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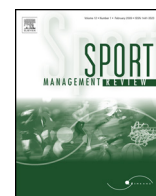
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Social and charitable impacts of a charity-affiliated sport event: A mixed methods study



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ABSTRACT

In this mixed methods research, the authors examine a unique type of small-scale event – a charity-affiliated sport event – and define and measure its social and charitable impacts as perceived by residents. Findings from interviews ($N=37$) and surveys ($N=459$) with residents indicated that the event's social impacts can be defined by its capacity to develop social capital, enhance collective identity and pride, and promote sport, health, and well-being. Three types of charitable impacts also emerged, including empathy for cause, informational support, and tangible support. Of them, empathy for cause, which addresses a central social issue in the host community, had the strongest association with residents' perceptions of social impacts. These results provide evidence of a variety of positive impacts that a charity-affiliated sport event has on a community, which can be used to bolster appeals for corporate sponsorship and government support to assist in event delivery.

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1. Introduction

Hosting sport events constitutes an important strategy for community development. Public investment in sport events is often justified based on their potential to provide economic benefits to the local economy (Santo, 2007), but researchers have failed to find strong evidence (Baade & Matheson, 2004). In response, the assessment of social impacts – intangible benefits accruing to residents – has increasingly been used as an alternative way to evaluate community development benefits from sponsoring sport events and programs (Inoue & Havard, 2014; Lee, Cornwell, & Babiak, 2013). Recognized “as a core source of potential event value” (Chalip, 2006b, p. 109), social impacts represent the only type of event benefit that focuses on residents (Crompton, 2004). Research has been conducted to understand the social impacts of sport events, with a predominant focus on large-scale spectator sport events, such as the Olympic Games (Waitt, 2003), Super Bowl (Kim & Walker, 2012), and Formula One Grand Prix (Kim, Jun, Walker, & Drane, 2015; Mao & Huang, 2016).

A focus on large-scale spectator sport events is justified by the high visibility and high-profile nature of these events (Kim & Walker, 2012). Despite their potential to produce positive impacts, large-scale spectator events can also cause

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substantial financial burdens, environmental impacts, and resident displacements, which could outweigh the benefits of the events (Gibson, Kaplanidou, & Kang, 2012). In addition, because large-scale events involve major infrastructure projects, only communities with ample resources are able to host these events (Taks, 2013). The problems associated with hosting large-scale spectator sport events have created a growing call to shift focus to small-scale sport events, which can provide substantial benefits to residents, especially when held in a small or medium sized community (Gibson et al., 2012). Small-scale sport events are often held annually, generate limited economic activity and national media interest, and may attract more participants than spectators (Gibson et al., 2012). Most participatory sport events (except for a few large-scale events, such as the New York City Marathon) fall into this category of event.

In the current research, we extend the understanding of social impacts to the context of small-scale sport events by defining and measuring the social impacts of a participatory sport event. Specifically, the Angkor Wat International Half Marathon (AWHM), an annual event held in Siem Reap, Cambodia, served as the setting for this research, and it represents a unique type of participatory sport event, a charity-affiliated sport event (Bennett, Mousley, Kitchin, & Ali-Choudhury, 2007). A large proportion of marathon events incorporate some form of charitable alignment, yet differ by the prominence of the charity. Select events including the AWHM are classified as charity-affiliated sport events, since they feature the charitable cause throughout all event marketing communication and the registration process. In contrast, many other events place minimal emphasis on their charitable aspect within event marketing communication and registration, allocating a limited presence to the charity at the event (Filo, Funk, & O'Brien, 2011). The prominence of the charity can be integrated into the operations and promotion of an event with a strong charitable alignment (Rundio, Heere, & Newland, 2014), which can allow the event and charity to reach new population segments (Woolf, Heere, & Walker, 2013).

Consistent with the scope of a charity-affiliated sport event, providing charity support for local causes has been central to the operations of the AWHM since its inception in 1996. The event has donated over US\$330,000 to organizations addressing important local causes, such as the provision of support for anti-personnel landmine victims affected by the country's civil war (Angkor Wat International Half Marathon, 2015). This central role of the charity makes the AWHM an important setting for understanding the social impacts of a small-scale sport event.

Within this setting, we address two purposes. First, we modify the framework of social impacts proposed by Lee et al. (2013) based on qualitative data obtained from residents, and then subsequently develop and test a survey scale to measure residents' perceptions of social impacts. Although scholars have proposed multiple frameworks to conceptualize and measure the social impacts of sport events (Crompton, 2004; Kim & Walker, 2012; Lee et al., 2013), these frameworks were developed deductively without considering residents' opinions. We are the first to incorporate residents' qualitative descriptions into the conceptualization and measurement of social impacts. Second, we explore community benefits resulting from the charity affiliation of the AWHM and how these benefits may correlate with the event's social impacts. Aligning an event with a charitable cause is an effective strategy for enhancing the event's social impacts (Filo, Funk, & O'Brien, 2009; O'Brien & Chalip, 2008). However, the effects of charity affiliation on social impacts have not been empirically examined. Consequently, we extend existing findings through the empirical examination of charity-based community benefits and their relationship with the social impacts of an event.

2. Conceptual background

2.1. Social impacts of sport events

Social impacts represent broad intangible benefits that accrue to residents (Inoue & Havard, 2014; Kim & Walker, 2012; Lee et al., 2013). While most researchers conceptualize social impacts in the context of large-scale spectator sport events, Lee et al. (2013) have proposed a related, yet distinct framework for social impacts to assess a range of sport events and programs. Their framework defines social impacts based on five dimensions representing a set of interrelated intangible benefits: (a) social capital, (b) collective identities, (c) health literacy, (d) well-being, and (e) human capital. Social capital is the development of trustworthy social relationships and conditions that are essential to facilitating successful cooperation in the community. Collective identities entail the enhanced sense of belonging to the community that can provide residents with a shared self-concept as community members. Health literacy relates to residents' capability to understand health-related information and make an appropriate health decision using such information. Well-being refers to enhancement in life quality that reflects improved psychological function and development. Lastly, human capital is the acquisition of knowledge, competencies, and skills fundamental to personal development (Lee et al., 2013).

Several of Lee et al.'s (2013) social impact dimensions overlap with those discussed by others in their examination of spectator sport events. For example, collective identities correspond to the two types of community pride (i.e., pride resulting from the enhanced community image and from improved community infrastructure) Kim and Walker (2012) identified in their study of the Super Bowl. Similarly, social capital and well-being relate to Kim and Walker's community attachment and excitement (i.e., excitement experienced by the whole community and by residents), respectively. Nevertheless, Lee et al.'s framework also identifies distinctive dimensions of social impacts – health literacy and human capital – that reflect key characteristics of sport participation (Lawson, 2005). Thus, this framework can provide comprehensive insight into the assessment of social impacts from participatory sport events.

2.2. Charity-affiliated sport events

An array of research has examined the antecedents and outcomes of charity sport event participation. A charity sport event is a participatory sport event that raises funds for a designated charitable cause from participants in exchange for their event participation (Woolf et al., 2013). Supplementary events and activities can also be organized during the event to promote cause awareness and support. Through these efforts to support causes, charity sport events can generate a sense of community and meaning among participants (Filo et al., 2009). Notably, the AWHM is distinct from a traditional charity sport event in that fundraising for a specified charity is not compulsory for participation, while the charitable impacts are still significant. These events represent charity-affiliated sport events, or participatory sport events with connections to one or more charities wherein fundraising for a specific charity is not compulsory for participation (Bennett et al., 2007). Examples include the Sun-Herald City2Surf, Tough Mudder, and St. Jude Memphis Marathon, as each event provides participants with the option to fundraise for a charity (or multiple charities) without requiring this for registration. The charity affiliation of the AWHM, along with its objectives towards community development and its relative size and scope, make it a meaningful context for understanding the social impacts of small-scale sport events.

2.3. Social and charitable impacts of a charity-affiliated sport event

Given the capacity to take into account intangible benefits associated with sport participation, we adopted Lee et al.'s (2013) framework to guide our investigation of the social impacts of the AWHM. However, a direct application of this framework would be problematic because Lee et al. developed the framework to broadly define the social impacts of sport rather than focusing on a specific sport event. In addition, the five dimensions of social impacts proposed by Lee et al. were identified deductively based on the conceptual work of Lawson (2005). Although their empirical investigation confirmed these dimensions using survey data obtained from U.S. college students (Lee et al., 2013), it is uncertain if this approach would adequately capture the characteristics of the AWHM and its host community. Specifically, this event is distinctive because of its charitable affiliation and operation in a society that has suffered from conflicts and instability (for further description of the research context, see the Research Overview section). To modify Lee et al.'s framework to reflect the uniqueness of the research setting, we developed the following question:

Research Question 1: What constitutes social impacts of the AWHM from residents' perspectives?

As noted, the AWHM is classified as a charity-affiliated sport event because it raises donations and awareness for a variety of causes. Besides broad tangible benefits identified by Lee et al.'s (2013) framework of social impacts, leveraging the charitable aspects of the event may bring additional benefits specific to the promotion of given causes in the host community (Filo et al., 2009; O'Brien & Chalip, 2008). A content analysis of popular press articles describing charity activities of sport organizations and events suggested that such charity-based community benefits (hereafter "charitable impacts") may take both tangible (e.g., providing money and resources to the cause) and intangible (e.g., providing a sense of hope for the beneficiary of support) forms (Inoue & Havard, 2015). These benefits, however, have yet to be confirmed through primary data obtained from residents who could offer unique insight through seeing the impact of the charitable activity. To explore residents' perceptions of different types of charitable impacts resulting from the charitable affiliation of the AWHM, we developed the following research question:

Research Question 2: What types of charitable impacts are generated from the AWHM's charity affiliation?

Sport events are capable of generating liminality, which refers to a sense of feeling that an event has some sacred qualities allowing participants to go beyond their regular social boundaries and explore alternative social constructions (Chalip, 2006b; O'Brien & Chalip, 2008). For the host community, the liminality created by the event represents a fundamental resource that can be leveraged to generate social impacts to its residents (Chalip, 2006b; O'Brien & Chalip, 2008). An effective way to leverage liminality for creating social impacts is to align sport events with charitable causes (Filo et al., 2009; O'Brien & Chalip, 2008). An event's association with a cause can increase its importance and meaning to those involved with the event (e.g., participants, organizers, government officials, residents) and further promote their event attachment. In turn, the enhanced importance and attachment to the event can facilitate relationships among individuals, groups, and organizations in the host community, furthering the event's capacity to generate intangible benefits to residents (O'Brien & Chalip, 2008). The proposed role of a charity affiliation in enhancing social impacts indicates that different types of charitable impacts generated from the AWHM may serve as correlates of the event's social impacts. To explore this notion, we developed the final research question:

Research Question 3: What is the relationship between residents' perceptions of social impacts of the AWHM and different types of its charitable impacts?

3. Research overview

To address the three research questions, we used a mixed methods two-phase design, where qualitative findings guided a subsequent quantitative investigation (Creswell & Plano Clark, 2007). The qualitative phase of this mixed methods research had two goals, the first of which was to address the first research question by assessing the applicability of Lee et al.'s (2013)

framework to the AWHM based on qualitative data obtained from residents. Second, we addressed the second research question by using the qualitative data to explore charitable impacts that may result from the charity affiliation of the AWHM. Building on the qualitative phase, we designed the second quantitative phase to provide additional insight into the first two research questions by developing and testing an instrument to measure the social and charitable impacts emerging from the qualitative data. In this phase, we further assessed the extent to which charitable impacts would be associated with the level of social impacts perceived by residents, thereby addressing the third research question.

The AWHM, the setting of this research, was established in 1996 as Cambodia's first international sport event since the outbreak of the civil war in the 1970s. The host city is Siem Reap, a mid-sized city known as the home of the country's first World Heritage Site, Angkor Wat. Since its inception, the AWHM has aimed to serve two purposes. First, this event operates as a participatory sport event, offering runners different distance categories including 3 K, 10 K, and half marathon. As the first Cambodian distance race recognized by the Association of International Marathons and Distance Races, the popularity of the AWHM has increased over time. In 1996, the total number of participants was just over 650 with about 250 participants from foreign countries. In 2014, nearly 8000 people participated in the event, and international participants accounted for over 60% of the total participants. Second, the AWHM is designed as a charity-affiliated sport event to provide support for Cambodian victims of anti-personnel landmines and other locally important causes, such as HIV/AIDS prevention, youth education, and medical care for underprivileged children.

Supporting landmine victims represents a relevant social issue in Cambodia, where one of every 290 people has been amputated by landmines, which remain from the country's civil war (Haas, 2013). The AWHM supports these causes primarily through donations, but also engages in other efforts, such as promoting awareness through event-related activities (e.g., charity booths at event registration) and publications (e.g., event pamphlets), and providing race categories (e.g., wheelchair, artificial arm/leg) for residents with disabilities, many of whom are victims of anti-personnel landmines.

4. Study 1: Qualitative study

4.1. Participants and data collection

Qualitative research is a prudent methodology when examining an unknown or under-researched phenomenon (Shaw & Hoerber, 2016). As discussed, Lee et al.'s (2013) framework of social impacts has been tested with U.S. college students, but its applicability to a charity-affiliated sport event has yet to be understood. Therefore, considering how this framework applies to the AWHM through a qualitative method yields greater understanding of the applicability and adaptability of the framework. We used interviews as a data collection method, a conventional approach in the existing sport management research (Hoerber & Shaw, 2017). Yet, this study is a departure from a conventional qualitative method, as it is the initial phase of a mixed methods study, which has been rarely used in the impact evaluation of a sport program (Sherry, Schulenkorf, Seal, Nicholson, & Hoye, 2017). The integration of qualitative data into quantitative data complements the limitations of quantitative data, such as their inability to portray the meaning behind a concept (Stride, Fitzgerald, & Allison, 2017).

Inoue traveled to Siem Reap, Cambodia, in June 2015—six months before the 2015 AWHM to conduct interviews with residents. Maximum variation sampling was used to gain perspectives from residents with varying demographic characteristics, backgrounds, and engagement with the event (Patton, 2002). By working with a local translator, he identified 37 interview participants who varied by gender, age, area they lived, occupations, and levels of prior engagement with the AWHM (e.g., employed in supporting industries). Most of the participants were recruited from the translator's social network based on predetermined criteria, while others were recruited at targeted research locations, specifically areas along the marathon course. As shown in Table 1, participants were equally divided by gender (18 men and 19 women), and their age varied between 18 years and 44 years old ($M = 29.08$, $SD = 6.49$). Also, participants' residency in Siem Reap ranged from 5 years to their entire life, and about one-third of them ($n = 11$) participated in a past AWHM event as a runner or volunteer.

Participants were interviewed in 14 semi-structured interviews (5 individual and 9 group interviews) mediated by the translator. The majority of initial interviews were done individually; however, based on the observation that participants were more comfortable sharing information in group settings, Inoue adapted to employ group interviews. Group interviews were arranged to maximize cohesion among participants; therefore, shared characteristics (such as occupation type or residential area) were used to group participants.

Interviews were semi-structured as directed by an interview guide, but flexibility was maintained through follow-up questioning to gain information-rich answers. Participants were initially asked to discuss their perceptions of the intangible benefits produced by the AWHM. When participants needed clarification, follow-up questions referencing specific dimensions of social impacts identified by Lee et al.'s (2013) framework were used. For example, to gain participants' opinions about social capital from the event, the following question was used: "Has this event promoted a sense of trust and cooperation in your community? If so, how?" A question ("what types of benefits do you think that the event's support for the causes has generated for your community?") was also directed at understanding how the charity affiliation of the event had provided specific charitable impacts to the community. The average duration of the interviews was 36 minutes. All interviews were recorded, translated, and transcribed.

Table 1
Characteristics of Interview Participants.

Participant	Interview Type	Gender	Age	Residence	Occupation
1	Individual	Male	41	Along the course	Nonprofit sector
2	Individual	Female	24	Along the course	Restaurant employee
3	Individual	Female	23	Along the course	Seller
4	Individual	Female	32	Along the course	Seller
5	Individual	Male	25	Along the course	Public sector
6	Group 1	Male	27	Downtown	Hotel employee
7	Group 1	Male	28	Downtown	Tour guide
8	Group 1	Male	31	Downtown	Tour guide
9	Group 2	Female	19	Downtown	Student
10	Group 2	Female	21	Downtown	Student
11	Group 2	Female	27	Downtown	Private sector
12	Group 2	Male	24	Downtown	Hotel employee
13	Group 2	Male	26	Downtown	Student
14	Group 2	Male	23	Downtown	Student
15	Group 2	Male	35	Downtown	Hotel employee
16	Group 2	Male	22	Downtown	Student
17	Group 3	Female	26	Outskirts	Seller
18	Group 3	Female	35	Along the course	Seller
19	Group 3	Female	18	Outskirts	Seller
20	Group 3	Female	30	Along the course	Seller
21	Group 3	Female	31	Along the course	Seller
22	Group 4	Female	NA	Along the course	Retail store owner
23	Group 4	Male	36	Along the course	Unemployed
24	Group 5	Female	31	Along the course	Retail store owner
25	Group 5	Female	41	Along the course	Restaurant owner
26	Group 6	Male	25	Downtown	Student
27	Group 6	Female	25	Downtown	Student
28	Group 6	Female	24	Outskirts	Hotel employee
29	Group 7	Female	32	Downtown	Hotel employee
30	Group 7	Female	27	Outskirts	Hotel employee
31	Group 8	Female	25	Downtown	Hotel employee
32	Group 8	Male	27	Downtown	Hotel employee
33	Group 8	Male	35	Downtown	Hotel employee
34	Group 8	Male	44	Outskirts	University faculty
35	Group 8	Male	36	Downtown	Hotel employee
36	Group 9	Male	41	Downtown	Tour guide
37	Group 9	Male	30	Downtown	Hotel employee

4.2. Analysis

A directed content analysis was used as a primary method to analyze interview data (Hsieh & Shannon, 2005; Miles & Huberman, 1994). Deductive codes were developed prior to coding based on the five dimensions of social impacts introduced by Lee et al. (2013). Similar to the procedure adopted by Denis, Lamothe, and Langley (2001), the deductive coding was supplemented by inductive coding, allowing for exploration of how participants understood specific dimensions of social impacts as a combined concept, as well as how they perceived the event's charitable impacts.

All transcripts were independently coded by Inoue and Heffernan using Nvivo 10. These authors met regularly to establish a common understanding and discuss potential modifications for the codes. After coding all interviews, they assessed intercoder reliability using Cohen's kappa coefficient and confirmed that all final codes achieved a kappa coefficient of at least .70 for sufficient intercoder agreement (Mayring, 2000). Instances where disagreement was identified by the intercoder reliability analysis were resolved by altering or combining the codes through discussion among the authors. After coding was complete, the validity of the findings was confirmed using member checking and peer debriefing (Creswell & Miller, 2000). For member checking, the summarized findings were sent to two interview participants who reviewed the findings and confirmed the consistency of the findings with their understanding of the event's impacts and benefits. For peer debriefing, we met with an external researcher (an expert in qualitative research), who reviewed the methods and the findings and supported they were consistent with the scope of the inquiry.

4.3. Findings and discussion

Analysis revealed two categories that addressed the first two research questions: social impacts and charitable impacts. Quotations illustrating themes within the category are presented below.

4.3.1. Social impacts

Social impacts refer to the intangible benefits sport events bring to their community (Lee et al., 2013). We found three interrelated themes to support the social impacts of the AWHM, thus providing insight into Research Question 1: social capital; collective identity and pride; and sport, health and well-being. First, social capital confirmed Lee et al.'s (2013) framework, suggesting the AWHM encouraged the establishment of social relationships for residents. Interviewees indicated that the social relationships created through the event are not transient. As Participant 4 discussed:

Upon completion of the half marathon, the runners or participants go for a walk in the community and . . . they get to know each other. When they come the next year, they recognize the people with whom they have interacted in the community.

Other quotations highlighted the interactions of residents with foreign visitors and the inclination to helping others within the event. For example, Participant 8 elaborated on this point:

We can interact with foreigners to exchange cultures. They can also help each other while running where someone gets an accident, such as offering water and cold handkerchief. Even though running is a kind of competition in which people try to win over each other, the people help each other there.

The event's role in developing social capital supports Lee et al. (2013) and Misener and Mason's (2006) research by indicating that sport events provide the host community with the opportunity to bring together residents. Arguably, the partnerships developed for a sport event can outlive the event itself (Misener & Mason, 2006). Such lasting partnerships within the community as well as with visitors represent important social infrastructure that can sustain the event's long-term contributions to community development (Misener & Mason, 2006).

Second, the social connection facilitated by the AWHM can further impact the residents' sense of identity and pride as community members, leading to the second theme, collective identity and pride. For example, Participant 35 noted: "I feel very proud that this event has been organized in my homeland and this event has promoted the provincial tourism." As this quotation suggests, collective identity and pride extended collective identities in Lee et al.'s (2013) framework by capturing how the impact that the event had on the host community enhanced not only residents' identification with the community but also feelings of pride "as Khmers and to have Angkor Wat" (Participant 4).

The theme of collective identity and pride is consistent with the findings of past research on large-scale spectator sport events (Kim et al., 2015; Waitt, 2003), such that these events have the capacity to generate feelings of pride for residents. Our findings suggest that promotion of civic pride, which represents a key policy goal (Chalip, 2006a), is not limited to large-scale sport events. Rather, a smaller-scale sport event, like the AWHM, can foster pride among residents, especially if it has significant status in society, such as the first international event in the country and multiple charity affiliations that impact the community.

Third, participants' discussions around how the event promoted sport participation and physical and mental health in the community were connected, resulting in an overarching theme, sport, health and well-being, that combines dimensions of health literacy and well-being proposed by Lee et al. (2013). Participants not only noted how the AWHM increased participation in running, but also discussed how the event has promoted general sport participation and care for physical and mental health in the community. The focus on residents' perceptions did not allow us to assess the impact of the event on actual sport participation. However, the increase in sport participation was a recurring theme in the participants' perceptions of intangible benefits from the AWHM. The following quotation represents the discussion around the physical and mental health benefits of sport participation promoted by the event: "[The AWHM] can increase interest in sports activities. People will be more interested in playing sports for their health. Sport activities make them healthy and happy" (Participant 13). Participant 3 spoke to how the event has influenced her physical activity individually: "This event has inspired me to run."

Participants also discussed how the event has helped residents view running as a recreational sport, citing instances of participating in running in their leisure time or for enjoyment. Such a perceived sustained increase in participation in running is illustrated by the following quotation: "Running is good for health, not only for participants, but also for others. Not only during the event, but also after the event those people still continue to run, so it is good for their health" (Participant 27). Furthermore, a number of interviewees referred to their own observations concerning increased physical activity resulting from the event. Participant 35 explained: "On average, the number of runners has increased. According to my observation in sport clubs and streets, many people run." This was further supported by Participant 32, who detailed some diversity across this increase: "I have seen a lot of Siem Reap residents jogging along the street and in sport clubs, including youngsters and old people."

Collectively, the quotations identified for the theme of sport, health, and well-being highlight the role of sport promotion through the event in enhancing the health and well-being of residents. Although, some have suggested sport events are a means to promote community sport participation (Taks, Green, Misener, & Chalip, 2014), empirical support for the events' effects on participation is lacking (Weed et al., 2015). In addition, past social impact researchers did not find the promotion of sport participation as a central component of social impacts (Kim et al., 2015; Mao & Huang, 2016; Waitt, 2003). Our results diverge from this work by documenting AWHM's perceived ability to positively impact sport participation in the community. This finding is closely connected to the current research context, where the civil war and resulting political instability made the AWHM one of the first opportunities after the war to allow residents to engage in sport. Our finding offers insight into the potential of a sport event to increase participation after periods of unrest and limited sport participation.

Analysis also revealed that participants' perceptions of social capital; collective identity and pride; and sport, health, and well-being were interrelated, supporting that these three intangible benefits collectively create the total social impact of the AWHM. The interrelationship between collective identity and pride and social capital was illustrated by the following comment, suggesting that the event provided residents with the opportunity to interact with race participants and helped increase residents' sense of collective identity and pride:

There are so many participants coming from different parts of the world including Cambodian participants . . . When the participants run along the street, the local residents stand on the side of the street to cheer them up, and they feel proud to be born as Khmers and to have Angkor Wat. (Participant 4)

Furthermore, the following sentiment is an example of how the two themes – social capital and sport, health and well-being – impacted each other: “[During last year's event], I met a man from Hong Kong, a marathon runner . . . Every morning, he got up at 5:00am and ran until 8:00am, and then he came back [to the guesthouse]. He told me about how to run well a long distance. I [am] following . . . his [instructions]” (Participant 28). This quotation illustrates how a social connection created through the AWHM continues to influence this resident's running habits.

The final dimension of Lee et al.'s (2013) framework of social impacts, human capital, did not emerge as an independent theme. Participants did not discuss instances where their engagement in previous AWHM events enabled them to obtain broad knowledge and skills. Rather, participants' discussion of acquiring new knowledge or skills was integrated with social capital (e.g., learning new cultures through social interactions with visitors) and sport, health, and well-being (e.g., acquiring knowledge on running), as well as themes on the event's charitable impacts as discussed below. Consequently, we excluded human capital from the conceptualization of social impacts in the follow-up quantitative study.

Overall, this qualitative study demonstrates how intangible benefits of a charity-affiliated sport event are perceived in a community where the regional history has limited residents' sport participation opportunities. With the exception of human capital, the analysis supported the applicability of Lee et al.'s (2013) social impact framework to this research setting. We extended previous research on large-scale sport events' ability to create community pride (Kim et al., 2015; Waitt, 2003) by showing that the AWHM, even though small in size, generated feelings of pride for residents. Participants also illustrated how the three themes – social capital; collective identity and pride; and sport, health, and well-being – are closely related to each other and collectively define the social impacts of the AWHM.

The findings also offer insight into Edwards's (2015) community capacity through sport. Community capacity refers to a set of resources that can be leveraged to address health problems affecting people within a community (Edwards, 2015). Specifically, Edwards identified social relations, civic participation, and level of skills and resources as key contributors to building community capacity, which align with the three themes illustrating the social impacts of the AWHM. The AWHM's role in building social capital provides evidence of how sport facilitates positive social relations in a community by bringing people together (Edwards, 2015). Civic participation highlights sport's ability in forming a community identity, which was reflected in the theme of collective identity and pride. Regarding the theme of sport, health and well-being, our interviewees discussed how the AWHM increased residents' understanding of running as a recreational sport, as well as their interests and participation in running. This supports the development of levels of skills and resources, as suggested by Edwards, in showing how the knowledge and infrastructure created by operating a sport event can promote sport participation opportunities for residents. Additionally, since the AWHM is designed to address community health problems (e.g., HIV/AIDS prevention, care for anti-personnel mine victims), we demonstrate how a sport event supports the development of community capacity for public health issues.

4.3.2. Charitable impacts

In addressing Research Question 2, the charitable impacts of the AWHM were concerned with how the event provided support for important local causes, such as victims of anti-personnel mines. Within this category, three primary themes emerged: attitudinal change, social support, and informational support. The first theme, attitudinal change, focused on changing perceptions toward the capabilities of individuals directly supported by the event. For example, the event was acknowledged for its ability to “cut down or eradicate discrimination against victims of HIV/AIDS and victims of anti-personnel mines” (Participant 20). The following quotation from Participant 24 further indicated how her view on the capabilities of persons with disabilities was reshaped by seeing their event participation: “I felt that disabled people have only hands and one leg, but they have been able to participate in the event as runners. For me, I'm not disabled, but I haven't been able to participate as [a runner].”

Attitudinal change offers insight into the learning culture of Edwards's (2015) community capacity framework – that is, a community's capacity to “reflect upon their history, structures, and assumptions and consider alternative means of thinking about issues” (Edwards, 2015, p. 14). The AWHM provided anti-personnel mine victims with the opportunity to showcase their physical abilities by participating in the marathon as a runner. In turn, their event participation not only reminded residents about the lasting impact of the civil war, but also positively changed residents' perceptions and assumptions about the capabilities of disabled individuals. Edwards called for further research into how learning culture promoted through sport creates community capacity. In this regard, the theme of attitudinal change demonstrates how sport events offer participation opportunities that can impact residents' understandings and assumptions of a given social issue.

The second and third themes resembled the concept of social support, which is defined as “the assistance and protection given to others” (Langford, Bowsher, Maloney, & Lillis, 1997, p. 95). Specifically, the second theme, social support, broadly denoted the donation of tangible goods (e.g., money, equipment) or provision of intangible support (e.g., sport opportunities, emotional support) to the event’s affiliated causes. For example, Participant 16 discussed how the charitable activity of the event created an opportunity “to support orphans financially, especially in Siem Reap for the purpose of enhancing education sector for them.” Intangible support from the event was further described by Participant 22, who noted: “This event has motivated anti-personnel mine victims and also HIV/AIDS patients to participate in the event happily and to feel that they have the same opportunity as other runners.”

Informational support refers to a special category of social support that focuses on providing information useful for solving issues (Langford et al., 1997). Similar to this definition, the third theme, informational support, described that the event provided general education around anti-personnel mines and information to prevent HIV/AIDS. For example, the event provided residents with a venue to be “aware of how to protect themselves from HIV/AIDS . . . [and] to avoid accidents caused by anti-personnel mines” (Participant 11). As illustrated by this quotation, interviewees conveyed that the information promoted through the event focused on educating non-afflicted community members, which differs from how Langford et al. (1997) conceptualized informational support. In particular, the theme of informational support found here aimed at describing how individuals could avoid becoming victims, whereas Langford et al. focused on providing education once people had the condition in question. Our findings thus provide an alternative perspective for how informational support can be defined depending on the intended audience of the information presented.

Overall, the qualitative findings provided initial answers to the first two research questions by revealing residents’ perspectives of social and charitable impacts of the AWHM. Building on these findings, we conducted a quantitative study during the post event period of the 2015 AWHM to measure residents’ perceptions of social impacts (Research Question 1) and charitable impacts (Research Question 2) and to assess the relationship between these impacts (Research Question 3).

5. Study 2: Quantitative study

5.1. Participants and data collection

The target population of the quantitative study was residents of Siem Reap. From this population, study participants were recruited by local university students, who were placed at different locations in the city (e.g., the start/finish area of the 2015 AWHM, downtown, along the course, outskirts of the city). To ensure that data would be obtained from diverse segments of the population, students were instructed to balance respondents by gender and age groups. Students were also instructed to make sure that potential respondents identified themselves as residents of Siem Reap before the survey was distributed to them.

The survey was conducted over two days following the conclusion of the 2015 AWHM. Approximately 300 surveys were distributed at the start/finish area of the event during the post-event period, while another 300 surveys were distributed at other locations to include both event participants and non-participants in the sample. In total, 600 surveys were distributed during the two-day period, with 499 surveys (83.2%) being returned. Of the 499 surveys, 40 surveys were deemed unusable because of missing values for 20% or more of survey items measuring key constructs. For the remaining 459 usable surveys (76.6% of the original 600 surveys), missing values on constructs were replaced with estimated values based on the expectation maximization method (Tabachnick & Fidell, 2006). We chose the expectation maximization method over listwise deletion because the latter can reduce statistical power for hypothesis testing by disregarding a large amount of possibly usable data. In contrast, the expectation maximization method fully uses available information from the existing data sets while minimizing biased and poor estimates, and hence allows the analysis to have sufficient statistical power (Allison, 2009).

Table 2 includes characteristics of the 459 residents who provided usable survey data. The final sample consisted of residents with diverse sociodemographic characteristics. In addition, 37.5% participated in the event as a runner or volunteer, and 29.6% lived or worked along the course, suggesting varied levels of event involvement among the respondents.

5.2. Scale development steps

We used the steps suggested by DeVellis (2012) to develop scales to measure residents’ perceptions of the social and charitable impacts of the AWHM. The first step involved determining the scope of these constructs (DeVellis, 2012). Based on the findings of the qualitative study, we defined social impacts as intangible benefits residents perceived from hosting the event, with these benefits capturing the event’s effects on promoting social capital, collective identity and pride, and sport, health, and well-being in the community. Charitable impacts were defined as community benefits specific to the event’s support of charitable causes, including residents’ attitudinal changes toward the causes, provision of tangible and intangible assistance for the causes, and promotion of information that prevents or solves the causes.

Next, we generated a pool of items for scales and determined the response formats (DeVellis, 2012). For social impacts, we adopted items from existing scales of social impacts (Kim et al., 2015; Lee et al., 2013) and modified based on qualitative data. Several new items were also created using quotations from the qualitative study to reflect the uniqueness of the research context. For charitable impacts, because of the absence of established scales, all items were developed based on the

Table 2
Characteristics of Survey Respondents.

Variable	<i>f</i>	%
<i>Gender</i>		
Male	252	54.9
Female	202	44.0
Missing	5	1.1
<i>Age</i>		
18–24	172	37.5
25–34	118	25.7
35–44	79	17.2
45–54	25	5.4
55–64	17	3.7
Missing	48	10.5
<i>Marital status</i>		
Single	216	47.1
Married	217	47.3
Other	4	.9
Missing	22	4.8
<i>Employment status</i>		
Full-time	159	34.6
Part-time	43	9.4
Self-employed	139	30.3
Unemployed	81	17.6
Missing	37	8.1
<i>Participated in the 2015 event as a runner or volunteer</i>		
Yes	172	37.5
No	270	58.8
Missing	17	3.7
<i>Live or work along the course</i>		
Yes	136	29.6
No	293	63.8
Missing	30	6.5

Note: *N* = 459.

definition and qualitative findings. We adopted a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*) as the response format for the two scales.

We obtained feedback from an expert panel to refine the initial items and enhance the content validity evidence of the scales (DeVellis, 2012). Specifically, three full-time faculty members (recruited from different institutions) with extensive research experience in sport event evaluation assessed the extent to which each item represented the definition of the construct and provided suggestions for improving the wording and clarity. Based on feedback from the experts, items were removed and modified.

The next step involved the inclusion of items to be used for assessing the validity evidence of the developed scales, which becomes a concern when individuals' responses are influenced by a desire to positively represent themselves (DeVellis, 2012). To control for this potential bias (DeVellis, 2012), we included a five-item scale of social desirability in the survey (Hays, Hayashi, & Stewart, 1989). As in Hays et al. (1989), respondents rated five statements regarding their relationships with others, using Likert scale ranging from 1 (*definitely false*) to 5 (*definitely true*). A sample statement includes: "I am always courteous even to people who are disagreeable." Responses for the five items were dichotomized by scoring 1 for only responses representing the extreme tendency of social desirability (1 or 5 for original responses depending on items) and 0 for the remaining responses. In turn, the summed scores from the five dichotomous variables (which ranged between 0 and 5) were linearly transformed to a score ranging from 0 to 100 to interpret these scores as direct proportions of the total possible score (Hays et al., 1989). For this study, respondents provided a mean score of 35.25 (*SD* = 27.04) for social desirability, which is comparable to scores obtained in past research (Hays et al., 1989).

DeVellis (2012) suggested administrating a pilot survey to a sample of the study population and evaluating the developed scales through statistical analysis. The short time period between the conclusion of the qualitative study and main quantitative data collection did not allow for the full implementation of these steps. Consequently, we used alternate steps, where three residents who were familiar with the event and were informed of the purpose of this research evaluated all items in the scales for clarity and provided suggestions for improvement. Through this review, we modified the items to which the residents made suggestions.

Table 3

Descriptive Statistics and Standardized Factor Loadings of Items in the Scale of Social Impacts.

Item	M	SD	β
1. This event gives me a strong sense of belonging to my community.	5.67	1.43	.64
2. This event creates a united feeling among the people in my community.	5.86	1.28	.66
3. This event shows that I have shared goals, ideas or opinions with the people in my community.	6.00	1.26	.49
4. This event enhances the pride of local residents.	5.85	1.45	.65
5. I feel proud to live in my community when seeing participants enjoying this event.	6.23	1.15	.71
6. I enjoy the trustworthy interaction and cooperation with the people this event brings to my community.	5.63	1.45	.54
7. I feel a sense of trust and cooperation when I interact with people this event brings to my community.	5.58	1.38	.56
8. This event brings my community trustworthy and cooperative people whom I can work with.	5.49	1.42	.51
9. During the event, I saw people helping each other.	5.97	1.20	.55
10. This event makes me feel happy and appreciated.	6.27	1.15	.56
11. This event makes my life enjoyable.	6.04	1.28	.71
12. This event gives me knowledge to better monitor my health.	5.66	1.47	.61
13. From this event, I have learned basic health information in daily life to maintain good health.	5.72	1.43	.60
14. This event has increased my interest in participating in sport.	6.01	1.24	.67
15. This event has increased local residents' interest in running or jogging.	6.12	1.14	.56

Note: N = 459. All standardized factor loadings were significant ($p < .001$). β = Standardized factor loadings.

The final step for scale development was to optimize the length of each scale by determining the set of items to be included (DeVellis, 2012). The goal was to develop a concise scale to facilitate responses from the target population, which can still provide evidence of reliability and validity.

5.3. Survey instrument and back translation process

The final survey instrument developed through the aforementioned procedures included the 15-item scale of social impacts (see Table 3), the 13-item scale of charitable impacts (see Table 5), and Hays et al.'s (1989) five-item scale of social desirability. Additional items measuring the sociodemographic characteristics of respondents, such as gender, age, marital status, and employment status, were also included.

All survey items were initially written in English and were subsequently translated into Khmer, the native language of Cambodia. To confirm the accuracy of the Khmer translation, a back translation technique was used (Brislin, 1986). Specifically, all English-written items were first translated into Khmer by a professional translator. Next, the resultant Khmer-written survey was independently translated back to English by another professional translator to assess its equivalence to the original English-written survey. Subsequently, the two versions of the surveys were assessed by a U.S.-born citizen, who verified the consistency in meaning for items and suggested modifications for improved consistency. The suggested modifications were incorporated into the Khmer-written survey distributed to residents.

5.4. Analysis and results

Before addressing the research questions, we examined the correlations between each item included in the two developed scales and the measure of social desirability to assess the extent to which social desirability bias influenced participants' responses to individual items (DeVellis, 2012). The analysis yielded correlation coefficients ranging from $-.01$ to $.33$, indicating that social desirability accounted for less than 10% of the variance in each item. Because the magnitude of the correlations suggested the negligible effect of social desirability bias (Richins, 1983), all items were retained for subsequent analysis of the two scales.

5.4.1. Assessing the scale of social impacts

To answer Research Question 1, the psychometric properties of the scale of social impacts were examined through a confirmatory factor analysis (CFA) using Mplus 7.0 software. The maximum likelihood estimation with robust standard errors (MLR) was employed as an estimation method to address the potential violation of multivariate normality (Muthén & Muthén, 2010). We first estimated a measurement model consisting of three factors: the first factor representing the qualitative theme collective identity and pride formed by items 1–5 in Table 3, the second representing social capital formed by items 6–9, and the third representing sport, health and well-being formed by items 10–15.

This three-factor model provided the following indices that suggest an acceptable model fit (MacKenzie, Podsakoff, & Podsakoff, 2011): Comparative Fit Index (CFI) = .93, Root Mean Square Error of Approximation (RMSEA) = .05, and Standardized Root Mean Square Residual (SRMR) = .04. Regarding reliability, the first factor (collective identity and pride) had a construct reliability (CR) of .76; the second factor (social capital) had a CR of .64; and the third factor (sport, health and well-being) had a CR of .79. Based on these results, although two factors – collective identity and pride and sport, health, and well-being – met the threshold of .70 for acceptable reliability (DeVellis, 2012; Hair, Anderson, Tatham, & Black, 1998; MacKenzie et al., 2011), the factor of social capital did not meet this threshold.

Table 4

Comparison of Model Fit Indices between Three-Factor Model and One-Factor Model for the Scale of Social Impacts.

	χ^2	df	χ^2/df	$\Delta\chi^2$	Δdf	CFI	RMSEA	SRMR
Three-factor model	174.31	87	2.00	–	–	.93	.05	.04
One-factor model	176.53	90	1.96	2.23	3	.93	.05	.04

Note: $N = 459$; χ^2 = Chi-square; df = Degrees of freedom; $\Delta\chi^2$ = Difference in chi-square values; Δdf = Difference in degrees of freedom; CFI = Comparative Fit Index; RMSEA = Root Mean Square Error of Approximation; SRMR = Standardized Root Mean Square Residual; The critical value for a χ^2 with $df = 3$ is 7.82 at the .05 level.

Because the initial three-factor model provided mixed evidence for the reliability of its factors, we estimated an alternative one-factor model in which all 15 items were loaded onto a single factor “social impacts.” As shown in Table 4, goodness-of-fit indices of the one-factor model were comparable to those of the three-factor model. In addition, a chi-square difference test indicated that the one-factor model fits the data as well as the three-factor model: $\Delta\chi^2 (\Delta df = 3) = 2.23, p = .53$. These results suggest that, because of its greater parsimony, the one-factor model is a more appropriate solution than the three-factor model (Kline, 2005). Moreover, in the one-factor model, factor loadings for all 15 items were statistically significant ($p < .001$) with a standardized value of at least .49 (see Table 3), and the items altogether provided a CR of 89. Given the overall fit and high reliability of the one-factor model, we retained this model and treated social impacts as a unidimensional construct measured collectively by the 15-item scale in the subsequent analysis addressing Research Question 3.

5.4.2. Assessing the scale of charitable impacts

To answer Research Question 2, we split the samples ($N = 459$) in half, and used the first sample ($n = 229$) to perform exploratory factor analysis (EFA) with promax rotation on the 13 items constituting the scale of charitable impacts. An EFA was appropriate for the first stage of analysis, because our goal was to explore different types of charitable impacts based on residents’ responses to the newly developed scale rather than to test a theoretically driven factor structure (Hair et al., 1998). Next, we conducted a CFA with the second sample ($n = 230$) to confirm the factor structure identified through the EFA.

The results of the EFA with the first sample ($n = 229$) identified three factors with an eigenvalue greater than 1, which collectively explained over 50% of the total variance in all items. The scree plot supported the three-factor structure by showing that eigenvalues steeply decreased for the first three factors, but the rate of decrease became much smaller after the third factor (Tabachnick & Fidell, 2006). Table 5 provides factor loadings of the items with the three factors. Following the suggestions of Tabachnick and Fidell (2006), only items with factor loadings of over .32 were used for interpretation of each factor (factor loadings under this threshold are not shown in Table 5).

The first factor consisted of four items capturing the event’s efforts to provide information intended to prevent or solve locally important social issues. Consistent with the qualitative theme, we named this factor informational support. The second factor had high loadings with two items designed to measure the qualitative theme “attitudinal change,” as well as three other items included to assess the event’s effects on providing intangible support (i.e., sport opportunities, emotional support) for individuals associated with the supported cause, especially the disabled. Using the five items, the second factor, empathy for cause, was obtained. The third factor entailed four items concerning how donations from the event would be used to support charitable causes. Given its focus on the provision of tangible goods, especially donations, this third factor was named tangible support.

Using the three factors that emerged from the EFA as a factor structure, we estimated a measurement model through CFA for the 13 items of the scale of charitable impacts based on the second sample ($n = 230$). The results of the CFA supported the validity of the three-factor model by providing the following goodness-of-fit indices (MacKenzie et al., 2011): CFI = .93, RMSEA = .05, and SRMR = .05. As shown in Table 6, the reliability of each factor was also supported, as all three factors yielded CR values greater than .70 (DeVellis, 2012; Hair et al., 1998; MacKenzie et al., 2011). To further confirm the validity of the three-factor model, this model was compared to a one-factor model that specified all 13 items as indicators of a single factor “charitable impacts.” The results of a chi-square difference test suggested the overall fit of the original three-factor model was significantly better than that of the one-factor model: $\Delta\chi^2 (\Delta df = 3) = 156.98, p < .001$. Consequently, we retained the three-factor model, and defined different types of charitable impacts based on the following three factors: informational support, empathy for cause, and tangible support.

Mean scores for charitable impacts based on all 459 respondents varied among the three types, with empathy for cause providing a significantly higher mean ($M = 5.85, SD = 0.99$) than tangible support ($M = 4.97, SD = 1.28; t = 14.52, p < .001$) and informational support ($M = 4.09, SD = 1.62; t = 21.49, p < .001$). The results of a paired sample t -test further identified a significant mean difference between tangible support and informational support ($t = 12.01, p < .001$). In addition, although the three types of charitable impacts were significantly correlated with each other, the analysis provided the following correlation coefficients, indicating small to medium effect sizes based on Cohen’s (1992) criteria: $r = .15$ ($p = .001$) between empathy for cause and informational support, $r = .36$ ($p < .001$) between empathy for cause and tangible support, and $r = .43$ ($p < .001$) between informational support and tangible support. The variation in the mean scores and small to medium correlations suggest that the three factors represent related but distinct types of charitable impacts generated from the AWHM’s support of causes.

Table 5

Results of Exploratory Factor Analysis on Charitable Impacts Based on the First Data Set (n = 229).

Item	Factor 1: Informational Support	Factor 2: Empathy for Cause	Factor 3: Tangible Support
This event has increased awareness of HIV/AIDS prevention in my community.	.87		
This event has increased awareness of antipersonnel mine accidents in my community.	.65		
This event has provided information about what contributes to HIV/AIDS transmission.	.66		
This event has provided information about why antipersonnel mines still persist.	.51		
This event has broadened my understanding of what I thought people with disabilities could do.		.56	
This event has changed my attitudes towards people with disabilities.		.48	
This event gives sport opportunities to people with disabilities.		.60	
This event gives people with disabilities the opportunity to interact with different people in the community.		.47	
This event shows people with disabilities that their local community supports them.		.69	
This event gives donations to local people in need.			.55
I have seen the direct impact this event has on my community through the funds raised by this event.			.49
The donations from this event give local children educational opportunities.			.34
I trust that the funds raised by the event are actually going to help those in need.			.75
Eigenvalue	3.48	2.15	1.25
Proportion of variance explained (%)	26.76	16.55	9.61

Note: Only factor loadings with a value of .32 and above are shown in the table. Factor loadings were obtained from the pattern matrix.

Table 6

Results of Confirmatory Factor Analysis on Charitable Impacts Based on the Second Data Set (n = 230).

Factor/Item	β	CR
<i>Informational Support</i>		.74
This event has increased awareness of HIV/AIDS prevention in my community.	.56	
This event has increased awareness of antipersonnel mine accidents in my community.	.72	
This event has provided information about what contributes to HIV/AIDS transmission.	.63	
This event has provided information about why antipersonnel mines still persist.	.66	
<i>Empathy for Cause</i>		.77
This event has broadened my understanding of what I thought people with disabilities could do.	.70	
This event has changed my attitudes towards people with disabilities.	.62	
This event gives sport opportunities to people with disabilities.	.68	
This event gives people with disabilities the opportunity to interact with different people in the community.	.49	
This event shows people with disabilities that their local community supports them.	.64	
<i>Tangible Support</i>		.72
This event gives donations to local people in need.	.53	
I have seen the direct impact this event has on my community through the funds raised by this event.	.60	
The donations from this event give local children educational opportunities.	.72	
I trust that the funds raised by the event are actually going to help those in need.	.65	

Note: All standardized factor loadings were significant ($p < .001$). β = Standardized factor loadings; CR = Construct reliability coefficients.

5.4.3. Relationships between social and charitable impacts

To answer Research Question 3, a multiple regression model was estimated. In this model, social impacts (calculated as the mean of the 15-item scale) were regressed on the three types of charitable impacts identified above (i.e., informational support, empathy for cause, tangible support). This model also included social desirability as a control variable to eliminate the effect of this bias on suppressing the relationship between social impacts and each type of charitable impact (King & Bruner, 2000). Moreover, according to social exchange theory (Cropanzano & Mitchell, 2005), residents may perceive greater social impacts from a sport event as their involvement in the event increases (Inoue & Havard, 2014; Mao & Huang, 2016). Accounting for the potential effect of event involvement on the perception of social impacts, we included two dummy variables capturing residents' involvement in the AWHM as additional control variables: event participation (1 = respondents who participated in the 2015 AWHM as a runner or volunteer) and live or work along the course (1 = respondents who lived or worked along the marathon course). For this analysis, 39 respondents with missing values for either of the last two control variables were excluded, leading to the sample size of 420. Correlations among the variables included in the regression as well as two demographic characteristics (gender and age; other characteristics were excluded because they represent multinomial variables) are shown in Table 7.

Table 7
Results of Correlation Analysis.

Variable	1	2	3	4	5	6	7	8	9
1. Social impacts	–								
2. Informational support	.17**	–							
3. Empathy for cause	.72**	.14**	–						
4. Tangible support	.45**	.43**	.34**	–					
5. Social desirability	.37**	.06	.31**	.10*	–				
6. Event participation	–.01	–.01	–.02	.04	–.07	–			
7. Live or work along the course	–.02	.14**	.01	.01	.14**	–.14**	–		
8. Gender ^a	–.14**	.04	–.12*	.02	–.06	–.09	.03	–	
9. Age ^a	.14**	.05	.06	–.05	.15**	–.10*	.04	–.11*	–

Note: The sample size was 420 unless noted otherwise. Gender was included as a dummy variable (1 = male; 0 = female), and age was included as an ordinal variable ranging from 1 (18–24) to 5 (55–64).

* $p < .05$.

** $p < .01$.

^a Due to additional missing values for gender and age, the sample size was 377 for the analysis involving these two variables.

Table 8
Multiple Regression Analysis Predicting Social Impacts.

Independent variable	β	t
Informational support	–.02	–0.52
Empathy for cause	.59**	16.79
Tangible support	.24**	6.58
Social desirability	.18**	5.37
Event participation	–.01	–0.26
Live or work along the course	–.05	–1.59
R^2	.59	
F	100.18**	
N	420	

Note: $N = 420$; Standardized values are shown for regression coefficients. * $p < .05$.

** $p < .01$.

As shown in Table 8, the regression model explained 59% of the variance in social impacts ($R^2 = .59$, $F = 100.18$, $p < .001$). Of the three control variables, only social desirability had a significant effect on social impacts ($\beta = .18$, $t = 5.37$, $p < .001$). Accounting for the effects of the control variables, empathy for cause ($\beta = .59$, $t = 16.79$, $p < .001$) and tangible support ($\beta = .24$, $t = 6.58$, $p < .001$) positively predicted social impacts, but informational support had a nonsignificant association ($\beta = -.02$, $t = -0.52$, $p = .61$). A follow-up analysis with a bias corrected bootstrapping technique based on 1,000 bootstrap samples revealed that a 95% confidence interval for the standardized coefficient of empathy for cause (.49, .69) does not overlap with that of tangible support (.17, .31). These results suggest that empathy for cause had a statistically larger coefficient than tangible support (Cumming, 2009). Overall, the results addressed Research Question 3 by indicating that social impacts are significantly associated with empathy for cause and tangible support (but not with informational support), with empathy for cause having the strongest association with social impacts.

5.5. Discussion

In addressing Research Question 1, we demonstrate reliability and validity evidence for the scale of social impacts, which was developed based on the three qualitative themes reflecting the social impacts of the AWHM. Specifically, the CFA results identify social impacts as a unidimensional construct, with all 15 items in the scale loading on the single factor. These results are consistent with the earlier qualitative findings, indicating that the three themes of social impacts are interrelated to each other from residents' perspectives. Overall, the findings of this quantitative study contribute to research on the social impacts of sport events (Kim & Walker, 2012; Lee et al., 2013; Mao & Huang, 2016) by demonstrating that the social impacts of a charity-affiliated sport event refer to the event's role in creating social capital, fostering a sense of collective identity and pride, and promoting sport, health, and well-being.

Regarding Research Question 2, the qualitative study identified three themes illustrating the charitable impacts of the AWHM: generating positive attitudes toward the key beneficiaries of the event (attitudinal change); providing both tangible and intangible support to affiliated charities (social support); and disseminating cause-related information to residents (informational support). The results of this quantitative study extend these initial findings by confirming informational support and further identifying two other types of charitable impacts based on attitudinal change and social support. These include empathy for cause, entailing the event's role in changing residents' attitudes toward individuals with disabilities, as well as providing these individuals with emotional support and sport opportunities; and tangible support, capturing

tangible assistance from the event, especially donations, to the affiliated causes. Notably, the three types of charitable impacts identified by the quantitative results align with three categories of social support: tangible, informational, and emotional support (Inoue & Havard, 2015; Langford et al., 1997). The first two social support categories directly correspond to the findings of this quantitative study, and the last category, emotional support, is reflected in empathy for cause, where people with disabilities are said to be provided acceptance and compassion.

In response to Research Question 3, the quantitative results demonstrate that, of the three types of charitable impacts, empathy for cause and tangible support were positively associated with social impacts. These results indicate residents perceived greater social impacts from the AWHM if they positively evaluated the event's benefits for affiliated charitable causes. For example, the positive association between empathy for cause and social impacts means that residents' perceptions that the event promoted the inclusion of disabled individuals in the community and, in particular sport participation, increased the residents' perceptions of the event's role in creating social relationships, promoting civic pride and identity, and enhancing physical and mental health. Our findings provide support for the notion that aligning a sport event with a charitable cause can allow the community to effectively leverage liminality created through the event, which, in turn, increases the level of social impacts accruing to residents (Filo et al., 2009; O'Brien & Chalip, 2008).

6. General discussion

This mixed methods research illustrates how residents define the social and charitable impacts of a small-scale sport event that has a strong connection with locally important charitable causes. In this setting, social impacts refers to the event's intangible benefits accruing to the local community by fostering a sense of collective identity and pride; creating social capital; and promoting sport, health, and well-being. The charity affiliation of the event further provides the community with three types of charitable impacts: informational support, empathy for cause, and tangible support. Additionally, we observed a relationship between the social and charitable impacts, such that empathy for cause and tangible support distinctively contribute to increased perceptions of the event's social impacts.

6.1. Theoretical contributions

Our research extends the understanding of social impacts of small-scale sport events by defining the social impacts of a charity-affiliated sport event and developing a scale of social impacts that captures this definition. We provide support for the applicability of Lee et al.'s (2013) social impact framework to this new research context, and also suggest some modifications to their conceptualization and measurement (e.g., excluding human capital, merging health literacy and well-being). The findings also contribute to Edwards's (2015) framework of community capacity through sport by illustrating how hosting a sport event can enhance the availability of resources essential for facilitating a community's capacity to address local health issues.

Second, we identified three types of charitable impacts associated with the charity affiliation of a participatory sport event and showed these impacts resemble social support categories (Inoue & Havard, 2015; Langford et al., 1997). This finding contributes to the literature on the intersection between participatory sport events and support for charitable causes (Bennett et al., 2007; Filo et al., 2009; Woolf et al., 2013) by showing that the concept of social support provides a theoretical basis for understanding community benefits associated with the events' charitable efforts. In addition, the scale of charitable impacts offers an initial measurement for the three types of charitable impacts, which can be further validated and modified by future research in assessing community benefits resulting from the charity affiliation of other participatory sport events. Our findings also show that making support for individuals with disabilities the central theme of a sport event can promote sport opportunities for these individuals and change residents' attitudes and understanding toward disability. This finding contributes to the sport for development literature, which has provided limited evidence of how sport events and programs can benefit disabled community members by promoting disability sport participation at the grassroots level (Schulenkorf, Sherry, & Rowe, 2016).

Third, we find that empathy for cause, which entails the event's contribution to the inclusion of disabled residents in the community, had the strongest association with social impacts. As noted, providing access and support for disabled individuals represents a key social issue in Cambodia because of the high number of people amputated by anti-personnel landmines. This observed association thus advances the understanding of social leverage, which presents the ways to maximize social impacts from events (Chalip, 2006b; O'Brien & Chalip, 2008), by indicating that addressing a central social issue in the community and positioning this charity support as a core event theme would expand the event's capacity to generate intangible benefits.

6.2. Practical implications

The findings reveal several implications for sport event managers. First, our results provide evidence of a variety of positive impacts a charity-affiliated sport event has on a community, which can bolster appeals for corporate sponsorship and government support to assist in event delivery. Event social responsibility, encompassing an event giving back to the community and/or local businesses, is a critical element in securing sponsorship of local events (Scheinbaum & Lacey, 2015). Meanwhile, a social impact perspective is a potential alternate justification when seeking public investment in sport event

delivery (Inoue, Sato, Filo, Du, & Funk, 2017). Our research highlights additional evidence – both in terms of social impacts and charitable impacts – that could further substantiate this positioning within appeals.

Second, the results underscore the importance of demonstrating the impact of the charitable alignment of an event on the local community. Specifically, the association between the charitable impacts of the event and the resident's perceptions of its broader social impacts indicates that showcasing a tangible and intangible influence on a cause that is important to the community can heighten perceptions of the positive impacts of the event. Across many charities and foundations, there has been a pronounced shift towards outcome-oriented philanthropy, which has been amplified by the emergence of platforms (e.g., GoFundMe) that allow fundraisers and donors to support specific, personal causes (Harris, 2017). The results of this research suggest that charity-affiliated sport event managers should personalize the charity with which they align to the local community to increase the charitable impacts of the event and promote residents' support for the charity. This can be accomplished through consultation with the host community to determine charitable causes central to the community, as well as the use of testimonials to articulate the tangible and intangible results derived from the event.

Third, the emergence of perceptions of increased running and general sport participation within the community suggests that the event can be used as a platform to promote increased physical activity among host community residents. Previous researchers have indicated that sport events do not necessarily translate to sustained increases in sport participation among community residents (Weed et al., 2015). However, the perceptions uncovered within the current research present an opportunity for event managers to leverage. Misener, Taks, Chalip, and Green (2015) suggest that sport demonstrations and advanced education about sport activities can be implemented to facilitate increased participation outcomes from a sport event. To this end, group-based interventions such as training teams to showcase the sport and advance knowledge and competencies among the community can be implemented after an event to leverage the increased perceptions of sport participation to initiate behavioral change.

6.3. Limitations and future research

Some limitations of this research should be acknowledged. First, the samples of both qualitative and quantitative studies included residents from diverse segments of the population. One important segment of the population left out from the current samples, however, is the key beneficiaries of the event (e.g., landmine victims). A focused investigation into beneficiaries' perspectives of the event's social and charitable impacts should complement the current findings.

Second, residents' evaluation of social impacts and charitable impacts in the quantitative study might have been inflated because the data collection was conducted right after the conclusion of the 2015 event. As the AWHM has been held annually for nearly 20 years, it is assumed residents developed consistent evaluation of the event that would be less likely to be influenced by the timing of data collection (Inoue & Havard, 2014). Nevertheless, by conducting follow-up surveys with residents, future researchers would yield insight into the longitudinal impacts that the event would have on the local community.

Third, the AWHM was uniquely positioned in the host community because of its status as the first international sport event after the civil war, and this distinctive feature of the event was reflected in our findings. It is difficult to isolate distinct social and charitable impacts this particular event had on the community because the event has been in existence for a long period and effects from other events, programs, and policies implemented over the years may have confounded residents' perceptions. Consequently, we recommend future researchers to extend the current research by examining social impacts of sport events differing in size, attributes of local communities, and associated meanings, as well as those initiated more recently.

Fourth, as we focused on residents' perceptions in defining and measuring the event's impacts, it is desirable to supplement the current findings with more objective evidence. For example, in relation to the theme of sport, health, and well-being, Hodgetts and Duncan (2015) assessed the Australian Surf Life Saving Championships' impact on local sport participation by analyzing secondary data on membership and competitor numbers. One challenge of adopting designs similar to Hodgetts and Duncan's study is to gather comprehensive secondary data sources that capture various impacts identified in the current research. Nevertheless, analysis of objective data, if available, should allow future researchers to assess the extent to which residents' perceptions reflect actual changes in the community.

Finally, past evidence suggests residents' perceptions of social impacts from a sport event are influenced by how important supporting its affiliated cause is to them (Inoue & Havard, 2014). In the quantitative study, we did not assess residents' personal support of affiliated causes using a survey scale because, based on the qualitative study, it was evident that residents had strong support for main affiliated causes, such as anti-personnel mines and HIV/AIDS care and prevention. Nevertheless, future researchers can advance the findings of this study by considering how the personal importance of a given cause may affect the perceptions of social and charitable impacts as well as their relationships.

In conclusion, we demonstrate how the social and charitable impacts of a charity-affiliated sport event can be defined and measured in a society that has suffered from conflicts and instability. We also show that using a sport event as a means to address important causes increases its capacity to produce social impacts. Future scholars should build on these findings and investigate an array of small-scale events to establish a body of knowledge about the capacity of these events to generate social and charitable impacts to local communities.

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