Assessing the Pro-environmental Behaviour Associated with Small-scale Sport Tourism Events

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Abstract

This study examined the pro-environmental behaviour that is associated with small-scale sporting events in the context of South Africa. To achieve this aim, the study employed a mixed-method research strategy, wherein face-to-face questionnaire surveys (n=316) were conducted with small-scale sporting event attendees. These were complemented by in-depth, semi-structured interviews with key informants who are involved in the organisation and management of such events (n=9). The key findings indicated that small-scale sport event attendees are environmentally conscious and practice pro-environmental behaviour at small-scale sport events to a large extent. However, the study observed certain nuances relating to behavioural differences at different events, with regards to environmental management. Moreover, there seemed to be a misalignment of environmental management from the event organisers and environmental behaviour by the attendees of small-scale sporting events, especially when looking into intended future behaviour at the events. The study advocates for a more comprehensive planning and management approach for small-scale events, particularly from the viewpoint of the organisers in order to promote responsible behaviour by attendees of the events going forward.

Keywords: sport tourism, small-scale events, environmental behaviour, sustainable development, environmental management

Introduction

There has been an increase in research studies that have analysed the sustainability of sport tourism activities and events globally (Becken & Hay, 2007; Daniels & Tichaawa, 2021; Dingle & Mallen, 2021; Grimm, Alcantara & Sampaio, 2018; Mallen, Chard, Keogh & Mansurov, 2015). In addition, environmental sustainability has become an important research focus, given concerns associated to climate change and global warming. As such, sporting associations and event organisers have recognized the need to host environmentally sustainable events and mitigate negative environmental impacts associated with the hosting of sport events (Achu, 2019; Ehigiamusoe, 2020; Getz, 2017; Gibson, Kaplanidou & Kang, 2012; Yuan, 2013). Some scholars (see for example Gibson et al., 2012; Kuo & Chen, 2009; Marinoski & Korunovski, 2012) argue that achieving environmental sustainability in the sport tourism industry is largely dependent on human behaviour. In fact, by its very definition, environmental
sustainability underscores the ability of human beings to conserve and preserve the different systems and processes with which they interact (see works by Costa, Rodrigues & Gomes, 2019; Mowforth & Munt, 1998; Sutton, 2004). Therefore, the environmental impacts caused by sporting events, such as pollution and disturbing ecosystems, are a consequence of human behaviour (Dingle & Mallen, 2021; Grimm et al., 2018; Smith-Christensen, 2009). As a result, there is an increasing need to investigate the environmental behaviours of sport attendees at sporting events (Achu, 2019; Han, Nelson & Kim, 2015; Trendafilova, McCullough, Pfahl, Nguyen, Casper & Picariello, 2014) as well as the overall behaviour of all those involved in the staging of these events. However, very little research has been conducted on the pro-environmental behaviour of sport attendees at small-scale sporting events particularly in the emerging world context. Much of the existing research that has been conducted in this regard has been largely skewed towards major and mega-events (Achu, 2019; Getz, 2017; Gibson et al., 2012; Yuan, 2013) with small-scale events being generally neglected. This paper sets out to assess the pro-environmental behaviour associated with small-scale sporting events in the South African context.

In the existing literature, much academic focus on sport tourism events has been concentrated on economic and social dimensions associated with these events. As such, the environmental aspect has largely been overlooked. In a similar vein, much of the existing research has focused on larger-scale sporting events with very limited focus being directed towards small-scale sporting events (Gibson et al. 2012). This is despite the very important role that such events play in attracting many participants and their families to destinations that otherwise would be affected by seasonality in times of less visitation (Gibson et al., 2012; Nyikana & Tichaawa, 2020). Gibson et al. (2012) also point out that such events tend to encourage repeat visitation to the host destination. In fact, developing countries have specifically targeted these types of events because of their potential linked to fast-tracking development as well as urban and rural regeneration (Ardiet, Sobry & Melo, 2021; Cernaianu, Sobry & Melo, 2021; Nyikana & Tichaawa, 2018a). Others (see for example Chalip, 2017; Giampiccoli, Lee & Nauright, 2015; Gibson et al., 2012) have suggested that small-scale events are actually more economically and environmentally sustainable when compared to major- and mega-events. This assertion is informed by the fact that small-scale events tend to be recurring events which occur more frequently, when compared to mega-events which tend to be “once-off” (Csobán & Serra, 2014; Yusof, Omar-Fauzee, Shah & Geok, 2009). In addition, many destinations in the developing world context may not have the capacity to host mega-events in the first place and thus regularly hosting small-scale events is a significantly better strategy when developing their sporting event portfolios (Kotze, 2006; Nyikana & Tichaawa, 2018b; Ziakas & Costa, 2011). Some destinations have justified their pursuit of small-scale sporting events by suggesting that these events use existing infrastructure and have relatively fewer attendees which make them more environmentally sustainable in the long term (Gibson et al., 2012). Apart from making use of existing infrastructure, these events are argued to be less impactful when it comes to environmental behaviour such as volumes of electricity used, carbon emissions from vehicles transporting participants and attendees alike and the travelling to different destinations by means of air transportation (Dingle & Mallen, 2021; Grimm et al., 2018).

Against this background, this study sought to assess the pro-environmental behaviours that are associated with small-scale events in South Africa both from the viewpoints of attendees as well as event organizers. This assessment, we argue, is anticipated to assist in the better understanding of environmental concerns associated with sport tourism broadly, and small-scale sporting events in particular, especially from an impact-based prospect. To achieve this aim, the paper begins with a literature review focusing on the sport tourism context and
the related environmental implications of sport tourism and events. This is followed by a description of the research methodology that was employed in the study, as well as the ensuing findings and discussions. Lastly, the concluding remarks are presented, based on the key findings of the study.

**Literature review**

**Sport tourism in context**

The sport tourism industry has experienced tremendous growth in the last few decades (Daniels & Tichaawa, 2021; Hemmonsby & Tichaawa, 2020; Higham, 2021; Lin & Lu, 2017; McKay, McEwan & Baker, 2019; Nyikana, 2016; Nyikana, Tichaawa & Swart, 2014). Several researchers have extensively explored the growth of the industry and the multiple opportunities it presents (Fotiadis, Vassiliadis & Yeh, 2016; Nyikana, 2019; Watkin, Mallen & Hyatt, 2021). Many countries, especially in the emerging world have sought to further develop their sport tourism industries because of the economic, social and environmental benefits the industry provides (Bama & Tichaawa, 2020; Hinch & Higham, 2009). Sport tourism, specifically sport events tourism, has greatly contributed to the local economic development (LED) of rural and peripheral destinations wherein there are limited tourism activities on offer (Nyikana & Tichaawa, 2020; Odounga-Othy & Swart, 2016; Radicchi, 2013).

Sporting tourism literature recognizes sporting events as tourist attractions because the events positively contribute towards the destination image and the seasonality patterns of sporting destinations (Wise & Harris, 2017; Zhang & Park, 2015). In addition, countries like South Africa are using sport tourism events to promote social cohesion and socio-cultural dynamics (Knott, Swart & Visser, 2015; Marshall & Barry, 2015; Swart, Tichaawa, Odounga-Othy & Daniels, 2018) Besides the socio-economic benefits that the sector provides, more recent literature has recognised the need to promote and influence environmental sustainability at sporting events (Dingle, 2020; Ehigiamusoe, 2020; Getz, 2017; Watkin et al., 2021). In the context of sport tourism, environmental sustainability refers to the measures implemented to mitigate negative environmental impacts, evaluating the extent to which sport tourism events may affect sporting destinations and the extent to which the behaviour of attendees may impact the environment (Van Niekerk & Getz, 2019; Smith-Christensen, 2009). In this respect, several research studies (see for example Case, 2013; Dingle & Mallen, 2021; Giampiccoli et al., 2015; Gibson et al., 2012; Pâvăluc, Anichiti, Nîţă & Butnaru, 2020) have investigated the direct relationship between sport tourism and the environment. Most sporting activities and events are environmentally-based, thus it is imperative to maintain a healthy environment for the sustainable growth of the sport tourism industry. The focus of this study was on small-scale events and their implications on the environment. The following section explores the relationship between these events and the environment.

**Small-scale sport events and the environment**

Sport tourism literature has largely focused on mega-events and the economic benefits that arise from hosting such mega-events (Ardiet et al., 2021; Bazzanella, Peters & Schnitzer, 2019). For many decades, countries preferred hosting major sport events over smaller-scale sporting events because of the perception that mega-events fast-tracked economic development while small-scale sport events would only delay such growth because of the perceived low impact associated with them in the short-term (Cernaianu et al., 2021; Gibson et al., 2012; Nyikana & Tichaawa, 2020). However, in the last decade, there has been an increase in academic research that focuses on the growth and development of small-scale sporting events as a sustainable alternative to the large-scale events (Badurina, Perić, & Vitezić, 2015; Nyikana & Tichaawa, 2020; Peachey, Borland, Lobpries & Cohen, 2015; Van Rheehan, Sobry & Melo,
These studies have highlighted the significant socio-economic benefits presented by small-scale events especially over a longer-term period. As a result, more countries, especially in the emerging world, are hosting more small-scale sport events as a means to assist economic growth and further develop sporting destinations (Chalip, 2017; Giampiccoli et al., 2015; Gibson et al., 2012; McKay et al., 2019). In any case, hosting small-scale sport events is more practical for developing countries because most of the countries do not have the financial resources to bid for, or host, major sporting events. Small-scale sporting events are held in existing sporting facilities which require minimal financial resources thus reducing the economic burden on sporting destinations (Giampiccoli et al., 2015; Gibson et al., 2012). Several scholars (see for example Ardiet et al., 2021; Badurina et al., 2020; Van Rheethan et al., 2021; Ziakas & Boukas, 2016) argue that small-scale sport events have the potential to provide long-lasting economic benefits for host destinations compared to major events which present more short-lived benefits. More importantly, scholars have also argued that small-scale sport events are more environmentally sustainable compared to major sport events (Duglio & Beltramo, 2017; Giampiccoli et al., 2015; Gibson et al., 2012; Nyikana & Tichaawa, 2020; Radicchi, 2013).

Small-scale sport events have been defined as ‘regular-season sporting competitions (i.e. soccer, rugby leagues, cricket, and basketball), domestic sporting competitions, masters or disabled sports’ (Giampiccoli et al., 2015; Higham, 1999). The authors have highlighted that the key characteristic of small-scale sport events is that they tend to attract relatively less participants and spectators when compared to major events. Gratton, Dobson and Shibli (2000), further describe small-scale sport events as events that are held either annually, monthly or weekly depending on the nature of the sporting competition which influences repeat visits to sporting destinations. Other scholars (Casper, McCulough & Pfahl, 2020; Gibson et al., 2012; Trendafilova et al., 2014) have argued that, based on the recurring nature of small-scale sport events, the events are more closely linked to the environment than mega-events and that the environmental impacts as well as the environmental behaviour of attendees are more manageable in that regard. More recently, it has been observed that there is an increase in environmentally friendly event attendees who have adopted pro-environmental behavioural traits at small-scale events (Casper et al., 2020; Mair & Laing, 2013; McCullough & Kellison, 2016). Similarly, event tourism literature has noted a trend wherein more tourists are attending and supporting environmentally friendly events (Casper et al., 2020; Huh & Vogt, 2008; Yuan, 2013). Kollmuss and Agyeman (2002), define pro-environmental behaviour as conscious behaviour that seeks to protect the environment and minimize any negative environmental impacts. Some scholars (see for example Achu, 2019; Bob & Naidoo, 2012; Han et al., 2015; McCullough & Kellison, 2016) have noted that more sporting associations like the IOC and FIFA are promoting green events and encouraging pro-environmental behaviour which is part of their environmental strategies to decrease the sport events’ carbon footprint. It has also been noted that people tend to behave differently based on the environmental setting in which they find themselves (Achu, 2019; Han et al., 2015; Mair & Laing, 2013). For instance, attendees may practice pro-environmental behaviour at home and not practice pro-environmental behaviour at sporting events. This is because pro-environmental behaviour is largely determined by certain factors that come into play when an attendee is at an event.

These factors include sport attendees’ level of environmental awareness, perceptions and attitudes regarding environmental sustainability and socio-demographic variables, among others (Kaplanidou & Vogt, 2007; Kim & Jogaratnam, 2015; Okumah Ankomah-Hackman & Yeboah, 2020; Yuan, 2013). In fact, a strong connection has been identified between environmental awareness, perceptions and environmental behaviour. According to some researchers (Kruger, 2015; McCullough, Hardie, Kellison & Dixon, 2021; Vicente-Molina,
Fernández-Sainz & Izagirre-Olaizola, 2018; Yuan, 2013), the lack of environmental awareness and lack of interest in environmental sustainability are considered to be barriers to pro-environmental behaviour. There are many reasons attendees’ may not be environmentally aware such as their lack of concern, lack of access to information relating to environmental sustainability, negative perceptions and attitudes towards environmental issues as well as lack of motivation to practice pro-environmental behaviour (Kruger, 2015; Walker, Kaplanidou, Gibson, Thapa, Geldenhuys & Coetzee, 2013). All these reasons tend to result in poor environmental attitudes while attending small-scale events. In addition to the above-mentioned factors, the environmental impact measures implemented by sport event organisers can influence the environmental behaviour of attendees (Han et al., 2015; Yuan, 2013). For instance, the absence of effective waste management plans may encourage attendees to litter. On the contrary, Mair and Laing (2013), claim that encouraging pro-environmental behaviour at sport events may motivate sport attendees to practice pro-environmental behaviour in other environmental settings as well. This would then serve to reinforce the notion that small-scale sporting events can be leveraged in order to provide key environmental knowledge and awareness, making them more sustainable in the longer run (Gibson et al., 2012). The recurring nature of small-scale sport events presents opportunities for event organisers to promote and encourage pro-environmental behaviour at the events. Some studies (see for example Gibson et al., 2012; Mair & Laing, 2013; Walker et al., 2013; Yuan, 2013) opine that small-scale sport events are an ideal platform through which to increase environmental awareness and positive environmental perceptions, which influences pro-environmental behaviour at the events. This study contents with this notion. Given the frequency of small-scale sporting events, understanding the environmental behaviour currently observed there, and the pro-environmental behaviour in particular, should lead to a better management model for these types of events. In the case of South Africa, such lessons can be applied to the bigger events, and later, broader society.

Methodology
This study focused on small-scale events in the city of Johannesburg, located in the Gauteng province of South Africa, with the aim of assessing pro-environmental behaviour at these events. These types of events have often been neglected in the academic discourse despite displaying an ability to have more sustainable traits than their larger counterparts especially in the context of developing countries (Gibson et al., 2012). In recent years, these small-scale events have gradually gained attention from local governments, event organisers, destination marketers and other stakeholders for their role as important tourism products which consistently increase tourism arrivals in local communities (Gibson et al., 2012; Hemmonsby & Tichaawa, 2019; Nyikana & Tichaawa, 2020). The aforementioned scholars argue that these events can develop the economy and improve the socio-economic hardships experienced by a local community by encouraging attendees and participants to buy from local businesses, consume local products and use local facilities more frequently. Small-scale sporting events tend to be home-grown recurring events (Hemmonsby & Tichaawa, 2019). Hemmonsby and Tichaawa (2019) further describe these events as having mass participation, typically consisting of local audiences, being largely informal and being staged in outdoor, natural spaces. The informal nature of these events also mean that they may be associated with free, or very cheap entrance fees and vibrant informal business and trading activities wherein locals buy and sell event-related merchandise at the event spaces. Such events typically include local football, rugby, and cricket league games, triathlons, mountain biking and water sports among others (Hemmonsby & Tichaawa, 2019; Nyikana, Tichaawa & Kimbu, 2021).
The city of Johannesburg was purposively chosen as a case study for this research owing to its potential as a sport tourism destination. Numerous sporting events have been hosted in Johannesburg, ranging from small-scale to mega-events, which has led to the city being proclaimed as ‘Africa’s sporting capital’ (City of Johannesburg, n.d.; Rogerson, 2012). Many of the city’s soccer, cricket and rugby teams take part in many different annual sporting events across all levels. Thus, the importance of sport tourism to the province’s economic growth makes the city an ideal case study for the present enquiry. In addition, the prevalence and frequency of small-scale sporting events observed in the city presented an opportunity for empirical data to be collected on a traditionally neglected area of sport tourism research in this context. A concurrent mixed-method research approach was adopted for the collection and analyses of the data for the study. Creswell (2014) defines a concurrent mixed-method research approach as that which simultaneously applies both qualitative and quantitative techniques in order to provide a comprehensive analysis of the research problem as well as the necessary answers to the research question. In this regard, semi-structured, in-depth interviews were conducted with event organisers of small-scale sporting events (n=9) for the qualitative aspect of the research. These were recorded, and transcribed verbatim and analysed through a thematic analysis procedure. The interviews were held virtually through the use of Microsoft Teams and Zoom applications and lasted on average 45 minutes each. All interview participants were given the study objectives and overview of the study prior to the interviews, and as such all agreed to being recorded. The quantitative aspect of the research included the collection of closed-ended questionnaire surveys (n=316) with small-scale sporting event attendees. Such questionnaire surveys were collected face-to-face with the attendees using a simple random sampling (SRS) approach. The data from this set of enquiries were analysed using the IBM Statistical Package for Social Sciences (SPSS) software with the aid of a statistician. The findings of the study are presented in the section that follows.

Results and discussion

Demographic profiles of respondents

The event attendees were first asked if they had previously attended a small-scale event in the past five years (i.e. 2017-2021) in an effort to screen for relevance and to ascertain interest and involvement in small-scale sporting events hosted in their areas of residence. The five-year period was used to include an element of recall since there were a lack of events hosted in the years 2020 and 2021 owing to the different lockdown restrictions that were imposed due to the COVID-19 pandemic. The question was a multiple response question with the option to choose all relevant events attended. It was found that all those who participated in the study (n=316) had attended a small-scale sporting event, with the most popular sporting codes attended being local league football matches (84.2%), local league netball games (26.9%), basketball (22.5%), local league rugby games (17.9%) as well as local cricket games (10.6%). These findings were unsurprising when considering that these sporting codes are amongst the most popular ones in South Africa. In terms of demographic profiles, Table 1 below reveals that the vast majority of the attendees (82.3%) were male, and relatively youthful given that 91.2% of them were between the ages of 18 and 36 years collectively. In addition, it was found that the majority of attendees were relatively well educated with those who had obtained at least a matric (completed secondary school), had a higher certificate, an undergraduate diploma and postgraduate degree collectively made up 96.9% of the total sample. Such findings were consistent with other similar studies which found that the demographic profiles of those who attended sporting events generally tended to be relatively young, educated males (see for example Achu, 2018, 2019; Nyikana & Tichaawa, 2018c; Turco, Tichaawa, Moodley, Munien, Jaggernath & Stofberg, 2012; Valek, Shaw & Bednarik, 2014).
Table 1: Demographic profiles of respondents

<table>
<thead>
<tr>
<th>Type of sport event attended</th>
<th>Total (n=316, in percentages)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local league football games</td>
<td>84.2</td>
</tr>
<tr>
<td>Local league netball games</td>
<td>26.9</td>
</tr>
<tr>
<td>Basketball games</td>
<td>22.5</td>
</tr>
<tr>
<td>Local league rugby games</td>
<td>17.9</td>
</tr>
<tr>
<td>Local cricket games</td>
<td>10.6</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th></th>
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<tbody>
<tr>
<td>Male</td>
<td>82.3</td>
</tr>
<tr>
<td>Female</td>
<td>17.1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age (in years)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>18-24</td>
<td>61.4</td>
</tr>
<tr>
<td>25-30</td>
<td>20.9</td>
</tr>
<tr>
<td>31-36</td>
<td>8.9</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Highest level of education obtained</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Secondary school completed (matric)</td>
<td>39.6</td>
</tr>
<tr>
<td>Undergraduate diploma</td>
<td>30.4</td>
</tr>
<tr>
<td>Postgraduate degree</td>
<td>14.2</td>
</tr>
<tr>
<td>Higher certificate</td>
<td>12.7</td>
</tr>
</tbody>
</table>

**Environmental awareness and behaviour**

Some scholars (see for example Kaplanidou & Vogt, 2007; Kruger, 2015; Yuan, 2013) have argued that the level of interest in, and awareness about, environmental management and sustainability in the context of tourism events largely determines the behaviour that will be displayed by attendees at small-scale sporting events. In this regard, the study also sought to gauge the levels of interest and involvement in small-scale sport tourism events. This is on the back of the fact that small-scale sporting events have been defined, by their very nature, as recurring events that are often hosted several times in a year (Badurina et al., 2020; McKay et al., 2019). In fact, by their very nature, small-scale sporting events allow for repeat attendance because they are frequently available for those who wish to attend given their recurring nature. In this study, it was found that the majority of respondents (48.4%) had attended small-scale sporting events at least 13 times or more in the past five years on average (see Table 2 below). This was closely followed by those who indicated that in the past five years they had attended between two and four times (18%) and between five and eight times (16.8%).

In an effort to further test the levels of awareness and interest in environmental management and sustainability, the attendees were asked to indicate their preferred transportation method when going to the events. This follows some other studies that have suggested that the sport tourism industry as a whole is one of the major contributing factors to adverse changes in the climate owing to the element of transportation (see for example Achu, 2019; Chirieleison, Montrone & Scrucca, 2020; Hall, Le-Klähn, & Ram, 2017). In this study, it was found that a majority of the respondents (44.8%) preferred to travel with their private cars in order to attend small-scale sport events. There was a notable number of respondents (24.8%) who preferred to walk to these events, which was not surprising given the close proximity of the event spaces to the areas from which data was collected. The remaining percentage of respondents indicated using public transport in the form of taxis and e-hailing services (20.3%) and school busses (10.2%). To further ascertain attendees’ environmental awareness, the respondents were asked to rate their level of environmental concern while attending small-scale sport events. This is on the back of some studies that have found that the level of environmental concern exhibited by attendees determines their pro-environmental...
behaviour at sport events (Casper et al., 2020; Saayman, 2012; Yuan, 2013). This study revealed that most of the respondents (45.7%) were extremely concerned about the environment. This was followed by respondents (28.9%) who indicated they were very concerned and respondents who noted they were moderately concerned about the need to protect the environment (19.7%). A small percentage of the respondents (3.5%) indicated they were slightly concerned and the remaining percentage (2.2%) stated that they were not concerned at all about the environment. These results reveal that generally there is a significant concern towards the need to protect the environment amongst attendees. However, the in-depth interviews conducted with small-scale sport event organisers revealed that sport event attendees do not in fact display any particular environmental concern when attending the small-scale sport events. For example, one of the event organisers expressed the following:

Sometimes it is ignorance, hence the lack of concern and other times, attendees have an ‘I do not care’ attitude about the environment. They know what the right thing to do is but choose to ignore it. Others even say they are creating employment when they litter.

The organisers claim that event attendees have a negative perception and attitude towards environmental sustainability hence their lack of environmental concern. This is consistent with some studies (see for example Kruger, 2015; Vicente-Molina et al., 2018; Yuan, 2013) that have highlighted negative perceptions and attitudes towards environmental sustainability as barriers to achieving pro-environmental behaviour at sporting events.

In order to ascertain the pro-environmental behaviour of attendees at small-scale sporting events, in a multiple response question respondents were asked to indicate what action they took in the absence of environmental impact measures (i.e. rubbish and recycle bins, signage posts for rubbish bins etc.) implemented by event organisers. The results revealed that majority of the respondents (47.6%) took it upon themselves to look for rubbish bins. This was closely followed by respondents (31.1%) who stated they threw their litter in the correct rubbish and recycle bins in cases where they did not come across signage posts indicating the direction of disposal bins. A notable percentage of the respondents (25.1%) said they used paper cups when consuming alcohol and threw the paper cups in the correct disposal bins. This was closely followed by respondents (20.6%) who stated that in cases where they could not see or find the disposal bins, they had asked the event organisers where the disposal bins were situated. Some respondents (14.6%) revealed that they threw their litter on the floor, somewhat confirming the observations of the event organiser mentioned above. Most of the qualitative respondents revealed that they experience excessive littering at small-scale sport events because attendees do not dispose of their litter in the disposal bins. Other respondents (13%) stated that they picked up litter that had been disposed of on the floor after the event. A notable percentage of respondents (27.6%) stated they did not take any action in the absence of environmental impact measures at small-scale sport events. Ultimately, the findings here seem to paint a grim picture of the matter of environmental management at small-scale sporting events. While there is an indication of pro-environmental behaviour on the part of the attendees, there are still many of them who are not really concerned about the environment. Additionally, the organisers and other stakeholders also seem to be failing to come up with effective environmental management strategies suitable for adoption at these events.

Having established the extent to which pro-environmental behaviour is practiced at small-scale sport events, respondents were also asked to indicate whether they would practice certain environmental actions at future small-scale sport events that they would attend. According to some scholars (see for example Carneiro, Breda & Cardeiro, 2016; Dolnicar &
Grün, 2009; Han et al., 2015), the presence of environmental impact measures such as effective waste management measures and environmental educational campaigns at sporting events encourages attendees to practice pro-environmental behaviour.

Table 2: Environmental awareness and behaviour

<table>
<thead>
<tr>
<th>Frequency of sport event attendance</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>13 time and above</td>
<td>48.4</td>
</tr>
<tr>
<td>2-4</td>
<td>18</td>
</tr>
<tr>
<td>5-8</td>
<td>16.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Mode of transport used</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Private car</td>
<td>44.8</td>
</tr>
<tr>
<td>Walked</td>
<td>24.8</td>
</tr>
<tr>
<td>Public transport (taxis, e-hailing services)</td>
<td>20.3</td>
</tr>
<tr>
<td>School buses</td>
<td>10.2</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Level of environmental concern</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely concerned</td>
<td>45.7</td>
</tr>
<tr>
<td>Very concerned</td>
<td>28.9</td>
</tr>
<tr>
<td>Moderately concerned</td>
<td>19.7</td>
</tr>
<tr>
<td>Slightly concerned</td>
<td>3.5</td>
</tr>
<tr>
<td>Not concerned at all</td>
<td>2.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Environmental action taken by attendees</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Looked for recycle or rubbish bins</td>
<td>47.6</td>
</tr>
<tr>
<td>Threw litter in the correct rubbish or recycle bins</td>
<td>31.1</td>
</tr>
<tr>
<td>If I was consuming alcohol, I used paper cups and threw the cups in the correct disposal bins</td>
<td>25.1</td>
</tr>
<tr>
<td>Asked the event organisers where to find correct disposal bins</td>
<td>20.6</td>
</tr>
<tr>
<td>Threw litter on the floor</td>
<td>14.6</td>
</tr>
<tr>
<td>Picked up litter disposed on the floor after the event</td>
<td>13</td>
</tr>
<tr>
<td>None of the above</td>
<td>27.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pro-environmental behaviour at future small-scale sport events</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recycle</td>
<td>93</td>
</tr>
<tr>
<td>I will use the correct disposal bins</td>
<td>93</td>
</tr>
<tr>
<td>Reuse paper/plastic cups</td>
<td>83.5</td>
</tr>
<tr>
<td>Purchase/consume less products at the events</td>
<td>71.5</td>
</tr>
<tr>
<td>Use public transport</td>
<td>70.6</td>
</tr>
<tr>
<td>Reuse water</td>
<td>56.1</td>
</tr>
</tbody>
</table>

In terms of using recycling measures, the results revealed that a vast majority of the respondents (93%) said they would recycle at future small-scale sport events. They further indicated that they would use the correct disposal bins (93%) at future small-scale sport events. This was closely followed by respondents (83.5%) who indicated that they would re-use paper and plastic cups. Most of the respondents (71.5%) revealed that they would also intensify their individual efforts to prevent excessive littering at small-scale sport events, in terms of which they said that they would buy and consume less products that are harmful to the environment. The findings further reveal that the majority of the respondents (70.6%) agreed that they would use public transport when attending small-scale sport events in future in order to reduce their carbon footprint. The latter indication however was disputed by the event organisers who argued that the accessibility and frequency of the small-scale events meant that people could drive in their private cars and consume alcohol and food inside their cars, then throw the waste outside in the event spaces. This notion was aptly summarised by one of the organisers:

Look, we organise local events for the community. That means everyone has access to them and someone could just have been passing in their car, but when they see the gathering and the excitement, they join in. They really don’t bother with environmental responsibility and they love the convenience of their own cars anyway.
Such sentiments reveal that there is a negligence on the part of the attendees where pro-environmental behaviour is concerned. It also shows the lack of interest on the part of the organisers when it comes to raising awareness and applying strategies that ought to discourage this behaviour. Additionally, the lack of control that the organisers are showing speaks to a somewhat disappointing approach to effective planning for, and management of, these types of events, especially when considering how frequently they take place. It would be expected that the organisers would have come up with effective ways to address some of the biggest concerns that they are raising over time.

**Strategies to overcome negligent environmental behaviour**

Several studies (see for example Casper et al., 2020; Kruger, 2015; Walker et al., 2013; Yuan & Jang, 2008), claim that the lack of environmental awareness and knowledge are considered barriers to pro-environmental behaviour at sporting events generally. To test the above claim, respondents were asked to indicate their preferred strategy to overcome negligent environmental behaviour through a Likert-type Scale linked to a range of statements. For the purpose of this paper, the focus was on the two statements that received the largest support from respondents and is presented in Table 3 below. The first statement sought to uncover whether the implementation of environmental educational campaigns at small-scale sport events would motivate them to practice pro-environmental behaviour. Unsurprisingly, a notable percentage of respondents (79.1%) agreed with the statement and felt that more environmental educational campaigns would promote responsible environmental behaviours. Some of the respondents (14.9%) had a neutral view on the matter and a small percentage of the respondents (6.0%) disagreed with the statement altogether, indicating that environmental educational campaigns would not encourage pro-environmental behaviour at small-scale sport events. This finding was consistent with the views expressed by the event organisers relating to educating event attendees. One of the key informants expressed the following:

In most cases, the problem is not the environmental impact measures that are implemented at the small-scale events, sometimes event attendees do not know how to use the environmental measures hence the negative behaviour. So, we [event organisers] should teach event attendees how to use the measures and adhere to the environmental regulations. Unfortunately, they don’t want to engage with our notices on awareness and are only interested in the sport itself

The feeling from the event organisers is that they do need to intensify the education of event attendees, as they feel this would assist in developing a degree of responsible behaviour. However, they are also cautious as there seems to be disinterest in the campaigns from the part of the attendees. Regardless, the event organisers should be making an effort to promote pro-environmental behaviour amongst attendees as many of the attendees seem to think these campaigns would be of benefit.

The second statement was related to environmental awareness. Yuan (2013) claims that sport event attendees can be influenced by the environmental behaviour of other sport event attendees. Thus, this study sought to ascertain whether attendees’ participation in raising environmental awareness among other sport event attendees at small-scale sport events would contribute to pro-environmental behaviour. Most of the respondents (67.8%) agreed to participating in raising environmental awareness. A notable percentage of the respondents (22.5%) remained neutral on the statement and a minority of the respondents (9.8%) expressed a lack of interest in participating in raising environmental awareness from a personal point of view.
Table 3: Attitudes and perceptions towards pro-environmental behaviour

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The implementation of environmental educational campaigns at small-scale</td>
<td>79.1</td>
<td>14.9</td>
<td>6.0</td>
</tr>
<tr>
<td>sport events would motivate me to practice pro-environmental behaviour</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I will participate in raising environmental awareness and interest among</td>
<td>67.8</td>
<td>22.5</td>
<td>9.8</td>
</tr>
<tr>
<td>other event attendees</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In an effort to further understand the environmental behaviours associated with small-scale sport events from the perspective of event organisers, the organisers were asked whether they had witnessed different environmental behavioural traits at the different sporting events they host. The findings indicate that attendees exhibit different environmental behaviour at each sporting code event. According to the key informants, the culture of the sporting events influences the environmental behaviour of sport attendees. They noted that event attendees are more likely to adopt pro-environmental behavioural traits at rugby and cricket sporting events than soccer sporting events. For instance, one of the event organisers said the following:

Obviously, the environmental behaviour of attendees will not be the same at different sporting events. Soccer is more vibrant and it involves more fans. It is common to see fans run on the field during a soccer game but with cricket, it is more controlled and calm. Cricket fans make less noise compared to soccer fans. This also translates to the behaviour regarding the environment. Soccer fans can be upset and throw some of their glasses and bottles on the ground in anger. Perhaps the fluctuating emotions also encourage them to eat and drink more.

The views of the key informants in this regard, while uncertain, suggest that the setting at an event can play a role in the type of behaviour exhibited there. Dolnicar and Grün (2009) argued that environmental behaviour of sport attendees in general largely depended on the environmental setting observed at an event. Thus, in this instance, perhaps the environmental behaviour practiced by attendees is closely linked to the overall setting and atmosphere at the specific sporting code and its event. As argued by the interview participants, soccer is the number one sport in South Africa and tends to draw large crowds of passionate supporters. Such a setting can lead to more littering, noise and other negative environmental impacts.

**Discussion and conclusion**

It has been widely noted in sport tourism literature that the quality of the environment and sport tourism events is dependent on human behaviour (Păvăluc et al., 2020; Pavlović, Belij, Vesić, Jovanovic & Manojlović, 2019; Yuan, 2013). Hence, it is important that sport tourism events encourage pro-environmental behaviour in order to ensure the long-term sustainability of sport tourism events. The main purpose of this study was to assess the pro-environmental behaviour associated with small-scale sporting events. The key findings of this study are consistent with several studies (see for example Achu, 2019; Casper et al., 2020; Kruger, 2015; Yuan, 2013) that have argued that the pro-environmental behaviour of sport event attendees is susceptible to various factors such as the lack of knowledge, lack of environmental concern, negative attitudes and perceptions towards environmental sustainability. The findings from this study reveal that majority of the respondents have positive perceptions and attitudes towards practicing pro-environmental behaviour at small-scale sport events which further indicates that the respondents are environmentally conscious attendees. In addition, the results also revealed that a majority of the respondents practiced pro-environmental behaviour by adhering to the environmental measures implemented at small-scale sport events and actively looked for the measures in instances where the measures were not visible. This finding is consistent with
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studies (see for example Casper et al., 2020; Grimm et al., 2018; Han et al., 2015; Kim & Jogaratnam, 2015) that have argued that the implementation of effective environmental impact measures contributes to the pro-environmental behaviour of sport attendees. These results show that event organisers have the responsibility to ensure that attendees practice pro-environmental behaviour.

The results, however, also indicate that small-scale sport event organisers have different perceptions regarding the positive attitudes and awareness of attendees. From their perspective, there are limited pro-environmental behaviours exhibited at small-scale sport events. The organisers conceded that the lack of knowledge on environmental sustainability and impacts is a major contributing factor to the negative environmental behaviour witnessed at small-scale sport events. The organisers also point to the negligence of the attendees in practicing responsible behaviour while attending events, especially football games. This disconnect in terms of each stakeholder pointing to the failure of the other, and the lack of accountability on the part of the organisers does not help improve the situation. In addition, the tone of the organisers is one of defeat in the plight to be responsible to the environment, which further compounds the issue. This study advocates for the implementation of environmental educational campaigns which seek to encourage and increase pro-environmental behaviour at small-scale sport events. The inconsistencies found in the environmental behaviour of attendees at different sporting events is also of concern. According to Achu (2019), the different environmental behaviours may be explained by the fact that the environmental sustainability of an event and the sporting facilities influence the pro-environmental behaviour of attendees. For instance, the absence of effective waste management measures at stadiums will influence attendees to litter (Achu, 2019; Dodds & Walsh, 2019). The recurring nature of small-scale sport events presents an ideal platform for promoting pro-environmental behaviour and engaging with attendees on environmental education.

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References


