเรียนเชิญเป็นกรรมการสอบวิทยานิพนธ์

เรียน อาจารย์ ดร.สาริษฐ์ กุลธวัชวิชัย

ตามที่ คณะวิทยาศาสตร์การกีฬา ได้แต่งตั้งท่านเป็นอาจารย์ที่ปรึกษาวิทยานิพนธ์ร่วมของ นายธีร์ ตรงจิตพิทักษ์ นิสิตระดับปริญญาดุษฎีบัณฑิต แขนงวิชาการจัดการการกีฬา หลักสูตรวิทยาศาสตรดุษฎีบัณฑิต สาขาวิชาวิทยาศาสตร์การกีฬา ซึ่งทำวิทยานิพนธ์เรื่อง ผลของการเข้าถึงสนามกีฬา ความพึงพอใจ และแรงจูงใจ ที่มีต่อความตั้งใจในการกลับมาเข้าร่วม และความตั้งใจในการบอกต่อ ของคนพิการทางการเคลื่อนไหว ในบริบทของการแข่งขันกีฬา (THE IMPACT OF SPORTS FACILITIES' ACCESSIBILITY, SATISFACTION, AND MOTIVATION ON RE-PARTICIPATION AND WORD OF MOUTH INTENTIONS FOR PEOPLE WITH MOBILITY IMPAIRMENTS: THE SPORT EVENTS CONTEXT) นั้น บัดนี้ ได้กำหนดวันสอบวิทยานิพนธ์ **ในวันที่ ๒๗ พฤศจิกายน ๒๕๖๓ ระหว่างเวลา ๑๓.๐๐ - ๑๖.๐๐ น.** ห้องประชุม ๑ อาคารจุฬาพัฒน์ ๗ คณะวิทยาศาสตร์การกีฬา ทั้งนี้ ขอความกรุณาท่านโปรดทำการประเมินลงในแบบประเมินก่อนสอบวิทยานิพนธ์ที่แนบมาพร้อมนี้ เพื่อนำไปประกอบการประเมินผลในวันสอบวิทยานิพนธ์ดังกล่าว

จึงเรียนมาเพื่อทราบและขอเรียนเชิญท่านเป็นกรรมการสอบวิทยานิพนธ์ให้กับ นายธีร์ ตรงจิตพิทักษ์ ตามวัน เวลา และสถานที่ดังกล่าวด้วย จักเป็นพระคุณยิ่ง

ขอแสดงความนับถือ

(ผู้ช่วยศาสตราจารย์ ดร.สิทธา พงษ์พิบูลย์)
คณบดี

หน่วยจัดการศึกษา กลุ่มภารกิจวิชาการ
โทร.๐-๒๒๑๘-๑๐๔๗
โทรสาร ๐-๒๒๑๘-๑๐๔๐

บันทึกข้อความ

ส่วนงาน หน่วยจัดการศึกษา กลุ่มภารกิจวิชาการ คณะวิทยาศาสตร์การกีฬา โทร. ๘๑๐๔๗
ที่ อว ๖๔.๒๔(วข)/ว.๕๔๘ **วันที่** ๒๒ ตุลาคม ๒๕๖๓
เรื่อง ขอเรียนเชิญเป็นกรรมการสอบวิทยานิพนธ์

เรียน อาจารย์ ว่าที่ร้อยตรี ดร.กวีพงษ์ เลิศวัชรา

ตามที่ คณะวิทยาศาสตร์การกีฬา ได้แต่งตั้งท่านเป็นกรรมการสอบวิทยานิพนธ์ของ นายธีร์ ตรงจิตพิทักษ์ นิสิตระดับปริญญาดุษฎีบัณฑิต แขนงวิชาการจัดการการกีฬา หลักสูตรวิทยาศาสตรดุษฎีบัณฑิต สาขาวิชาวิทยาศาสตร์การกีฬา ซึ่งทำวิทยานิพนธ์เรื่อง ผลของการเข้าถึงสนามกีฬา ความพึงพอใจ และแรงจูงใจ ที่มีต่อความตั้งใจในการกลับมาเข้าร่วม และความตั้งใจในการบอกต่อ ของคนพิการทางการเคลื่อนไหว ในบริบทของการแข่งขันกีฬา (THE IMPACT OF SPORTS FACILITIES' ACCESSIBILITY, SATISFACTION, AND MOTIVATION ON RE-PARTICIPATION AND WORD OF MOUTH INTENTIONS FOR PEOPLE WITH MOBILITY IMPAIRMENTS: THE SPORT EVENTS CONTEXT) นั้น บัดนี้ ได้กำหนดวันสอบวิทยานิพนธ์ **ในวันที่ ๒๗ พฤศจิกายน ๒๕๖๓ ระหว่างเวลา ๑๓.๐๐ - ๑๖.๐๐ น.** ห้องประชุม ๑ อาคารจุฬาพัฒน์ ๗ คณะวิทยาศาสตร์การกีฬา ทั้งนี้ ขอความกรุณาท่านโปรดทำการประเมินลงในแบบประเมินก่อนสอบวิทยานิพนธ์ที่แนบมาพร้อมนี้ เพื่อนำไปประกอบการประเมินผลในวันสอบวิทยานิพนธ์ดังกล่าว

จึงเรียนมาเพื่อทราบและขอเรียนเชิญท่านเป็นกรรมการสอบวิทยานิพนธ์ให้กับ นายธีร์ ตรงจิตพิทักษ์ ตามวันเวลา และสถานที่ดังกล่าวด้วย จักเป็นพระคุณยิ่ง

(ผู้ช่วยศาสตราจารย์ ดร.สิทธา พงษ์พิบูลย์)
ประธานกรรมการบริหารหลักสูตรวิทยาศาสตรดุษฎีบัณฑิต

ที่ อว ๖๔.๒๔/

คณะวิทยาศาสตร์การกีฬา
จุฬาลงกรณ์มหาวิทยาลัย
ถนนพระราม ๑ ปทุมวัน กทม. ๑๐๓๓๐

๒๒ ตุลาคม ๒๕๖๓

เรื่อง ขอเรียนเชิญเป็นกรรมการสอบวิทยานิพนธ์

เรียน อาจารย์ ดร.จุฑา ติงศภัทิย์

ตามที่ คณะวิทยาศาสตร์การกีฬา ได้แต่งตั้งท่านเป็นกรรมการสอบวิทยานิพนธ์ของ นายธีร์ ตรงจิตพิทักษ์ นิสิตระดับปริญญาดุษฎีบัณฑิต แขนงวิชาการจัดการการกีฬา หลักสูตรวิทยาศาสตรดุษฎีบัณฑิต สาขาวิชาวิทยาศาสตร์การกีฬา ซึ่งทำวิทยานิพนธ์เรื่อง ผลของการเข้าถึงสนามกีฬา ความพึงพอใจ และแรงจูงใจ ที่มีต่อความตั้งใจในการกลับมาเข้าร่วม และความตั้งใจในการบอกต่อ ของคนพิการทางการเคลื่อนไหว ในบริบทของการแข่งขันกีฬา (THE IMPACT OF SPORTS FACILITIES' ACCESSIBILITY, SATISFACTION, AND MOTIVATION ON RE-PARTICIPATION AND WORD OF MOUTH INTENTIONS FOR PEOPLE WITH MOBILITY IMPAIRMENTS: THE SPORT EVENTS CONTEXT) นั้น บัดนี้ ได้กำหนดวันสอบวิทยานิพนธ์ **ในวันที่ ๒๗ พฤศจิกายน ๒๕๖๓ ระหว่างเวลา ๑๓.๐๐ - ๑๖.๐๐ น.** ห้องประชุม ๑ อาคารจุฬาพัฒน์ ๗ คณะวิทยาศาสตร์การกีฬา ทั้งนี้ ขอความกรุณาท่านโปรดทำการประเมินลงในแบบประเมินก่อนสอบวิทยานิพนธ์ที่แนบมาพร้อมนี้ เพื่อนำไปประกอบการประเมินผลในวันสอบวิทยานิพนธ์ดังกล่าว

จึงเรียนมาเพื่อทราบและขอเรียนเชิญท่านเป็นกรรมการสอบวิทยานิพนธ์ให้กับ นายธีร์ ตรงจิตพิทักษ์ ตามวัน เวลา และสถานที่ดังกล่าวด้วย จักเป็นพระคุณยิ่ง

ขอแสดงความนับถือ

(ผู้ช่วยศาสตราจารย์ ดร.สิทธา พงษ์พิบูลย์)
คณบดี

หน่วยจัดการศึกษา กลุ่มภารกิจวิชาการ
โทร.๐-๒๒๑๘-๑๐๔๗
โทรสาร ๐-๒๒๑๘-๑๐๔๐

บันทึกข้อความ

ส่วนงาน หน่วยจัดการศึกษา กลุ่มภารกิจวิชาการ คณะวิทยาศาสตร์การกีฬา โทร. ๘๑๐๔๗
ที่ อว ๖๔.๒๔(วช)/ว.๕๔๘ **วันที่** ๒๒ ตุลาคม ๒๕๖๓
เรื่อง ขอเรียนเชิญเป็นกรรมการสอบวิทยานิพนธ์

เรียน อาจารย์ ดร.ทศพร ยิ้มลมัย

ตามที่ คณะวิทยาศาสตร์การกีฬา ได้แต่งตั้งท่านเป็นกรรมการสอบวิทยานิพนธ์ของ นายธีร์ ตรงจิตพิทักษ์ นิสิตระดับปริญญาดุษฎีบัณฑิต แขนงวิชาการจัดการการกีฬา หลักสูตรวิทยาศาสตรดุษฎีบัณฑิต สาขาวิชาวิทยาศาสตร์การกีฬา ซึ่งทำวิทยานิพนธ์เรื่อง ผลของการเข้าถึงสนามกีฬา ความพึงพอใจ และแรงจูงใจ ที่มีต่อความตั้งใจในการกลับมาเข้าร่วม และความตั้งใจในการบอกต่อ ของคนพิการทางการเคลื่อนไหว ในบริบทของการแข่งขันกีฬา (THE IMPACT OF SPORTS FACILITIES' ACCESSIBILITY, SATISFACTION, AND MOTIVATION ON RE-PARTICIPATION AND WORD OF MOUTH INTENTIONS FOR PEOPLE WITH MOBILITY IMPAIRMENTS: THE SPORT EVENTS CONTEXT) นั้น บัดนี้ ได้กำหนดวันสอบวิทยานิพนธ์ **ในวันที่ ๒๗ พฤศจิกายน ๒๕๖๓ ระหว่างเวลา ๑๓.๐๐ - ๑๖.๐๐ น.** ห้องประชุม ๑ อาคารจุฬาพัฒน์ ๗ คณะวิทยาศาสตร์การกีฬา ทั้งนี้ ขอความกรุณาท่านโปรดทำการประเมินลงในแบบประเมินก่อนสอบวิทยานิพนธ์ที่แนบมาพร้อมนี้ เพื่อนำไปประกอบการประเมินผลในวันสอบวิทยานิพนธ์ดังกล่าว

จึงเรียนมาเพื่อทราบและขอเรียนเชิญท่านเป็นกรรมการสอบวิทยานิพนธ์ให้กับ นายธีร์ ตรงจิตพิทักษ์ ตามวันเวลา และสถานที่ดังกล่าวด้วย จักเป็นพระคุณยิ่ง

(ผู้ช่วยศาสตราจารย์ ดร.สิทธา พงษ์พิบูลย์)
ประธานกรรมการบริหารหลักสูตรวิทยาศาสตรดุษฎีบัณฑิต

REFERENCES

Abrantes, J. L., Seabra, C., Lages, C. R., & Jayawardhena, C. (2013). Drivers of in-group and out-of-group electronic word-of-mouth (EWOM). *European Journal of Marketing*.

Adler, P. A., & Adler, P. (1999). Resort workers: Adaptations in the leisure-work nexus. . *Sociological Perspectives 42(3): 369–402*.

Agree, E. M. (2014). The potential for technology to enhance independence for those aging with a disability. *Disability and Health Journal 7(1): 33-39*.

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes 50: 179–211*.

Alagappan, V., Hefferan, A., & Parivallal, A. (2017). Exploring accessibility issues of a public building for the mobility impaired. Case study: interstate bus terminal (ISBT), Vijayawada, India. *Disability and Rehabilitation: Assistive Technology 13 (3): 271-279*.

Allsop, D. T., Bassett, B. R., & Hoskins, J. A. (2007). Word-of-mouth research: principles and applications. *Journal of Advertising Research 47(4): 398-411*.

Anderson, E. W., Fornell, C., & Lehmann, D. R. (1994). Customer satisfaction, market share, and profitability: Findings from Sweden. *Journal of Marketing 58(3):53-66*.

Anderson, L. S., & Heyne, L. A. (2010). Physical activity for children and adults with disabilities: an issue of ‘‘amplified’’ importance. *Disability and Health Journal 3: 71-73*.

Arbour, K. P., Latimer, A. E., Martin Ginis, K. A., & Jung, M. E. (2007). Moving beyond the stigma: the impression formation benefits of exercise for individuals with a physical disability. *Adapted Physical Activity Quarterly 24(2):144–59.*

Arndt, J. (1967a). Role of product-related conversations in the diffusion of a new product. *Journal of Marketing Research 4(3): 291–295*.

Arndt, J. (1967b). *Word-of-mouth advertising and informal communication. In: Cox, D.F. (Ed.), Risk Taking and Information Handling in Consumer Behavior*. Harvard University, Boston, MA, 188–239.

Arndt, J. (1967c). *Word of mouth advertising: A review of the literature*. New York: Advertising Research Foundation

Ashton, A. S. (2018). Spiritual retreat tourism development in the Asia Pacific region: investigating the impact of tourist satisfaction and intention to revisit: a Chiang Mai, Thailand case study. *Asia Pacific Journal of Tourism Research 23(11)*.

Attia, A. M., Aziz, N., & Friedman, B. A. (2012). The impact of social networks on behavioral change: a conceptual framework. *World Review of Business Research 2: 91-108*.

Atulkar, S., & Kesari, B. (2017). Satisfaction, loyalty and repatronage intentions: Role of hedonic shopping values. *Journal of Retailing and Consumer Services 39: 23–34*.

Baker, D. A., & Crompton, J. L. (2000). Quality, satisfaction, and behaviour intentions. *Annals of Tourism Research 27(3): 785-804*

Basri, N. A. H., Ahmad, R., Anuar, F. I., & Ismail, K. A. (2016). Effect of word of mouth communication on consumer purchase decision: Malay upscale restaurant. *Procedia - Social and Behavioral Sciences 222: 324-331*.

Baur, T., & Nyström, B. (2017). *The effect of eWOM components on brand attitude and purchase intention: A cross country study between Germany and Sweden.* Luleå University of Technology, Luleå, Sweden.

Bitner, M. J. (1992). Servicescapes: The impact of physical surroundings on customers and employees. *Journal of Marketing 56(2): 57-72*.

Blal, I., & Sturman, M. C. (2014). The differential effects of the quality and quantity of online reviews on hotel room sales. *Cornell Hospitality Quarterly 55(4), 365-375*.

Blinde, E. M., & McClung, L. R. (1997). Enhancing the physical and social self through recreational activity: accounts of individuals with physical disabilities. *Adapted physical activity quarterly: APAQ 14: 327-344*.

Bodaghi, N. B., & Zainab, A. N. (2012). Accessibility and facilities for the disabled in public and university library buildings in Iran. *Information Development 29(3): 241–250*.

Bowdin, G. A. J., Allen, J., O'Toole, W., Harris, R., & McDonnell, I. (2006). *Events management* (2nd ed.). Great Britain: Butterworth-Heinemann.

Brady, M. K., Voorhees, C. M., Cronin Jr, J. J., & Bourdeau, B. L. (2006). The good guys don't always win: The effect of valence on service perceptions and consequences. *Journal of Services Marketing 20: 83–91*.

Brittain, I. (2010). *The Paralympic Games Explained*. Oxfon: Routledge.

Brown, J., Broderick, A. J., & Lee, N. (2007). Word of mouth communication within online communities: Conceptualizing the online social network. *Journal of interactive marketing 21(3): 2-20*

Budd, J. W., & Mumford, K. A. (2006). Family-friendly work practices in Britain: availability and perceived accessibility. *Human Resource Management 45(1): 23-42*.

Bughin, J., Doogan, J., & Vetvik, O. J. (2010). A new way to measure word-of-mouth marketing. *McKinsey Quarterly 2: 113-116*.

Buhalis, D., & Michopoulou, E. (2011). Information-enabled tourism destination marketing: addressing the accessibility market. *Current Issues in Tourism 14(2):145-168*.

Burki, T. K. (2015). More hurdles: exercise for people with disabilities. *The Lancet Diabetes & Endocrinology 3*.

Cantallops, S. A., & Salvi, F. (2014). New consumer behavior: a review of research on eWOM and hotels. *International Journal of Hospitality Management 36: 41-51*.

Cardozo, R. N. (1965). An Experimental Study of Customer Effort, Expectation, and Satisfaction. *Journal of Marketing Research 2(3): 244-249*.

Carmines, E. G., & Zeller, R. A. (1988). *Reliability and validity assessment*. Beverly Hills, CA: Sage.

Casidy, R., & Shin, H. (2015). The effects of harm directions and service recovery strategies on customer forgiveness and negative word-of-mouth intentions. *Journal of Retailing and Consumer Services 27: 103-112*.

Chang, F. H., & Tsai, C. Y. (2016). Influence of the sports tourism attractiveness, motivation, and experience on revisit intentions. *Journal of Social Sciences &*

Humanities Research 2(1): 1–10.
Chang, S. C. (2008). The effects of windsurfers' participating motivation and leisure constraints on recreational experiences, satisfaction, and future participating intentions. *Journal of Tourism and Leisure Studies 14(2): 109–134*.
Cheung, C. M. K., & Thadani, D. R. (2012). The impact of electronic word-of-mouth communication: A literature analysis and integrative model. *Decision Support Systems 54: 461–470*.
Chi, C. G., & Gursoy, D. (2009). Employee satisfaction, customer satisfaction, and financial performance: An empirical examination. *International Journal of Hospitality Management 28: 245–253*.
Chi, C. G. Q., & Qu, H. (2008). Examining the Structural Relationships of Destination Image, Tourist Satisfaction and Destination Loyalty: An Integrated Approach. *Tourism Management 29(4): 624–36*.
Chikuta, O., Plessis, E., & Saayman, M. (2018). Accessibility expectations of tourists with disabilities in national parks. *Tourism Planning & Development*.
Choudhury, K. (2014). Service quality and word of mouth: a study of the banking sector. *International Journal of Bank Marketing 32 (7): 612-627*.
Chu, S. C., & Kim, Y. (2011). Determinants of consumer engagement in electronic word-of-mouth (ewom) in social networking sites. *International Journal of Advertising 30(1): 47-75*.
Clemes, M. D., Brush, G. J., & Collins, M. J. (2011). Analysing the professional sport experience: A hierarchical approach. *Sport Management Review 14: 370–388*.
Crompton, J. L., & McKay, S. L. (1997). Motives of visitors attending festival events. *Annals of Tourism Research 24(2): 425-439*.
Culley, P., & Pascoe, J. (2009). *Sports facilities and technologies*. The USA: Routledge.
Curl, A., Nelson, J. D., & Anable, J. (2011). Does accessibility planning address what matters? A review of current practice and practitioner perspectives. *Research in Transportation Business & Management 2: 3-11*.
Darcy, S. (2003). The politics of disability and access: The Sydney 2000 games experience. *Disability & Society 18(6): 737–757*.
Darcy, S., & Appleby, L. (2011). *The Sydney 2000: Moving from post-hoc legacy to strategic vision and operational partnership. In Legg, D. & Gilbert, K. (Eds.), The Paralympic Games: Legacy and regeneration*. Champaign, IL: Commonground Publishing.
Darcy, S., & Dickson, T. J. (2009). A whole-of-life approach to tourism: The case for accessible tourism experiences. *Journal of Hospitality and Tourism Management 16(1): 32–44*.
Darcy, S., & Taylor, T. (2013). *Managing Olympic venues. In Frawley, S. & Adair, D. (Eds.), Managing the Olympics*. Houndmills: Palgrave Macmillan.
Datta, P. R., Chowdhury, D. N., & Chakraborty, B. R. (2005). Viral marketing: New form of word-of-mouth through Internet. *The Business Review. Cambridge 3(2): 69-75*.
Deci, E. L. (1971). The effects of externally mediated rewards on intrinsic motivation. *Journal of Personality and Social Psychology 18(1): 105-115*.
Department for Culture Media and Sport (DCMS). (2013). *Report 5: Post-games evaluation: Meta-evaluation of the impacts and legacy of the London 2012 Olympic games and Paralympic games, summary report*. Retrieved from

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/224181/1188-B_Meta_Evaluation.pdf

Department for Work and Pensions (DWP). (2015). *The inclusive and accessible stadia report*. London: Department for Work and Pensions.

Department of Empowerment of Persons with Disabilities. (2020). *Report on disability situation in Thailand 30 Sep 2020*. Retrieved from http://www.dep.go.th/uploads/Docutents/026e194d-5dbd-4c61-b94c-f72de37d4eaa%E0%B8%A3%E0%B8%B2%E0%B8%A2%E0%B8%A5%E0%B8%B0%E0%B9%80%E0%B8%AD%E0%B8%B5%E0%B8%A2%E0%B8%94%E0%B8%82%E0%B9%89%E0%B8%AD%E0%B8%A1%E0%B8%B9%E0%B8%A5%E0%B8%84%E0%B8%99%E0%B8%9E%E0%B8%B4%E0%B8%81%E0%B8%B2%E0%B8%A330%E0%B8%81.%E0%B8%A2.63.pdf

Dichter, E. (1966). How word-of-mouth advertising works. *Harvard business review 44: 147-160*.

Dickson, T. J., Darcy, S., Johns, R., & Pentifallo, C. (2016). Inclusive by design: transformative services and sport-event accessibility. *The Service Industries*.

Disability Rights Commission (DRC). (2004). *Organising accessible events*. Stratfordupon-Avon: Disability Rights Commission.

Disability Sport NI. (2016). *Accessible sports stadia design guidelines*. Belfast: Disability Sport NI.

Dobele, A. R., & Ward, T. (2003). Enhancing word-of-mouth referrals. *Paper presented at the Australian & New Zealand Marketing Academy Conference 2003, December 1-3, Adelaide, Australia*.

Donovan, R. J., & Rossiter, J. R. (1982). Store atmosphere: an environmental psychology approach. *Journal of Retailing 58(1)*.

Drummond, S., & Anderson, H. (2011). *Service quality and managing your people. In I. Yeoman, M. Robertson, J. Ali-Knight, S. Drummond, & U. McMahon-Beattie (Eds.). Festival and events management: An international arts and cultural perspective. New York: Taylor & Francis Group*.

Eguchi, M. (2016). *Effects of affinity, WOM, and EWOM on decision making: Study on impact of subjective affinity to WOM provider to WOM and EWOM influence on decision making in different consumer behavior phases.* Tokyo Metropolitan University, Tokyo.

El-Geneidy, A. M., & Levinson, D. M. (2006). Access to destinations: Development of Accessibility Measures. *Minnesota Department of Transportation Research Services Section*.

Elseidi, R. I., & El-Baz, D. (2016). Electronic word of mouth effects on consumers' brand attitudes, brand image and purchase intention: an empirical study in Egypt. *The Business and Management Review 7(5)*.

English Federation of Disability Sport, & County Sports Partnership Network. (2013). Engaging disabled people in sport and physical activity.

English Federation of Disability Sport (EFDS) & County Sports Partnership Network (CSPN). (2013). *Engaging disabled people in sport and physical activity*.

Fabrigar, L. R., & Wegener, D. T. (2012). *Exploratory factor analysis: Understanding statistics*. NY, USA: Oxford University Press, Inc.

Fan, Y. W., & Miao, Y. F. (2012). Effect of electronic word-of-mouth on consumer purchase intention: The perspective of gender differences. *International Journal*

of Electronic Business Management 10(3): 175.
Fetchko, M. J., Roy, D. P., & Clow, K. E. (2013). *Sports marketing* (1st Ed.). New York: Taylor & Francis.
Fotiadis, A., & Vassiliadis, C. (2012). *What motivates people to be involved in Sport Tourism events? The Greek case of Sfendami International Mountain Festival.* Paper presented at the the 4th Asia-Euro conference 2012. In tourism, Hospitality & Gastronomy "the way forward: Exploring multidisciplinary approaches", Lakeside Campus, Subang Jaya, Selangor, Malaysia: Taylor's University.
Fried, G. (2010). *Managing sport facilities*. the United States of America: Thomson-Shore, Inc.
Funk, D. C., Toohey, K., & Bruun, T. (2007). International sport event participation: Prior sport involvement; Destination image; and Travel motives. *European Sport Management Quarterly 7(3): 227-248*.
Garnefeld, I., Helm, S., & Eggert, A. (2011). Walk your talk: an experimental investigation of the relationship between word of mouth and communicators' loyalty. *Journal of Service Research 14(1): 93-107*.
Getz, D. (1991). *Festivals, special events and tourism*. New York: Van Nostrand Reinhold.
Getz, D. (2007). *Event studies: Theory, research and policy for planned events* (1st ed.). Massachusetts, USA: Elsevier Ltd.
Getz, D., & Andersson, T. D. (2010). The event-tourist career trajectory: A study of highinvolvement amateur distance runners. *Scandinavian Journal of Hospitality and Tourism: 10(4): 468–491*.
Getz, D., & McConnell, A. (2014). Comparing trail runners and mountain bikers: Motivation, involvement, portfolios, and event-tourist careers. *Journal of Convention and Event Tourism 15(1): 69-100*.
Giacobbi, P. R., Hardin, B., Frye, N., Hausenblas, H. A., Sears, S., & Stegeli, A. (2006). A multi-level examination of personality, exercise, and daily life events for individuals with physical disabilities. *Adapted Physical Activity Quarterly 23(2): 129-147*.
Givoni, M., & Rietveld, P. (2007). The access journey to the railway station and its role in passengers' satisfaction with rail travel. *Transport Policy 14(5): 357-365*.
Gold, J. R., & Gold, M. M. (2007). Access for all: The rise of the Paralympic games. *The Journal of the Royal Society for the Promotion of Health 127(3): 133-141*.
Graciola, A. P., Toni, D. D., Lima, V. Z., & Milan, G. S. (2018). Does price sensitivity and price level influence store price image and repurchase intention in retail markets? *Journal of Retailing and Consumer Services 44: 201–213*.
Grady, J. D., & James, J. D. (2013). Understanding the needs of spectators with disabilities attending sporting events. *Venue and Event Management*.
Green, C., & Chalip, L. (1998). Sport tourism as the celebration of subculture. *Annals of Tourism Research 25(2): 275-291*.
Groff, D. G., & Kleiber, D. A. (2001). Exploring the identity formation of youth involved in an adapted sports program. *Therapeutic Recreation Journal 35(4): 318-332*.
Gvili, Y., & Levy, S. (2016). Antecedents of attitudes toward eWOM communication: differences across channels. *Internet Research 26(5): 1030-1051*.

Hair, J. F. J., Black, W. C., Babin, B. J., & Anderson, R. E. (2014). *Multivariate data analysis* (7th ed.). Essex, UK: Pearson Education Limited.

Han, H. (2013). Effects of in-flight ambience and space/function on air travelers' decision to select a low-cost airline. *Tourism Management 37: 125-135*.

Han, H., Back, K.-J., & Barrett, B. (2009). Influencing factors on restaurant customers' revisit intention: The roles of emotions and switching barriers. . *International Journal of Hospitality Management 28(4), 563-572*.

Han, H., & Ryu, K. (2012). Key factors driving customers' word-of-mouth intentions in full-service restaurants: The moderating role of switching costs. *Cornell Hospitality Quarterly 53(2): 96–109*.

Handy, S. (2005). Planning for accessibility: In theory and in practice. *Access to Destinations*.

Hansen, W. (1959). How accessibility shape land use. *Journal of the American Institute of Planners*.

Hellier, P. K., Geursen, G. M., Carr, R. A., & Rickard, J. A. (2003). Customer repurchase intention: a general structural equation model. *European journal of marketing, 37(11): 1762-1800*.

Hemmerling, M. (1997). *What makes an event a success for a host city, sponsors and others?* . Paper presented at the The Big Event New South Wales Tourism Conference, Wollongong, Australia.

Hennig-Thurau, T., Gwinner, K. P., Walsh, G., & Gremler, D. D. (2004). Electronic word-of-mouth via consumer-opinion platforms: What motivates consumers to articulate themselves on the Internet. *Journal of Interactive Marketing 18(1)*.

Hennig-Thurau, T., Gwinner, K. T., & Gremler, D. D. (2002). Understanding relationship marketing outcomes: An integration of relational benefits and relationship quality. *Journal of Service Research 4(3): 230-247*.

Hennig-Thurau, T., & Klee, A. (1997). The impact of customer satisfaction and relationship quality on customer retention: A critical reassessment and model development. *Psychology & Marketing 14(8): 737-764*.

Herdman, T. H., & Kamitsuru, S. (2014). *Nursing diagnoses: Definitions & classification 2015–2017* (10th ed.). UK: NANDA International, Inc.

Herold, K. (2015). *Impact of word-of-mouth on consumer decision-making: An information processing perspective in the context of a high-involvement service.* (Doctor of Science (Economics and Business Administration)), Lappeenranta University of Technology, Lappeenranta, Finland.

Herr, P. M., Kardes, F. R., & Kim, J. (1991). Effects of word-of-mouth and product-attribute information on persuasion: An accessibility-diagnosticity perspective. *Journal of Consumer Research 17(4): 454-462*.

Higham, J., & Hinch, T. (2009). *Sport and tourism: Globalization, mobility and identity*. Oxford: Butterworth-Heinemann.

Ho, J. Y. C., & Dempsey, M. (2010). Viral marketing: Motivations to forward online content. *Journal of Business Research 63: 1000-1006*.

Hossain, A., Sultana, N., & Biswas, S. (2015). A proportional study and analysis: Evaluation the effectiveness of word of mouth marketing in opposition to traditional advertising concerning medical treatment facilities in Bangladesh. *Management and Organizational Studies 2(1):143-152*.

Hsu, L. C. (2018). Investigating effect of service encounter, value, and satisfaction on

word of mouth: An outpatient service context. *International Journal of Environmental Research and Public Health 15(1): 132*.

Huang, S. S., & Hsu, C. H. C. (2009). Effects of travel motivation, past experience, perceived constraint, and attitude on revisit intention. *Journal of Travel Research Volume 48(1): 29–44*.

Hutchinson, J., Lai, F., & Wang, Y. (2009). Understanding the relationships of quality, value, equity, satisfaction, and behavioral intentions among golf travelers. *Tourism Management 30: 298–308*.

Interior Ministerial Regulation B.E. 2548. (2005). *Prescribing accessible facilities for persons with disabilities and the elderly B.E. 2548*: Department of Public Works and Town & Country Planning.

International Paralympic Committee. (2013). *Accessibility guide: An Inclusive Approach to the Olympic & Paralympic Games*. Bonn: International Paralympic Committee.

International Paralympic Committee (IPC). (2007). IPC handbook. Retrieved from http://www.paralympic.org/TheIPC/HWA/Handbook

International Paralympic Committee (IPC). (2015). *Accessibility guide: An inclusive approach to the Olympic & Paralympic Games*. Bonn: IPC.

Isa, H. M., Zanol, H., Alauddin, K., & Nawi, H. M. (2016). Provisions of disabled facilities at the malaysian public transport stations. *EDP Sciences*.

Ishida, K., Slevitch, L., & Siamionava, K. (2016). The effects of traditional and electronic word-of-mouth on destination image: A case of vacation tourists visiting Branson, Missouri. *Administrative Sciences 6(12)*.

Iso-Ahola, S. E. (1980). *The social psychology of leisure and recreation*. Dubuque IA: Wm. C. Brown.

Israeli, A. A. (2002). A Preliminary Investigation of the Importance of Site Accessibility Factors for Disabled Tourists. *Journal of Travel Research 41: 101-104*.

Jahn, S., Cornwell, T. B., Drengnerc, J., & Gaus, H. (2018). Temporary communitas and willingness to return to events. *Journal of Business Research 92: 329–338*.

Jeong, E., & Jang, S. C. (2011). Restaurant experiences triggering positive electronic word-of-mouth (eWOM) motivations. *International Journal of Hospitality Management 30: 356-366*.

Jin, N. P., Lee, S., & Lee, H. (2015). The effect of experience quality on perceived value, satisfaction, image and behavioral intention of water park patrons: New versus repeat visitors. *International Journal of Tourism Research 17(1): 82-95*.

Johnson, C. C. (2009). The benefits of physical activity for youth with developmental disabilities: A systematic review. *American Journal of Health Promotion 23(3)*.

Jones, M. A., & Suh, J. (2000). Transaction-specific satisfaction and overall satisfaction: An empirical analysis. *Journal of Services Marketing 14(2): 147-159*

Jones, T., & Taylor, S. F. (2007). The conceptual domain of service loyalty: how many dimensions? . *Journal of Services Marketing 21(1): 36-51*.

Kaiser, H. F. (1974). An index of factorial simplicity. *Psychometrika 39: 31-36*.

Kaplanidou, K., & Gibson, H. J. (2010). Predicting behavioral intentions of active event sport tourists: The case of a small-scale recurring sports event. *Journal of Sport & Tourism 15(2): 163-179*.

Katz, E., & Lazarsfeld, P. F. (1955). *Personal Influence: The Part Played by People in the Flow of Mass Communications*. Glencoe, IL: The Free Press.

Kehn, M., & Kroll, T. (2009). Staying physically active after spinal cord injury: a qualitative exploration of barriers and facilitators to exercise participation. *BMC Public Health 9: 168*.

Keller, E., & Libai, B. (2009). A holistic approach to the measurement of WOM, presentation at ESOMAR worldwide media measurement conference, Stockholm (May 4–6).

Khalid, S., Ahmed, M. A., & Ahmad, Z. (2013). Word-of-mouth communications: A powerful contributor to consumers decision-making in healthcare market. *International Journal of Business and Management Invention 2(5): 55-64*.

Kim, J. H. (2018). The impact of memorable tourism experiences on loyalty behaviors: The mediating effects of destination image and satisfaction. *Journal of Travel Research 57(7): 856-870*.

Kim, M. J., Lee, C. K., Petrick, J. F., & Hahn, S. S. (2018). Factors affecting international event visitors' behavioral intentions: the moderating role of attachment avoidance. *Journal of Travel & Tourism Marketing 35(8): 1027–1042*.

Kim, S., Holland, S., & Han, H. (2013). A structural model for examining how destination image, perceived value, and service quality affect destination loyalty: A case study of Orlando. *International Journal of Tourism Research 15(4): 313-328*.

Kim, W., & Han, H. (2008). Determinants of restaurant customers' loyalty intentions: A mediating effect of relationship quality. *Journal of Quality Assurance In Hospitality & Tourism 9(3): 219-239*.

Kim, Y. H., Duncan, J., & Chung, B. W. (2015). Involvement, satisfaction, perceived value, and revisit intention: A case study of a food festival. . *Journal of Culinary Science & Technology 13(2): 133-158*.

King, R. A., Racherla, P., & Bush, V. D. (2014). What we know and don't know about online word-of-mouth: A review and synthesis of the literature. *Journal of Interactive Marketing 28: 167-183*.

Kitapci, O., Adkogan, C., & Dortyol, I. T. (2014). The impact of service quality dimensions on patient satisfaction, repurchase intentions and word-of-mouth communication in the public healthcare industry. Procedia–Soc. Behav. Sci. 148 (25), 161–169. *Procedia-Social and Behavioral Sciences 148: 161-169*

Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd ed.). New York: The Guilford Press.

Koo, Y. G., Andrew, D. P. S., & Kim, S. (2008). Mediated relationships between the constituents of service quality and behavioral intentions: A study of women's college basketball fans. *International Journal of Sport Management and Marketing 4: 390–411*.

Kosma, M., Ellis, R., Cardinal, B. J., Bauer, J. J., & McCubbin, J. A. (2007). The mediating role of intention and stages of change in physical activity among adults with physical disabilities: An integrative framework. *Journal of Sport & Exercise Psychology 29: 21-38*.

Ladhari, R. (2007). The effect of consumption emotions on satisfaction and word-of-mouth communications. *Psychology & Marketing 24(12): 1085-1108*.

Lakowski, T., & Long, T. (2011). *Proceedings: Physical activity and sport for people with disabilities*. Washington, DC: Georgetown University Center for Child and

Human Development.
Lättman, K., Olsson, L. E., & Friman, M. (2016). Development and test of the Perceived Accessibility Scale (PAC) in public transport. *Journal of Transport Geography 54: 257-263*.
Lättman, K., Olsson, L. E., Friman, M., & Fujii, S. (2019). Perceived accessibility, satisfaction with daily travel, and life satisfaction among the elderly. *International Journal of Environmental Research and Public Health 16(22): 4498*.
Lee, A. Y. (2003). The impact of leisure-sport facility design on customer satisfaction. *Edith Cowan University Research Online*.
Lee, Y., Kim, M., & Koo, J. (2016). The impact of social interaction and team member exchangenon sport event volunteer management. *Sport Management Review 19: 550-562*.
Lee, Y. H., & Park, I. (2010). Happiness and physical activity in special populations evidence from Korean survey data. *Journal of Sports Economics 11(2): 136-156*.
Lepkova, N. (2012). Study on customer satisfaction with facilities management services in Lithuania. *Journal of Civil Engineering (4): 1–16*.
Li, F., Wen, J., & Ying, T. (2018). The influence of crisis on tourists' perceived destination image and revisit intention: An exploratory study of Chinese tourists to North Korea. *Journal of Destination Marketing & Management 9: 104–111*.
Li, J., Xue, W., Yang, F., & Li, Y. (2016). *A research review on effect of eWOM*. Paper presented at the Fifteenth Wuhan International Conference on E-Business, Wuhan, China.
Li, S. P., & Yuan, C. H. (2005). Analysis of social capital accumulation and competitive advantages of hospital. *Chinese Journal of Health and Service Management 21: 63-73*.
Lin, Y. S., Lin, B. W., & Zhao, S. K. (2006). Study on sports and religions tourism motivation, pre-trip expectation, emphasis degree, satisfaction degree, and loyalty degree. *Journal of Sport,Leisure and Hospitality Research 1(2): 119-150*.
Litman, T. (2017). *Evaluating accessibility for transport planning* Retrieved from Victoria:
Lotfi, S., & Koohsari, M. J. (2009). Analyzing accessibility dimension of urban quality of life: where urban designers face duality between subjective and objective reading of place. *Soc Indic Res 94: 417–435*.
Maeng, H. K., & Park, J. W. (2015). A study on the effect of the physical environment in an airplane on customer loyalty. *Journal of Airline and Airport Management 5(2), 81-100*.
Makhov, A. S., Stepanova, O. N., Shmeleva, S. V., Petrova, E. A., & Dubrovinskaya, E. I. (2015). Planning and organization of sports competitions for disabled people: Russian experience. *Biosciences Biotechnology Research Asia*.
Malcolm, D. (2008). *The Sage dictionary of sports studies*. London: Sage Publications.
Martin, J. J. (2005). Psychosocial aspects of youth disability sport. *Adapted Physical Activity Quarterly 23: 65–77*.
Martin, J. J. (2013). Benefits and barriers to physical activity for individuals with disabilities: a social-relational model of disability perspective. *Disability and Rehabilitation 35(24): 2030-2037*.
Masterman, G. (2009). *Strategic sports event management* (2nd ed.). Massachusetts,

USA: Elsevier Ltd.
Mauerberg-deCastro, E., Campbell, D. F., & Tavares, C. P. (2016). The global reality of the Paralympic Movement: Challenges and opportunities in disability sports. *The Journal of Physical Education 22: 111-123*.
Maxham, J. G. (2001). Service recovery's influence on consumer satisfaction, positive word-of-mouth, and purchase intentions. *Journal of Business Research 54: 11-24*.
McClelland, D. C. (1985). *Human motivation*. London, England: Scott, Foresman, & Co.
Meleddu, M., Paci, R., & Pulina, M. (2015). Repeated behaviour and destination loyalty. *Tourism Management 50(2015): 159-171*.
Melian, A. G., Prats, L., & Coromina, L. (2016). The perceived value of accessibility in religious sites – do disabled and nondisable travellers behave differently? *Tourism Review 71(2): 105-117*.
Meng, B., & Han, H. (2018). Working-holiday tourism attributes and satisfaction in forming word-ofmouth and revisit intentions: Impact of quantity and quality of intergroup contact. *Journal of Destination Marketing & Management 9: 347-357*.
Mishra, A., & M, S. S. (2016). eWOM: Extant research review and future research avenues. *The Journal for Decision Makers 41(3): 222-233*.
Moon, H., & Han, H. (2018). Destination attributes influencing Chinese travelers' perceptions of experience quality and intentions for island tourism: A case of Jeju Island. *Tourism Management Perspectives 28: 71–82*.
Morris, J. (1991). *Pride against prejudice: Transforming attitudes to disability*. London: The Woman's Press Ltd.
Murray, E. J. (1964). *Motivation and Emotion*. Englewood Cliffs: Prentice-Hall.
Muzamil, M., Qadeer, A., Makhija, P., & Jahanzeb, A. (2018). Impact of different factors in creation of word of mouth at hospitality industry. *Journal of Hotel & Business Management 7(1)*.
Nail, J. (2005). What's the Buzz on word-of-mouth marketing? Social computing and consumer control put momentum into viral marketing. In, Trusov, M., Bucklin, R. E., & Pauwels, K. (2009). Effects of word-of-mouth versus traditional marketing: Findings from an internet social networking site. *Journal of Marketing 73: 90-102*.
Naz, F. (2014). Word of mouth and its impact on marketing. *International Journal of Scientific and Research Publications 4(1)*.
Neumann, M. (2015). What does the research tell us about word-of-mouth communication? - A literature review -. *University of Rostock*(6).
Noe, F. P., & Uysal, M. (1997). Evaluation of outdoor recreational settings: A problem of measuring user satisfaction *Journal of Retailing and Consumer Services 4(4): 223-230*.
Ogles, B., & Masters, K. (2003). A typology of marathon runners based on cluster analysis of motivations. *Journal of Sport Behavior 26(1): 69–85*.
Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research, 17(4): 460-469*.
Oliver, R. L. (1997). *Satisfaction: A behavioral perspective on the consumer*. New York: McGraw-Hill.

Oliver, R. L. (1999). Whence consumer loyalty? *Journal of Marketing 63: 33-44*.

Oliver, R. L. (2010). *Satisfaction: A behavioral perspective on the consumer* (2nd ed.). New York: ME Sharpe.

Ong, C. H., Lee, H. W., & Ramayah, T. (2018). Impact of brand experience on loyalty. *Journal of Hospitality Marketig & Management 27(7): 755–774*.

Ostrom, A. L., Bitner, M. J., Brown, S. W., Burkhard, K. A., Goul, M., Smith-Daniels, V., . . . Rabinovich, E. (2010). Moving forward and making a difference: Research priorities for the science of service. *Journal of Service Research 13(1): 4–36*.

Perovic, D., Moric, I., Pekovic, S., & Stanovcic, T. (2018). The antecedents of tourist repeat visit intention: systemic approach. *Kybernetes 47 (9): 1857-1871*.

Petruzellis, L., D'Uggento, A. M., & Romanazzi, S. (2006). Student satisfaction and quality of service in Italian universities. *Managing Service Quality 16(4): 349–364*.

Pope, J. A., Isely, P., & Agbetunsin, B. (2017). How do we keep them coming back? A look at individual factors impacting attendee satisfaction and intention to return to festivals. *International Journal of Event and Festival Management 8(2): 102-120*.

Pratiwi, A. R., Zhao, S., & Mi, X. (2015). Quantifying the relationship between visitor satisfaction and perceived accessibility to pedestrian spaces on festival days. *Frontiers of Architectural Research 4: 285-295*.

Qu, H., Kim, L. H., & Im, H. H. (2011). A model of destination branding: Integrating the concepts of the branding and destination image. *Tourism Management 32: 465-476*.

Qvist, A. (2009). Online word-of-mouth - Influences on brand perceptions and choices. *Haaga-Helia University of Applied Sciences*.

Rahman, M. S., Mohamad, O., Abdel-Fattah, F. A., & Aziz, N. (2014). Factors determining customers' repurchase intention of healthcare insurance products in Malaysia. *Proceedings of the Australian Academy of Business and Social Sciences Conference*.

Rasinaho, M., Hirvensalo, M., Leinonen, R., Lintunen, T., & Rantanen, T. (2006). Motives for and barriers to physical activity among older adults with mobility limitations. *Journal of Aging and Physical Activity 15: 90-102*.

Reichheld, F. F. (2001). *The loyalty effect: The hidden force behind growth, profits, and lasting value*. Boston: Harvard Business School Press.

Richins, M. L., & Root-Shaffer, T. (1988). The role of involvement and opinion leadership in consumer word-of-mouth: An implicit model made explicit. *Advances in Consumer Research 15: 32-36*.

Rimmer, H. J., Padalabalanarayanan, S., Malone, A. L., & Mehta, T. (2016). Fitness facilities still lack accessibility for people with disabilities. *Elsevier Inc.*

Robinson, T., & Gammon, S. (2004). A question of primary and secondary motives: Revisiting and applying the sport tourism framework. *Journal of Sport Tourism 9(3): 221–233*.

Ross, E. L. D., & Iso-Ahola, S. E. (1991). Sightseeing tourists's motivation and satisfaction. *Annals of Tourism Research 18: 226-237*.

Rust, R. T., & Zahorik, A. J. (1993). Customer satisfaction, customer retention, and market share. *Journal of Retailing 69(2): 193-215*.

Ryan, R. M., & Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary Educational Psychology 25: 54-67*.

Sáa, M. M., Azevedob, R., Martins, M. C., Machadob, O., & Tavaresb, J. (2012). Accessibility of sports facilities for persons with reduced mobility and assessment of their motivation for practice. *IOS Press*.

Saha, G. C., & Theingi, T. (2009). Service quality, satisfaction, and behavioral intentions: A study of low-cost airline carriers in Thailand. *Managing Service Quality 19(3): 350-372*.

Sang, A. L., Yeong, J. J., Joo, E. L., In, S. H., Jin, Y. N., Kyu, T. H., & Eun, C. P. (2016). The relationship between sports facility accessibility and physical activity among Korean adults. *BMC Public Health*.

Scherer, M. J. (1996). Outcomes of assistive technology use on quality of life. *Disability and Rehabilitation 18(9): 439-448*.

Schiffman, L. G., & Lazar, K. L. (2004). *Consumer behaviour* (8th ed.). Upper Saddle River, New Jersey: Prentice Hall.

Sen, S. (2008). Determinants of consumer trust of virtual word-of-mouth: An observation study from a retail website. *Journal of American Academy of Business 14(1): 30*.

Shapiro, D. R., & Malone, L. A. (2016). Quality of life and psychological affect related to sport participation in children and youth athletes with physical disabilities: A parent and athlete perspective. *Disability and Health Journal 9: 385-391*.

Sharma, P., & Nayak, J. K. (2018). Testing the role of tourists' emotional experiences in predicting destination image, satisfaction, and behavioral intentions: A case of wellness tourism. *Tourism Management Perspectives 28: 41–52*.

Shilbury, D., Deane, J., & Kellett, P. (2006). *Sport management in Australia: An organisational overview*. Melbourne: Strategic Sport Management.

Silverman, G. (2011). *The secrets of word-of-mouth marketing: How to trigger exponential sales through runaway word of mouth* (2nd ed.). New York: AMACOM.

Smith, B., & Sparkes, A. C. (2012). Disability, sport and physical activity: A critical review.

Social Development and Human Security Ministerial Regulation B.E. 2555. (2012). Retrieved from Available from: http://law.m-society.go.th.

Sotiriadou, P., Quick, S., & Shilbury, D. (2006). Sport for 'Some': Elite versus mass participation *International Journal of Sport Management 7: 50-66*.

Sotiriadou, P., Shilbury, D., & Quick, S. (2008). The attraction, retention/transition, and nurturing process of sport development: Some Australian evidence. *Journal of Sport Management 22: 247-272*.

Sport England. (2010). *Accessible sports facilities*. London.

Sports Association for the Disabled of Thailand. (2019). *Hosting diability sport events*. Retrieved from Sports Authority of Thailand:

Spreng, R. A., Harrell, G. D., & Mackoy, R. D. (1995). Service recovery: impact on satisfaction and intentions. *Journal of services Marketing 9(1): 15-23*.

Stanley, J., & Vella-Brodrick, D. (2009). The usefulness of social exclusion to inform social policy in transport. *TransportPolicy16: 90-96*.

Steffes, E. M., & Burgee, L. E. (2009). Social ties and online word of mouth. *Internet*

Research 19(1): 42-59.
Sundaram, D. S., Mitra, K., & Webster, C. (1998). Word-of-mouth communications: a motivational analysis. *Advances in Consumer Research 25: 527-531*.
Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics*. Boston: Pearson Education Inc.
Talib, Y. A., Ghani, N. I. A., Ismail, K., & Salleh, N. A. (2016). The provision of the disabled facilities in public hospitals. *MATEC Web of Conferences 66*.
Tanford, S., & Jung, S. (2017). Festival attributes and perceptions: A meta-analysis of relationships with satisfaction and loyalty. *Tourism Management 61: 209-220*.
Taub, D. E., & Greer, K. R. (2000). Physical activity as a normalizing experience for school-age children with physical disabilities. *Journal of Sport and Social Issues 24: 395-414*
Thammadee, N. (2015). The effects of travel motivation, satisfaction, and attitude on revisit intention: A case study of east asian tourists in Thailand. *Business Review 7(1)*.
The Americans with Disabilities Act (ADA). Accessible stadiums. U.S. Department of Justice. Retrieved from Available from: https://www.ada.gov/stadium.pdf
The Chambers Dictionary. (1998). Definition of event. In Bowdin, G. A. J., Allen, J., O'Toole, W., Harris, R., & McDonnell, I. (2006). Events Management (2nd ed.). Great Britain: Butterworth-Heinemann.
The United Nations. (2006). *Convention on the Rights of Persons with Disabilities (CRPD) and Optional Protocol UNITED*.
Theodorakis, N. D., Alexandris, K., Tsigilis, N., & Karvounis, S. (2013). Predicting spectators' behavioral intentions in professional football: The role of satisfaction and service quality. *Sport Management Review 16: 85–96*.
Theodorakis, N. D., Kaplanidoub, K. K., & Karabaxogloua, I. (2015). Effect of event service quality and satisfaction on happiness among runners of a recurring sport event. *Leisure Sciences: An Interdisciplinary 37(1): 87-107*.
Trusov, M., Bucklin, R. E., & Pauwels, K. (2009). Effects of word-of-mouth versus traditional marketing: Findings from an internet social networking site. *Journal of Marketing 73: 90-102*.
Tse, D. K., & Wilton, P. C. (1988). Models of consumer satisfaction formation: An extension. *Journal of Marketing Research 25(2): 204-212*.
Tsuji, Y., Bennett, G., & Zhang, J. (2007). Consumer satisfaction with an action sports event. *Sport Marketing Quarterly 16: 199–208*.
Tutuncu, O. (2017). Investigating the accessibility factors affecting hotel satisfaction of people with physical disabilities. *Hospitality Management*.
UEFA. (2011). *Access for all: UEFA and CAFE good practice guide to creating an accessible stadium and matchday experience*. Switzerland: Union des associations européennes de football.
Um, S., Chon, K., & Ro, Y. (2006). Antecedents of Revisit Intention. *Annals of Tourism Research 33(4): 1141-1158*.
United nations general assembly: UNGA. (2015). Sustainable Development Goals (SDGs) Retrieved from https://sustainabledevelopment.un.org/post2015/transformingourworld
Vallerand, R. J., & Losier, G. F. (1999). An integrative analysis of intrinsic and extrinsic motivation in sport. *Journal of Applied Sport Psychology 11(1): 142-169*.

Van Wee, B. (2016). Accessible accessibility research challenges. *Journal of Transport Geography 54: 257-263*.

Vanichbuncha, K. (2011). *Statistics* (6th ed.). Bangkok: Publisher of Chulalongkorn University.

Varga, A., Dlačić, J., & Vujičić, M. (2014). Repurchase intentions in a retail store – Exploring the impact of colours. *Ekonomski Vjesnik Econviews 229-244*

Vuuren, C. V., & Slabbert, E. (2011). Travel behavior of tourists to a South African holiday resort. *African Journal for Physical, Health Education, Recreation and Dance, 17(Special issue), 694-707*.

Wakefield, K. L., Blodgett, J. G., & Sloan, H. J. (1996). Measurement and management of the sportscape. *Journal of Sport Management 10: 15-31*.

Wang, C., & Wu, L. (2012). Customer loyalty and the role of relationship length. *Managing Service Quality: An International Journal 22(1): 58-74*.

Weinberg, R. S., & Jackson, A. (1979). Competition and Extrinsic Rewards: Effect on Intrinsic Motivation and Attribution. *The Research Quarterly 50(3): 494-502*.

Wendell, S. (1996). *The rejected body: Feminist philosophical reflections on disability*. New York: Routledge.

Westbrook, R. A. (1987). Product/Consumption-based affective responses and postpurchase processes. *Journal of Marketing Research 24(3): 258-270*.

Westerbeek, H., Smith, A., Turner, P., Emery, P., Green, C., & Leeuwen, L. V. (2006). *Managing sport facilities and major events* (2nd ed.). the USA: Routledge.

Woods, R. B. (2007). Florida: Human Kinetics.

Word of Mouth Marketing Association (WOMMA), & American Marketing Association (AMA). (2014). The state of word of mouth marketing: A survey of marketers.

World Health Organization. (2011). *World report on disability*. Geneva: WHO Press.

World Tourism Organization (UNWTO). (2016). *Manual on accessible tourism for all: Principles, tools and best practices* (1st ed.). Madrid: World Tourism Organization.

Yang, H. W., & Chang, K. F. (2011). A comparison of service experience on repatronage intention between department stores and hypermarkets in Taiwan. *African Journal of Business Management 5(19): 7818-7827*.

Yazicioglu, K., Yavuz, F., Goktepe, A. S., & Tan, A. K. (2012). Influence of adapted sports on quality of life and life satisfaction in sport participants and non-sport participants with physical disabilities. *Disability and Health Journal 5: 249-253*.

Ye, Q., Law, R., & Gu, B. (2009). The impact of online user reviews on hotel room sales. *International Journal of Hospitality Management 28(1): 180-182*.

Yen, C. L. A., & Tang, C. H. H. (2018). The effects of hotel attribute performance on electronic word-of-mouth (eWOM) behaviors. *International Journal of Hospitality Management 76: 9-18*.

Yoshida, M., & James, J. D. (2010). Customer satisfaction with game and service experiences: Antecedents and consequences. *Journal of Sport Management 24: 338–361*.

Yuen, E. F. T., & Chan, S. S. L. (2010). The effect of retail service quality and product quality on customer loyalty. *Journal of Database Marketing & Customer Strategy Management 17 (3/4): 222-240*.

Yürük, P., Akyol, A., & Simsek, G. G. (2017). Analyzing the effects of social impacts

of events on satisfaction and loyalty. *Tourism Management 60: 367-378*.
ZeithamI, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing 60: 31-46*.
Zeithaml, V. A., Bitner, M. J., & Gremler, D. D. (2017). *Services marketing: integrating customer focus across the firm* (7th ed.). Dubuque: McGraw-Hill Education.

VITA

NAME	Thee Trongjitpituk
DATE OF BIRTH	29 April 1990
PLACE OF BIRTH	Surin, Thailand
INSTITUTIONS ATTENDED	Chulalongkorn University
HOME ADDRESS	50/476, Ladprao 51, Saphansong, Wangthonglang, Bangkok, Thailand 10310
AWARD RECEIVED	Best Presentation Award of 3rd National and International Conference on Business, Informatics, and Management (NCBIM & ICBIM) in 2020