

Local Resident Perceptions of the Social Impacts of Sports Events:  
The Case of Nanaimo as a Host City for the 2014 BC Summer Games

by  
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LOCAL RESIDENT PERCEPTIONS OF THE SOCIAL IMPACTS OF SPORTS EVENTS:  
THE CASE OF NANAIMO AS A HOST CITY FOR THE 2014 BC SUMMER GAMES

*By Yihua Chen*

Presented as part of the requirement for the award of  
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LOCAL RESIDENT PERCEPTIONS OF THE SOCIAL IMPACTS OF SPORTS EVENTS:  
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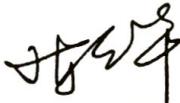
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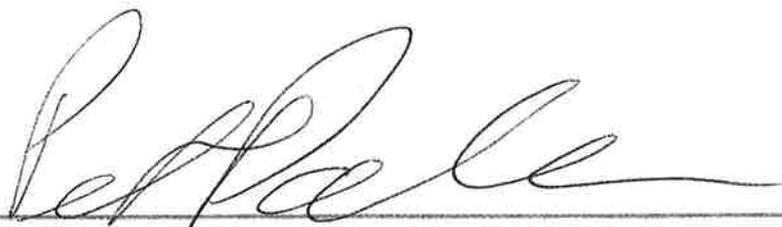
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**THESIS EXAMINATION COMMITTEE SIGNATURE PAGE**

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**ABSTRACT**

Events are increasingly being considered as an effective tool contributing to local development. Though hosting an event has significant economic impacts on the host community, the community is also confronting potential social consequences from it. No matter the social impacts are positive or negative, it is the community members who are affected mostly from them. Therefore, the research aims to understand resident perception towards the social impacts that events can have on their host communities and their daily life. It measures a provincial multi-sports event hosted in 2014 in Nanaimo, British Columbia, Canada by conducting a resident perception questionnaire. The questionnaire was designed based on the literatures relating to event management and social impact assessment such as Festival Social Impact Attitude Scale (FSIAS). The research is able to gain a better understanding of the social impacts an event can have on host communities, add further academic value to measurement of the social impacts, and provide possible suggestions based on the findings for the event organizers and community leaders to maximize the positive social impacts and minimize the negative ones.

*Key Words:* event social impacts, resident perception, Festival Social Impact Attitude Scale (FSIAS), post-event evaluation

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## CHAPTER 1

### INTRODUCTION

As the popularity of events and festivals grows, so too has the number of academic studies conducted measuring the impacts of events and festivals from various perspectives (Getz, 2010). The positive outcomes of holding events are increasingly recognized by local governments, event organizers and community leaders as an important and efficient contributor to economic growth and community development (Getz, 2009; Ritchie, 1984). Although economic impacts have been widely identified, it is only in recent years that researchers' attentions were drawn gradually to the social impacts of events. The appealing economic gains received from hosting events may lead to a failure to consider the possible social benefits and costs to the host community. However, such social impacts are closely related to people's life, culture and their community, which can have a more profound and long-term effect on the host destination other than economic impacts (Delamere, Wankel, & Hinch, 2001; Vanclay, 2002).

Although a considerable amount of research has already emphasized measuring social impacts, a systematic theoretical development of research on the social impact of events has only recently begun (Getz, 2010). Emerging from tourism impact research and based on practical case studies, several scales were established in the early twenty-first century measuring the event social impacts from the perspective of resident perception(see Delamere, Wankel, & Hinch, 2001; Fredline, Jago, & Deery, 2003; Small, Edwards, & Sheridan, 2005). For example, Delamere et al. (2001) asked the attitudes of residents on the social benefits and costs of Edmonton Folk Music

festival and formatted the Festival Social Impact Attitude Scale (FSIAS). Small et al. (2005) established the Social Impact Perception scale, a scale identifying six aspects of socio-cultural impacts, to measure community perceptions of the potential impacts derived from staging small community festivals. While Fredline et al. (2003) developed another scale that incorporates the social impacts as one generic value to assess the overall impact of an event.

Even though the existing scales have been published for quite some time, a redundancy of items may still exist because of a lack of implementation. After the initial validation of FSIAS in Edmonton, Canada, Rollins and Delamere (2007) tested the scale at the Parksville Sandcastle Festival and Pacific Rim Whale Festival in British Columbia, Canada. Although they found credibility in the scale, further validations remain necessary by implementing the scale in different contexts and various types of events (Rollins & Delamere, 2007).

The goal of the research is to explore the post-event perceptions of local residents regarding the social impacts of the 2014 BC Summer Games in Nanaimo. This research applied the FSIAS to achieve an understanding of resident perceptions of the social impacts of a sporting event. Findings will help event organizers gain a better understanding of the impacts of sport events so that they are able to minimize the negative impacts and maximize the positive ones, which is crucial for both the event and the host community to develop in a sustainable manner. Moreover, the research builds upon previous studies and verifies the FSIAS under a new context to continually add both theoretical and practical value in the field of event management. It is the first time that the scale has been applied in a post-event evaluation as well as in a new context in

which a provincial multi-sports event was hosted in a medium-sized city. To achieve the research goal, the objectives of the research are set as follows:

1. to explore resident perception of the social impacts of a multi-sport event;
2. to understand the underlying dimension of the social impacts of the BC Summer Games on the residents of Nanaimo;
3. to explore the differences in perceptions towards the social impacts across socio-demographic variables (e.g. length of residency, willingness to hold the event again);
4. to confirm the factor structure and assess the internal consistency of the FSIAS under a new context;
5. to provide recommendations to event organizers (such as the BC Games Society) and community leaders to help improve event management in the future.

This thesis is divided into five chapters. Chapter 1 serves as a brief introduction of the research problem, research context, as well as the necessity of such studies. Chapter 2 reviews the relevant literature and empirical studies to help develop the research. It begins with a discussion of the core concepts and terms used in event studies. The outstanding contributions from hosting an event to host destinations are also discussed, such as leverage effect in local economy. Chapter 2 then emphasizes on the findings drawn from the literature on the social impacts of events and host community resident perceptions towards it. Three major existing scales measuring the perceptions are concluded and compared, which provide a fine

methodological basis for the research.

Chapter 3 presents the research methodology implicated in this research. It outlines the methods designed to obtain and understand resident perceptions towards the social impacts of the event in the community. The research setting and selection of the event are explained. According to the context, survey design and sampling frame are discussed. A series of data analysis procedures are proposed based on the research design. Quantitative data analyzing techniques, such as descriptive analysis and factor analysis, are the major procedures used. At the end of this chapter, the rationale and the limitations of the research methods are also discussed.

Chapter 4 demonstrates the results of the survey. Firstly, the chapter presents the profile of the respondents, including demographic information and the summary of the survey answers. Secondly, factor analysis is applied to find out the underlying structure of the social impacts of the event. Thirdly, several community subgroups are identified and discussed across their perceptions of the social impacts. Lastly, qualitative analysis is conducted in terms of the qualitative data collected from the survey.

Chapter 5 discusses the results of the research and presents conclusions and future implications of the research. The chapter further discusses about the results and answers the questions in accordance with the objective outlined for the research. The contributions of the research are recognized, as well as recommendations based on the research findings are discussed for future event management. Lastly, the chapter points out the limitations of the research and suggests possible dimensions for proposing future research.

## **CHAPTER 2**

### **LITERATURE REVIEW**

The purpose of the research is to understand resident perceptions towards the social impacts of the 2014 BC Summer Games in Nanaimo. The relevant literatures to this research pertain to event management, event outcomes, social impact assessment, and residents' attitude towards events. This review of the literature is divided into five themes in order to address the various aspects that shaped the research questions. The first theme clarifies the major concepts of events and festivals, specifically defining the term event in the context of this particular research. The second theme explores benefits that events can bring to communities, especially economic gains and political benefits. The third theme emphasizes on reviewing the various potential social impacts identified from hosting an event. The fourth theme widens the scope by discussing the scope of resident perceptions in assessment of event social impacts. The fifth theme summarizes, reviews, and compares the three scales developed so far for standardizing the measurement of the social impacts of events and festivals.

#### **Type of Events**

This section clarifies and compares some of the key terms that have been used so far across the discipline of events and festivals management. Arcodia and Robb (2000) pointed out that inconsistency exists in the use of the terms, events, festivals, and M.I.C.E. (refers to meetings, incentives, conferences, and events), due to the differences between these terms being so minor. In some cases, the differences between events, festivals, and M.I.C.E. tend to be vague because

those activities all have similar influences on the tourism, leisure and hospitality industries (Arcodia & Robb, 2000; Getz, 2008). According to Arcodia and Robb's (2000) event categories, events, festivals, and M.I.C.E. industries have some characteristics in common, but their true nature differs from each other (see TABLE1). Generally, specific kinds of activities are categorized as festivals and M.I.C.E. The M.I.C.E. industry is the most distinguished which mainly focuses on the dissemination of information for the purpose of knowledge sharing or commercial advantages (Arcodia & Robb, 2000). Festivals refer to "themed public celebrations" that have a strong connection to local cultures of the host destinations and are capable of generating a celebrative atmosphere (Getz, 1991, p. 7; Jago & Shaw, 1998).

TABLE 1  
*Event Categories and Characteristics*

<b>Type of event</b>	<b>Distinctive Characteristics</b>
<b>Events</b>	
Mega-events	High volume of visitors; extensive media exposure; economically significant
Major events	High volume of visitors; wide media exposure; economically significant
Hallmark events	Strongly themed; presence of ceremony and ritual
Signature events	Linked to a particular location; sometimes identical to hallmark events
Special events	Once only or occurring irregularly; small scale
<b>Festivals</b>	
Festivals	Themed public celebration; seasonal; social; community participation
<b>MICE</b>	
Meetings	Assembly of individuals to debate certain issues and to make decisions
Incentives	Motivation tool to stimulate employees' productivity
Conferences / Conventions	Large scale meeting; exchange of ideas about a common interest
Seminars / Forums	Small scale meeting for educational purposes; exchange of opinions
Exhibitions / Trade shows	Display of goods, services or achievements; open to the public; marketing tools

Source: Adapted from Arcodia and Robb (2000), Richie (1984), Getz (2008)

Events have a much broader application compared to festivals and M.I.C.E. Different standards in the classification of events result in different interpretations of the term. The most common way to categorize events is in terms of the events' scale, e.g. the number of the participants to the event (Arcodia & Robb, 2000; Quinn, 2009). An event can be a mega-event at an international level such as Olympics, or a special event held just at the local community level. Getz (1991) argued that mega-events should not only be determined by its volume of visitors but also by their world-wide extensive media exposure. Outstanding media exposure has a strong effect on the host destination's brand, which also separates mega-events from other kinds of events distinctively (Jago, Chalip, Brown, Mules, & Ali, 2003). Major events are distinguished from mega-events mainly because of their smaller scale of impacts. Hallmark events refer to frequently occurring events which represent specific themes (Arcodia & Robb, 2000; Quinn, 2009). Ritchie (1984) classified major sporting events, significant cultural and religious events, and even unique festivals as a sub classification of hallmark events. Use of the term signature events is sometimes viewed as the same as hallmark events, but signature events have a stronger emphasis on their geographical identities (Arcodia & Robb, 2000).

Perhaps the biggest debate in event terminology is around the definition of special events. The term "special events" has been used with a broad meaning that includes all types of events in the early literatures. Getz (1991) defined special events by emphasizing their frequencies as one-time or infrequently occurring events, while Nicholls, Laskey, and Roslow (1992) defined the term focusing on the durations and the associated distinct themes. Arcodia and Robb (2000, p.

157) argued that “any definition of a special event needs to focus on the notion of 'special' and what makes it so”.

The classifications stated above are useful for researchers and readers to have a better understanding of the scope and the context of research; however, there are limitations to such categorizations. Arcodia and Robb (2000, p. 159) suggested that “the definitions are tentative because the characteristics of one type of event may, according to its context, overlap with another”. Although there are various ways to classify and define events, the most important thing is that the explanation best contributes to the purpose of the research. For example, Getz (2008) classified the relevant event terms according to their functions and missions from a practitioner’s perspective: political, entertainment, sport competition, or private purposes.

### **Social Impacts of Events**

Numerous events and festivals studies have been carried out in the past several decades. The impacts of hosting events are reflected on various aspects, including economic, tourism, physical, cultural, psychological, and political (Ritchie, 1984). Mayfield and Crompton (1995) suggested eight generic reasons why a community is willing to support festivals: recreation and socialization, culture and education, tourism, internal revenue generation, natural resources, agriculture, external revenue generation, community pride and spirit. Recent research has focused on impact evaluation utilizing a Triple-Bottom-Line approach, a framework with three parts: economic, social, and environment (Getz, 2010). Among the three dimensions of impacts, social impacts assessment has increasingly attracted researchers’ attention.

## **The Definition of Social Impacts**

Social impacts are defined as the impacts that include “all social and cultural consequences to human populations of any public or private actions that alter the ways in which people live, work, play, relate to one another, organize to meet their needs, and generally cope as members of society” (Burdge & Vanclay, 1995, p. 59). Similarly, Fredline et al. (2003, p. 26) referred to social impacts as “any impacts that potentially have an impact on quality of life for local residents”. Though often confused with social impacts, socio-cultural impacts are the collective results from both social and cultural impacts. Cultural impacts are those that “involve changes to the norms, values, and beliefs of individuals that guide and rationalize their cognition of themselves and their society” (Burdge & Vanclay, 1995, p. 59). Thus, socio-cultural impacts demonstrate potential changes in local value systems, lifestyles, relationships between people and social environments (Jovicić, 2011), which have a broader application compared to social impacts.

## **Importance of Measuring Social Impacts**

Social impacts are one of the core effects that events and festivals will have on a host community (Moscardo, 2007), and they tend to have a long-term effect on the community (Chalip, 2006; Delamere et al., 2001). Small communities, especially, have stronger reactions to social impacts as they are much more noticeable for them (Mason & Cheyne, 2000).

Social impacts are intangible in nature as they are not as quantifiable as economic outcomes (Dwyer, Mellor, Mistilis, & Mules, 2000), but the evaluation of event social impacts should not

be neglected. Rather, it is very critical for the future development of events and their host communities. Social impacts of events will potentially result in greater significance than the intended economic outcomes (Sharpley & Stone, 2011; Vanclay, 2002). Sustainable and responsible events should achieve a balance between the costs and benefits within both the economic domain and the social domain (Delamere, 1999). TABLE 2 presents a range of the positive and negative social impacts of events identified from previous research.

TABLE 2  
*Social Impacts of Events and Festivals*

<b>Potential Social Impacts of Events and Festivals</b>
<b>Positive social impacts</b>
<ul style="list-style-type: none"> <li>• Improved destination image</li> <li>• Enhanced sense of place</li> <li>• Increased social capital</li> </ul>
<b>Negative social impacts</b>
<ul style="list-style-type: none"> <li>• Amenity loss</li> <li>• Loss of authenticity</li> <li>• Changing social environment</li> </ul>

### **Positive Social Impacts of Events**

Positive social impacts of events include improved destination image (Getz, 1991), enhanced sense of place (Allen, O'Toole, Harris, & McDonnell, 2005; Crompton, 2004), and increased social capital (Arcodia & Whitford, 2006; Rao, 2001). Events are particularly useful in distinguishing one destination from others (Getz, 1991). A successful event guarantees a certain level of exposure of the host community to the mass media (Chalip et al., 2004). Destination image of the host communities is magnified or even reshaped through the "showcase effect" of events (Fredline et al., 2003; Hiller, 1989).

Staging events can also help cultivate a sense of place (Sharpley & Stone, 2011). A sense of place is always reflected on people's emotional attachment of the landscape and shared memories of heritages and cultures (Derrett, 2003). Events and festivals provide a stage for a place to interpret itself to both inside residents and outside visitors. For local members, such "the emotional and psychological benefits" are regarded as psychic income which they are able to receive as a result of staging an event even though they might not have physically participated in or organized the event (Crompton, 2004, p. 47). Via hosting events, a sense of place is increased in several ways: enhanced group and place identity created by tourist commodification (Crompton, 2004; De Bres & Davis, 2001), strengthened local culture because of culture and education opportunities provided during events (Mayfield & Crompton, 1995), as well as increased community attachment and civic pride (De Bres & Davis, 2001). Sport events have similar effects on the host community (Kim & Walker, 2012).

In addition to enhanced sense of place, social capital can also be increased via events to build on community well-being because hosting an event consumes a lot of collective efforts yielding from binding within a community (Derrett, 2003; Getz, 2009). Social capital refers to human relationships that facilitate actions in which certain values such as trust, mutual support and cooperation can be cultivated (Sharpley & Stone, 2011). Rao (2001) suggested that celebrations such as events can be considered as a means of social investment. Social capital can be built in three ways through festival attendance (Arcodia & Whitford, 2006): building community resources, social cohesiveness, and public celebration. For instance, the Canada Line

in Vancouver was finished ahead of schedule for the 2010 Winter Olympics and is now an irreplaceable resource that reduces traffic congestion and more importantly saves visitors a lot of time while traveling between the airport and downtown Vancouver (Canada Line, 2009).

### **Negative Social Impacts of Events**

The negative social impacts of events are often associated with the influx of visitors and a sense of losing community control (Dwyer et al., 2000; Fredline & Faulkner, 2002). The three main negative social impacts from events are amenity loss, loss of authenticity and changing social environments. Amenity loss, or loss of community resources, is more likely to occur when an event relies largely on the community (Delamere, 2001). Such losses include traffic congestion, crowds, noise, vandalism, and limited access to recreation facilities during the event.

Although hosting events may promote destination image, the image might be at risk of losing its authenticity because of event commodification (Moscardo, 2007; Sims & D'Mello, 2005). Inappropriate commodification of local culture and image can damage local culture and traditions and also alienate community members (Hall, 1993). Event organizers need to understand the social and cultural context of the host community prior to carrying out any business activities in order to share a sense of place (Derrett, 2003). Event development should fit as much as possible within the local image and community values, and consistent marketing strategies are a useful tool to achieve such goals (Jago et al., 2003).

The influx of visitors to events can negatively change the social environment. Consequences such as increasing crime, decreasing levels of safety and deteriorating employment conditions

will add to the social stresses (Hall, 1993; Klauser, 2013). Alcoholism and drug use are social costs that occur in some events, which can have a bad demonstration effect on locals especially the youth (Hall, 1993). The most recent example happened during the 2014 FIFA World Cup in Brazil. Although beer sales at football matches in Brazil were banned since 2003 due to violence previously experienced, the law was changed for the 2014 World Cup because one of the largest sponsors was a beer company (“Brazil World Cup beer law”, 2012).

Negative social impacts are also very difficult to measure. The most commonly used economic metric of social costs has been the evaluation of people’s willingness to pay to avoid them (Dwyer et al., 2000). During an event, residents can feel alienated from their community and seek for alternative destinations to avoid the event disrupting their normal life and lifestyle (Reid, 2007).

### **The Importance of Understanding Resident Perceptions Towards Events**

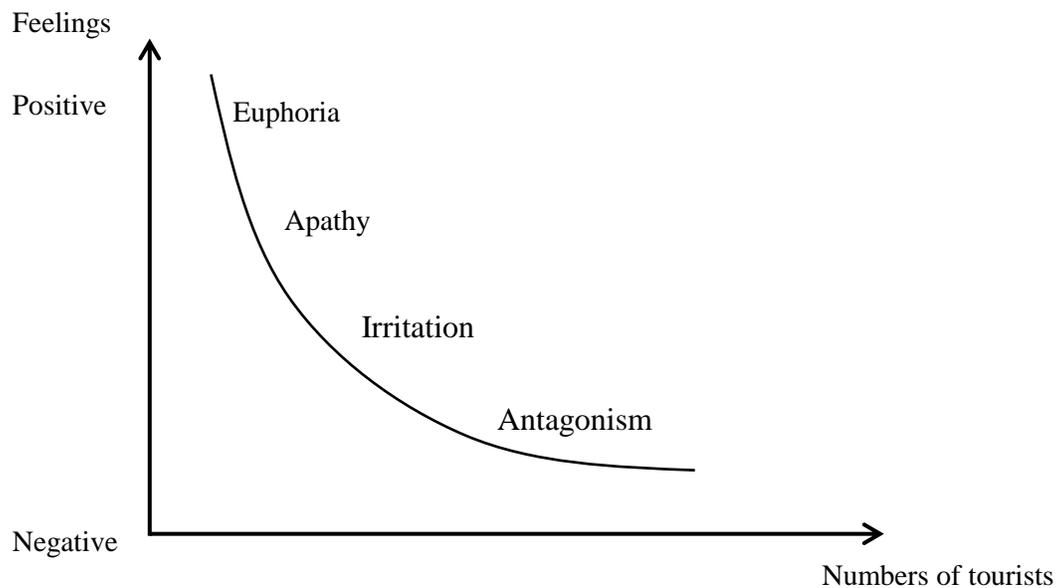
Event impact evaluations need to be assessed from the community’s perspective in order to optimize the desired outcomes from hosting events (Sharpley & Stone, 2011). Understanding “why and for who?” is the core in planning and managing events (Hall, 1993). Despite the intangible character of social impacts (Dwyer et al., 2000), an increasing number of research has begun to measure the social impacts of events from the perspective of community members (Getz, 2010).

Residents and communities are the most affected by a wide range of event impacts. Sims and D’Mello (2005, p. 271) pointed out that “hosting major events is a complex interaction of

physical, socio-cultural and economic impacts, both positive and negative, felt by the host community and consequently by the resident”. Especially the negative consequences such as loss of community control, which are all directly linked to residents’ quality of life.

The associated high volumes of visitors at events can interference with normal life and lead to a loss of community control, which may result in residents’ dissatisfaction and resistance to support the event (Fredline et al., 2003; Moscardo, 2007). Tourism development is the most apparent within all event impacts at the community level of the destination as it is the “nucleus” of event products (Simmons, 1994, p. 98). A heavy emphasis on the tourism industry of a destination directly results in negative attitudes or hostility from local residents (Pizam, 1978). Doxey’s Irridex Model (see FIGURE 1) describes the relationship between resident attitudes towards the impacts of tourism. Doxey (1975) illustrates how local resident respond to tourism development changes with accelerating numbers of visitors through a linear series of stages of irritation (euphoria, apathy, irritation, and antagonism). If the upper tolerance level of residents is reached and exceeded, there will be raised attitudes against more input into the festival (Jovicić, 2011). This frequently occurs in mega events such as the Olympics.

FIGURE 1  
*Doxey's Irritation Index*



Source: Adapted from Doxey(1975)

A successful event cannot be separated from cumulative efforts from the community (Delamere et al., 2001; Gursoy, Kim, & Uysal, 2004). There is little doubt that community involvement and resident assistance and support are indispensable for the sustainable development of the event industry (Gursoy et al., 2004). A host community is capable of providing most of the essential elements for a successful event, including sufficient human resources, facilities and even cultural demands. Specifically, when an event is becoming a tourist attraction, public sector assistance is significantly necessary so that the issues of equity, distributions and public obligation can be properly solved (Felsenstein & Fleischer, 2003).

The core theory behind the increasing attention drawn to resident perceptions in event management is stakeholder theory. The theory proposed that the success of one business does not

simply lie in the organization arrangements to generate the values for its stockholders. Instead, it is the ability of one organization to address the aspiration of the related groups who hold their own interests and stake (Garrod, Fyall, Leask, & Reid, 2012; Reid & Arcodia, 2002). As the recognition of the importance of residents, residents are often considered as one of the important stakeholders in event management. The balance of the needs between the event organization and the community will lead to achieve public goods and also maximize the benefits from hosting events (Moscardo, 2007; Rigall-I-Torrent, 2008). Gursoy et al. (2004) suggested that event organizers can obtain residents' acceptance and support by offering strong social incentives and cultural benefits.

Yet, community involvement into event planning and management can be limited and complex (Garrod et al., 2012). Gursoy et al. (2004) pointed out that event organizers do not often value contributions to community cohesiveness and social incentives as same importance as economic benefits. Moreover, residents are very likely to be "informative participants" who lack legitimacy as a stakeholder, which is due to a limited ability to affect the organization and a lack of substantial relationship with it (Garrod et al., 2012, p. 1171).

### **Limitations of Assessing Resident Perceptions**

Although community perceptions are important indicators to evaluate the social impacts of events and festivals, advantages and disadvantages exist in this approach (Fredline, Raybould, Jago, & Deery, 2005). Firstly, almost any kind of impact can be analyzed via resident perceptions. Secondly, the indicators are closely related to residents' quality of life. Lastly, subgroups within

communities can be further assessed, expanding as much as possible the depth of the analysis.

Perhaps the most visible disadvantage of measuring resident perceptions is that such assessment methods require a lot of effort in collecting data. Quantitative methods such as questionnaires are often used, which demand a large number of respondents for participation to ensure research reliability. Another disadvantage of assessing resident perceptions is that resident responses can be highly subjective (Fredline et al., 2005). The formation of expectations derives from people's knowledge, value system and previous experiences from similar events instead of simply the investigated event itself (Ap, 1992). Survey results can be influenced by values of respondents individually (Fredline et al., 2005) who also re-evaluate an event after it ends by comparing their initial expectations with actual experiences (Sims & D'Mello, 2005). For instance, someone can end up being against an event if the negative impacts of the event exceeded their predictions.

### **Existing Scales Measuring Social Impacts of Festivals and Events**

In response to the need of appropriate tools for measuring resident perceptions of the social impacts of events, several studies were conducted to develop an event impact attitude scale that drew on previous studies related to tourism impact scale development. The two most commonly referenced tourism development attitude scales are Lankford and Howard (1994) and Ap and Crompton (1998). Three scales have been developed to evaluate the social impacts of events and festivals (see Delamere et al., 2001; Fredline et al., 2003; Small et al., 2005). These three scales similarly utilize questionnaires to assess the social impacts of events from resident perceptions,

but some differences exist between them in terms of their applicability, development procedure, aspects measured, factor structure, and measurement type (see TABLE 3).

TABLE 3  
*Existing Scales Measuring Social Impacts of Festivals and Events*

<b>Scale Name and Descriptions</b>	
<b>Festival Social Impact Attitude Scale (FSIAS) (Delamere, 1999)</b>	
Applicability	Pre-event expectations of community festivals
Development Procedures	Nominal Group Technique to generate items; Delphi Technique to modify the items
Aspects Measured	Social impacts
Number of items	25 items
Number of factors	2
Description of factors	Social Benefits of festivals (sub-factors: individual benefits, community benefits), social costs of festivals (sub-factors: amenity loss, loss of community control)
Type of Measurement	The existence of an impact and its level of importance
<b>Generic Scale (GENERIC) (Fredline, 2003)</b>	
Applicability	Post-event evaluations of medium to large-scale events
Development Procedures	Focus groups to generate items; Three Case Studies in sporting, cultural, and community events
Aspects Measured	Socio-cultural impacts and economic benefits
Number of items	42 items
Number of factors	6
Description of factors	Social and economic development benefits, concerns about justice and inconvenience, impact on facilities, bad behavior and environmental impacts, impact on selected goods and services
Type of Measurement	The direction of an impact (increase or decrease) and its level of influence respectively on personal quality of life and the community as a whole
<b>Social Impact Perception Scale (SIP) (Small, 2005)</b>	
Applicability	Pre-event & post-event perceptions of community festivals
Development Procedures	Emerging from the Social Impact Evaluation (SIE) Framework; Delphi Technique to modify the items
Aspects Measured	Socio-cultural impacts
Number of items	21 items
Number of factors	6
Description of factors	Entertainment and socialization opportunities, community identity and cohesion, community growth and development, personal frustration, inconvenience, behavioral consequences
Type of Measurement	The occurrence and the nature of an impact and its level of influence

Fredline et al. (2003) established a scale which is comprised of six factors to measure community perceptions of the impacts of events. Derived from focus group interviews and academic literature, scale items were validated in three different types of events, including medium to large-scale events in both metropolitan and regional areas in the state of Victoria, Australia. Residents were asked to assess their beliefs of one change and then to identify the direction of the change (increase or decrease). If a change was perceived, the respondents were subsequently asked the level of influence respectively on their personal life and the community. Forty two items survived in the research and were then divided into six factors: social and economic development benefits, concerns about justice and inconvenience, impact on public facilities, impacts on behavior and environment, long-term impact on community, and impact on prices of some goods and services. The research presented an evaluation tool that assesses the overall impacts of one event including both socio-cultural and economic impacts, as opposed to simply examine economically in early research.

Small et al. (2005) developed the Social Impact Perception (SIP) scale in which environmental impacts were merged with social impacts into the measurement of the socio-cultural impacts of events. The scale was implemented in two Australian community festivals (Small, 2007). In her research, respondents were asked to assess whether an impact occurred (Yes, No or Don't Know), and for those who answered Yes or No, a 5 part directional scale was used to indicate the level of impact they believe it had. The scale ranged from -5 to +5, with zero as a midpoint representing 'no impact', 1 representing a 'very small impact', 2

representing a 'small impact', 3 representing a 'moderate impact', 4 representing a 'large impact', and 5 representing a 'very large impact'. Different to Fredline's research (2003), the SIP scale allows respondents to rate the non-occurrence of an impact so that such items are interpreted as signifying indicator for the success of an event. After implementation, twenty one items survived and were distributed into six factors: entertainment and socialization opportunities, community identity and cohesion, community growth and development, personal frustration, inconvenience, behavioral consequences. In addition to the development and validation of the six-factor scale, the research identified two general types of impacts, those are felt on a personal level and those that impact the community as a whole.

The Festival Social Impact Attitude Scale (FSIAS) assesses local resident attitudes toward the social impacts of community festivals (Delamere et al., 2001; Delamere, 2001). Residents were asked to assess the existence of an impact and its level of importance. The scale was first used at the Edmonton Folk Music Festival, which lead to a refinement of the items from the original 70 items down to 25 items. The survived items were arranged into two categories: social benefits and social costs of community festivals. With additional analysis, Delamere (2001) found out that the two categories each had two sub-dimensions: individual benefits, community benefits, amenity loss, and loss of community control. In the further analyses of the FSIAS, Delamere (2001) confirmed the validity of measuring the social impacts from expectation-only mode.

Unlike the other two scales measuring the existence, the nature and the level of effect of an

impact, Delamere (2001) measured the impact of items in terms of resident belief of their occurrences and the level of importance. As the first social impact assessment tool developed for events, the FSIAS continued to use the two assessment aspects from the previous tourism impact attitude scales (such as Lankford & Howard, 1994). However, Small (2007) argued that it is important to not only evaluate the occurrence of one impact but also evaluate its nature and level of perceived impact. Despite the great quantity of information that is able to be obtained by assessment of both the occurrence and the nature, such measurements might not be appropriate for FSIAS as the item wordings of FSIAS have had a clear tendency to positive or negative while the wordings in the generic scale and the SIP scale remain an objective and neutral tone when describing one impact to respondents. Moreover, there is no evidence showing that different methods of measurement will significantly affect the results of event social impacts assessment. In fact, all three scales agree that residents perceive the social impacts of events basically in two ways: on a personal level and on the community as a whole. Small (2007) also pointed out that the items identified in the SIP are comparable to the others two scales.

Among the three scales, the FSIAS has been implemented the most. The FSIAS was utilized at the Parksville Sandcastle Festival and the Pacific Rim Whale Festival in BC, Canada.

Although, the key findings have not been published, the scale was deemed a reliable, valid, and robust tool to measure resident perceptions towards the social impacts of festivals (Rollins & Delamere, 2007). The scale was also recently used on a rural Texas Cultural festival and had strong validity showing that resident perceptions towards the social impacts had significant

relationships to the social demographic variables and proved valid in the context of cultural festivals outside of Canada (Woosnam, Van Winkle, & An, 2013). Further use in Texas indicated that residents with a greater sense of community are better in perceiving festival impacts and their needs fulfillment were negatively related to social costs (Van Winkle & Woosnam, 2014). The GENERIC and SIP scales have not been additionally validated. Fredline et al. (2003) proposed further refinement to compress the generic scale to about 10-12 items. Small (2007) also suggest that further development and testing is necessary for ensuring the construct and content validity of the SIP scale.

The implementations of the FSIAS listed above not only uncovered valuable findings for some communities and festivals but also advanced the development of the scale. However, most of the implications were limited in the context of music festivals or cultural festivals and certain community environments. Moreover, the FSIAS has had little validation that focuses on post-event evaluation, and most use has been on annual events with a fairly long history. This research applied the FSIAS after the culmination of a sports event (the BC Summer Games) hosted in a medium-sized community (Nanaimo, BC, Canada). Therefore, the research was able to further validate the scale and add value to the discipline of event management.

### **Summary**

Studies around events management are gaining increasing attention. This chapter reviewed the literature related to event management, especially measurement of social impacts. Events can be used as a tool to propel community development (Moscardo, 2007). Along with the economic

and political benefits, there will also be profound social impacts, both positive and negative on the host community. Those impacts of events have a huge effect on residents' quality of life (Simmons, 1994). Since community members are one of the key players in the management of events, it is important to understand their expectations in order to gain their support and maximize the benefits derived from events (Ap, 1992; Reid & Arcodia, 2002).

## CHAPTER 3

### METHODOLOGY

The research aims to understand the social impacts that a provincial sports event can have on a host community. The research measured resident perceptions of the BC Summer Games that were hosted in Nanaimo in 2014. The method of research is mainly quantitative, using a survey questionnaire to assess the perceptions of local residents with only a few open-ended questions. The chapter first discusses the research context, followed by a discourse on how the event was selected, the design for data collection, the methods used to analyze the data, and lastly the methodology limitations.

#### Research Setting

Located on the east coast of Vancouver Island, the city of Nanaimo is situated 55 kilometers east of Vancouver and 111 kilometers of Victoria, BC, Canada. Dubbed “the Harbour City”, Nanaimo is an important gateway of the Vancouver Island to other cities because it plays the hub of both water and land transportation (see FIGURE 2). Nanaimo is classified as a medium-sized population center with approximately 83,810 people living in the city as of 2011 and the population has kept growing since 2006 (Canada 2011 Census). The median age in Nanaimo was 45.2 years old in 2011 (Canada 2011 Census).



FIGURE 2 The Map of Vancouver Island – City of Nanaimo  
(<http://portalice.ca/visitors/directions-maps>)

Due to its advantageous location on the island, Nanaimo has many more opportunities to develop its economy and tourism industry compared to other cities on the island. Additionally, the city provides diverse festival and event opportunities throughout the year to build a livable community and to welcome the visitors (see TABLE 4). Nanaimo is a member of the BC Sport Tourism Network (BCSTN) and has hosted numerous events and festivals. Some of the events have been hosted for a fairly long time and proved the community's strong ability as a hosting city. Those events have become well-known and attracted many tourists to the community, such as Nanaimo Marine Festival and the music events Summertime Blues. Around 5 million tourists have visited Nanaimo every year since 2009. The city has been concentrating on improving the tourism related businesses and services in recent years to enhance the city's capacity of welcoming the increasing numbers of tourists throughout the years and to provide tourists better

travelling experiences. Most of the events held in Nanaimo have taken advantage of the water amenities and infrastructure as the main venues, such as the Downtown Harbourfront and Beban Park recreation complex.

TABLE 4  
*Major Festivals and Events in Nanaimo*

<b>Month</b>	<b>Theme of the Events</b>	<b>Venue</b>
February	Maple Sugar Festival	Beban Park
May	Vancouver Island International Children's Festival	Harbourfront Plaza
June	Empire Days Celebration Multicultural Festival	Downtown Harbourfront The Old City Quarter
July	Dragon Boat Festival Nanaimo Marine Festival & International World Championship Bathtub Race	Maffeo Sutton Park Downtown Harbourfront
August	Summertime Blues	Maffeo Sutton Park, downtown Harbourfront
October	Bite of Nanaimo Nanaimo Pumpkin Festival	Beban Park Beban Park
November	Festival of Trees	Vancouver Island University
All year round	Farmers' Market	Various locations

(<http://www.hellobc.com/nanaimo/things-to-do/festivals-events.aspx>)

### **Selection of the Event**

The BC Summer Games is an amateur multisport event held annually in British Columbia, Canada (see TABLE 5). The Games have a fairly long history dating back to 1978. The mission of the Games is “to create development opportunities for athletes, coaches, officials, volunteers, and communities” (“Our Mission”, 2015). There have been 38 communities and over 350,000 participants and volunteers involved in these events. Most of the participants are young athletes, aging from 9 to 18 depending on the sport. Twenty different sports were presented in the 2014

BC Summer Games in Nanaimo, involving more than 4000 athletes, coaches and officials. The major activities of the event are sports matches which are open to the public viewing. Attendees can be from the local community as well as families and friends of the competitors. There are also several related events which are hosted before or after the main matches, such as opening and closing ceremonies, torch relay and lighting ceremony. Those surrounding events play an important role in involving the host community as well as opportunities in recruiting volunteers. The BC Games largely depend on local sponsors for funds.

TABLE 5  
*Event Profiles*

<b>Characteristics</b>	<b>The 2014 BC Summer Games in Nanaimo</b>
Local Population	Approximately 83,810
Participant numbers*	Approximately 3,900
Volunteers involved	Approximately 3,200
Number of sports	19 kind of sports
Number of years running**	29 <sup>th</sup> BC Summer Games since 1978
Theme	Amateur sporting event
Timing	Held annually in the province of British Columbia, Canada
Duration	4 days, July 17-20, 2014
Host history	Nanaimo previously hosted the event in 1985 and 2002.

\*Participants included athletes, coaches, and officials.

\*\*The first BC Games were held in 1978 and went annually after 1998.

According to the event categories (see TABLE 1) and for the purpose of this research, the BC Summer Games is regarded as a hallmark sport event because of its nature and traditions. It is also a sports event due to its mission to build on the expertise and support of partners to create development opportunities for sports-related activities.

There are three important reasons why the research chose this research setting. Firstly, the

city has been hosting a number of sport events in recent years. 2014 was the 48<sup>th</sup> time that the International World Championship Bathtub Race was held in this city dating back to 1967. The natural amenities entitle Nanaimo to good capacities of hosting such events. But what do the residents think of the events which can potentially occupy their community resources and bring visitors to the city? Secondly, it is the third time that the BC Summer Games have taken place in Nanaimo; the other two times were in 2002 and 1985. The possible large amount of sport tourists and athletes entering in the host community to participate in the 2014 BC Summer Games in a short period of time will potentially have profound impacts both economically and socially. The 2002 Games in Nanaimo attracted the largest amount of funds generated from the games to invest back into the community sport organizations and local groups (Nanaimo 2002 BC Summer Games Community Impact Assessment, 2003). The BC Games show a strong ability to bring economic benefits into the host community, but no research has assessed its social impacts on the host community. Whether there would be significant social benefits or costs remained unknown to the public. Therefore, the results of the research will lead to a better understanding of residents' perceptions to the social impacts from the event, as well as help the event planners and leaders in the community to planning and cope with the potential impacts.

The feasibility of conducting the research was also took into account. There should be a proper amount of time for generating the social impacts while not too long so that the community residents are still able to remember and reflect their perceptions on the impacts. Given the duration and participants of the event, the selected event is a reasonable choice, and is also the

most suitable.

### **Data Collection**

The research measured the social impacts of the 2014 BC Summer Games from a community's perception using a questionnaire survey. In social research, there are a range of data collection methods that have been used in measuring social impacts, such as questionnaires or interviews. Questionnaire surveys are used most often when the research involves a large sample size (Fredline et al., 2003). Other than the capability of involving a large sample, a questionnaire is also simple to administer and easy to analyze (Veal, 2006). But there are also disadvantages when employing such an approach. Because questionnaires provide limited options, participants often can only choose one option as their response. Therefore, important information might not be included in the final results. Also, respondents who choose to participate are more likely to hold either really positive or really negative attitudes towards compared to those who hold neutral attitudes (Veal, 2006). Though there are concerns in conducting a questionnaire, the approach is considered the most suitable method given the time, cost and targeted sample group of the research.

### **Questionnaire Design**

The survey instrument in this research consisted of three sections (see TABLE 6). Questions were adapted from the Festival Social Impact Attitude Scale (FSIAS) (Delamere, 2001) and previous event social impacts research. The final instrument consisted of 35 questions with 2 open-ended questions. The questionnaire was less than 3 pages (see Appendices).

TABLE 6  
*Format of the Instrument*

<b>Section</b>	<b>Item measured</b>
Section A	24-item FSIAS measuring the level of the social impacts of the event
Section B	Measurement of independent variables <ol style="list-style-type: none"> <li>1. levels of participation</li> <li>2. willingness to volunteer</li> <li>3. feelings of living in Nanaimo</li> <li>4. overall satisfaction with the event</li> <li>5. the willingness to have the event hosted in the community again (with opportunities for open-ended comments)</li> </ol>
Section C	Respondent demographic information

The first section of the questionnaire assessed resident perceptions based on a list of 24 items pertaining to the potential social impacts resulting from the 2014 BC Summer Games. There are 12 positive social impact items and 12 negative items. Responses of perceived level of impact are measured in the form of a quantitative Likert-type scale from 1 to 5 (where 1= *not at all*, 2= *only a little*, 3= *some*, 4= *a lot*, 5= *a great deal*). Values of the positive statements indicated the levels of positive impacts, while values on the negative statements indicated the levels of negative impacts.

When measuring resident attitudes towards some issues, it is very common that items are valued in terms of both their expectations and their values (such as Delamere, 2001; Lankford & Howard, 1994). Results would then be compared in pairs in axes to predict outcomes and make the results more readable. However, such a design almost doubles the length of the questionnaire questions, potentially lowering response rates. Survey participants may also feel confused about the questions because of the repetition of items. As discussed above, there is no significant effect on the results if a more complicated or a simpler type of measurement is applied.

The instrument was thus designed to measure only perceived level of impact by using the expectancy-only model of the FSIAS, not their expectancy or importance. Ap (1992) and Sims and D'Mello (2005) suggested that resident evaluations of the impacts usually tend to be based on a mixed range of causes, including previous experiences with similar events, knowledge and value system, and the differences between the initial expectations and the actual experiences. Previous research has validated the use of the expectancy-only scale (Rollins & Delamere, 2007; Woosnam et al., 2013).

The second section of the survey instrument assessed feelings about the event in general. It involved several aspects, including levels of participation, willingness to volunteer, feelings of living in Nanaimo, and overall satisfaction with the event. These variables were adapted from various sources on resident attitudes towards tourism development (Ap, 1992; Harrill, 2004; Tosun, 2002) and towards the social impacts of events (Fredline et al., 2003; Small, 2007). Respondents were also provided space to give their individual opinions within an open ended question about why they want to host the event again in Nanaimo or why not.

In the last section of the questionnaire, demographic information and spatial factors were collected to assess gender, age, length of residency, distance from the recreation facilities, and usage frequencies of those facilities. In addition to the demographic information such as age and gender, Harrill (2004) pointed out that spatial factors such as distance and location can be important for planners to determine whether the site is suitable or not, while socio-economic factors such as income can sometimes be contradictory and play a relatively minor relationship

to residents' attitudes on the impacts.

### **Sampling Frame**

The population of interest for this research was defined as those who are at least 18 years old living within the geographic boundaries in Nanaimo, BC, Canada. There were no other inclusion and exclusion criteria in selecting participants because of no need to target specific group of people according to the objectives. Although the young athletes competing in the event matches were called participants of the event, they were not informants of the current research. A total of 382 respondents were sought to achieve a confidence level at 95% with 5% confidence interval to ensure the research creditability and to be able to represent the whole community.

All respondents were recruited via home telephone numbers, accessed from a local phone directory. A systematic sampling procedure was applied in selecting respondents. The first of every ten numbers was selected from the beginning of the residential phone book section. If the chosen number was a local business number, the number was abandoned and the next tenth number was chosen. If the selecting procedure reached the end of the phone book, the counting of every ten number continued and added counting from the beginning of the residential number section again. If the tenth number was exactly the last number in the section, the new selecting procedure started from the second number at the beginning of the residential number section. The systematic sampling procedure is suitable for selecting a sample from a large sample base in order to eliminate selection bias (Tourangeau, 2004). One concern of such sampling methods is that possible important information from those who are not contacted may be missing in the final

findings. In other words, households who do not own a landline telephone were excluded along with the information they can provide to the research.

The best times for administering phone surveys is on weekday evenings (after 5 p.m.), followed by weekend daytime then weekday daytime (Weeks, Kulka, & Pierson, 1987). Therefore, telephone interviews were conducted on both weekdays and weekends. Each phone number was dialed 3 times at different times (weekday daytime, weekday evenings, weekend time) before the number was considered a failed call. Voice messages were left if possible in order to increase the response rate of the following calls. Participants could choose to either complete the survey orally on the telephone or electronically via the internet.

The survey was administered two weeks after the event ended (starting on August 1<sup>st</sup>) so that enough time was allowed for residents to perceive the social impacts. The entire survey took approximately 15 minutes to complete. All the respondents were given explanations about the purpose and other important information of the research before they start answering any of the questions. The instrument was pre-tested with a small group in order to ensure proper use of language and a smooth process.

### **Methods of Data Analysis**

In order to conduct the statistical analyses, the data were input into IBM SPSS version 22.0. All the quantitative data was recoded consistently, such as YES was recoded as 0 and NO as 1.

### **Descriptive Statistics**

Frequency and means are the two most common attributes in describing quantitative data

(Veal, 2006). Frequencies were calculated for the demographic variables from Section C of the survey to provide a profile of the respondents. Means and standard deviation values were presented for the social impacts items as well as overall satisfaction of the event.

### **Factor Analysis**

Factor analysis was conducted to determine the underlying structure and consistency of a set of variables (VanPool & Leonard, 2010). Common factor analysis was applied to the 24 items of the FSIAS. In order to apply factor analysis, the negative statements from the scale were recoded reversely, as 1 representing *a great deal* while 5 representing *not at all*. The Kaiser-Meyer-Olkin (KMO) measure was used as an indicator to test sampling adequacy. A KMO value around 0.7 suggested fair sampling adequacy to conduct factor analysis (Tabachnick & Fidell, 2001; VanPool & Leonard, 2010).

### **Cluster Analysis**

Cluster analysis was used to identify sub-groups of the residents based on their feelings about the social impacts of the event. Cluster analysis is a useful statistical method in grouping homogeneous informants into clusters, such as informants sharing with similar perceptions, culture background, or values (Mooi & Sarstedt, 2011). Both demographical information and behavioral variables (see TABLE 7) were used to identify the sub-groups. By defining the social representatives, in other words sub-groups, it provides a mechanism to investigate the level of impact under certain system, which has meaningful implication value for planners and organizers (Fredline & Faulkner, 2002).

TABLE 7  
*Clustering Variables*

<b>Behavioral Variables</b>	<b>Demographic Variables</b>
<ul style="list-style-type: none"> <li>• The willingness to attend the event</li> <li>• The willingness to volunteer</li> <li>• General feeling about the event</li> <li>• Attachment to the host community</li> <li>• Interests in supporting future events</li> </ul>	<ul style="list-style-type: none"> <li>• Gender</li> <li>• Age</li> <li>• Year of residence</li> <li>• Distance from the recreation facilities</li> <li>• Frequency of usage of the facilities</li> </ul>

### **Qualitative Data Analysis**

Qualitative data was gathered and was analyzed to add a deeper understanding for the research. Qualitative data bring more creativity and add more content to the results (Veal, 2006). Research also suggested that qualitative research methods help to generalize more case-based and more valid perceptions (Steckler, Mcleroy, Goodman, Bird, & McCormick, 1992). In other words, the answers tend to be more personalized and give the researcher an inside view of each respondent about certain issues comparing to fixed multiple choice questions.

With two open-ended questions in the survey, respondents were given opportunities to give away their opinions on whether they would like to see the event hosted in their community again and their overall comments to the event. The researcher encouraged the respondents to use single words and brief phrases to express their thoughts over the social impacts. Traditional qualitative data analysis methods were used, inducing a series of themes from the text. It is the most commonly used methods in the existing literature (Veal, 2006). Although software such as NVivo has been approved reliable and useful in qualitative data analysis, such aids usually require a fairly large sample size, which is not suitable for the current research.

### **Methodological Limitations**

There are a number of limitations of the methodologies occupied in this research. Firstly, most of data collected through questionnaire survey is quantitative. Fixed choices of the questions may possibly under-represent what respondents want to express and thus lead to miss important information. Secondly, although there is no intention in the sampling frame to exclude any informants (except that one participant has to be 18 years of age or older), exclusion of certain respondents may be resulted from the administration of the survey, such as households without a landline or a computer, people who do not know how to complete a web-based survey, or people who are usually unavailable during the scheduled recruiting time. Thirdly, potential restrictions may appear when gathering the qualitative information from the open-ended questions because of the time and space allowed in the telephone interview and web survey. Fourthly, the issue of non-response rate must be acknowledged. Non-response rate is a potential source of bias of the sample (Veal, 2006). Moreover, research showed that most often those who participate in the survey are those who hold strong opinions, either positive or negative, towards the research questions, which can lower the reliability of the research results in which some types of respondents is over-represented. Last but not least, the researcher's own bias and previous experiences might influence the interpretation of the results.

### **Summary**

The research intends to explore the social impacts of sports events from resident perceptions by measuring on the 2014 BC Summer Games in Nanaimo. This chapter discussed and clarified

the methodology, research setting, the selection of the event, data collection procedures, analyzing methods and the methodological limitations. A questionnaire survey is the major research approach in the research. Resident perceptions on the social impacts, their general feelings and socio-demographic information were gathered via the questionnaires. In the survey, the social impacts items were drawn from the Festival Social Impact Attitude Scale (Delamere et al., 2001). Although the sample size and methods were not ideal to the studies of social impacts, the research was made as valid as possible given the conditions and research capability.

## **CHAPTER 4**

### **RESULTS**

This chapter presents the results from a questionnaire survey used to assess resident perceptions of the social impacts resulting from the BC Summer Games in Nanaimo, BC. The chapter is divided into four sections. The first section provides the profile of the survey respondents. The second section presents the results of the factor analysis, demonstrating the factor extraction solution with a description of each factor. Cluster analysis is then used to identify subgroups within the survey participants. Then, results from the FSIAS are compared among the generated clusters, providing a deeper understanding of the differing perceptions of the sub-groups' regarding the social impacts of the Games. Lastly, several themes are extracted based on the qualitative responses from the survey, expanding the depth of the analyses.

#### **General Profile of the Respondents**

##### **Response Rate**

The community survey yielded the sample of 86 usable responses, which is far below the proposed 382 responses required to achieve a representative sample. During the 40 days of data collection, 812 residents in total were contacted. This equates to a response rate of 10.6%. Nine answers in total were missing among all the responses, and all of them are in section A (evaluation of the social impacts). Respondents may prefer not to rate a specific social impact or they might accidentally skip the question because of the layout of the social impact items.

There are several main reasons why a large amount of people declined to participate in the

survey. First, many of them refused to participate in the survey thinking they were not ‘suitable’ e.g. some of them were outside the city during the event while others did not participate in the event at all. Those people claimed that they had little knowledge of the event and would not be helpful in completing the survey. Second, high rate in the refusal to participate is another obstacle in achieving an increased response rate (Tourangeau, 2004). Moreover, though some of the residents consented to provide their emails for the web-survey, the response rate of the web survey was also low (23.3%). Additionally, it was increasingly difficult to collect responses as time passed by after the completion of the event as the memories and feelings of the residents towards the event were fading.

### **Demographic Profile of the Respondents**

A demographic profile of the 86 respondents who participated in the survey is presented in TABLE 8. A slight majority of the respondents were female (60.5%) and the most common age group were those aged 50–59 years (25.6%), followed by those above 60 years old (22.1%). Most respondents have been living in Nanaimo for over 10 years (61.6%), and 20.9% for between 5-10 years. The accessibility of the recreation facilities is perceived overall as being convenient as the majority of the respondents (97.7%) can access the recreation facilities within a 20-minute drive. While 38% of the respondents barely use those facilities (less than once a month or never), 28% of the respondents used them at least once a week and 24.4% used them two to three times a month.

TABLE 8  
*Demographic Profile of the Participants (n=86)*

<b>Characteristic</b>	<b>Frequency</b>	<b>Percent</b>
<b>Gender</b>		
Male	34	39.5%
Female	52	60.5%
<b>Age</b>		
under 20 years old	4	4.7%
20 years old to 29 years old	13	15.1%
30 years old to 39 years old	15	17.4%
40 years old to 49 years old	13	15.1%
50 years old to 59 years old	22	25.6%
above 60 years old	19	22.1%
<b>Year of residence</b>		
less than one year	5	5.8%
1-3 years	3	3.5%
3-5 years	7	8.1%
5-10 years	18	20.9%
over 10 years	53	61.6%
<b>Distance from the recreation facilities</b>		
walk distance / less than 5 minutes' drive	12	14.0%
5-10 minutes' drive	27	31.4%
10-20 minutes' drive	45	52.3%
20-30 minutes' drive	2	2.3%
More than 30 minutes' drive	0	0.0%
<b>Frequency of usage of the facilities</b>		
almost everyday	2	2.3%
once a week	22	25.6%
2 to 3 times a month	21	24.4%
once a month	8	9.3%
less than once a month	21	24.4%
never	12	14.0%

### **Residents' Level of Participation in the Event**

A little over half of the respondents (53.3%) went to the 2014 BC Summer Games or related events primarily to satisfy their own interests, to spend time with family, or to socialize with

friends; while 46.5% of the respondents claimed that they did not go at all (TABLE 9). None of the respondents attended either because they want “to meet new friends” or “to kill time”. Of those respondents who did not participate at all, 45% reported leaving Nanaimo during the games and 55% reported they did not leave town during the event.

TABLE 9

*Resident Level of Participation in the Event*

<b>Residents watch the matches or ceremonies.</b>	<b>53.5%</b>
To satisfy my own interests	36.7%
To spend time with my family	34.7%
To socialize with my friends	18.4%
Other	10.2%
To meet new friends	0.0%
To kill time	0.0%
<b>Residents did not watch the matches or ceremonies.</b>	<b>46.5%</b>
I did not leave the town during the event	55.0%
I left the town during the event	45.0%

**Summary of the FSIAS Results**

The social benefits and costs assessed via the FSIAS were ranked respectively according to the perceived level of impact from high to low (TABLE 10). All 12 social benefit items had a mean score over 2.5 (midpoint on the 5-likert scale), indicating that respondents agreed with all the positive social impacts to some degree. The benefit “the community gaining positive recognition” yielded the highest mean score (M=3.79, SD=1.03), closely followed by “celebration of the community” (M=3.78, SD=1.19). The lowest mean score of the social benefits was “variety of cultural experiences” (M=2.73, SD=1.09). Most of the social costs had a mean score around 2, indicating that respondents felt most of the social costs had little impact on

their community. The negative impact “the community being overcrowded during the event” yielded the highest impact level ( $M=2.45$ ,  $SD=1.16$ ), while the cost “vandalism increasing to unacceptable levels” yielded the lowest mean score ( $M=1.30$ ,  $SD=0.72$ ). Four out of twelve social costs achieved a mean score lower than 2, which means that respondents barely perceived those negative impacts of the event on their community. The correlation values between the items are mostly above 0.3, indicating that most of the items correlate with the scale well (Tabachnick & Fidell, 2001). However, there are several items showing low correlation values with the other items (below 0.2), such as “changing my normal routine during the event”. Further discussion is included in the following sections regarding whether these items should be dropped from the scale.

TABLE 10

*Perceived Social Impacts of the 2014 BC Summer Games (1=not at all, 5=A great deal)*

<b>Variables</b>	<b>Mean</b>	<b>Std. Dev.</b>
<b>Social Benefits</b>		
The community gaining positive recognition	3.79	1.03
Celebration of the community	3.78	1.19
Showing others why Nanaimo is unique	3.60	1.23
Opportunity to experience new activities	3.53	1.23
Enhancing community identity	3.49	1.00
Enhancing image of the city of Nanaimo	3.42	1.07
Feeling pride and recognized when participating in the event	3.28	1.18
Having positive cultural impacts on Nanaimo	3.16	1.21
Learning new things	3.08	1.35
The event acting as a showcase for new ideas	2.88	1.02
Increasing community well-being (such as community cohesion)	2.85	1.07
Variety of cultural experiences	2.73	1.09
<b>Social Costs</b>		
The community being overcrowded during the event	2.45	1.16
An unequal distribution of power among groups in the community	2.37	1.06
Delinquent activity increasing to unacceptable levels	2.35	1.18
Noise level increasing to unacceptable levels during the event	2.29	1.32
A decreased sense of community involvement	2.23	0.97
Public recreational facilities being overused during the event	2.17	0.98
Changing/disrupting my normal routines during the event	2.05	0.91
Traffic increasing to unacceptable levels during the event	2.03	1.13
Intrusion into local residents' lives	1.80	1.11
Crime increasing to unacceptable levels	1.67	0.71
Feeling less privacy because of increasing visitors	1.51	0.89
Vandalism increasing to unacceptable levels	1.30	0.72

### **Overall Satisfaction with the Community and the Event**

Overall resident satisfaction with the community and the 2014 BC Summer Games are presented in TABLE 11. Most respondents were very satisfied with their living in Nanaimo (M=4.74, SD=0.49). The majority of the respondents agreed that the event met their overall expectation (M=3.93, SD=0.73), while some of them hold different views, yielding the highest

deviation value among the four items. The majority of the respondents felt the positive social impacts were fairly spread within the community ( $M=3.85$ ,  $SD=0.58$ ), while the respondents tend to remain ambivalent towards the distribution of the costs ( $M=2.90$ ,  $SD=0.70$ ).

TABLE 11  
*Overall Satisfaction with the Community and the Event*

<b>Variables</b> (1=strongly disagree, 3= no opinion, 5=strongly agree)	<b>Mean</b>	<b>Std. Dev.</b>
I enjoy living in Nanaimo.	4.74	0.49
The 2014 BC Summer Games overall met my expectations.	3.93	0.73
I think the positive social impacts of the 2014 BC Summer Games have been spread throughout the community.	3.85	0.58
I think the negative social impacts of the 2014 BC Summer Games have been spread throughout the community.	2.90	0.70

### **Factor Analysis of the FSIAS**

In order to understand resident perceptions towards social impacts of the community sports event, factor analysis was applied to the items of the FSIAS scale by using IBM SPSS version 22.0. Despite the low response rate to the survey, the sample of this research is considered to be acceptable for a factor analysis. According to Arrindell and van der Ende's (1985), the subject-to-variables (STV) ratio for a factor analysis should be best range from 3 to 6, while the STV ratio of the current research is 3.58.

Factor analysis is the most common and useful means to uncover the underlying structure of a set of variables (Tabachnick & Fidell, 2001). A reliability analysis was first undertaken to purify the scale items and screen the sample. Common factor analysis using principal axis factoring was utilized to identify the dimensions of the scale. Principal axis factoring is employed because it performs well with a simple factor pattern and helps present weak factors

(Winter & Dodou, 2012). In order to allow correlated factors and to achieve the best factor structure, oblique rotation using the direct oblimin approach was used. Pairwise deletion was used to deal with the missing data. A four-factor solution was determined to explain 46.63% of variance.

Cronbach's Alpha reliability test was conducted to screen the sample and to assess the internal consistency of the scale. An item is considered not reliable for further factor analysis if it shows a higher Cronbach's value after deleted than the overall value. A total of 19 out of 24 items survived the test and were then submitted to a common factor analysis. The Cronbach's Alpha rose to 0.824 from 0.790 after deletion of these 5 items. Deleted items were "changing/disrupting my normal routines during the event", "public recreational facilities being overused during the event", "an unequal distribution of power among groups in the community", "intrusion into local residents' lives", and "noise level increasing to unacceptable levels during the event". Additionally, deletion improved the KMO value from 0.695 (24 items) to 0.757 (19 items), indicating appropriate sampling adequacy for a factor analysis (above 0.70).

The factor loadings were used to determine factor components and naming of the factors. Studies suggest that variables which load equal or higher than 0.3 are reliable to be interpreted (Tabachnick & Fidell, 2001). A four-factor solution was determined to be the best description of variance and is presented in TABLE 12. The table compressed loading values below 0.3 to make the table more readable. The values of communalities ( $h^2$ ) indicate the percentage of each variables explained by the factors (Tabachnick & Fidell, 2001). The results suggest that the

factor analysis does the best in explaining “Celebration of the community”, “Enhancing image of the city of Nanaimo”, “Feeling less privacy because of increasing visitors”, and “Showing others why Nanaimo is unique”.

TABLE 12  
*Alpha Values and Factor Loadings - FSIAS Analysis*

	<b>F1</b>	<b>F2</b>	<b>F3</b>	<b>F4</b>	<b>h2</b>
Enhancing image of the city of Nanaimo	0.85				0.65
Showing others why Nanaimo is unique	0.67				0.55
Enhancing community identity	0.56				0.50
Opportunity to experience new activities	0.55				0.39
Learning new things	0.54				0.36
Having positive cultural impacts on Nanaimo	0.38				0.37
The community gaining positive recognition	0.38				0.38
Feeling pride and recognized when participating in the event	0.33				0.44
Feeling less privacy because of increasing visitors		0.72			0.57
Traffic increasing to unacceptable levels during the event		0.66			0.44
Vandalism increasing to unacceptable levels		0.64			0.49
The community being overcrowded during the event		0.58			0.38
Delinquent activity increasing to unacceptable levels		0.35			0.46
The event acting as a showcase for new ideas			0.66		0.50
Variety of cultural experiences			0.59		0.53
Increasing community well-being			0.59		0.37
Celebration of the community			0.40		0.74
A decreased sense of community involvement				0.65	0.42
Crime increasing to unacceptable levels				0.46	0.35
Eigenvalues	5.05	2.07	1.02	0.71	
Explained Variance (%)	26.60	10.92	5.35	3.75	
Reliability of Total 20 Items: 0.824.					
Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO): 0.757					

Extraction Method: Principal Axis Factoring.

Rotation Method: Oblimin with Kaiser Normalization.

A Rotation converged in 10 iterations.

*Coefficient < 0.30 suppressed; Communalities (h2); Total Variance explained 46.63%*

Factor 1, “community identity and civic pride”, addresses the issues related to the positive

social impacts of enhancing community identity and an increasing sense of community pride among the community members. These include impacts such as showing the uniqueness of the community, the community being more recognized, and the community members feeling pride when participating in the event. Having new experiences and learning new things are also considered important aspects of raising residents' pride and generating a unique image of the community.

Factor 2, "personal frustration", consists of the items that address the issues of negative social impacts affecting residents on individual levels. This factor include impacts such as overcrowding during the event, traffic congestion, increased delinquent activity, and decreased sense of privacy which are closely related to residents' daily life. Particularly, these impacts often result from an increasing amount of visitors during the event. This might be one major reason why some residents are resistant to host events in their community because such problems usually influence their normal routines whether they participate in the event or not.

Factor 3, "community well-being and cohesion", summarizes the beneficial social impacts of the event on community overall. There are opportunities to share new ideas, experience other cultures, increase community cohesion and generate a celebratory atmosphere. As the descriptions of these impacts, such social impacts do not have a direct effect on residents' life but influence the host city in a broader and more abstract way.

Factor 4, "loss of community control", reflects one aspect of the negative social consequences perceived by residents. Variables in this factor include a sense of losing adequate

community involvement and increased crime. Differentiated from “personal frustration”, the impacts in this factor affect the community in general instead of on a personal level. As the BC Summer Games relies heavily on sponsors and the public for funding, residents may feel that they lost power when determining how the community was going to support the events. Therefore, this factor is named to describe the sense of the community losing control and the impact on their perceived opportunities for involvement.

### **Split Loadings**

Although a four-factor solution was determined as the best underlying structure for the scale, there are two items loaded on more than one factor. As stated above, items with factor loading value greater than 0.3 can be interpreted as a component of the factor (Tabachnick & Fidell, 2001). Those items which have a loading value bigger than 0.3 on more than one factor are considered as split loading items. Split loadings of the items indicate that one item is probably complex in its meanings and can be interpreted into more than one factor.

“Having positive culture impacts on Nanaimo” loaded both onto factor 1, community identity and civic pride (0.38), and factor 3, community well-being and cohesion (0.32). When local culture is commodified and presented to event tourists, residents will feel an increased sense of pride (Cole, 2007). Meanwhile, an event is able to provide opportunities to better understand and preserve local culture (Lorde et al., 2011), which can benefit the overall quality of life of various cultural groups. This might be the reason why some of the respondents deem the impact as a contributor to community well-being.

“Celebration of the community” has a factor loading higher than 0.3 on factor 1 (0.33), factor 3 (0.40), and factor 4 (0.36). There is little doubt that the theme of celebration is rooted in almost every event and festival. Such celebrations also provide a stage to enhance group identity, which is crucial for social cohesion being further raised (Rao, 2001). This is why staging events can be important for community cohesion. Additionally, the atmosphere of celebration was viewed by some respondents as a unique occasion when the city is able to present its uniqueness to outsiders. However, the variable might be also a negative social impact as celebrations can also bring increased event tourism, resulting in a sense of community loss to the locals.

### **Inter-correlations Between Factor Scores**

Inter-correlations between the factor scores should be checked in order to ensure the accuracy of the analysis (Tabachnick & Fidell, 2001). There are nine answers missing in the social impact evaluation section in total. Given the small sample in the research, the correlation value between the factors is checked. TABLE 13 shows the correlation scores of the factors extracted. Cohen (1988) suggested a value above 0.50 representing a strong correlation. None of the factors show strong relationships with another. The largest correlation was found between factor 1 “Community identity and civic pride” and factor 3 “Community well-being and cohesion” (0.419). Factor 1 “Community identity and civic pride” and factor 4 “Loss of community control” also show a moderate correlation with each other, illustrating a correlation value of 0.370. A very modest correlation is found between factor 3 and factor 4 (0.194). The rest of the correlation between the other factors is weak as they all have a correlation score below

0.15.

Table 13

*Factor Correlation Scores (n=86, pairwise deletion)*

<b>Factor</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
1. Community identity and civic pride	-	-	-	-
2. Personal frustration	0.040	-	-	-
3. Community well-being and cohesion	0.419	0.047	-	-
4. Loss of community control	0.370	0.068	0.194	-

*Strength of the correlation: Strong= .50-.80; Moderate= .30-.50; Modest= .15-.30; Weak < .15*

### **Resident Perceptions of Social Impacts Among Various Groups**

#### **Cluster Profiles**

Cluster analysis was applied to identify sub-groups within the community. The analysis used a two-step method on a range of behavioral and demographic variables. Distance likelihood was used to cope with missing values. Out of 10 selected clustering variables, eight key variables showed validity in identifying the sub-groups. Two variables, “overall satisfaction of living in the community” and “support for future events”, were omitted from the analysis. The importance level of both variables was too high that they end up dominating the clustering and left other variables useless. The result of two dominating variables is due to most respondents selecting the same answer for these two questions. In order to allow better description of the attributes of the groups, such high importance variables were removed.

Three-, four-, and five-cluster solutions were tested, and the four-cluster solution was chosen as the most appropriate in distinguishing the sample of the respondents. The profiles of the four clusters across the key variables are presented in TABLE 14. Variables are listed by predictor

importance from the most important (imp=1) to the least important (imp=0), indicating how well the variables can differentiate the groups. The four clusters are labeled according to their key variables as “*Active Participants*”, “*Avoiders*”, “*Passive Participants*”, and “*Volunteers*”.

TABLE 14  
*Cluster Profiles*

	<b>Cluster 1</b>	<b>Cluster 2</b>	<b>Cluster 3</b>	<b>Cluster 4</b>
<b>Cluster Membership (n)</b>	30	18	20	18
<b>Percentage (%)</b>	34.9%	20.9%	23.3%	20.9%
<b>Attendance (imp=1)</b>				
yes	65.2%	0.0%	19.6%	15.2%
no	0.0%	45.0%	27.5%	27.5%
<b>Facility usage frequency (imp=0.83)</b>				
almost everyday	100.0%	0.0%	0.0%	0.0%
once a week	22.7%	9.1%	59.1%	9.1%
2 to 3 times a month	61.9%	19.0%	19.0%	0.0%
once a month	75.0%	12.5%	0.0%	12.5%
less than once a month	4.8%	19.0%	14.3%	61.9%
never	25.0%	58.3%	0.0%	16.7%
<b>Volunteered at the event (imp=0.70)</b>				
yes	74.1%	0.0%	0.0%	25.9%
no	16.9%	30.5%	33.9%	18.6%
<b>Age (imp=0.64)</b>				
under 20	75.0%	0.0%	25.0%	0.0%
20 to 29	76.9%	7.7%	15.4%	0.0%
30 to 39	46.7%	20.0%	33.3%	0.0%
40 to 49	38.5%	15.4%	46.2%	0.0%
50 to 59	13.6%	9.1%	18.2%	59.1%
above 60	10.5%	52.6%	10.5%	26.3%
<b>Gender (imp=0.63)</b>				
female	25.0%	7.7%	32.7%	34.6%
male	50.0%	41.2%	8.8%	0.0%
<b>Length of residency (imp=0.43)</b>				
less than one year	40.0%	0.0%	40.0%	20.0%
1-3 years	33.3%	0.0%	66.7%	0.0%
3-5 years	0.0%	0.0%	85.7%	14.3%
5-10 years	72.2%	27.8%	0.0%	0.0%
over 10 years	26.4%	24.5%	18.9%	30.2%

**Overall satisfaction (imp=0.22)**

no opinion	15.4%	42.3%	15.4%	26.9%
agree	40.0%	12.5%	22.5%	25.0%
strongly agree	50.0%	10.0%	35.0%	5.0%

**Distance to the facilities (imp=0.16)**

walk distance / less than 5 minutes' drive	33.3%	25.0%	41.7%	0.0%
5-10 minutes' drive	44.4%	29.6%	0.0%	25.9%
10-20 minutes' drive	31.1%	13.3%	33.3%	22.2%
20-30 minutes' drive	0.0%	50.0%	0.0%	50.0%

*Note: imp refers to predictor importance.*

**Active Participants (Cluster 1)**

The important variables that differentiate Cluster 1 from all other clusters are listed in TABLE 15. 34.9% of the respondents were clustered into this sub-group. The two most distinguishing features of Cluster 1 are that the entire cluster attended the event and the majority volunteered for it. This cluster represented the highest level of participation among the four clusters. They are not only interested in experiencing the event but also took initiatives in supporting it by contributing their time and energy to ensure its success. This is why they were labelled as *Active Participants* who distinguish themselves from other participants. They also showed the highest level of satisfaction towards the event. As the youngest cluster, the members also use the public facilities the most frequently though they are not the ones who live the closest by the facilities. This might be an important reason why a lot of them volunteered because most of the volunteer recruitment took place in these facilities.

TABLE 15  
*Key Variables Differentiating Cluster 1*

Key Variables	Distinguished Characteristic
Attendance	Entire cluster attend the event
Facility usage	The most frequent among the four clusters
Volunteered	Majority volunteered at the event
Age	The majority is aged 29 and below
Residency length	Mostly 5 to 10 years
Overall satisfaction	Mostly very satisfied with the event
Distance to the facilities	Entire cluster less than 20-minute drive

### **Avoiders (Cluster 2)**

The variables that best distinguished Cluster 2 are presented in TABLE 16. Members of this cluster consist of residents who have a relatively low connection to the event, representing 20.9% of the sample. They have little interest in the event and tend to minimize any impacts from the event by avoiding it. The entire cluster did not participate in the event nor did they volunteer. Thus, a high proportion reported no opinion about their overall satisfaction with the event. The *Avoiders* are the oldest cluster and show the lowest frequency in facility usage. All the members have been living in the community for more than 5 years.

TABLE 16  
*Key Variables Differentiating Cluster 2*

Key Variables	Distinguished Characteristic
Attendance	Entire cluster did not attend the event
Facility usage	The majority barely use the facilities
Volunteered	Entire cluster did not volunteer
Age	Oldest cluster
Gender	Mostly male
Residency length	Entire cluster live in the community more than 5 years
Overall satisfaction	Mostly hold no opinion to overall satisfaction

### Passive Participants (Cluster 3)

TABLE 17 shows the variables best differentiating Cluster 3. This cluster accounted for 23.3% of the total sample. Though labelled as participants as well, *Passive Participants* have some characteristics that distinguish them from *Active Participants*. They are not as keen as *Active Participants* in involving into the event. No one in this cluster volunteered at the event and only less than half of the members participated in the event as attendees. It was found that Cluster 3 held a certain degree of interest in the event and the majority are satisfied with the event, however they might be unable to volunteer or more fully participate in the event. This cluster is mostly composed of middle aged residents between 30 to 49 years of age while *Active Participants* are mostly in their early twenties. Members of this cluster tend to live close by the public facilities and use the facilities on a regular basis (once a week).

TABLE 17  
*Key Variables Differentiating Cluster 3*

Key Variables	Distinguished Characteristic
Attendance	Some of the cluster attended the event
Facility usage	Usually once a week
Volunteered	Entire cluster did not volunteer
Age	Widest age from 40 to 49
Gender	Mostly female
Residency length	The majority around 3 to 5 years
Overall satisfaction	The majority are satisfied
Distance to the facilities	Either walk or take 5 to 10 minutes' drive

### Volunteers (Cluster 4)

The fourth cluster accounted for 20.9% of the respondents and its distinguished characteristics are shown in TABLE 18 below. Cluster 4 consists of respondents who are very

enthusiastic in volunteerism but have little to no opinion on the level of satisfaction towards the event. Though most members of this cluster did not attend the event, most of them dedicated their time in volunteering for the event despite it taking more than 20 minutes' drive for most of them to get access to the facilities. That's why the cluster was named as the *Volunteers*. The members can be described as aged in their fifties and have been living in the community for over 10 years. They also use the facilities infrequently.

TABLE 18  
*Key Variables Differentiating Cluster 4*

Key Variables	Distinguished Characteristic
Attendance	Most of the cluster did not attend the event
Facility usage	Mostly less than once a month
Volunteered	Most of the cluster volunteered
Age	Majority aged 50 to 59
Gender	Mostly female
Overall satisfaction	The majority tend to agree or hold no opinion
Distance to the facilities	Majority takes 20-30 minutes' drive

### Perceptions of the Social Impacts Among the Clusters

The mean impact level for each factor by each cluster is presented in TABLE 19 below.

*Passive Participants* perceive the highest level of impacts in the two positive factors, “community identity and civic pride” and “community well-being and cohesion”, followed by *Volunteers* in both factors. The differences of the attitudes between different clusters tend to be moderate, which may be due to the small scale of the event. Surprisingly, *Active Participants* did not score the highest in the mean impact level for the two positive factors though most of the members are enthusiastic about the event. The reason behind this may be that *Active Participants*

attended and volunteered the event mainly out of personal interests. Therefore they are not as concerned about the social impacts, while *Passive Participants* may evaluate the social impacts more objectively. *Avoiders* perceived lower positive impacts than the other clusters and they reported the lowest negative impact from the factor of “personal frustration”. *Volunteers* also showed less negative attitudes towards personal frustration from the event. Unlike all the other clusters, *Avoiders* perceived the highest impact of “loss of community control”.

TABLE 19

*Cluster Means on Each of the Social Impact Items (1=not at all, 5=A great deal)*

	Active Participants	Avoiders	Passive Participants	Volunteers
<b>Community identity and civic pride</b>	<b>3.34</b>	<b>3.24</b>	<b>3.73</b>	<b>3.40</b>
Enhancing image of the city of Nanaimo	3.53	3.00	3.65	3.39
Showing others why Nanaimo is unique	3.60	3.22	4.00	3.56
Enhancing community identity	3.30	3.41	3.75	3.61
Opportunity to experience new activities	3.43	3.67	3.50	3.61
Learning new things	3.03	2.89	3.55	2.83
Having positive cultural impacts on Nanaimo	3.07	3.17	3.35	3.11
The community gaining positive recognition	3.57	3.56	4.30	3.83
Feeling pride and recognized when participating in the event	3.20	3.00	3.70	3.22
<b>Personal frustration</b>	<b>2.11</b>	<b>1.73</b>	<b>2.00</b>	<b>1.75</b>
Feeling less privacy because of increasing visitors	1.70	1.33	1.75	1.11
Traffic increasing to unacceptable levels during the event	2.27	1.67	2.30	1.72
Vandalism increasing to unacceptable levels	1.40	1.17	1.50	1.06
The community being overcrowded during the event	2.80	1.83	2.25	2.72
Delinquent activity increasing to unacceptable levels	2.40	2.67	2.20	2.12
<b>Community well-being and cohesion</b>	<b>2.93</b>	<b>2.87</b>	<b>3.43</b>	<b>3.06</b>
The event acting as a showcase for new ideas	2.93	2.72	3.21	2.61
Variety of cultural experiences	2.57	2.61	3.00	2.83
Increasing community well-being	2.70	2.83	3.25	2.67
Celebration of the community	3.53	3.33	4.25	4.11
<b>Loss of community control</b>	<b>2.00</b>	<b>2.11</b>	<b>1.75</b>	<b>1.95</b>
A decreased sense of community involvement	2.13	2.50	2.05	2.33
Crime increasing to unacceptable levels	1.87	1.72	1.45	1.56

### Resident Perceptions of the Event – Qualitative Results

This section presents the results of the open-ended questions and other comments from the questionnaire survey. The discussion is derived from the responses of the question which asked why respondents want to hold the event in the community again or why not. Among all the respondents, 86% of them would like to see the event hosted in the community again. 72 respondents in total provided their reasons (84%). The answers are divided into several themes in TABLE 20 and discussed below.

TABLE 20

#### *Reasons for Staging or Not Staging the Event Again*

<b>Residents would like to see the event hosted in their community again</b>	<b>86.0%</b>
People who participated into the event had a good time	31.8%
Hosting the event can bring the community together	23.8%
Nanaimo has the capability to host such events	20.9%
Such events do good to foster young people's sport spirit	16.2%
Residents do not feel any interruption in daily life during the event	8.4%
<b>Residents do not want to see the event hosted in their community again</b>	<b>14.0%</b>
Too much effort and time is needed to prepare the event	57.8%
It is difficult to recruit volunteers	33.0%

#### Positive Perceptions Towards the Event

There are five reasons given for wanting to host the event in their community again. Firstly, about one third of the respondents stated that their further support comes simply from their good experiences when participating in the event. Secondly, 23.8% of respondents acknowledged the social benefits from the event as bringing the community together. One respondent noted that *“the event is a great opportunity for people to get involved in the community. The event is*

*interesting and enjoyable. I like it.*” Thirdly, 20.9% of respondents think the community has the capability and adequate facilities for such events, and fourthly, the event is considered to play an important role in fostering sport spirit in the young generation. Finally, 8.4% of respondents said that they do not feel any inconvenience from the event so they would not mind having the event in the community again.

### **Negative Perceptions Towards the Event**

Two main reasons were given for why the residents do not want the community to host the event again. The most mentioned reason is that they feel a lot of time and effort is need to prepare the event (57.8%). Secondly, around one third of the respondents think that it is really difficult to recruit volunteer for such events for a community like Nanaimo. One respondent noted that *“the kids enjoyed the Games. (I would love to see the event being host here again), but not in recent years. It is a lot of work, and it is hard to get Volunteers. Nanaimo should host the Games maybe after 3 more years.”* It is noteworthy that barely any respondent stated any potential social costs as a main reason why they refused to stage the event again in the community.

## CHAPTER 5

### DISCUSSION AND CONCLUSIONS

This research aimed to examine the social impacts of a sports event on a host community through the perspective of local residents to help provide better event management that maximizes the positive impacts on host communities and minimizes the negative ones. It is important to not neglect the social benefits and costs of events because such impacts can have significant and profound influences on host communities, especially on local daily lives (Delamere et al., 2001; Sims & D’Mello, 2005). Moreover, community support has been increasingly recognized as an indispensable element in successful event management (Moscardo, 2007). The following objectives were followed to fulfill the research aim:

1. to explore resident perception of the social impacts of a multi-sport event;
2. to understand the underlying dimension of the social impacts of the BC Summer Games on the residents of Nanaimo;
3. to explore the differences in perceptions towards the social impacts across socio-demographic variables (e.g. length of residency, willingness to hold the event again);
4. to confirm the factor structure and assess the internal consistency of the FSIAS under a new context;
5. to provide recommendations to event organizers (such as the BC Games Society) and community leaders to help improve event management in the future.

Data was collected through questionnaire surveys to assess resident perceptions of the 2014

BC Summer Games in Nanaimo. Perceptions of the social impacts were evaluated using questions based on the Festival Social Impact Attitude Scale (FSIAS) (Delamere et al., 2001), general feelings of the event and the community, as well as demographic information. Overall, residents perceived some degree of social impacts and very little social costs. Four factors were identified among the social impacts, namely Community identity and civic pride, Personal frustration, Community well-being and cohesion, and Loss of community control. Four types of respondents were identified who held varying attitudes towards those social impacts: *Active Participants*, *Avoiders*, *Passive Participants*, and *Volunteers*. The findings confirm the internal consistency of the FSIAS when applied in the post event evaluation of other types of events.

This chapter summarizes the key findings from the data analyses, and also compares the findings of the current research with that of related previous studies. The first section concludes residents' overall perceptions towards the social impacts of the event based on both quantitative and qualitative responses. The second section presents the underlying structure of the social impacts of the FSIAS specifically in community sport events. The third section discusses the differences in perceptions between different community segments. Then, the consistency of the FSIAS scale as an assessment tool in this research is presented. Lastly, recommendations for event organizers and further research suggestions are offered.

### **Resident Perceptions of the Social Impacts of Sports Events**

In general, Nanaimo residents perceived both positive and negative social impacts stemming from the 2014 BC Summer Games. The majority of the respondents showed a high level of

satisfaction towards the event. From interpreting the means of each social impact item, respondents indicated a moderate level of social benefits ( $M=3.30$ ) and a fairly low level of social costs ( $M=2.02$ ). The respondents agreed that the social benefits have been spread throughout the community, while they tended to hold no opinion on the distribution of the social costs.

Two major conclusions can be drawn regarding the positive social impacts of community sports events. Firstly, the importance of events as a marketing tool is applicable to community sports events (Jago et al., 2003). Respondents regarded the recognition of the host community gained through the event as the most visible benefit to them ( $M=3.79$ ). Similar results of promoting destination image were also found at cultural events (Delamere, 2001; Small, 2007) as well as mega-sports events (Whitson & Horne, 2006). Secondly, respondents perceived greater community benefits compared to individual benefits. For example, respondents tended to perceive greater beneficial impact from the showcase of the community ( $M=3.60$ ) than opportunities to learn and experience new things through the event ( $M=3.08$ ). Fredline et al. (2003) and Kim and Walker (2012) reached similar conclusions at both cultural festivals and large-scale sports events.

On the other hand, most respondents perceived only minor, if any, social costs associated with the event. Overcrowding during the event was regarded as the greatest social cost, but the impact was minimal ( $M=2.45$ ). Respondents did not perceive the typical negative impacts of a lack of privacy or increased vandalism as social costs resulting from the event. One possible

explanation can be that the scale of such community sports events tend to be medium or small so that the overall impact appears to be minor compared to other larger scale events. An alternative reason can be because of the type of the participants at such events. As mentioned above, the 2014 BC Summer Games is a sports event that provides development opportunities for young athletes. Unlike mega-sport events which attract event tourists from all over the world, young local athletes account for the majority of the event tourism for this event. Most of the activities for those “tourists” are often organized beforehand by the organizer, such as accommodation and catering. Thus, with those arrangements, it is less likely that locals will feel too disturbed by the event.

Two other conclusions can be drawn based on responses to the open-ended questions. Firstly, the majorities of the residents in Nanaimo showed their supportiveness to future events and were willing to be a host destination for the event again. Respondents felt that the 2014 BC Summer Games brought more social benefits to their community than the costs and also expressed a sense of pride in showing others the capability of the community. This finding is in accordance with respondents’ feeling of the community being recognized and increased civic pride through the event. Secondly, the reason why a few respondents showed resistance to hold the event again is mainly due to their concerns that the organizers might face difficulties when staging the event in such small communities, such as the limited resources the community can provide and difficulties in recruiting enough Volunteers. The potential social costs are not the main reason why some residents are against staging the event again. Some of the respondents who do not

want the community to host the event again claimed that there is little interference on their daily life from the event. This is similar to the findings based on FSIAS that showed minimal feelings of “intrusion into residents’ life” and “changing normal routines”.

### **Impact Dimensions of the FSIAS at the BC Summer Games**

Factor analysis identified five social impact factors of community sports events: (1) community identity and civic pride, (2) personal frustration, (3) community well-being and cohesion, and (4) loss of community control. Factors 1 and 3 represent the social benefits and factors 2 and 4 represent the social costs. TABLE 21 presents the similarities as well as the differences between the factor dimensions identified in this and previous research (Delamere, 2001; Fredline et al., 2003; Small, 2007).

TABLE 21  
*Factor Comparisons*

<b>This Study</b>	<b>Delamere (2001)</b>	<b>Fredline et al. (2003)</b>	<b>Small (2007)</b>
<b>Positive social impacts</b>			
Community identity and civic pride	Individual benefits (sub-factor)	Social and economic development benefits	Community identity and cohesion
Community well-being and cohesion	Community benefits (sub-factor)		Entertainment and socialization opportunities, Community growth and development
<b>Negative social impacts</b>			
Personal frustration	Amenity loss (sub-factor)	Concerns about injustice and inconvenience Bad behavior and environmental impacts	Inconvenience, Personal frustration Behavioral consequences
Loss of community control	Loss of community control (sub-factor)		
<b>Other impacts</b>			
		Impact on facilities, Impact on selected goods and services	

Overall, the factor structure identified in the research exhibits a large degree of similarities with the social factors identified in previous studies. The findings suggest that residents from host communities perceive both social benefits and social costs from a community sports event. Host communities gain more exposure and become more recognized via staging such events (De Bres & Davis, 2001; Derrett, 2003). However, along with the enhanced place image and increased civic pride, residents may also feel the frustration of the inconvenience and changing environment mainly due to the influx of event tourism (Dwyer et al., 2000). Although the four social factors show slight differences from the social impact factors identified in other contexts in previous studies, a community sports event can have similar social consequences compared to

hosting other types of events such as cultural festivals. But the negative impacts do appear to be minor in this community sports event.

The primary reason for the difference in findings in this study compared to others is that the current research emphasized only on the social impacts of events. Previous researchers had wider lenses while analyzing the impacts of an event. Fredline et al.'s (2003) research measured both social and economic impacts while Small (2007) assessed the socio-cultural impact. This study's settings were also different from the previous studies. Both previous studies measured the impacts in the context of cultural festivals, such as the 2002 Melbourne Moomba Festival (Fredline et al., 2003) and in contemporary Australian music festivals (Small, 2007), while the current research assessed a community sports event.

It is noteworthy that the factors identified in this research are different from those identified in Delamere's (2001) although both assessed the social impacts using the FSIAS. The four factors in this research show more similarities to that of Small (2007) than that of Delamere (2001). Factor wording might be one reason that leads to the differences as Delamere (2001) termed the social impacts of festivals broadly into two aspects, the social benefits and the social costs, while the current research found four dimensions for the structure of the social impacts. Another important reason is that the items included in each factor are different from that in Delamere (2001). Five items from the original FSIAS were excluded in the analysis as they were not reliable in identifying factors.

### **Identifying Community Groups with Differing Perceptions of Social Impacts**

Four clusters were identified in this research whose attitudes differ toward the social impacts of the 2014 BC Summer Games, namely *Active Participants* (34.9%), *Avoiders* (20.9%), *Passive Participants* (23.3%), and *Volunteers* (20.9%). They were distinguished based on a series of behavioral variables and demographic variables, including attendance, overall satisfaction of the event, the frequency of facility usage, volunteerism, gender, age, length of residency, and distance to the public facilities.

Based on the cluster analysis, some similarities and differences exist among the four community subgroups regarding their perceptions of the social impacts of community sports events. The response patterns were found by comparing the means of each social impact factor across each subgroup. TABLE 22 presents the patterns and the means of the different perceptions and how they differ across the five social impact factors.



frustration while rating the least negative social impact on the community as a whole. Mostly middle aged, the members in this cluster are very likely to have limited personal time to fully participate in the event. This might explain why the costs such as increasing traffic are more visible to them than the impacts on the community.

The *Active Participants*, in which most of the members both attended and volunteered in the event, show the highest enthusiasm towards the event. Surprisingly, this group holds merely a moderate view towards the positive impacts. Their participation may have made them perceive limited beneficial effects of the event on the community as the scale of the event was not as big as other sports events. Meanwhile, they tended to have strong opinions toward the negative social impacts, assigning the most negative ratings on personal frustration and the second highest when it comes to loss of community control. Their passion for such community events may explain why they have comparably higher ratings on the negative impacts as they seem to care the most about the event among the four clusters.

Amongst the four clusters, the *Volunteers* held a moderate view on both social benefits and social costs. They assigned the second highest on both positive social impacts and the second lowest on both negative impacts. The members gain an increased sense of community identity and enhanced community cohesion via their volunteerism as well as perceive a certain degree of social costs. Their moderate feeling towards the social impacts is because the members care more about the volunteerism than the event itself.

In general, the *Avoiders* held the most negative view towards the positive social benefits while the *Passive Participants* hold the most positive views towards them. The *Active Participants* felt the most negative towards personal frustration and the *Avoiders* felt the highest negative impact of losing community control. Some similarities are found between the results regarding clustering resident response patterns in the current research and previous research (Davis, Allen, & Cosenza, 1988; Fredline & Faulkner, 2002; Ryan & Montgomery, 1994; Small, 2007; Williams & Lawson, 2001). One similar pattern is that the research identified a neutral cluster (*Volunteers*) which holds neither most negative nor most positive views towards the impacts. The *Volunteers* have similar response pattern with previous research, such as “in-betweeners” (Davis et al., 1988), “ambivalent” (Fredline & Faulkner, 2002), and “middle roader” (Ryan & Montgomery, 1994). While these clusters were labelled based on their neutral perceptions, *Volunteers* were labeled based on the members being keen on volunteerism. The labeling also distinguished the cluster from the others in terms of the level and the means of their participation to the event. Also, *Active Participants* in the current study show some similarities to the “Cautious Romantics” (Davis et al., 1988) as they both appreciate the benefits to some degree while have some concerns toward the negative impacts. Another parallel finding is that the current research also identified one cluster (*Avoiders*) that are the most negative among the clusters. This resembles the cluster identified in previous research such as “somewhat irritated” (Ryan & Montgomery, 1994), “cynics” (Williams & Lawson, 2001), “most negative” (Fredline & Faulkner, 2002), and “the avoiders” (Small, 2007).

Differences also exist among the clusters between the current research and the previous ones. While in the previous research (Davis et al., 1988; Ryan & Montgomery, 1994; Williams & Lawson, 2001), the clusters were identified in terms of whether they agree or object to tourism development. The informants in those researches were not necessarily involved in the development procedure. However, when it comes to events, residents at the destination often attend the event as participants or volunteer. Their levels of participation usually reflect to a degree their feelings about the event. Therefore, labelling of the clusters is different and the current research labelled the clusters based on more than their points of views.

Furthermore, the clusters in the current research showed a mix of attitudes toward the benefits and the costs. This is also different compared to previous event research (Fredline & Faulkner, 2002; Small, 2007). Fredline & Faulkner (2002) divided the segmentations in terms of their attitudes from “most negative” to “most positive”, and in Small’s (2007) research, two extreme clusters were identified, “the avoiders” as the most negative and “the volunteers” as the most positive. Though the name of the clusters and the chosen descriptive variables showed some similarities between the current research and Small’s (2007) research, the attitudes within the similar clusters were different. Firstly, “the avoiders” in Small’s (2007) research showed the most negative ratings for both positive and negative impact while the *avoiders* in the current research are most negative towards positive impacts but somewhat less negative about the negative impacts as they tried to minimize the costs by avoiding attending the event. Secondly, “the volunteers” identified by Small (2007) are a group of people who are enthusiastic and most

positive about the event. But the same cluster in the current research showed ambivalent attitudes as they are simply passionate for volunteerism and not so much for the event itself. Lastly, “the attendees” from Small (2007) are the second most positive cluster, while the current research identified two types of attendees, *active* and *Passive Participants*. The *Passive Participants* are generally more positive than the *Active Participants*, and the *Active Participants* hold comparably negative attitudes toward the social costs.

### **Consistency and Internal Validity of the FSIAS**

The research assessed resident perceptions of the social impacts of events using the Festival Social Impacts Attitude Scale (FSIAS) (Delamere et al., 2001). Despite several uses and validations of the scale, this is the first time that the scale was used in a post-event evaluation of a community sports event. Thus, this section discusses the strengths and weaknesses of applying the scale in a new context.

The FSIAS allows residents to evaluate the social consequences that may occur from events on host communities. Current research suggests that overall the FSIAS is applicable for the assessment of the social impact of community sports events. The number of factors identified in this research is four while two factors including four sub-factors were identified in Delamere (2001). Though the number of factors differs, the content of the social impact factors in this research are generally comparable to the previous study, especially when comparing to the sub-factors. Delamere (2001) had a higher reliability value of 0.951 using 25 items while this research had a reliability of 0.824 using 19 items. Total variance explained was 62.8% in

Delamere (2001) while this research explained less at 46.62% of the variance. Delamere (2001) also found a higher KMO value of 0.88 compared to 0.76 in the current research. These lower scores compared to Delamere (2001) may be due to the relatively small sample size in this research. However, the overall performance of the scale on a community sports event is still fairly good according to the reliability and KMO values (Tabachnick & Fidell, 2001). Findings also suggest that the scale is validated in a 5-point Likert scale measuring resident perceptions on each item's level of impact. The factor structure of the current research is reasonable and is comparable to previous implications. Similar results were also achieved under a 7-point Likert scale by Woosnam et al. (2013). This shows the scale is very versatile when evaluating in conjunction with different measurement methods. Additionally, the findings show that the FSIAS is valid at assessing post-event evaluations. Previous applications of the FSIAS were mostly pre-event tests even though the scale was not originally designed for pre-event assessment only. Particularly in this research setting in which the BC Summer Games have already been hosted twice before in the same community, it is hard to determine whether it is a pre- or post-evaluation. The scale showed a fairly good performance in testing resident perception of the social consequences after the event.

This research proposes some improvements to the use of the FSIAS on a community sports event. Findings indicate that items of the scale can be adjusted in order to better fit the new settings of community sports events. The existing items, including “changing/disrupting my normal routines during the event”, “public recreational facilities being overused during the

event”, “intrusion into local residents' lives”, “noise level increasing to unacceptable levels during the event”, and “an unequal distribution of power among groups in the community” did not survive the reliability test prior to the factor analysis, which means that these items are unreliable and can be excluded when identifying the social impact factors in this specific research context. The exclusion of the items might be due to the comparably small scale of the event, the type of the participants, and the preparation beforehand by the event committee. The results do not mean that further modifications are need for the FSIAS. Rather, the research validates using the FSIAS in a community sports events but minor adjustments of the scale items are suggested based on the situations of the event and the host community. As a fixed scale measuring the 25 social impact items, some important information may be missing such as potential significant social impact from a particular type of event. Also, with the development of the event industry, other social impacts, which were not included in the scale when developed more than a decade ago, may need to be considered for inclusion in future research using the FSIAS.

Future implications should also consider revising some of the item wording to make them easier for respondents to understand. Phrases such as “community well-being” are very academic and may sometimes cause challenges for respondents to evaluate precisely. Meanwhile, several scale items need to be described more specifically to avoid confusion. For example, the type of community involvement being measured in the scale needs to be clarified. Is it involvement

during the decision-making stage of the event? Or does it mean the amenities and resources are provided by the community?

Future research may also take into account other effects that might impact the results of the scale, such as whether the level of impact can differ among the respondents who were already aware of the event and those who were not aware of the event at all. Residents who are aware of the event tend to be more prepared for the impacts and can have a different evaluation on the impacts according to their expectations. On the other hand, respondents who were unaware of the event might face challenges in evaluating the social impacts based on knowledge of the event. Views of society from various regions may also create different attitudes toward the impact. In this case, the fact that the competitors of the BC Summer Games were all young athletes or the event being sport-related may change how people feel about the social impacts from it.

### **Recommendations for Future Event Organizers**

Community sports events such as the BC Summer Games will likely to continue to play an important role in fostering community attachment and pride as well as investing in community well-being. The findings of this research provide a better understanding of resident perceptions towards the social impacts of such events on a medium-sized community. The research also identifies different types of residents and their reaction to various social impacts. Based on these findings, this research proposes a range of suggestions for the event organizers and host communities in order to achieve the successful management of future events as well as continuously foster healthy community development.

## **Understanding Resident Perceptions towards the Social Impacts**

The findings suggest that residents can perceive both positive social impacts and negative social impacts from the 2014 BC Summer Games. Though the social impacts do not appear to be as visible as that of other large-scale events, residents did perceive various social impacts from a community sports event. As community member support is essential to the success of events, it is crucial for the organizers to understand residents' feeling about the social consequences and take steps to maximize the benefits and minimize the costs. Especially when it comes to personal frustration such as increasing traffic, organizers had better notice the residents in advance and come up alternative solutions so that such negative impacts will not exceed residents' tolerance.

The organizers also need to pay attention to the inter-relations between the four factors of the social impacts. The factors are not independent but can influence each other. This can be implicated as guidelines when organizers decide strategies to cope with various social impacts. For example, if community identity is well addressed through the event, residents are very likely to also feel the enhancement of community well-being. On the other hand, organizers shall be careful not to let personal frustration decrease residents' appreciation to the increased community identity and civic pride as the costs are as well an important factor that determines residents' attitudes toward the social benefits.

### **Increase Community Excitement**

The findings suggest that most of the residents hold positive feelings towards the benefits while the costs tend to be minor to them. Moreover, based on residents' qualified answers, they

regard the social benefits as one important reason to continue supporting the event, particularly the effect of event bringing the community together and showing its capability to the visitors. The implication of such findings for the event organizers is to take advantage of those social benefits to drive community excitement. Kim et al. (2006) emphasized the importance of organizers understanding residents' hedonic attitudes and what attracts them to attend such events. Fredline et al. (2005, p. 6) also suggested that the most important social benefit of events is the "feel-good" factor, which reflects on residents' sense of pride and excitement associated with the event. Residents perceived only moderate social benefits and little social costs. The moderate impact can be good in terms of the social costs. However, the weak recognition of the social benefits from the event can be one major obstacle for the 2014 BC Summer Games to involve the community. As the BC Summer Games heavily relies on community amenities, the Games committee should make the social benefits more explicit to the residents. The increased attention and excitement can be useful in attracting more residents to attend, volunteer in the event and might be helpful for event fund raising as well. For example, special events can be hosted prior to the official event specifically targeting the locals to share possible social benefits to individuals and the host community. They can highlight the potential increase of community cohesion through the event and why it is important for the residents in the long-term.

One other dilemma that community sports events are facing is that the type of locals who are interested in attending and volunteering for the event can be very limited. Due to the restrictive group of participants as young athletes for the event, the majority of the attendees are those

whose children are competing in the matches. Local residents tend to not feel connected to events like this. Organizers can educate residents as to the benefits for the community gaining positive recognition and how the host community can enhance its image and present its uniqueness to visitors via the event. This can motivate people who have previously considered themselves uninterested in the event to become involved for broader community benefits, potentially as attendees or volunteers. Similarly, Woosnam et al. (2013) also suggested organizers educate residents about community and individual benefits through media such as local newspaper and radio.

### **Meet the Needs of Different Subgroups**

The organizers should understand that different types of residents have different attitudes toward the social impact. When planning and marketing events, organizers should seek strategies that satisfy the various needs of identified community subgroups to involve more locals and raise the levels of community support. Small (2007) advocated the importance of identifying such distinctions of how residents view certain type of impacts in planning and implementing strategies of future events.

*Passive Participants* are perhaps the most important cluster the organizers need to pay attention to as they might be interested in participating in the event but are often unable to attend because of personal reasons such as limited time. Based on this finding, organizers can get them excited by sharing what to expect from the event. As a big portion of the cluster is middle aged resident, the event can also market itself as an excellent place for family activities and maybe

also a good resource for those who have kids to nurture children's sporting spirits. If *Passive Participants* understand that the event can be a great opportunity for families to get together and to socialize, they might be more motivated to attend.

For *Active Participants*, it is more important to enhance their experiences of attending and volunteering in the event. The members of this subgroup are most likely to feel frustrated by amenity loss such as crowding and increasing traffic. This means that even though they are interested in participating in the event at first, they can lose their enthusiasm because of the frustration experienced during the event. Organizers should consider ways to retain this subgroup by minimizing such personal frustration, such as by communicating strategies in place to minimize negative social impacts that contribute to resident frustration. For sports events like BC Summer Games in which many of the local recreation complexes might be employed during the event, the organizers should notify residents as early as possible and provide alternative places to go for them. The organizers can also ask for the attendees and volunteers' opinions about what they think needs to be improved in the next event, such as efficient ways to improve volunteer experiences.

*Volunteers* focus more on the feeling of accomplishment from volunteerism than the excitement from the actual event. Volunteers add substantial value to community sports events. Researches looking specifically into event volunteerism provide suggestions in terms of how to train, recognize and retain volunteers (Getz, 2010). In addition to using the event's mission of fostering young athlete sporting careers as a way of retaining volunteers' support, social benefits

such as feeling pride can also be a reason for them to continue contributing to community-based sports events.

*Avoiders* are probably the most difficult group to attract. As the oldest group, members tend to consider the event irrelevant to them. However, for communities such as Nanaimo where senior citizens constitute a large amount of the residents, they should not be neglected. One suggestion to engage this subgroup is by increasing their connections to the event. Despite that they might be still not interested in attending the event; an increase in awareness of the benefits from hosting the event maybe turn them into *Volunteers*. Promoting the positive impacts of the event that are directly related to them is the key, such as increased community well-being and a variety of new activities and cultural experiences.

### **Recommendations for Future Host Communities like Nanaimo**

There are also implications for other community leaders from this research. A community sport event can bring benefits to both individuals and the host community as a whole. It provides a lot of opportunities for the community members to socialize with friends, have wide range of activities and so on. Moreover, the event is able to contribute to community well-being, such as increase community visibility, raising community attachment, and enhance community cohesive. Meanwhile, along with the benefits, community leaders should also pay attention to the social costs from hosting such events because such costs are usually closely related to residents' quality of life. As the organizers ensures the experience of the event participants, the community plays

an important and essential role in working together with the organizers to ensure better resident experiences no matter they want to attend or not.

### **Study Limitations and Suggestions for Improvement**

As with other studies, the current research has its limitations. First and foremost, the research only assesses the existing social impact items from the FSIAS. The assessment of event social impacts in this research is merely representative to the items derived from the scale. In addition to these social impacts that usually occur in most of the events, studies should also consider an examination of other possible consequences that can result from a particular event or provide open-ended questions for respondents to identify the social impacts from their perspective. New found social impacts will deepen the scope of the event social impact research as well as advance the scale over time. Especially regarding to the fourth factor ‘loss of community control’, which is a distinct factor from the others, but which currently has only two items included in it. The inclusion of related impact items may help further develop this factor.

Secondly, this research only analyzed a limited quantity of demographic and behavioral variables. Though eight clustering variables were used in identifying community subgroups, future research can explore other variables such as cultural backgrounds to expand research dimensions. It would be interesting to see if there are other resident attributes that are important in representing the subgroups.

Thirdly, this research used a mixed sampling method but was not able to achieve an ideal response rate. It is undeniable that it is becoming more and more difficult to achieve a satisfying

response rate for questionnaire surveys in the modern society (Tourangeau, 2004). From the experience of this research, the researcher feels hard to tell if online survey is better than telephone survey, and vice versa. During a telephone survey, informants are able to talk with a “real” person but informants’ pool and contact time are very limited compared to another method. However, online survey also experience hinders because email usually cannot be obtained except with much trust, not to mention informants may forget to complete the survey. But a mixed survey method can help to some degrees in reaching more potential informants and decrease possible exclusions. Future research should seek other feasible and effective methods for data collection to solve the dilemma of low response rates in community surveys. A precise and strong consent letter is also highly recommended to increase response rate.

Last but not least, the findings of this research only represent the survey sample and the particular context. It would be interesting to see whether there are differences of the results between similar events that are hosted in different communities. This will create a deeper understanding of resident perceptions towards the social impacts of community sports event.

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## APPENDIX

### Appendix 1: Resident perceptions Evaluation Survey

#### A. Evaluation of the Social Impacts

This section is designed to help me understand your views about the social impacts of the 2014 BC Summer Games in Nanaimo. I am going to read a list of impacts that may have resulted from the event. After I read each statement, please indicate to what extent you think those outcomes occurred, ranking from one to five with one indicating not at all to five indicating a great deal. There are no right or wrong answers. We are simply interested in your opinions.

1= not at all	2= only a little	3= some	4= a lot	5= a great deal
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Q1.To what extent do you feel that having the 2014 BC Summer Games resulted in...:

	Not at all					A Great Deal				
1) celebration of the community	1	2	3	4	5	1	2	3	4	5
2) changing/disrupting my normal routines during the event	1	2	3	4	5	1	2	3	4	5
3) public recreational facilities being overused during the event	1	2	3	4	5	1	2	3	4	5
4) enhancing community identity	1	2	3	4	5	1	2	3	4	5
5) feeling less privacy because of increasing visitors	1	2	3	4	5	1	2	3	4	5
6) enhancing image of the city of Nanaimo	1	2	3	4	5	1	2	3	4	5
7) feeling pride and recognized when participating in the event	1	2	3	4	5	1	2	3	4	5
8) having positive cultural impacts on Nanaimo	1	2	3	4	5	1	2	3	4	5
9) an unequal distribution of power among groups in the community	1	2	3	4	5	1	2	3	4	5
10) increasing community well-being (such as community cohesion)	1	2	3	4	5	1	2	3	4	5
11) intrusion into local residents' lives	1	2	3	4	5	1	2	3	4	5
12) learning new things	1	2	3	4	5	1	2	3	4	5
13) noise level increasing to unacceptable levels during the event	1	2	3	4	5	1	2	3	4	5
14) delinquent activity increasing to unacceptable levels	1	2	3	4	5	1	2	3	4	5
15) opportunity to experience new activities	1	2	3	4	5	1	2	3	4	5
16) crime increasing to unacceptable levels	1	2	3	4	5	1	2	3	4	5
17) showing others why Nanaimo is unique	1	2	3	4	5	1	2	3	4	5
18) the community being overcrowded during the event	1	2	3	4	5	1	2	3	4	5
19) the community gaining positive recognition	1	2	3	4	5	1	2	3	4	5
20) the event acting as a showcase for new ideas	1	2	3	4	5	1	2	3	4	5
21) a decreased sense of community involvement	1	2	3	4	5	1	2	3	4	5
22) traffic increasing to unacceptable levels during the event	1	2	3	4	5	1	2	3	4	5
23) Vandalism increasing to unacceptable levels	1	2	3	4	5	1	2	3	4	5
24) variety of cultural experiences	1	2	3	4	5	1	2	3	4	5

**B. General Perceptions**

In this section, several questions will be asked to find out your perceptions of having the 2014 BC Summer Games in Nanaimo.

Q2. Did you go to some of the matches or special events before or during the 2014 BC Summer Games?

Yes (GO TO Q3a)

No (GO TO Q3b)

Q3a. Why did you attend the 2014 BC Summer Games?

To satisfy my own interests

To spend time with my family

To socialize with my friends

To meet new people

To kill time

Other: \_\_\_\_\_

Q3b. Did you leave Nanaimo during the 2014 BC Summer Games?

Yes

No

Q4. Did you volunteer at the 2014 BC Summer Games?

Yes

No

Q5. Please indicate to what extent do you agree or disagree with the following statements.

1=strongly disagree	2=disagree	3=no opinion	4=agree	5=strongly agree
I enjoy living in Nanaimo.				1 2 3 4 5
The 2014 BC Summer Games overall met my expectations.				1 2 3 4 5
I think the positive social impacts of the 2014 BC Summer Games have been spread throughout the community.				1 2 3 4 5
I think the negative social impacts of the 2014 BC Summer Games have been spread throughout the community.				1 2 3 4 5

Q6. Please explain simply in one or two sentences to the open-ended question below.

Would you like to see the BC Games held in Nanaimo again? Why or why not?

Yes (Why : \_\_\_\_\_)

No (Why : \_\_\_\_\_)

### C. General Information

In this section, there will be five questions help me to find out your demographic information.

Q7. Are you

Male

Female

Q8. Which year were you born? 19\_\_\_\_

Q9. How long have you lived in Nanaimo?

Less than 1 year

1-3 years

3-5 years

5-10 years

Over 10 years

Q10. How much time does it take to travel from your place of residence to one of the public recreation facilities that you use the most often?

*(Facilities including major indoor facilities: Beban Park Social Center, Bowen Park Complex, Nanaimo Golf Club, Frank Crane Arena, Nanaimo Aquatic Center, Nanaimo Ice Center, Oliver Woods Community Center, and other major parks and trails)*

Walk distance / less than 5-minute drive

5 to 10 minutes' drive

10 to 20 minutes' drive

20 to 30 minutes' drive

More than 30 minutes' drive

Q11. How often do you usually use any of the public recreation facilities in Nanaimo?

Almost Everyday

Once a week

2 to 3 times a month

Once a month

Less than once a month

Never

Q12. Is there anything else you would like to say about the social impacts of the 2014 BC Summer Games?

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## **Appendix 2: Telephone Survey Cover Letter Script**

Hello, this is YIHUA CHEN calling from Vancouver Island University. I am a Master's student conducting a telephone survey about Nanaimo residents' feeling regarding the social impacts of the 2014 BC Summer Games. May I speak to someone 18 years or older in your household?

[IF RESPONDENT IS UNDER 18 YEARS, READ AND RECORD ON A SEPARATE SHEET]

When could I call and speak to someone over 18 years of age? And who should I ask for?  
[RECORD PHONE NUMBER, NAME, and TIME]

[IF RESPONDENT IS 18 YEARS OR OLDER]

As I stated, I am interviewing for your views about the social impacts of the 2014 BC Summer Games.

This research is a Master's Thesis research project and is supported by the 2014 BC Summer Games Society. You are being contacted because of a systematic selection from the local phone book. Your participation is completely voluntary. This means that you do not have to participate in this survey or answer the questions unless you want to. The survey will take approximately 15 minutes. All information I receive from you by phone, including your responses and any other identifying information will be strictly confidential. The results from this survey will be reported in my thesis, in an oral presentation and in a written report to the BC Games Society and Nanaimo Parks and Recreation Department. If you have any concerns about this study, you may contact the VIU Research Ethics Office by telephone at 250-753-3245 (ext. 2665) or by email at [reb@viu.ca](mailto:reb@viu.ca).

Would you like to take this survey?

[IF YES, CONTINUE]

Thank you very much for your time. Before we start the survey, do you have other questions about this research project?

May I start with the first question? ...

[IF NO FOR TAKING SURVEYS BY TELEPHONE]

The research also offers the survey questions online for you to complete later. The purpose and the questions of the online survey are exactly the same as this telephone survey. Again, your participation for the online survey is voluntary and confidential. The online survey will take about 10 minutes and can be completed any time before the online access closed. Would you like to take the survey online?

[IF YES, RECORD THE EMAIL ADDRESS ON A SEPARATE PAPER]

[IF NO FOR BOTH TELEPHONE SURVEY AND WEB SURVEY, THANK THEM FOR THEIR TIME AND POLITELY END THE CALL]

**Debriefing Script**

That concludes this interview. Thank you for taking this survey.

If you are interested in the results of this research project, you may contact me ([yyhhchen@163.com](mailto:yyhhchen@163.com)) or the project supervisor, Dr. Tom Delamere ([Tom.Delamere@viu.ca](mailto:Tom.Delamere@viu.ca)) at the completion of this study (March, 2015).

Would you like a copy of the results of this survey?

[IF YES], please tell me your Email address.

[RECORD ADDRESS ON A SEPARATE SHEET]

If you have any questions or concerns about this research, please contact Dr. Tom Delamere ([Tom.Delamere@viu.ca](mailto:Tom.Delamere@viu.ca)).

Thanks again for your participation!

### **Appendix 3: Web-based Survey Cover Letter**

#### **Title**

Community Survey: To Measure Residents' Perceptions of the BC Summer Games in Nanaimo

#### **Body**

Hello Residents of Nanaimo,

I am writing to you to ask for your participation in a brief online survey. The survey aims to measure Nanaimo residents' perceptions of the social impacts of the 2014 BC Summer Games. As you may recall, I contacted you earlier asking about completing the same survey by telephone. Your responses will help us minimize the negative impacts and enhance the positive impacts from the event.

The survey will take about 10 minutes to complete. A consent page will be presented before you start answering the questions. Please click the link below to go to the survey website (or copy and paste the link into address bar of your browser).

<http://fluidsurveys.com/surveys/yihua/copy-nanaimo-residents-perspectives-on-the-bc-g/>

Your participation in this survey is completely voluntary. All of your responses will be kept strictly confidential and will not be linked to any form of your identifying information. The results from this survey will be reported in my master's thesis and a written report to the BC Games Society and Nanaimo Parks and Recreation department.

Thank you very much for your time and cooperation! Your opinion is very important to us.

Sincerely,  
Yihua Chen (Erika), Master's Student,  
Sustainable Leisure Management,  
Vancouver Island University,  
[yhhchen@163.com](mailto:yhhchen@163.com)

