Determining attendees' green attitude and behaviour at arts festivals

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DECLARATION LETTER

I, EVA MABATSHIDI MARUMO, identity number 9205150413082 and student number 23044527, hereby declare that this research submitted to the North-West University, for Master study in article format: *Determining attendees' green attitude and behaviour at arts festivals,* is my own independent work; and complies with the Code of Academic Integrity, as well as other relevant policies, procedures, rules and regulations of the North West University; and has not been submitted before to any institution by myself or any other person in fulfillment (or partial fulfillment) of the requirement for the attainment of any qualification.

_____	_____
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ABSTRACT

The main goal of this study was to determine attendees' green attitude and behaviour at arts festivals, namely Aardklop National Arts Festival and Innibos Lowveld National Arts Festival. Four objectives were formulated to achieve this goal.

The **first objective** for this study was to conduct an in-depth literature study on the greening of events. The literature study investigated concepts and themes relating to the greening of events and green practices that can be implemented at events. The difference and link between the concepts of sustainability and greening were explored. Awareness of the environmental impacts of events as well as the associated benefits of limiting these impacts by means of green practices at these events were discussed. Specific green practices that can be implemented at events/festivals were identified and categorised into five broader categories, namely water management, waste management, energy management, greener transport options and green commitment practices. Possible green practices that can be implemented at home were also investigated and categorised with the intention to determine possible correlations between green behaviour at home and the willingness to support green practices at festivals. These four categories included water management, waste management, energy management and green commitment practices.

The **second objective** was achieved by conducting surveys at Aardklop in Potchefstroom, North West and at Innibos in Mbombela, Mpumalanga. The purpose of the surveys was to determine if attendees would be inclined to support the implementation of green practices at arts festivals. A confirmatory factor analysis that was employed on two separate data sets (Aardklop = 443 and Innibos = 400) revealed five factors, namely Greener transport options, Water management, Waste management, Energy management and Green commitment. The analyses revealed that attendees at both festivals were inclined to support the implementation of only four of the five green practice factors. They were less inclined to support the use of greener transport options at these festivals.

An independent sample *t*-test was conducted to determine possible significant differences between Aardklop and Innibos attendees. A statistically significant difference was

revealed between the two festivals regarding the inclination to support the waste management factor.

The **third objective** was achieved by determining the correlation between attendees' actual green behaviour at home and their inclination to support green practices at arts festivals (on a combined data set of Aardklop and Innibos). Two confirmatory factor analyses were conducted – one on the combined data set of green behaviour at home, and the other on the combined data set of the inclinations to support green practices (green attitude) at the arts festivals. The four green factors for green behaviour at home and green attitude at the festivals were labelled as Water management, Waste management, Energy management and Green commitment practices.

The independent sample *t*-test analysis revealed a difference between the implementation of green practices at home and the inclination to support the implementation of green practices at festivals. It was found that attendees were more inclined to support the implementation of green practices at festivals than the extent to which they were actually implementing green practices at their respective homes. Thus, words seemed to speak louder than actions.

The **fourth and final objective** for this study was to draw conclusions regarding the greening of South African arts festivals and, on the basis of festival attendees' green attitude and behaviour, make recommendations to arts festival organisers regarding the implementation of green practices that would be likely to be supported.

This study made significant contributions to events and arts festival literature, and recommendations for the industry were made to better manage the greening of arts festivals. It was recommended that arts festival organisers make green practices more appealing, compensatory/rewarding and less time consuming to gain more support from attendees and encourage attendees to be green at home. In addition, it was recommended that further research should be conducted at other arts festivals or events focusing on greening aspects. Investigating attendees' attitude and behaviour regarding the greening of arts festivals by means of green practices has set a platform for other festivals and events organisers to join the movement of hosting green festivals/events in order to make South African events more sustainable in future.

Keywords: *Arts festivals, Clover Aardklop National Arts Festival, Innibos Lowveld National Arts Festival, attitude, behaviour, green practices, festival attendees.*

OPSOMMING

Die hoofoogmerk van hierdie studie was om feesgangers se groen ingesteldheid en gedrag by kunstefeeste, naamlik die Aardklop Nasionale Kunstefees en die Innibos Laeveld Nasionale Kunstefees, te bepaal. Vier doelwitte is geformuleer om hierdie oogmerk te bereik.

Die **eerste doelwit** vir hierdie studie was om ’n grondige literatuurstudie oor die vergroening van gebeurtenisse te doen. Die literatuurstudie het konsepte en temas ten opsigte van die vergroening van gebeurtenisse en groen praktyke ondersoek wat by gebeurtenisse geïmplementeer kan word. Die verskil en verband tussen die konsepte van volhoubaarheid en vergroening is verken. Bewustheid van die omgewingsimpakte van gebeurtenisse, asook die verwante voordele van die beperking van hierdie impakte deur middel van groen praktyke by hierdie gebeurtenisse is bespreek. Spesifieke groen praktyke wat by gebeurtenisse/feeste geïmplementeer kan word, is geïdentifiseer en gekategoriseer in vyf breër kategorieë, naamlik waterbestuur, afvalbestuur, energiebestuur, groener vervoeropsies en groen verbintenispraktyke. Moontlike groen praktyke wat tuis geïmplementeer kan word, is ook ondersoek en gekategoriseer met die doel om moontlike korrelasies te bepaal tussen groen gedrag tuis en die bereidwilligheid om groen praktyke by feeste te ondersteun. Hierdie vier kategorieë het waterbestuur, afvalbestuur, energiebestuur en groen verbintenispraktyke ingesluit.

Die **tweede doelwit** is bereik deur opnames by Aardklop in Potchefstroom, Noordwes, en by Innibos in Mbombela, Mpumalanga te doen. Die doel van die opnames was om te bepaal of feesgangers geneig sou wees om die implementering van groen praktyke by kunstefeeste te ondersteun. ’n Bevestigende faktoranalise wat op twee afsonderlike datastelle toegepas is (Aardklop = 443 en Innibos = 400), het vyf faktore getoon, naamlik groen vervoeropsies, waterbestuur, afvalbestuur, energiebestuur en groen verbintenis. Die ontledings het getoon dat feesgangers by albei feeste geneig was om die implementering van slegs vier van die vyf groenpraktyk-faktore te ondersteun. Hulle was minder geneig om die gebruik van groener vervoeropsies by hierdie feeste te ondersteun.

’n Onafhanklikesteekproef-*t*-toets is uitgevoer om moontlike beduidende verskille tussen Aardklop- en Innibos-feesgangers te bepaal. ’n Statisties beduidende verskil is tussen die

twee feeste geïdentifiseer ten opsigte van die geneigdheid om die afvalbestuur-faktor te ondersteun.

Die **derde doelwit** is bereik deur die korrelasie te bepaal tussen feesgangers se werklike groen gedrag tuis en hulle geneigdheid om groen praktyke by kunstefeeste te ondersteun (op 'n gekombineerde datastel van Aardklop en Innibos). Twee bevestigende faktoranalises is uitgevoer – een op die gekombineerde datastel van groen gedrag tuis, en die ander een op die gekombineerde datastel van die geneigdheid om groen praktyke (groen ingesteldheid) by die kunstefeeste te ondersteun. Die vier groen faktore vir groen gedrag tuis en groen gedrag by die feeste is as waterbestuur, afvalbestuur, energiebestuur en groenverbintenis-praktyke geïdentifiseer.

Die onafhanklikesteekproef-*t*-toetsontleding het 'n verskil geïdentifiseer tussen die implementering van groen praktyke tuis en die geneigdheid om die implementering van groen praktyke by feeste te ondersteun. Daar is gevind dat feesgangers meer geneig was om die implementering van groen praktyke by feeste te steun as die mate waartoe hulle werklik groen praktyke by hulle onderskeie huise geïmplementeer het. Dit blyk dus dat woorde duideliker spreek as dade.

Die **vierde en laaste doelwit** van hierdie studie was om gevolgtrekkings te maak oor die vergroening van Suid-Afrikaanse kunstefeeste, en op grond van feesgangers se groen ingesteldheid en gedrag aanbevelings aan kunstefeesorganiseerders te maak oor die implementering van groen praktyke wat waarskynlik ondersteun sal word.

Hierdie studie het beduidende bydraes tot die literatuur oor gebeurtenisse en kunstefeeste gemaak, asook aanbevelings vir die bedryf om die vergroening van kunstefeeste beter te bestuur. Daar is aanbeveel dat kunstefeeste-organiseerders groen praktyke aantrekliker, lonender en minder tydrowend moet maak om meer steun van feesgangers te kry en feesgangers aan te moedig om tuis groen te wees. Verder is daar aanbeveel dat verdere navorsing by ander kunstefeeste of gebeurtenisse gedoen moet word en op vergroeningsaspekte te fokus. Die ondersoek van feesgangers se ingesteldheid en gedrag ten opsigte van die vergroening van kunstefeeste deur middel van groen praktyke het 'n platform gestel vir ander fees- en gebeurtenisorganiseerders om aan te sluit by die beweging om groen feeste/gebeurtenisse aan te bied ten einde Suid-Afrikaanse gebeurtenisse in die toekoms meer volhoubaar te maak.

Sleutelwoorde: *Kunstefeeste, Clover Aardklop Nasionale Kunstefees, Innibos Laeveld Nasionale Kunstefees, ingesteldheid, gedrag, groen praktyke, feesgangers.*

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CHAPTER 1

INTRODUCTION, PROBLEM STATEMENT, OBJECTIVES, AND METHOD OF RESEARCH

"We abuse the land because we regard it as a commodity belonging to us. When we see land as a community to which we belong, we may begin to use it with love and respect."

Aldo Leopold, *A Sand Country*

1.1 TITLE

Determining attendees' green attitude and behaviour at arts festivals

1.2 INTRODUCTION

The tourism industry has shown growth over the past few years with 9.4% in 2013, 9.5% in 2014 and 9% in 2015 (SA Tourism Review, 2015:vi). The growth of the tourism industry has also reflected an increase in festivals and events, which are multiplying and gaining in popularity (Roodt, 2008:1). People have always been motivated to celebrate the significance of events in their lives by hosting a festival/event because they feel that it is part of their history and a custom that they will be able to pass on to future generations (De Witt, 2006:1). Festivals have led to an increase in attention by researchers who investigate the economic, social and environmental impacts of festivals (Mair & Laing, 2012:683). This has resulted in numerous studies globally that have predominantly concentrated on the economic and social impacts, with little attention given to the negative environmental impacts of arts festivals, especially in South Africa (Adema & Roehl, 2010:199; Dickson & Arcodia, 2010:237).

Arts festivals are highly dependent on the environment, and the environment also forms part of the attraction (Saayman & Rossouw, 2011:256). Failure to manage different activities at an event can turn out to be a threat to the environment and its natural resources (Du Plessis, Van der Merwe & Saayman, 2013:180). Therefore it is clear that failing to protect and conserve the environment and its natural resources will mean that the concept of sustainable events will not be successfully implemented in the future (Smith, 2014:5).

The events industry can be seen as a big contributor to the increase in negative environmental impacts. This has led to concepts such as "sustainability", "environmentally friendly", "green" and "going green" being widely discussed in recent years to address environmental issues. This is evident because people are becoming increasingly aware of how important the environment is and recognising that an individual's choice of lifestyle and behaviour can have a negative impact on the natural environment (Miller, 2010:4). In this regard, previous research has made it clear that South Africa is greatly concerned

about protecting natural resources for future generations (Du Plessis *et al.,* 2013:180; Han, Hsun & Lee, 2009:519).

Arts festivals are increasingly motivated to go green in order to enhance the experience and environmental consciousness by raising awareness about using green practices as a means to reduce negative environmental impacts (Almadani, 2012:15). The concept "green" means making crucial decisions and choosing a lifestyle that is environmentally friendly and ecologically acceptable (Choong, Ang & Ng, 2014:1). However, basic green practices such as energy management, water management and waste management can be implemented when deciding to choose a green lifestyle and reduce negative environmental impacts (Kruger & Saayman, 2013:64). Furthermore, to successfully implement green practices requires collaboration between all stakeholders, including festival managers, regulating authorities, sponsors, and festival attendees (community members and visitors) (Jones, 2014:27).

Festival attendees, who in this case were the community and visiors were selected for the purpose of this study because festival atteedees' green attitude and behaviour both play a signifincat role in determining the successful implementation of green practices at arts festivals (Chong *et al.*, 2014:1; Wong, Lee, Lin & Low, 2012:15).

This chapter provides the route of the research and the overview of the problem statement that is analysed throughout the study. This is achieved by providing the research objectives, research methodology, concept clarification and the chapter classification.

1.3 BACKGROUND TO STUDY

Arts festivals are a significant contributor to the growth of tourism and over the years the events industry (of which festivals are a part) has been recognised as one of the sectors in the tourism industry (Getz, 2007:403). Globally there are different types of festivals and events that all differ in terms of their size and environmental, social and economic impact (George, 2011:511). These festivals and events include sports events (Kruger & Saayman, 2012; Shipway & Kirkup, 2012; Guilianotti, Armstrong, Hales & Hobbs, 2014), music festivals (Saayman & Rossouw, 2010; Riley & Laing, 2006), arts festivals (Kruger, Saayman & Ellis, 2011; Thomas & Thomas, 2012), wine festivals (Saayman, Saayman & Joubert, 2013), special events (Jazz festivals, Car rallies or Christmas pageant) (Kruger

& Saayman, 2014; Shihui & Hongtao, 2012; Monga, 2006:46) and cultural festivals (Herrero, Sanz, Bedate & Barrio, 2012). The environmental impacts (littering, overuse of electricity, soil compaction, air and noise pollution, overcrowding and carbon dioxide emissions) of these festivals and events is now visible and the quest for more sustainable festivals and events has begun (Ferdinand & Kitchin, 2012:199; Wale, Robinson & Dickson, 2010:187-188).

Sustainable development is a concept known to focus on three pillars, namely economic efficiency, social justice, and environmental integrity (Keyser, 2009:25). Mismanagement in any of these areas will therefore lead to negative economic, social and environmental impacts (Pasanen, Taskinen & Mikkonen, 2009:114).

The latter and more appropriate for this study, environmental impacts can be described as the 'indirect and direct' changes to the environment caused by people's efforts (Saayman, 2009:178). Arts festivals are seen as one of the contributors to environmental depletion due to these festivals bringing a huge number of attendees, noise and vehicles/traffic. This result in an increase in the pollution of a particular area/terrain for a certain period of time (DeLacy, Voster, Hawkins & Jaing, 2012:86), which in turn leads to architectural pollution, littering, traffic congestion, overcrowding, depletion of natural resources, loss of natural habitats and soil erosion (George, 2007:309–310).

Zhong, Deng, Song and Ding (2011:2974–2975) identified three main negative environmental impacts of tourism and arts festivals, namely soil erosion (increase of population in one area for a short or long period), water depletion (107 330 m^3 35%) (overuse of water resources), waste pollution (23 500 tonnes – 23%) and atmospheric impacts (19 778 – 80% tonnes of Carbon dioxide) (air pollution caused by an increase in emissions) annually (Table 1.1).

It is therefore crucial for arts festival organisers, sponsors and other stakeholders to incorporate "environmental management policies, land use planning and controls" and green practices to reduce these negative environmental impacts (Getz, 2007:342). This should be done to promote sustainable arts festivals that will encourage conservation of the environment and natural resources in the future (Du Plessis *et al.*, 2013:189).

Table 1.1: Previous studies conducted on environmental impacts

STUDY TITLES	DESCRIPTION OF ENVIRONMENTAL IMPACTS	RESEARCHERS
Environmental and visitor management in a thousand protected areas in China	✓ Water pollution ✓ Soil degradation ✓ Loss of native vegetation ✓ Exploitation of threatened species ✓ Waste pollution	Zhong, Buckley, Wardle and Wang (2015)
An integrated approach to evaluating the coordination between tourism and the environment	✓ Environmental pollution ✓ Ecology destruction	Tang (2015)
How to combine microsimulation tools to assess the environmental impacts of road traffic – lessons and direction	✓ Air pollution	Fontes, Pereira, Fernandes, Bandeira and Coelho (2015)
Environmental orientation and environmental behaviour: perceptions of protected-area tourism stakeholders	✓ Biodiversity loss	Imran, Alam and Beaumont (2014)
Chinese and Australian tourists' attitudes on nature, animals and environmental issues: implications for the design of nature-based tourism experiences	✓ The effects of global warming ✓ Pollution ✓ Environmental degradation	Packer, Ballantyne and Hughes (2014)
Environmental impact and life-cycle assessment (LCA) of traditional and "green" concretes: literature review and theoretical calculations	✓ Greenhouse gas emission ✓ Composition ✓ Climate change ✓ Damage of the ecosystem quality ✓ Stratospheric ozone depletion ✓ Damage to fossil and mineral resources	Van den Heede and De Belie (2012)
Life-cycle environmental impacts of wine production and consumption in Nova Scotia, Canada	✓ Increase in emission into the air ✓ Global warming ✓ Stratospheric ozone depletion	Point, Tydmers and Naugler (2012)
Research on environmental impacts of tourism in China: progress and prospects	✓ Water environment impacts ✓ Atmospheric environment impacts ✓ Soil erosion impacts	Zhong *et al*. (2011)

(Author's own compilation)

In this regard Mair and Jago (2010:78) find it appropriate to define green as "an investment in environmentally friendly facilities and practices". This is because recently arts festivals have been adopting green practices. These green practices have been divided into five categories in addition to those already mentioned by Getz (2007:342). The practices include recycling, reducing energy consumption, waste management, water management and raising awareness of the importance of using public transport. Furthermore, reducing negative community impact and environmental damage were

added to the category (Merrilees & Marles, 2011:16). An effective implementation of these green practices can lead to a decrease in negative environmental impacts.

Various green practices are implemented at various festivals and events and will be subsequently discussed. Green marketing is one of the most popular green practices introduced in the late 1980s and early 1990s. The implementation of green marketing as a green practice is intended to assist in making festivals more sustainable because it incorporates concepts such as the environment, eco-marketing and green, which form part of the innovation of new marketing approaches. Green marketing is defined as the use of marketing tools and mediums that are environmentally friendly (Chaudhary, Tripathi & Monga, 2011:6).

Another practice is waste management, in terms of which several bins are placed all around a festival terrain and labelled as “paper”, “bottles”, “tins” and “paper” (O’Rourke, Irwin & Straker, 2011:345). Instead of the attendees using their own vehicles, which increases traffic congestion, public transport in the form of shuttles can be provided (Dickson & Arcodia, 2010:241). Festivals can employ energy-saving methods by using an electricity meter to observe the usage of power during and after the festivals, and use appliances that are energy-efficient (Ahmad, Rashid, Razak, Yusof & Shah, 2013:334).

Some festivals and events have discovered the importance of becoming “green” and have implemented a number of green practices. These include international events such as the Taipei International Flora Exposition, the Manchester Commonwealth Games and South African festivals and events such as the Old Mutual Two Oceans Marathon, the Rocking the Daisies music festival, the Innibos Lowveld National Arts Festival, and the Klein Karoo National Arts Festival (Horng, Hu, Teng, Hsiao, Tsai & Liu, 2015; Robbins, Dickinson & Calver, 2007:310; Anon., 2015; Dobson & Snowball, 2012; Steadfast Greening, 2012).

The Taipei International Flora Exposition implemented energy-saving and carbon-reduction green practices (ESCR) in 2010 as a way to reduce the overconsumption of electricity and other negative environmental impacts (Horng *et al*., 2014:1218). The Manchester Commonwealth Games implemented public transport such as buses or minibus taxis and shuttles during the event to reduce traffic congestion (Robbins *et al.,* 2007:310).

The Old Mutual Two Oceans Marathon was launched in 1970 and celebrated 45 years' existence in 2014. In 2014 the event organisers, together with one of the sponsors, Peninsula Beverage, decided to go green by introducing the use of biodegradable cups to reduce waste between the intersections of the race (Anon., 2015).

The Rocking the Daisies music festival is the only event in South Africa to be initiated in 2006 as a "green" music event. Rocking the Daisies implements several green practices such as green ticketing, which means that the entire cost of green initiatives is incorporated into the ticket price (Dobson *et al.,* 2012:8). The event also provides water points to reduce water wastage, implements a three-bin recycling system to reduce waste, and energy-saving practices and mobile toilet facilities (Steadfast Greening, 2012:8-11).

The Innibos Lowveld National Arts Festival conducted a green audit in 2009 to reduce "green washing" in the events industry. "Green washing" can be defined as the "practice of paying lip service to greening principles and delivering shallow initiatives that are not effective in countering an events environmental impact*"* (Dobson *et al*., 2012:6–7)*.*

The Klein Karoo National Arts Festival decided to collaborate with a green organisation in 2012 by using the Trapsuutjies Tent, which enabled attendees to determine the carbon dioxide footprint they emitted while travelling to the festival. In addition, the festival organised an exhibition on recycling and reusing waste. Water-bottle filling stations were also provided to encourage attendees to have a green lifestyle (Dobson *et al.,* 2012:8)*.*

There are five common green practices that are implemented in all mega and major festivals and events. These include sporting events such as the FIFA World Cup, the Rugby World Cup, the Olympic Games and the Commonwealth Games. These green practices include:

(1) Waste management: standard colour-coded bins placed around the venue, and polystyrene boxes are used to avoid packaging waste in order to educate attendees about recycling.

(2) Energy saving: staff members are educated to save energy by switching off all the appliances that are not used during the event.

(3) Dust control is taken into consideration by covering the ground with artificial grass to prevent air pollution.

(4) Water supply: the water at the festivals is of good quality to use for toilets, food and drinking.

(5) Composting/mobile toilets that contain waste containers are always available at festivals, and are cleaned and maintained regularly during festivals (Van der Wagen & White, 2010:304-310).

Previous research conducted on the tourism industry, hospitality industry and national parks made a huge contribution on identifying the environmental impacts (see Table 1.1) and green issues (see Table 1.2) dealt with in this study.

Table 1.2: Previous studies that where conducted on green practices

PREVIOUS STUDIES	DESCRIPTION OF GREEN PRACTICES	RESEARCHERS
Evaluating green hotels in Taiwan from the consumer's perspective	✓ Saving energy ✓ Conserving water and resources ✓ Solid waste management ✓ Environmentally friendly purchasing	Tang (2015)
Consumers' environmental behaviour towards staying at a green hotel: moderation of green hotel knowledge	✓ An individual is willing to stay at a green hotel when touring ✓ Staying at a green hotel when visiting other countries is desirable ✓ Compared to friends an individual is familiar with hotels' green programmes	Moh and Moh (2015)
Environmental and visitor management in a thousand protected areas in China	✓ Sewage and solid waste treatment ✓ Water conservation sources ✓ Energy saving	Zhong *et al.* (2015)
What drives employees' intentions to implement green practices in hotels? The role of knowledge, awareness, concern and ecological behaviour	✓ Chefs are instructed to turn on cooking appliances when needed ✓ Purchasing department staff are advised to pay extra and take time to look for environmentally friendly products ✓ The laundry staff are encouraged to run full loads when washing	Chan, Hon, Chan and Okumus (2014)
Researching the green practices of smaller service firms: a theoretical, methodological and empirical assessment	✓ Waste management ✓ Energy use/saving ✓ Water use/saving	Aykol and Leonidou (2014)
The impact of eco-friendly practices on green image and customer attitudes: an investigation in a cafe setting	✓ Recycle waste ✓ Energy-efficient equipment ✓ Water-efficient equipment ✓ Recyclable take-out containers	Jeong, Jang, Day Ha (2014)
Role of perceived fit with hotels' green loyalty: impact of environmental concerns	✓ Energy saving ✓ Environmentally friendly products and services ✓ Reducing solid waste ✓ Recycling	Ham and Han (2013)

Consumers' willingness to pay for green initiatives of the hotel industry	✓ Green products and services	Kang, Stein, Heo and Lee (2012)
How "green" are North American hotels? An exploration of low-cost adaptation practices	✓ Donation of leftover or used old furniture ✓ Donation of leftover or used appliances ✓ Providing guests with tips or suggestions to help the hotel save water ✓ Providing guests with tips or suggestions to help the hotel save energy	Rahma, Rynolds and Svaren (2012)
Tourists' perception on whether South Africa national parks are environmentally friendly	✓ Landscaping with indigenous plants ✓ Energy-efficient systems ✓ Recycling programmes ✓ Renewable energy systems ✓ Grey water systems ✓ Architecture compatible with local environment ✓ Water reduction programmes ✓ Composting waste ✓ Use of natural or organic material	Du Plessis *et al.* (2013)

(Author's own compilation)

From Table 1.2 it is clear that different hotels, restaurants and firms use similar green practices but have implemented green practices differently. According to Moh and Moh (2015:104), people who are aware of green practices are able to influence other people, especially the young, to be more environmentally sensitive and to decide to use green products and services. The implementation of green practices can be very expensive, but arts festival operators and sponsors can enjoy the benefits that arise, namely (Leong *et al.,* 2014:10):

(1) Arts festivals will gain a competitive advantage in the events industry;

(2) Long-term operational costs will be saved;

(3) Attendees' experience will be enhanced and a positive image and reputation will be gained.

1.4 PROBLEM STATEMENT

Globally researchers are aware of the significance of investigating the impacts that festivals have on the natural environment (Viviers & Slabbert, 2012:197–198). Valuable environmental resources are being depleted as a result of global warming and droughts (Trenberth, Dai, Schrier, Jones, Barichivich, Briffa & Sheffield, 2012:1). There is an increase in carbon dioxide and other greenhouse gases in the atmosphere caused by traffic congestion (Barth & Biriboonsomsin, 2009:2). Littering and overuse of electricity are also causing damage and the diminishing of fossil and mineral resources (Zhong *et al.*, 2011:221). These aspects are only some of the reasons that led to greater pressure for arts festivals to become green. Festivals are increasingly forced to implement green practices as a means to reduce negative environmental impacts and to preserve natural resources for future generations (Cummings, 2016:170). However, some arts festivals claim to be green but do not necessarily implement green practices (Rahman *et al.,* 2012:721).

The growing notion for arts festivals to become green has raised a concern to determine if festival attendees are environmentally conscious and aware of environmental impacts and green issues. The green behaviour and attitude of festival attendees can possibly indicate if attendees will be inclined to support the implementation of green practices at arts festivals. The implementation of green practices has cost and time implications, which will be wasted if festival attendees are not inclined to support these green practices. Understanding which green practices attendees are inclined to support will effectively assist festival organisers in allocating valuable resources to the right green initiatives. A better understanding of attendees' attitude and behaviour towards the implementation of green practices at festivals will create a platform for festival organisers to effectively promote the use of green practices and associated benefits to address the negative attitude and behaviour of attendees towards supporting the implementation of green practices at festivals (Cummings, 2014: Laing & Frost, 2010:262; Carry, 2012:4; Holmes, Hughes, Mair & Carlsen, 2015:10).

The most important question to be addressed is therefore: Will festival attendees be inclined to support the implementation of green practices at Afrikaans arts festivals in South Africa, and which green practices will attendees be more inclined to support?

1.5 CONTRIBUTION OF THE STUDY

This study firstly contributed to festival literature on greening of festivals. An in-depth literature review was undertaken on the following terminology: sustainability, greening, and the difference between sustainability and greening. Furthermore, the benefits of greening festivals were analysed, possible green practices that can be implemented at festivals and possible green practices that can be implemented at home were identified.

Secondly, this study contributed by developing a measuring instrument that can be used at different arts festivals to determine if attendees will be inclined to support the implementation of different green practices at festivals and also to identify the green practices that festival attendees practise at their respective homes.

Thirdly, this study contributed by determining if attendees are inclined to support the implementation of green practices at festivals and which green practices attendees are more inclined and less inclined to support.

And lastly, this study contributed by determining festival attendees' green behaviour at their respective homes and if this behaviour correlated with attendees' inclination to support the implementation of green practices at arts festivals.

1.6 GOAL OF THE STUDY

This section focuses on the main goal and the secondary objectives that this study wanted to achieve.

1.6.1 Main goal of the study

The main goal of this research was to determine attendees' green attitude and behaviour at arts festivals.

1.6.2 Research objectives

The following were the secondary research objectives:

1.6.2.1 Objective 1

To conduct an in-depth literature review on the greening of events.

The following were investigated:

- ✓ The concept of sustainability
- ✓ The concept of greening and the significance of the concept in festivals through green practices
- ✓ The difference and the relationship between “sustainability” and “greening”
- ✓ Advantages of greening events
- ✓ Identification of possible green practices that can be implemented at festivals
- ✓ Identification of possible green practices that can be implemented at festival attendees’ homes
- ✓ Awareness about environmental impacts and green practices

1.6.2.2 Objective 2 (Article 1)

To determine if festival attendees will be inclined to support the implementation of green practices at arts festivals.

1.6.2.3 Objective 3 (Article 2)

To determine if festival attendees’ green attitude and behaviour at home correlate with their inclination to support green practices at arts festivals.

1.6.2.4 Objective 4

To draw conclusions and make recommendations concerning attendees’ green attitude and behaviour with respect to the implementation of green practices at arts festivals.

1.7 LITERATURE STUDY

The literature review identified and discussed green practices that can be implemented at festivals, possible green practices that can be implemented at home and provide the benefits that arise from implementing green practices. Tourism-related literature used included journal articles, dissertations, events and festival textbooks. The following keywords were used during this research: sustainability, advantages of greening events, green practices, green attitude, and green behaviour and arts festivals. In addition, Google Scholar was used as a search engine.

1.8 EMPIRICAL STUDY

The empirical study was conducted by means of the procedure below.

1.8.1 RESEARCH DESIGN AND METHODOLOGY

The following discussion provides an in-depth discussion of the methodology that was used to design the questionnaire, and collect and analyse the data that was received from the Aardklop National Arts Festival and the Innibos Lowveld National Arts Festival. The method used in this study is discussed under the following subheadings: measuring design, research design and method of collecting data, sampling method, statistical analysis such as the confirmatory factor analysis, and reliability of measurement scale, independent sample *t*-test analysis, the Spearman's rank order correlation and cross-tabulation analysis.

1.8.2 RESEARCH DESIGN

The purpose of a research design is to assist in achieving the main objectives of the research and answer the main research questions (Ivanovic, 2011:112). A quantitative method will be used to for the research study and this involves using a self-administered questionnaire with a set of structured questions and statem

ents as part of the survey (Burns & Bush, 2014:146). Furthermore, a descriptive research design will be undertaken to project the findings to a larger population (Burns & Bush, 2014:103).

1.8.2.1 Survey design

The first step of the empirical phase of the research of this study was to identify the method with which the data was to be collected. A survey was selected because a survey provides standardisation, is easy to administer and easy to analyse, and reveals subgroup differences (Burns & Bush, 2014:172). A survey involves the "administration of a set of structured questions with predetermined response options to a large number of respondents" (Burns & Bush, 2014:146).

1.8.2.2 Site selection

The second step was to select a suitable site where the survey could be conducted. The first survey was conducted at the Clover Aardklop National Arts Festival. This festival was selected because it is one of the most popular Afrikaans arts festivals in South Africa, held annually during October in Potchefstroom, North West, and attracts a huge number of visitors from across the country every year. Over a period of a week the festival offers attendees a variety of theatre productions, comedy shows, music concerts offering different genres, including pop and rock music, and dance performances that showcase the Afrikaans tradition or culture. Aardklop is one of the must-attend festivals on South Africa's arts festival calendar. This festival is an ideal getaway for the entire family and offers cultural education about South African identity (Anon., 2016).

The second survey was administered at the Innibos Lowveld National Arts Festival in Mbombela, Mpumalanga. This festival offers different music genres such as heavy metal, classic country, pop and other Afrikaans genres. Innibos attracts over 100 000 visitors annually and is an ideal getaway for family and friends who seek to enjoy comedy shows and theatre productions and poetry (Walkersons Hotel, 2015).

The selection of the two festivals proved to be an ideal choice to obtain a good sample with a wide spectrum of festival attendees. Neither of these festivals is currently classified

as green festivals and therefore it made them good research areas from which to gather data. Both of these festivals are also located in different provinces, which provided a wider perspective.

1.8.2.3 Time frame and survey administrators

The first survey was conducted at Aardklop from the 6 to 10 October 2015. The second survey was conducted at Innibos from the 29 June to 3 July 2016. The team of survey administrators for Aardklop included three tourism students, and five tourism students conducted the survey for Innibos. The survey administrators were all from the North-West University. These students were chosen because they had knowledge about conducting surveys and had people skills. The fieldworkers were trained and informed about the aim of the questionnaire and the study before they distributed the questionnaires among attendees at the festivals.

1.8.2.4 Survey procedures

The following procedures were put in place to ensure an even spread of the sample:

The survey was conducted during the week and weekend during the festivals (Aardklop from 6 to 10 October 2015 and Innibos from 29 July to 3 July 2016). Festival attendees were approached on the festival grounds and at shows/theatre venues. Festival attendees with different profile characteristics were targeted.

1.8.2.5 Structure of the questionnaire

The questionnaire was developed and used to obtain replies to the research questions of this study. The questionnaire was developed on the basis of the literature study and was used to determine if festival attendees at Afrikaans art festivals such as Aardklop and Innibos implement green practices at home and to determine if attendees will be inclined to support the implementation of green practices at these festivals.

The questionnaire consisted of a Section A, which dealt with 22 statements that measured the green practices that attendees implement at their respective homes. A five-point Likert scale with (1) = *Never;* (2) = *Rarely*; (3) = *Sometimes*; (4) = *Often* and (5) = *Always*, was used to rate statements with regard to water management, waste management, energy management and green commitment.

The questionnaire also contained a Section B, which dealt with 30 statements that measured the extent to which attendees will be inclined to support the implementation of green practices at arts festivals. Statements with regard to greener transport options, water management, energy saving and green commitment were rated on a five-point Likert scale where (1) = *Not at all*; (2) = *Less likely*; (3) = *Maybe*; (4) = *Most probably* and (5) = *Definitely*.

Lastly, Section C dealt with demographic questions such as gender, age, language, province of origin, level of education. It also included behavioural questions such as the number of times that respondents had attended each festival in the past, number of tickets purchased for the festival, how green the festival was considered to be, how green attendees considered themselves to be, type of accommodation and length of stay at the festival.

1.8.2.6 Sampling

A stratified sample was selected and used to conduct the two surveys at the two Afrikaans festivals selected (Clover Aardklop National Arts Festival and Innibos Lowveld National Arts Festival) (Fowler, 2013:37). The entire population at the festivals was divided into separate subgroups (also known as the strata) on the general festival grounds (arts and craft market, food stalls) and outside the festival grounds at the shows/theatre venues.

The data for this study consisted of primary data that was collected at Aardklop National Arts Festival in 2015 and at the Innibos Lowveld National Arts Festival in 2016. Four hundred and fifty (450) questionnaires were distributed at both festivals by fieldworkers. From the distributed questionnaires, 443 questionnaires were received from Aardklop and 400 questionnaires were received from Innibos and used in the analysis. According to Israel (2006:6), from a population of 50 000 (N), 397 respondents (n) would result in a

95% level of confidence with a sampling error of ± 5%, and therefore the two sample sizes were adequate.

1.8.2.7 STATISTICAL ANALYSIS

Microsoft Excel™ was selected and used to capture the collected data and SPSS® (Statistical Package for Social Sciences) was later used to analyse the data. SPSS® was selected and used to analyse the data with a confirmatory factor analysis, independent sample *t*-test and the Spearman's rank order correlation. These analyses are briefly discussed below:

1.8.2.7.1 Confirmatory factor analysis

The confirmatory factor analysis is used to verify the number of underlying dimensions of the instrument (factor) and the patterns of item-factor relationship (factor loadings), and to assist in determining how a test should be scored (Brown & Moore, 2012:3). A confirmatory factor analysis is described as a statistical technique that is used to verify the factor structure of observed variables. This type of analysis allows one to test the hypothesis that describes a relationship between the observed variables and their underlying latent construct(s) (Suhr, 2006:1). For the purpose of this study, all the item-factors such as water management, energy management, waste management, green transport options and green commitment practices (green practices at festivals and at home) were pooled together, thus a confirmatory factor analysis was used to check if all the identified aspects can be used together as a factor. The purpose was to see which factor attendees were more inclined or less inclined to support.

1.8.2.7.2 Reliability (of measurement scale)

Reliability refers to the accuracy and precision of a measurement procedure. This type of analysis answers the question of how well the instrument measures what it purports to measure (Suhr, 2003:1; Boynton & Greenhalgh, 2004:1313). Therefore, the reliability measurement scale was used to check whether the attendees who took part in the

surveys that were conducted at the two selected festivals clearly understood the questions or statements which the survey administrators explained to attendees with regards to the implementation of green practices at attendees' homes and the support of the implementation of green practices at the festivals.

The alpha or Cronbach's alpha coefficient is used to evaluate assessments and questionnaires (Tavakol & Dennick, 2011:54). The guideline for interpreting the Cronbach's alpha coefficient value is suggested that the coefficient value of 0.90 is highly reliable, a coefficient value of 0.80 reflects moderate reliability and the coefficient of 0.70 reflects low reliability. A coefficient value of less than 0.5 is considered to be unreliable (Dumbach, 2013:184; Tavakol, Dennick, 2011:54). The use of this measurement scale proven to be realiable for the pupose of this study.

1.8.2.7.3 Independent-sample *t*-test analysis

An independent-sample *t*-test is an analysis that determines the difference between the means of two independent groups that are dependent on one another. The most important step in reporting the results of a *t*-test is to look at the significance level. "The significance level provides if the difference observed between the means was greater than would be expected by chance" (Borden, Bosch, Card, Casper, Fletcher, Hawkins, Jones, Schlomer, Wiggs, Koch, Koss, Langbert, 2016:3–4). The significance level or value is indicated as the "Sig. (2-tailed)". If the significance value is less than or exactly 0.5 (< or = 0.5), there is a significant difference, and if the significance value is greater than 0.5 (> 0.5) there is no significance value (Boduszek, s.a.:18). According to Cohen (1988), the following are the guidelines for interpreting the effect size (cited from Lakens, 2013:3):

- ✓ 0.2 = small effect
- ✓ 0.5 = medium effect
- ✓ 0.8 = large effect

The effect size is used to compare the magnitude of the experimental treatment from one experiment to another. In other words, an effect size is the "difference between two means divided by standard deviation of the two conditions" (Thalheimer & Cook, 2002:3). For the purpose of this study, a *t*-test was used to determine the significance between the

individual green aspects that attendees at Aardklop and Innibos would be inclined to support. Furthermore, the *t*-test was used determine the significance difference between the green aspects that attendees at Aardklop and Innibos implement at their respective homes.

1.8.2.7.4 Spearman's rank order correlation

A Spearman's rank order correlation coefficient is an analysis "used to measure the monotonic relationship between two variables "(Zou, Tuncali & Stuart, 2003:618). This analysis is also used to "measure the strength of the association between the two ordinal variables by means of ranks*"* (Hauke & Kossowski, 2011:3). The following is the guide that is used to determine the strength of the correlation for the absolute value of r_s (Anon., 2008:2; Zou *et al.,* 2003:618; Anon., s.a:2):

- ✓ -1.0 to -0.8 = a very strong negative correlation
- ✓ -0.6 to -0.79 = a strong negative correlation
- ✓ -0.4 to -0.59 = a moderate negative correlation
- ✓ -0.2 to -0.39 = a weak negative correlation
- ✓ -0.01 to -0.19 = a very weak negative correlation
- ✓ 0.00 to 0.19 = a very strong correlation
- ✓ 0.20 to 0.39 = a weak positive correlation
- ✓ 0.40 to 0.59 = a moderate positive correlation
- ✓ 0.80 to 1.0 = a very strong positive correlation

For the purpose of this study the spearman rank order correlation was used to revel the significant correlation between how green attendees at Aardklop and Innibos considered themselves and the green practices attendees were more inclined to support.

1.8.2.7.5 Cross tabulations

A Chi-square test and Cramer's V together with Cross tabulations analysis was employed to determine if there were practical differences between the Aardklop and Innibos markets. A cross tabulation is described as an approach that can be used when the data

is in a nominal form. This method classifies each variable into two or more categories and then cross classifies the variables in these sub categories. After the analysis was done, the relationship or correlation between the variables was identified (Kothari, 2004:138). For the purpose of this study, this analysis was used to determine the significant difference between Aardklop and Innibos attendees' green practices implemented at home and the green practices attendees would support at the two festivals.

1.9 CONCEPT CLARIFICATION

The terms below were used and clarified throughout the study.

1.8.1 Arts festivals

"Arts festivals are described as a type of festival that focuses on the performing and visual arts in all forms, but which may also focus on or include other arts. Arts festivals in the visual arts are exhibitions and are not to be confused with the commercial art fair" (Farlex, 2012, cited in Pretorious, 2013:48). "Arts festivals involve the celebration of themed events, of human creative skills in areas as poetry; painting, music, and many involve the celebration of an individual artist "(Willians & Bowdin, 2007:306).

1.8.2 Environmental impacts

Environmental impacts can be described as indirect and direct changes in the environment (Saayman, 2009:178) caused by tourism development (Zhong *et al.,* 2011:2972), economic development (Dixon, Scura, Carpenter & Sherman, 2013:9) and human impact or development (hunting, deforestation, pollution, farming) (Goudie, 2013: para.12 and 14). These impacts can have positive results such as infrastructure development, transport improvement and protecting important local community resources (Collins, Jones & Munday, 2009:829) and negative results such as an increase in air pollution, land pollution, water pollution, noise pollution (Zhong *et al.,* 2011:2972; Gibson & Wong, 2011:103), traffic congestion, and overcrowding and soil erosion (George, 2007:309–310).

1.8.3 Going green

The term “green” or “greening” can be described as using environmentally friendly resources and an environmental management system (Mair *et al.,* 2010:78). Going green is described as the adoption of green practices aimed at reducing negative environmental impacts (Ramely & Rashid, 2014:2). Bostwick (2008:7) defines going green as daily activities that are altered so that the environmental impacts are reduced.

1.8.4 Green practices

Green practices involve practices such as waste management (recycling, re-using and reducing) (Glassett, 2014:15), energy management, for instance the use of green power such as solar and wind power and biogas (GoGreen, 2015), and water management (grey water system). The implementation and management of these practices can help reduce the negative environmental impacts caused by any form of development or different sectors within the tourism industry (Berber, Kim & Barth, 2014:77).

1.8.5 Green attitude

Festival attendees’ attitude is linked to satisfaction and commitment is described as the evaluation of the attendees’ willingness to attend a festival that expresses one’s feeling towards, beliefs about and the attachment to the festival (Schleicher, Smith, Casper, Watt & Greguras, 2015:1). Therefore, green attitude or environmental attitude is defined as the opinion attendees have with respect to the protection of the environment and promotion of the environment and green practices. This means that the implementation of green practices strongly relies on the attendees’ attitude towards the environment (Cherian & Jacob, 2012:120).

1.8.6 Green behaviour

Green behaviour or sustainable behaviour can be described as the way in which an individual behaves, taking into account the environmental impact of consumption on environmental well-being (Barber & Deale, 2014:102). Researchers have explored green behaviour by connecting factors such as their knowledge of the environment, their concerns, individual values, beliefs and norms that play a role in how an individual behaves (Samarasinghe, 2012:5). An individual's green behaviour can be seen from their initiative to implement waste management strategies (recycling, re-use and reduce) (Glassett, 2014:15), water management strategies and energy management strategies (GoGreen, 2015).

1.8.7 Attendee/visitor

A visitor can be defined as a person who has purchased tickets and their contact information is reflected in the visitor registration system (Shen & Haung, 2011:2680). Referring to the focus of this study, an attendee can be defined as "*a visitor who visits for longer than 24 hours or less and whose purpose of visit may be classified*" as attending a festival/event (George, 2007:5).

1.8.8 Clover Aardklop National Arts Festival

Held over the period of five days in Potchefstroom in October, attracting over 150 000 people and offering a stage for various upcoming as well as established artists to display their talent, the Aardklop ("Earth Beat") National Arts Festival is one of the biggest events for the Afrikaans society to celebrate their art and culture. This festival offers entertainment such as stand-up comedy, rock concerts and plays suitable for the entire family (Anon., 2016).

1.8.9 Innibos Lowveld National Arts Festival

Innibos Lowveld National Arts Festival was voted one of South Africa's most popular festivals. Innibos is held in Mbombela in Mpumalanga over a period of five days, with more than 100 000 festival attendees in 2016. The festival is family friendly, hosts over 200 musicians, actors, and artists, and has over 200 art, craft and food stalls around the festival grounds (Innibos Fees, 2016).

1.10 CHAPTER CLARIFICATION

Chapter 1: Introduction, problem statement, objectives and method of research

Chapter 1 concentrates on introducing the focus of the study, the background, problem statement, contribution of the study, research objectives, method of research, definition of key concepts to be used throughout the study and the outline of the chapters.

Chapter 2: Literature study

Chapter 2 provides an in-depth literature study on the greening of arts festivals. Firstly, it provides an overview of what sustainability entails and why it is important for festivals to implement this. Secondly, it explains what greening entails. Thirdly, it provides a link and the differences between sustainability and greening. The benefits of implementing green practices are discussed. Possible green practices that can be implemented at festivals and events are identified. Lastly, green practices that can be implemented at home are discussed.

Chapter 3 (Article 1): Attendees' attitude towards supporting green practices at festivals- A comparison between two Afrikaans arts festivals

This chapter (article 1) determines the extent to which attendees will be inclined to support the implementation of green practices at festivals. Moreover, this chapter tabulates and

discusses the results revealed by the descriptive analysis, confirmatory factors analysis, *t*-test and the Spearman rank order correlation.

Chapter 4 (Article 2): Do words speak louder than actions? Determining the correlation between attendees' behaviour at home and their inclination to support green practices at arts festivals

Chapter 4 (article 2) determines to what extent festival attendees' green attitude and behaviour at home correlate with their willingness to support the implementation of green practices at arts festivals. This was done by revealing and discussing the results from the confirmatory factor analysis and *t*-test analyses.

Chapter 5: Conclusions and recommendations

Finally, in Chapter 5, conclusions and recommendations are provided, based on the results from the different chapters. The recommendations provide Aardklop and Innibos organisers with information about festival attendees' green attitude and behaviour regarding arts festivals going green and what green practices to implement at these festivals.

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CHAPTER 2

LITERATURE REVIEW

"When *I* use a word," Humpty Dumpty said, in rather a scornful tone, "it means just what I choose it to mean – neither more nor less."

"The question is," said Alice, 'whether you *can* make words mean so many different things, "The question is," said Humpty Dumpty, "which is to be master – that's all."

- Lewis Carrol (1872:205)

2.1 INTRODUCTION

Over the past decades, the increased awareness about the widespread degradation of the environment and its resources (Tang, 2015:1) has led to the rapid growth in interest regarding concepts and themes such as “environmentally friendly practices” “going green” and “green practices” (Tang, 2015:1, Grove, Fisk, Pickett & Kungun, 1996:56). According to Du Plessis, Van der Merwe and Saayman (2013:188), this awareness is also evident within the tourism industry and endeavours towards going green or becoming more environmentally friendly have gained more popularity than ever. Tourism industry suppliers and consumers realise increasingly how vulnerable the environment is and how the growth in development impacts the environment and that future developments must be managed in such a way that the impact on the environment and natural resources is minimal (Du Plessis *et al.,* 2012:188).

The tourism industry consists of various sectors, including transport, catering, entertainment and events, to mention a few (Filimonau, 2016:35). The events sector is one of the fastest growing industries in developed and developing countries (AMEX Meetings Events Forecast, 2015:7), and is also seen as one of the biggest contributors to negative environmental impacts (Mair, 2011:1). The negative environmental impact includes on average annually produce 23 500 (68%) tonnes of waste, 231 000 (80%) of carbon emissions caused by the use of transportation, make use of 107 330 liters (35%) of water, 65% of energy and 85% of diesel. This is understandable if one considers the fact that in many cases festivals often attract a large number of attendees to an area for a number of days (Mair & Jago, 2010:683). These festivals inevitably impact these destinations mostly on an environmental level, thus resulting also in this impact being investigated and researched by a number of academics (Mair & Jago, 2010:683).

Previous studies that have specifically focused on the environmental impacts of festivals have been conducted by researchers such as Laing and Frost (2010) with the focus on exploring the challenges and main opportunities linked with hosting green events. The findings of this research comprehensively revealed the significance of involving various stageholders and effectively promoting greening massesges through hosting green events. Henderson (2011) research focus was developing a competitive advantatge through management of sustainable events. In this research, it was pointed out that the government and the private sector play a crucial role in organising green events. In

addition, revealed that hosting green events provide cost based and differentiation comapatitive advantage. Promoting green events was Dickson and Arcodia (2010) research which reveled that it is important that various associaltions in the events sector need to work together in developing guidelines and policies for organising and hosting green events. Futhermore Getz (2009) reseach focus was on identifying public policy for green and responsible festivals, were it was revealed that hosting green events to reduce negative environmental impacts needs to be evaluated by using the tipple-bottom-line. Whist Merrilees and Marles (2011) on the other hand research identified case studies on how various events and festivals implemented green pracrices to reduce environmental impacts. Moreover, Yuan (2013) research focused on identifying management principles of environmental sustainability for the events sector. The research firstly revealed that the host destination, host community and attendees play an important role when organising an event. Secondly, hosting a green event requires careful planning. Thirdy, promoting and raising awareness about the importance of implementing green practices is important in achieving sustainability this is due to festivals nature of attracting a number of attendees to a destination for a short or long period of time. These festivals make use of the environment and natural resources, and they are therefore encouraged to make greater efforts to become more green by encouraging, promoting and implementing green practices among their organisers and attendees (Mair & Laing, 2012:683).

The ability of festival organisers to green festivals relies on the provision of research and information regarding the planning and how festivals will go about going green, educate and share information with stakeholders such as community members and the attendees in order to instil an appropriate attitude and behaviour when attending festivals (Yuan, 2013:180). However, the purpose of this study is not to identify the role of the festival organisers and other stakeholders, but to understand the green attitude and behaviour of arts festival attendees and to determine how green these attendees are at their respective homes too.

As Laing and Frost (2010:262) have pointed out, there is a gap in the events literature with respect to understanding the main aspects of the attitude and behaviour of festival attendees. These aspects include the attendees' green interest, linked with the decision-making process with regard to attending festivals, and lastly the attendees' expectations with regards to festivals' shifting to using more environmentally-friendly products and services. If festivals are to be considered green or are to be called a green festival, the attendees' attitude and behaviour with respect to supporting green practices that will be

implemented at festivals are undoubtedly significant (Henderson, 2011:7). This goes back to what Laing and Frost (2010:262) suggested, namely that more research with regard to the festival attendees' green attitude and behaviour needs to be done, and this study will assist in filling that gap.

The literature study on events revealed that there is a need to understand the role that sustainability plays in the effectiveness of the events industry. Typically, green themes such as greening, environmentally friendly, and eco-friendly are interchangeably mixed with sustainability, and the role that stakeholders, festivals organisers and festival attendees play in the greening of festivals (Henderson, 2011:6). The success of green festivals, especially those with outdoor productions, relies on the involvement and commitment of various stakeholders such as sponsors, community members, relevant government agencies or departments and land managers and festival attendees (Ismail, 2015:37).

Therefore, the objective of this study was to provide an in-depth literature study on green practices that are implemented at festivals, with arts festivals as the specific context, and taking into account the advantages of these green practices. The implementation of these practices will be of advantage to festival organisers, sponsors and the local community. This chapter firstly discusses the concept of sustainability and greening. Secondly, the difference between sustainability and greening is discussed. Thirdly, the advantages of greening events are identified. Finally, the green practices that are implemented at international and South African events or festivals, as well as possible green practices that can be implemented at home, are identified and discussed.

2.2 SUSTAINABILITY VS. GREENING

The body of this study took into account concepts such as sustainability and greening with respect to arts festivals and environmental issues. The interconnection between these two concepts is discussed in depth below.

2.2.1 Sustainability

Sustainability is a concept that 'emerged as an explicit social, environmental and economic ideal in the late 1970s and 1980s'. According to Schutte (2009:17), sustainability means being economically viable, socially beneficial and environmentally responsible. Sustainability takes into account all tourism developments, and is achieved through appropriate planning, management and decision-making that ensure a balance between all three pillars. Sustainability later became superficially known as sustainable development (Caradonna, 2014:1).

Sustainable development was the first concept mentioned in the Brundland Report (Our Common Future, 1987) and was defined as the "development that meets the need of the present without compromising the ability of future generations to meet their own needs" (The World Commissions on Environment and Development, 1987:24). The World Tourism Orgnaisation in 2001 defined sustainable development as the development that meets the needs of the present tourists and the host region while protecting and enhancing opportunities such as economic, social and environmental conservation (cited from Dickson & Arcodia, 2010:237).

From the definitions, three types of sustainability are identified:

- **Social sustainability**: this means that sustainability requires a balance between social equality and the economy. This implies that the community's rights need to be respected, and opportunities have to be distributed equally to every member of the community with the aim of alleviating poverty. The community's needs and wants are taken into consideration, the community's standard of living is improved, their life support system (natural environment) is maintained and respected in the process, and their different cultures are recognised and respected (Caropdonna, 2014; Hall, 2010:133–134).
- **Economic and financial sustainability:** this means 'generating prosperity at different levels of society and addressing the cost-effectiveness of all economic activities' (Caropdonna, 2014; Hall, 2010:133–134).
- **Environmental or ecological sustainability:** this means making use of 'natural resources that are consumed at a rate below natural reproduction, or a rate below the development of substitutes'. It also means conserving and managing resources, especially those that are not renewable or are precious in terms of their

life support. These are resources that do not cause emissions and do not degrade the eco-system or the environment (Stettler, 2011:26; Caropdonna, 2014; Hall, 2010:133–134).

As shown in Figure 2.1, the concept of sustainability, with three connected circles, illustrates the three main pillars: (1) environment, (2) economy and (3) social (society), which need to be effectively balanced in order for sustainability to be achieved.

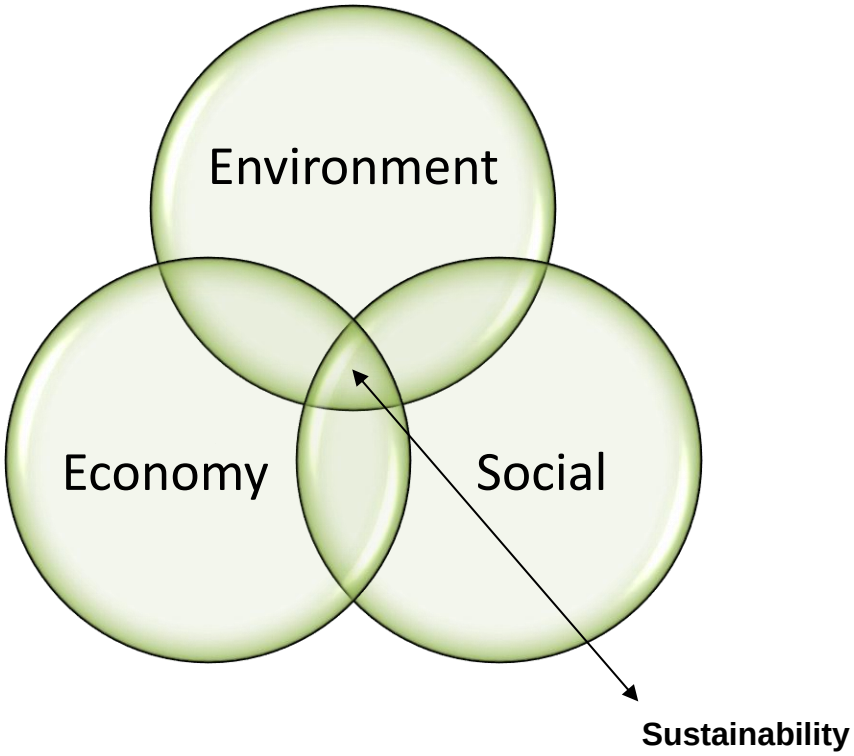

Figure 2.1: The three pillars of sustainability
(Source: adapted from Schutte, 2009:23)

From the research conducted by Schutte (2009:23–24), the following five main principles of sustainability were identified:

- **Community involvement:** this means that in order for sustainability to be recognised and achieved, support from the community is crucial. Involving the community members in the decision-making process makes it easy to share information and resources and gives the community the power to own the problems and the solutions.
- **Precautionary behaviour:** this 'implies that a conservation ethic within councils' (the Government, local municipality, educational institutions, tourist destinations)

environmental planning and management frameworks are needed as a means to prevent the environment from degrading in the future.

- **Equity within and between generations:** this means that there has to be fairness and equal access to opportunities for the present generation and future generations. This implies that ecological integrity and the natural resources need to be maintained to provide a better standard of living in the short and long term, while not compromising the right of the present generation and future generations to meet their own needs in the process.
- **Continual improvement: ‘**the declining environmental situation means it is imperative to become more sustainable and to make continual improvements’. This further means that there has to be an understanding as to what sustainability is all about and community awareness with respect to sustainability issues must be raised.
- **Environmental or ecological integrity: ‘**this requires the protection of biological diversity and the maintenance of essential ecological processes and life support systems’. It also means recognising the interdependence of all parts of the natural environment, that nothing is separate from it. The protection of the natural environment in its many diverse forms is essential, as there is a heavy dependence on it.

From the principles identified above, it is clear that these principles refer to conservation and protection of the natural environment and its resources. This can be concluded by pointing out that “... to the extent that any human right to a whole environment carries with it a human duty to care for the environment, together with a parallel duty to care for nature and cultural owned to present and future generations, sustainability principles and the stewardship ethic are tending to define such human duty” (Schutte, 2009:25). However, when looking into arts festival-related issues, sustainability plays a crucial role. However, in this case, the main emphasis is on the environmental sustainability of arts festivals.

Although the words green and sustainability are often ‘used interchangeably, one needs to understand that being green and being sustainable is not the same thing’ (Glassett, 2015). Being green is defined as using products and services that have less harmful impacts and assist in reducing negative environmental impacts. Sustainability, on the other hand, is an “economic, social and ecological concept that is intended to be a means of configuring civilisation and human activity so that society and its members are able to

meet their own needs and express their greatest potential in the present, while preserving biodiversity and planning and acting for the ability to maintain these ideals indefinitely" (Schutte, 2009:21).

2.2.2 Greening

According to Admas (2003:2), the theme of greening was first introduced in the early 1980s by a number of authors such as Riddell (1981), Sanhs (1970, 1980), Glaeser (1985b), Harrison (1987), Conroy and Litvinoff (1988). Over the period of 20 years since then the literature regarding greening has covered themes and concepts such as green practices, the greening of various industries, and the positive and negative environmental impacts (Funchs & Mazmania, 1998:193; Parry, 2011:221) (cited from Mair and Jago, 2010:78). Although there is no single universal definition for green or greening, as it means different things in different industries, Mair and Laing (2010:78) find it appropriate to define greening as an investment in environmentally friendly facilities and practices. Gupta (1995:36) defines going green or greening as harmonising corporate environmental performance with stakeholders' expectations, as well as constituting a significant new source of competitive advantage, resulting in lower costs and increasing the market share.

Boons and Strannegard (2000:14) further define greening as a process that forces a change in various sectors and products. According to Mair and Jago (2010:78), greening is defined as the use of environmentally friendly practices or green practices and the implementation of environmental management systems. From the definitions of greening, one sees that greening is a process of improving the environment and focuses mainly on individual components (management/organisers or festival attendees).

In relation to greening, the theme of a green festival has appeared in a number of festival management literature reviews. Laing and Frost (2010:262) define a green festival as a festival that has a sustainability policy or incorporates green practices into its management and operations. Jackson (2010:214) adds to this by defining a green festival as a festival that incorporates environmental management and agents to mitigate, ameliorate and eliminate festivals' negative environmental impacts. The main reasons for hosting green festivals are to incorporate green practices or environmentally friendly practices in order to host festivals in a responsible manner, and conserving the natural

environment and resources in the process (City of Cape Town, 2010:3; Marrilees & Marles, 2011:2). Greening festivals is a suitable way of approaching environmental management issues, including festival managers/organisers and festival attendees as part of the overall environmental responsibility of festivals (Mbasera, 2015:51).

Studies on the greening of festivals have touched on the environmental issues. Table 2.1 identifies these studies.

Table 2.1: Studies on greening festivals

STUDIES	SOURCES
1. How green was my festival: exploring challenges and opportunities associated with staging green events	Laing and Frost (2010)
2. The effect of environment-friendly perceptions on visitors' decision-making process using an extended model of goal-directed behaviour	Song, Lee, Kang and Boo (2012)
3. Assessing the environmental impacts of mega sporting: two options?	Collins, Jones and Munday (2009)
4. Towards an instrument measuring community perceptions of the impacts of festivals	Viviers and Slabbert (2012)
5. The greening of music festivals: motivation, barriers and outcome. – Applying the Mair and Jago model	Mair and Laing (2012)
6. Sustainable event management of music festivals: **An** event-organising perspective	Stettler (2011)

(Source: Author's own compilation)

While the studies on the greening of festivals have been identified in Table 2.1, this discussion further focuses on identifying the six main stakeholders that play a significant role in greening festivals (see Figure 2.2).

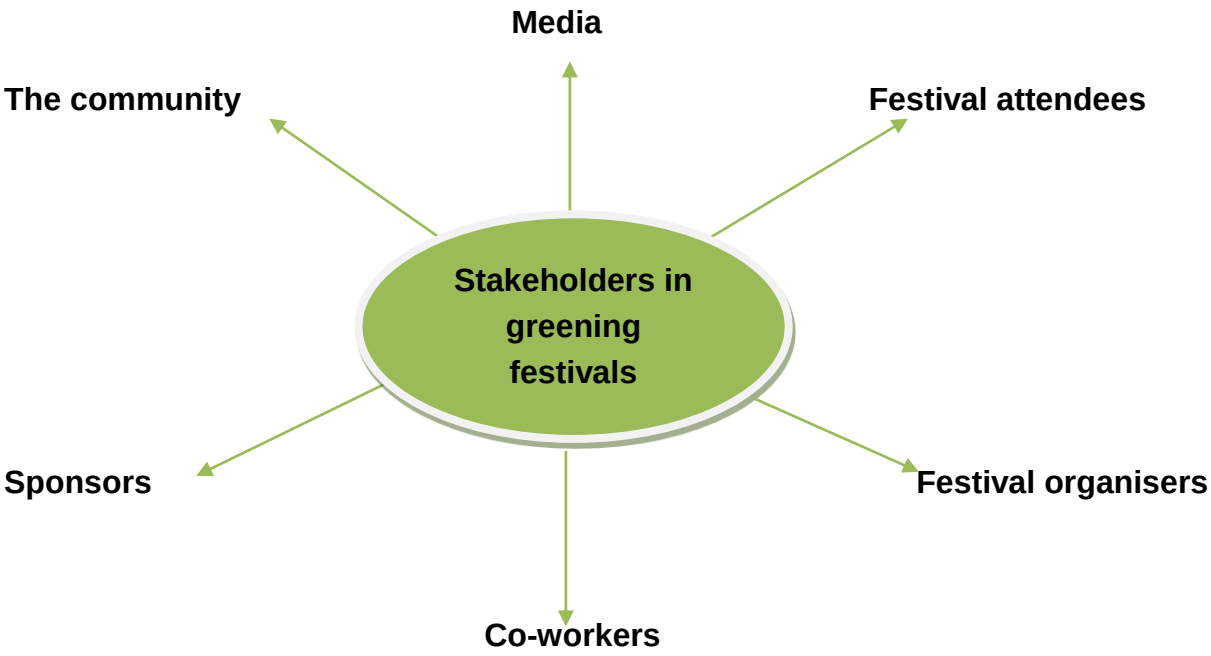

Figure 2.2: Stakeholders involved in greening festivals (Source: Getz, 1997:15)

The following are the stakeholders' abilities in the greening of festivals:

- **Festival organisers:** festival organisers' abilities in greening festivals revolve around planning, organising and hosting festivals with the aim of attracting festival attendees. In this process, festival organisers 'offer attractive festival programmes, select an attractive host location and make sure that festival attendees attend the festival again in the future'. Their abilities rely on taking control over the full-service management of the festival, which includes developing the festival programme, selecting the venue, making bookings, and logistics (Bartkeviciute & Puchkova, 2013:27).
- **Sponsors**: festival sponsors have the ability to improve the festival's image and provide assistance by supporting the festival's goal of being green by providing IT equipment, subsidising fuel-efficient shuttle buses for attendees, and funding waste management initiatives. Sponsors can be an effective marketing tool because of their ability to access a wide range of audiences (Sustainable Events Guide, 2012:18).
- **Co-workers:** there are a number of co-workers involved in greening festivals, including co-workers in the staging department with the ability to stage the festival, sound checks and lighting, plumbers, recyclers and picking up litter at the festival terrain (Glastonbury Festival, 1997–2016).

- **Media:** the media have the ability to be used as a marketing tool. The media are an effective tool with the ability to raise awareness and share information about green festivals through traditional media channels such as radio, television, billboards, and newspapers, and through Facebook, blogs, Instagram and Twitter (Oklobdžija, 2015:583).
- **The community:** the community members' ability is to assist in organising green festivals because the community members are the owners of the host environment or area, which means they can provide information to the festival organisers with regard to natural or cultural resources that need to be protected and conserved. The community also has the ability to be part of the decision-making process (Bryson & Caroll, 2007).
- **Festival attendees:** festival attendees have the ability to effectively share information with other attendees (word-of-mouth publicity), the ability to increase the number of attendees at festivals and to play a significant role in the decision-making process with regard to planning, managing and organising green festivals Furthermore attendees play a significant role by supporting the implementation of green practices at events or festivals, which will assist to reduce negative environmental impacts **(**Kim, Choi, Agrusa, Wang & Kim, 2009:309).

The main emphasis in this study was on the festival attendees, because of the significant abilities attendees have with regard to assisting festival organisers in achieving the goal of hosting green festivals. As was mentioned in the introduction, there is still a gap to be filled in event management literature in terms of understanding festival attendees' green attitude and green behaviour towards the greening of arts festivals. This understanding is required to determine if attendees will be inclined to support the implementation of green practices at arts festivals (Laing & Frost, 2007:262; Henderson, 2011:7).

Hosting green festivals is an effective way to increase awareness regarding environmental concerns and the need to implement green practices in such a way that festivals have fewer impacts on the environment (Merrilees & Marles, 2011:6). Although the majority of festival attendees feel a sense of environmental responsibility and satisfaction with greening festivals, there are few festival attendees who are 'dedicated to environmental causes, tend to display high levels of environmental awareness' and try by all means to implement green practices at their homes or households (Merrilees & Marles, 2011:6 & 7).

According to Jensen (2008:353), it is often said that an individual lifestyle determines how one's attitude and behaviour has an influence on the environment. This implies that festival attendees' green attitude and behaviour at their respective homes have the ability to assist researchers in analysing how green festival attendees will act and behave at festivals that implement green practices.

Attitude is defined as a 'mental and neutral state of readiness, which exerts a direct influence upon the individual's response to all objects and situations on' which it has a bearing. Therefore, the attitude towards environmental issues is rooted in an attendee's concept of self and the degree to which an attendee perceives him- or herself to be an integral part of the natural environment (Chen & Chai, 2010:30). This simply means that festival attendees' attitude indicates whether they will be inclined to support the greening of festivals or not and whether attendees will decide to attend festivals that implement green practices in the future (Chen & Chai, 2010:30). On the other hand, behaviour is defined as the way in which an individual behaves or acts. This means that it is a way in which festival attendees act/respond towards environmental issues and the idea of implementing green practices to reduce negative environmental impacts. This behaviour can be either negative or positive (Jost, 2000:15).

Attitude and behaviour can, for example, be seen in attendees' choice of lifestyle, the reaction that festival attendees have towards implementing green practices at home, and the attitude towards environmental issues. This attitude can assist in determining and analysing the attendees' behaviour with regard to supporting green practices implemented at festivals (Mostafa, 2007:2220). This means that:

> *"Going green doesn't start with doing green acts — it starts with a shift in consciousness. This shift allows you to recognize that with every choice you make, you are voting either for or against the kind of world you wish to see. When you assume this as a way of being, your choices become easier. Using a reusable water bottle, recycling and making conscious daily consumer choices are just a few …"* (Somerhalder, 2014).

It is important to note that there is a difference between greening and sustainability. The term greening differs from sustainability because greening focuses on only one element, namely environmental health. Greening focuses on environmentally friendly practices, also known as green practices, such as waste management, energy management, water management, biodiversity conservation, making financial contributions, purchasing

environmentally friendly products (organic and free-range products), and making use of greener transport alternatives (refer to section 2.5 for a full discussion of these green practices) (Yanarella, Levine & Lancaster, 2009:299). Moreover, greening involves the following focus points:

1. **Buy-in from the top:** involving and gaining support from all the internal and external stakeholders who will be involved in the greening process.
2. **Measurement:** identifying the high-impact areas, prioritising and measuring the improvements going forward.
3. **Consultation**: effectively communicating and engaging with all the stakeholders involved in greening festivals.
4. **Objectives:** setting objectives and targets, with timelines and roles and responsibilities allocated to stakeholders.
5. **Implementation:** implementing policies to change attitude and behaviour, and green practices such as waste management, energy management, water management, biodiversity conservation and greener transportation (Yanarella, *et al.,* 2009:299).

Through, effective communication and engaging stakeholders (the community, attendees, festival orgnaisers and sponsors) who are environmentally conscious and those who are inclined to adopt a green lifestyle, creates the opportunity for the identified five focus points to be achieved.

Sustainability, on the other hand, focuses on three dimensions, namely economic vitality, environmental health and social equity. This implies appreciating the existence of the three pillars. The balance between all three pillars requires certain practices that will assist in reducing air, land and water pollution, protecting and conserving the local biological diversity and the natural heritage in the process (Caropdonna, 2014). This simply means that sustainability is the combination of green practices (Yanarella *et al*., 2009:299).

2.3 THE ADVANTAGES OF GREENING EVENTS

The overall idea of going green is mainly to reduce negative environmental impacts and in the process save, enhance, preserve and protect the earth's natural resources for future generations. This results from the increased awareness about negative environmental impacts that arts festivals have and how green practices are used to reduce the negative environmental impacts. This process leads to a demand for greener products and services within the events industry (Smith & Perks, 2010:3).

Figure 2.3 indicates the main advantages of greening arts festivals.

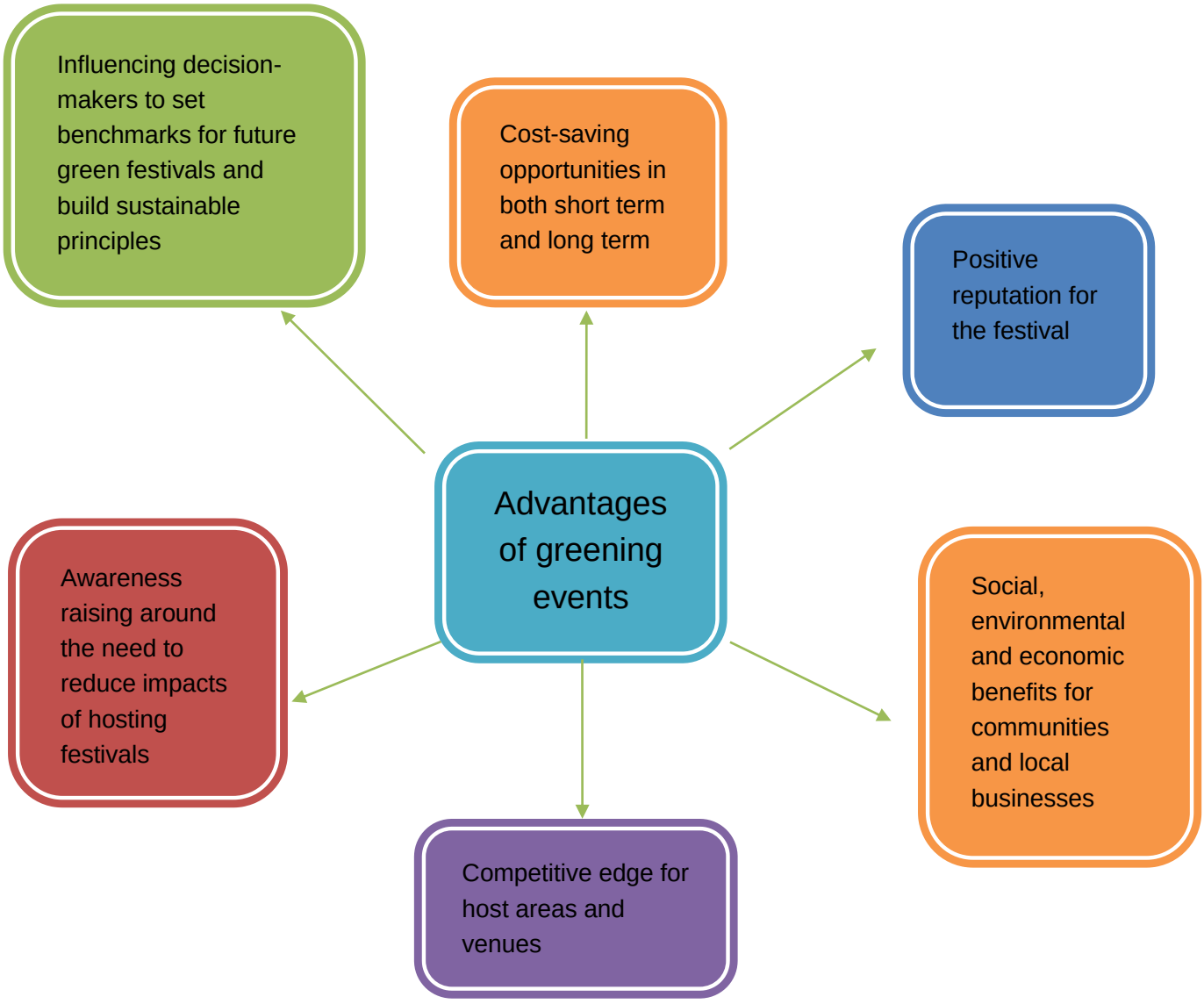

Figure 2.3: Advantages of greening events
(Source: Adapted from Green Event Guideline, 2011–2012:4)

2.3.1 Increased awareness

Greening events is a task that takes place behind the scenes and everyone, including festival attendees, is keen to know what will be done and how. Therefore, the event management/organisers have to develop effective ways to get festival attendees involved in greening festivals, and in the process, raise awareness about reducing the negative environmental impacts that festivals have. This can be done by inviting the media, having competitions and offering incentives or certificates. This can result in a change in event attendees' attitude and behaviour and attendees will gain more knowledge about environmental issues and green issues (City of Cape Town, 2010:28; Mair, 2014:103–107).

2.3.2 Cost-saving opportunities

The process of greening events involves implementing green practices including waste management, water management, energy management, biodiversity conservation, and the use of greener transportation. Each green practice plays an important role in reducing costs. These benefits are, for example, seen in the reduced costs of energy, water, biodiversity conservation programmes, petrol purchases for the festival operations or production, and marketing costs (Merrilees & Marle, 2011:362; Jain & Kaur, 2004:173; Misra & Mondal, 2011:516; Uecker-Mercado & Walker, 2012:269).

2.3.3 Economic benefits (local community)

The host region, the community, and the local businesses receive benefits, including the creation of short-term job opportunities such as waste separation projects. Local suppliers' products are purchased and used at the events, and local businesses that implement green practices such as accommodation facilities, shops, and other entertainment facilities also benefit because of the number of festival attendees who decide to stay the night (Stettler, 2011:11; City of Cape Town, 2010:18; Katzel, 2007:9).

2.3.4 Social benefits

The process of greening events not only results in protecting and conserving the environment but also results in social benefits for the host community. These benefits include providing opportunities for the community to take part in the shared experience, building community pride, improving the standard of living (food and items that were used at the event are donated to local organisations), and offering training and education (Frediline, Raybould, Jago & Deery, 2004; City of Cape Town, 2010:18; Mair, 2014:89).

2.3.5 Environmental benefits

The natural environment and natural resources are taken into consideration when greening events. The process of greening events requires implementing green practices, including waste management, energy management, water management, biodiversity conservation and making use of greener transport alternatives. The identified green practices play a significant role in reducing land, water, air and noise pollution and, as a result, indigenous plants and endangered species are conserved and protected (Fourie, 2009:47; Fam, Mosley, Lopes, Mathieson, Morison & Connellan, 2008:11).

2.3.6 Competitive advantage

The main advantage of greening events is that the host region gains a competitive advantage. Competitive advantage can be described as a marketing advantage a festival has regarding what the festival is doing and how things are being done, which gives a festival a good position against other festivals (Mair & Laing, 2012:692). Hosting green events/festivals can result in the event/festival gaining a competitive advantage over events and festivals that do not implement green practices (Koukkanen, 2013:98–103). Rocking the Daisies music event, the only event that is awarded a Recycling and Sustainable Transport Eco-Logic Award in South Africa which means that festivals receive economic, environmental and social benefits (SteadFast Greening, 2012).

2.3.7 Influence of decision-makers

Greening events involves collaboration among stakeholders, including the festival manager/organisers, sponsors, co-workers, the media, the community and the festival attendees. All these stakeholders have the ability to be part of the decision-making process. The main factors that influence decision-makers to set benchmarks for future green festivals and build sustainable principles include financial benefits, competitive advantage gained, and the enhanced reputation gained in the future (Mair & Jago, 2009:8; Getz, 1997:15).

2.3.8 Positive reputation

A positive image can result from “several potential economic benefits and from the effective promotion of the image of going green or protecting the environment”. The green attributes seen in festival attendees, such as having a positive attitude and behaviour towards the implementation of green practices, attending events because of the green products and services offered, and increased awareness of events’ green initiatives, can develop a unique image/reputation for events in the future (Wong, Wan & Qi, 2015:296; Akhoondnejad, 2016:468; Ashton, 2014:3).

Implementing green practices is not only about protecting and preserving the environment, but more on creating an enabling-environment were the local community, attendees, event orgnaisers and potential sponsors can benefit socially and economically. Thus, it is important to identify possible green practices that can be implemented at certain events.

2.4 POSSIBLE GREEN PRACTICES THAT CAN BE IMPLEMENTED AT CERTAIN EVENTS

Greening of arts festivals is all about progress and not perfection. This means that implementing green practices should assist in reducing the negative environmental impacts caused by arts events and, in the process, leaving a positive legacy for the host community (Ahmad, Rashid, Razak, Yusof & Shah, 2013:331). In order to achieve this, it

is extremely important for the festival managers/organisers to clearly point out in depth in festival bid documents the plans for reducing waste, treating sewage, saving energy, saving water, implementing the use of public transport, the item-refundable system and green marketing, and for raising awareness about all green practices (Van der Wagen & White, 2010:305).

The following greening practices are discussed in depth: (1) waste management, (2) water management, (3) energy management, and (4) biodiversity conservation.

2.4.1 Waste management

Waste management is one of the green practices that is discussed globally because of its effectiveness in protecting and conserving natural resources in the environment. Festival management/organisers are implementing waste management in order to reduce waste produced by events and include the sustainable approach in the festival management plan (Costi, Minciardi, Robba, Rovatti & Sacile, 2004:277). Waste can be described as all the bad items that have a harmful impact on the natural environment (Ahma *et al.,* 2013:332). Therefore, the implementation of green practices like a recycling-bin system, biodegradable packaging, digital marketing and e-marketing, item-refundable system and the electronic ticketing system will assist in reducing the harmful impacts of waste on the natural environment.

2.4.1.1 Recycling-bin system

The Triple Bottom Line Assessment of the XVII Commonwealth Games (Insight, 2006: xii) states that the low-waste programmes that consist of numerous initiatives aimed at increasing awareness about the importance of reducing waste have led to the most recent use of green practices known as the recycling-bin system. The recycling-bin system involves standard bins that are coded with different colours in order to indicate to festival attendees which bin to use for different waste materials. A green bin, for example, is for paper, a yellow bin for plastic, a blue bin for cans and a black bin for glass waste material. The recycling-bin system can be used as follows: (1) the Harvest Jazz and Blues Festival (Fredericton, Canada) provides bins to all the vendors at the festival to use for all the food

waste produced during the festival (Graci & Dodds, 2008b:13), (2) Rocking the Daisies (South Africa, Cape Town), an outdoor music festival, uses a germ micro-organism bacterium to sprinkle over the waste. This is done to increase the organic breakdown of the waste in the soil and later to use the waste as compost to enrich the soil and give nutrients to plants and vegetables in local gardens or farms (Steadfast Greening, 2014:5).

The 2010 FIFA World Cup event that was hosted at the Green Point Stadium in Cape Town, South Africa implemented the use of a two-bin waste system at all the key venues (Green Goal Legacy Report, 2010:67). The reasons for implementing the recycling-bin system are to educate and raise awareness among the festival attendees about the various types of waste, how waste can be easily separated, how harmful waste materials can be prevented from decomposing in the environment and how to reduce littering (Van der Wagen & White, 2010:305; Sustainable Events Guide, 2012:39; Ahmad *et al.,* 2013:332).

2.4.1.2 Biodegradable packaging

As non-biodegradable polymers are synthesised from petrochemicals, which have a harmful effect on the natural environment after decomposing, there has been a shift to biodegradable products to reduce negative environmental impacts in the events industry (Bang & Kim, 2012:1063). The term biodegradable refers to a type of material or product that can be decomposed by naturally occurring of micro-organisms such as fungi, bacteria and algae (Roy, Saha, Kitano & Saha, 2012:346; Yan, Zhang, Gautam, Lium Dey, Chen, Mason, Serrano, Schung & Tang, 2009:1).

Biodegradable packaging is different from non-biodegradable packaging because non-biodegradable packaging involves plastic materials that can easily be mixed with solid waste and increase soil, air and water pollution (Shukla, Ahmed & Singh, 2015:130). For example, the Rocking the Daisies music event (South Africa, Cape Town), the Home County Folk Festival, London Rib-Fest and SunFest (London) and the Ottawa Cisco Bluefest (Canada) implement the use of biodegradable products such as wooden or plastic spoons, biodegradable food packaging, reusable plastic bags for packaging goods purchased at the festival, and biodegradable beverage bottles, while the Winnipeg Folk Festival, Edmonton Folk Festival (Canada) and Harvest Jazz and Blues Festival

(Canada) implement the use of beverage composting cups (Roy *et al.*, 2012:346; Steadfast Greening, 2012:6; Graci & Dodds, 2008:11 & 13).

Therefore, shifting to biodegradable packaging is one of the green practices that have the ability to reduce pollution because of the softness, heat-seal ability and transparency of the material. The material can easily be separated during recycling and saves costs more than non-biodegradable plastic or packaging. Food is also protected against harmful bacteria that accelerate the process of food spoiling (Avella, Bonadies, Martuscelli & Rimidio, 2001:517; Roy *et al.*, 2012:346).

2.4.1.3 Digital marketing and e-marketing

The use of digital technologies is seen as an effective way to save costs when printing flyers, posters, and programmes, and reduces the amount of littering during and after an event (Wymbos, 2011:3; Kalyanam & Mclntyre, 2002:6). Digital marketing and e-marketing are used as a form of communication between the festival attendees and the festival organisers. Information is shared about what will take place at the festival, and festival attendees can access important festival information such as the festival programme on devices instead of printed programmes (Steadfast Greening, 2012:14; Sustainable Event Guide, 2012:35).

Digital and e-marketing are aimed at targeting environmentally conscious visitors or event attendees (Grove, Fisk, Pickett & Kangun, 1996:56). Digital technologies are used to create integrated, targeted and measurable communication to assist in acquiring and retaining event attendees while building deeper relationships in the process (Wymbos, 2011:2).

One of the largest festival events in South Africa, Rocking the Daisies, initiated as a green music event in 2006, and the Harvest Jazz Blues Festival (Canada) use digital marketing and e-marketing by incorporating the use of digital technologies such as social media (Facebook, Twitter, YouTube, blogs, MySpace and websites), digital television and billboards, and mobile or wireless devices (Chaffey, 2010; Steadfast Greening, 2012:14; Sustainable Events Guide, 2012:35).

2.4.1.4 Item-refundable system

Recently, because of the increase of littering by event attendees, the item-refundable system was introduced at events to get festival attendees involved in the process of greening. An item-refundable system in the case of events is described as an activity whereby an individual purchases a beverage in a cup/can/bottle and then returns the empty cup/can/bottle to be refunded a certain amount. Rocking the Daisies (South Africa, Cape Town) implemented the item-refundable system by involving the festival attendees in picking up cigarette butts on the ground. For every full cup of butts an individual received a free beverage of their choice (Steadfast Greening, 2012:28). The item-refundable system is one of the green practices that assists in reducing the amount of littering at the festival and creates an incentive for recycling (Ashenmiller, 2009:540; Steadfast Greening, 2012:28).

2.4.1.5 Electronic ticketing system

Over the years' paper tickets were used globally to grant access to a festival. Electronic ticketing was introduced as a means to reduce the use of paper tickets (Nakfoor, 2002:9). An electronic ticketing system is described as a contract between the festival attendee and the service provider and is an activity of buying and selling event tickets using a wireless mobile device. After purchase, the festival attendees receive a ticket with a barcode on an electronic device which can be displayed at the festival gate. The ticket is then scanned using an optical scanning device. An optical scanning device is an app that produces a light on the object that needs to be scanned (e.g. ticket with a bar code purchased online) (Yoshida, Nakano & Okamura, 2014:2). The Dubrovnik Summer Festival (Croatia, Slovenia) makes use of an electronic ticketing system (Majstorovic, s.a:6). The electronic ticketing system is a green practice that can be effectively implemented at events because it saves costs, is less time consuming and reduces the use of paper tickets that cause littering at events (Bremer, 2013:9; Mut-Puigserver, Payeras-Capella, Ferrer-Gomila, Vives-Duasch & Castella-Roca, 2012:926; Hamid, A'zhim & Yap, 2012:556; Yoshida *et al.,* 2014:2).

2.4.2 Water management

Water scarcity is becoming a huge problem with rivers drying up because of global warming and climate change (Hoekstra, Mokonnen, Chapagain, Mathews, Richter, 2012:1). The availability of water in adequate quantities and qualities is a fundamental requirement for all the sectors that make up the tourism industry, including the events industry. Therefore, the events industry has to explore alternative green practices to save water (Rico-Amoros, Sauri, Olcina-Cantos & Vera-Rebollo, 2012:553). The use of grey water, mobile or composting toilets and gel hand sanitiser is the next alternative green practice that can be implemented at events in order to reduce overconsumption of water during the festival.

2.4.2.1 Grey water

The use of grey water is becoming an effective way to reduce the demand for water in the events industry. Grey water is defined as water that has been slightly contaminated due to human activities, but can still be reused (Liu, Butler, Memom, Makropoulos, Avery & Jefferson, 2010:2). The main motive for using grey water is to conserve water during the production of the event (Al-Jayyousi, 2003:181). Rocking the Daisies (South Africa) uses grey water in mobile/composting toilets for flushing, and after the festival reuses water (grey water) used at shower facilities during the festival for plant irrigation in local areas (Steadfast Greening, 2012:10; Steadfast Greening, 2013:21).

2.4.2.2 Mobile/composting toilets

Because of the overconsumption of water in the tourism industry and the events industry, centralised water, and waste water treatment systems have become the norm at events and have been widely researched. This has led to the investigation of alternative green practices such as mobile/composting toilets that can be implemented to reduce water consumption. Rocking the Daisies (South Africa, Cape Town) and the Buddhafield Festival (United Kingdom) use mobile/composting toilets, which make use of little water or no water at all and therefore can be disconnected from the water supply and waste

water infrastructure (Anand & Apul, 2014:330; City of Cape Town, 2010:34). Composting toilets at events are placed at a distance from the audience and used because the toilets use less water per flush (Almadia, 2012:23). The benefits of implementing this green practice are that the consumption of clean/potable water is reduced, toilet facilities make use of less water and negative environmental impacts are reduced in the process (Berardi & Albozfard, 2015:49).

2.4.2.3 Gel hand sanitiser

One of the alternative green practices used most often nowadays to reduce the amount of water used is hand sanitisers. Health-wise it is used to reduce infection risk and virus transmission (Tamimi, Maxwell, Edmonds & Gerba, 2015:3335). The Reading and Leeds Festival (England) implements a hand sanitiser that is an alternative hand-cleaning technology requiring a gel and dispenser and is a no-drying method of cleaning hands (McKenzie, Priest, Audas, Poore, Bronton & Reeves, 2010:2; Denny, 2015:6). Hands are cleaned or washed with an alcohol-based sanitiser instead of soap and water.

2.4.3 Greener transport options at events

Travelling has been identified as one of the activities that contribute to negative environmental impacts. This has led event organisers and sponsors to use alternative modes of transport to reduce dependence on own vehicles, and to make the public aware of the importance of shifting to the use of an environmentally friendly mode of transport such as hybrid vehicles, carpooling, cycling rental services, shuttle services and walking to the festival (Beiro & Cabral, 2007:478).

2.4.3.1 Hybrid vehicles

Due to the increased demand for green transportation and the higher fuel economy the events industry and other industries have focused on making use of hybrid vehicles (Emadi, Lee & Rajashekara, 2008:2237). Hybrid vehicles are defined as a vehicle that uses energy from “fuel cell and battery-packs that are used to deliver propulsive power

through an electronic motor" (Husain, 2011:4). The benefits that arise from implementing the use of a hybrid vehicle are the use of oil will decrease, there is less noise pollution, carbon dioxide, and other gases that increase global warming are reduced (Husain, 2011:24; Sustainable Events Guide, 2012:25).

2.4.3.2 Carpooling

A transportation method that is environmentally friendly and sustainable and encouraged by the events industry is carpooling. Carpooling is described as the type of transport in which an individual shares a vehicle with other event attendees from a certain area to the place of the event (Galland, Knapen, Yasar, Gaud, Janssens, Lamottee, Koukam & Wets, 2014:83). The benefits that arise from using a carpooling green practice are the reduction of the number of individual parking spaces, traffic congestion, and vehicle travel miles (Fagnant & Kockelman, 2014:2). Rocking the Daisies (South Africa, Cape Town) is a practical example of a music event that effectively implements the use of carpooling with the aim of reducing the number of parking spaces required and encouraging car sharing (Steadfast Greening, 2015:9).

2.4.3.3 Bicycle rental service or walking

Over the years cycling or walking has been promoted as an alternative mode of transport (Hartog, Boogaand, Nijland & Hoek, 2010:1109). Cycling can be described as a healthy activity, an alternative mode of transport that has fewer negative impacts on the environment, prevents traffic congestion, takes up less space on the road and at parking areas and is cheap compared to other modes of transport (Wegma, Zhang & Dijkstra, 2012:19). This green practice can be implemented by monitoring event attendees who choose to walk to the event and rewarding them with a sponsored ticket. Those who choose to cycle to the event purchase the ticket at half price.

Rocking the Daisies is the only event in South Africa that has effectively implemented this green practice since the event was initiated as a green event in 2006. The Ottawa Cisco Bluefest (Canada) also encouraged attendees to use bicycles and provided bike parking (Steadfast Greening, 2012:13; Steadfast Greening, 2014:8; Graci & Dodds, 2008:12).

The main goal of promoting the use of cycling or walking is to make travelling to the event sufficiently easy and attractive by providing bicycles and incentives for those who decide to walk to the event and make short journeys by car (Pooley, Horton, Scheldeman, Mullen, Jones, Tight, Jopson & Chisholm, 2013:66).

2.4.3.4 Shuttle services

The implementation of shuttle services has increased over the years as a means to reduce the negative impacts relating to the use of transport. The aim of shuttle services, carpooling, cycling or walking is mainly to reduce traffic jams, overcrowding, illegal parking, excessive idling of vehicles, air and noise pollution (Orsi, 2015:75). The shuttle services are considered to be cheap and an effective service that assists event attendees to skip traffic jams. This service is flexible and drops event attendees near the venue rather than having the attendees walk a distance from the parking lot (Almadia, 2012:22). The Harvest Jazz and Blues Festival in 2008 implemented green practices by providing shuttles for all the musicians and attendees at the festival (Graci & Dodds, 2008:13).

2.4.4 Energy management

Energy is one of the important daily resources that are in great demand. South Africa is facing the depletion of natural resources, and climate change have increased the focus on reducing negative environmental impacts caused by the overconsumption of energy (Ahamad *et al.,* 2013:332). The following green practices are seen as alternatives in order to reduce energy use.

2.4.4.1 LED lights

Recently, ways have been designed to reduce the use of electricity in the events industry. One of these is the use of LEDs (light emitting diodes), which are described as a “solid-state lighting component that converts electricity into light by semiconductors instead of filament or gas” (Talebian, 2012:12). Rocking the Daisies makes use of LED lights because of their high efficiency, colour quality, constant switching of frequency, high

reliability and smaller filters (Arias, Lamar, Linera, Balocco, Diallo, Sebastian, 2012:1609; Steadfast Greening, 2012:23). The 2010 FIFA World Cup event hosted at the Green Point Stadium in Cape Town, South Africa is an example of events that implemented the use of LED lighting (Green Goal Legacy Report, 2010:53).

2.4.4.2 Natural ventilation

Because of the high demand for electricity, the pressure to drop the use of electric fans and change to alternative cooling options has increased (Laverge & Janssen, 2013:31). This has led to the use of what is known as natural ventilation, which is a green practice described as a system whereby the internal air of an enclosed space is continuously replaced by fresh external air through openings. This ensures better thermal comfort and good indoor air quality without applying any forced flow (Bangalee, Lin & Miau, 2012:317). Natural ventilation can further be described as the effective way to simultaneously enhance indoor air quality and reduce energy consumption (Wang, Zhao, Kuckelkorn, Liu, Liu & Zhang, 2014:258).

The 2010 FIFA World Cup event that was hosted at the Green Point Stadium in Cape Town, South Africa is an example of events that opted for natural ventilation. It is considered to be one of the green practices that are more effective instrument to improve indoor air quality at the event (e.g. closed smoking areas, VIP areas), protect health, provide thermal comfort and reduce unnecessary energy consumption (Allard & Ghiaus, 2012:3; Green Goal Legacy Report, 2010:57). Using natural ventilation as an alternative way to cool the area can be implemented by opening the windows and doors to allow outdoor quality air for free cooling (Laverge & Janssen, 2013:316; Schulze & Eicker, 2013:222).

2.5.5 GREEN COMMITMENT PRACTICES: IMPLEMENTATION AT EVENTS

There are other green practices that have been identified that festival organisers have to be committed to implementing before and after the event. These practices include biodiversity conservation, rehabilitation/restoration programmes, parking fines, capping the number of visitors and the provision of smoking areas.

2.5.1 Biodiversity conservation

A number of studies on biodiversity conservation have indicated that protected areas constitute 11.5% to 13% of the earth's surface. Protected areas are defined as a natural area or environment that is a home or habitat to animals and small living organisms, and an area that needs to be managed effectively (Du Plessis *et al.*, 2013:189; Saout, Hoffmann, Hughes, Bernard, Brooks, Bertzky, Butchart, Stuart, Badman & Rodrigues, 2013:803). According to Erdogan and Tosun (2009:406), it is essential for event stakeholders to make use of policies, procedures, processes, green products and green practices such as water management, energy management, alternative green transportation, waste management, and green awareness initiatives to reduce environmental impacts.

2.5.2 Rehabilitation/restoration programmes

The effective management of negative impacts on biodiversity is one of the issues that have been identified. This has led to the development of a green programme known as rehabilitation or restoration of the environment (Rainey, Pollard, Ekstrom, Temple & Pilgrim, 2015:1). Rehabilitation is defined as the actions that are taken to restore the area or habitat to their beneficial use and in the process recovering the 'ecosystem that has been degraded, damaged, or destroyed' (Hardner, Gullison, Anstee & Mayer, 2015:8).

In the context of events, rehabilitation is a green practice that takes into account the ecological, historical, social, cultural political and moral aspects of the area where the event is being hosted (Wassenaar, Herischel, Pfaffenthaler, Mutota, Seely & Pallett, 2013:130). Rehabilitation as a green practice can be implemented through an environmentally friendly waste management programme to ensure that all the waste is removed from the area where the event was held. A plant control green practice should also be implemented to ensure festival attendees do not trample the plants. Soil erosion reclamation is the process of allowing the environment/soil to recover by making use of organic amendments (organic fertilisers) (Saayman, 2009: 378-380; Larney & Angers, 2012:25). During the 2010 FIFA World Cup that was hosted in South Africa, a biodiversity showcase garden was developed in Cape Town with the aim of educating the visitors

about the importance of biodiversity and the importance of conserving the area. Contractors were trained to maintain the garden (Green Goal Legacy Report, 2010:73).

2.5.3 Parking fines

One of the alternative green practices that can be implemented to reduce negative environmental impacts is the issuing of penalties or fines. According to the Local Government Municipality System Act, 2000 (Act No. 32 of 2000) (City of Johannesburg Metropolitan Municipality, 2016), parking fines or penalties are described as the payment made when the event attendees have parked in restricted or no-parking areas at the festival terrain. A parking fine can be implemented if event attendees with vehicles do not park in the designated parking spaces. Vehicles parked in unauthorised zones can also be towed away at the owners' expense (Migotti, 2015:374). The Big Music Fest, in partnership with the City of Kitchener in Canada, decided to implement a parking regulation to increase the parking fine by $25 on a temporary basis (for the duration of the festival) with the aim of raising money for those who cleaned the area after the festival (News Staff, 2015).

2.5.4 Capping the number of visitors

Regulating or restricting the number of visitors at the event grounds is considered to be one of the best green practices that can be implemented to reduce the disturbance of the peace and quiet in the area and reduce soil compression/compacting (Batey, 2013:343). Peace and quiet of the environment in the context of events is described as a way of living together when people give living species the space and, if necessary, the mutual support to live their lives to the fullest (Humberstone, Price & Henderson, 2015:319).

The soil is considered to be an important component of the global ecosystem. In the context of events, it is therefore important to maintain the soil quality at all times because of the number of event attendees that attend the event every year (Garrigues, Corson, Van der Werf & Walter, 2013:1316). Soil compaction occurs when the soil is exposed to stress by traffic, caused by the large number of event attendees who cause damage to the soil pores (Chamen, Moxey, Towers, Balana & Hallett, 2015:11). Soil compaction is

defined as the process of soil degradation and the decrease of soil volume (Garrigues *et al.,* 2013:1317).

Soil compacting can be reduced by making use of wood chips or shavings on the ground at the festival terrain (Chalker-Scott, 2007:22). The effective and continuous collaboration of event organisers and all the stakeholders in carefully considering the trade-off between minimising the number of event attendees and encouraging public access will assist in reducing soil compacting and disturbance of the peace and quiet in the area (Batey, 2013:343). The Smart Event Handbook that provides guidelines for hosting sustainable events in Cape Town points out that restricting the number of festival attendees at festivals hosted out of doors in Cape Town will assist in protecting and conserving biodiversity (City of Cape Town, 2010:17).

2.5.5 Smoking area/designated areas

One of the green practices used most often in other industries is designated smoking areas to reduce the risk of fire and reduce environmental tobacco smoke. Environmental tobacco smoke is defined as the type of smoke to which non-smokers are exposed in an indoor environment with smokers (McNabola, Erye & Gill, 2011:69). The Tobacco Products Control Act, 1993 (South Africa,1993) describes a smoking room or area as a room that is designed for smoking purposes only or an area that is 'partitioned off with a solid partition from floor to ceiling and that may not exceed 25% of the floor area of the public place'.

In the context of events the Tobacco Products Control Act, 1993 (South Africa, 1993) further points out that events are required to designate certain areas on the event terrain for smoking, with notices and signs that illustrate or indicate where smoking is permitted and where smoking is not permitted. This assists in reducing the increase of environmental tobacco smoke and reduces health problems for event attendees who are non-smokers. The Ravinia Festival in the United States is an outdoor summer music festival hosted as a smoke-free concert environment in 1995. However, the festival organisers decided to develop two smoking areas for the festival attendees who smoke (Anon., 2016).

2.5.6 Well-planned walking routes

Traditionally the use of signs or signage is seen as a convenient green practice used to broadcast information to a large number of festival attendees who pass by the signage located in public areas (She, Crowcroft, Fu & Ho, 2014:232). The main aim of developing a well-planned walking route is to "manage and ensure a long-term protection and maintenance of biological diversity and in the process providing a sustainable flow of natural and products and services to meet the community needs*"* (Saayman, 2009:29). This green practice can be implemented by placing clear and effective signage with directions to the festival or to various show venues, which entrance to use, and directions to the food and beverage stalls and toilet facilities in order to manage the movement and behaviour of festival attendees, which in result will assist to minimise trampling of plants and soil erosion (Steenbekkers, 2014:50).

It is of importance to note that there is a link between green practices implemented at events/festivals and green practices implemented at home. Thus, it is important to identify the possible green practices that can be implemented at home to highlight the similarities between green practices that can be implemented at events/festivals and at home.

2.6 POSSIBLE GREEN PRACTICES THAT CAN BE IMPLEMENTED AT HOME

There are various green practices that have been analysed by different green organisations to understand the significance of going green at home. Green practices like waste management, energy management, and water management are seen as effective ways to reduce the negative environmental impacts caused by everyday activities at home.

2.6.1 Waste management

Bulk waste resulting from the use of non-reusable plastic bags, paper and catering are significant in every household environment (Van der Wagen & White, 2010:299). This has led to the attention to developing green practices that will assist in reducing the amount

of waste generated every day. There are a number of green practices that have been identified and implemented. These green practices are discussed below.

2.6.1.1 Grocery shopping bags

The adoption of reusable bags has increased due to the banning of non-reusable plastic bags. People are becoming aware of the importance of using reusable grocery bags that have been increasingly promoted as environmentally and socially conscious (Karmarkar & Bollinger, 2015:2). There are different types of grocery bags that can be used, namely paper bags, plastic bags and reusable bags that are made from either plastic or cotton. A shopping bag can be categorised as either a reusable or a single-use bag (Muthu & Li, 2013:4). A reusable grocery bag is described as a cloth type of bag that can be used more than once and has an indication outside that it is recyclable or compostable and has a less negative impact on the environment (Klick & Wright, 2012:3). A single-use grocery bag is the type of plastic bag that contains harmful toxic substances, and causes littering in sewages and is harmful if digested by animals (Dunn, 2012:5). The main advantage of implementing reusable or cloth grocery bags is to reduce the non-reusable plastic bag footprint (Ellis, Kanter, Saab & Watson, 2005:13).

2.6.1.2 Recycling

Recycling at home has led to every household sorting waste in different plastic bags before handing the separated waste to the recycling projects (Matsumoto, 2011:325). Among households and individuals recycling has become the norm, with materials such as plastic, paper, cans and glass being recycled (Thomas & Sharp, 2013:5). Recycling is described as the use of waste products or materials that are in a form of raw material from which the manufacturer produces a new or similar product (Tanskanen, 2013:1004). There are three ways in which recycling can be used, namely the material can be recycled, reused and reduced as seen in Figure 2.4 (Muthu, Li, Hu & Mok, 2011:470).

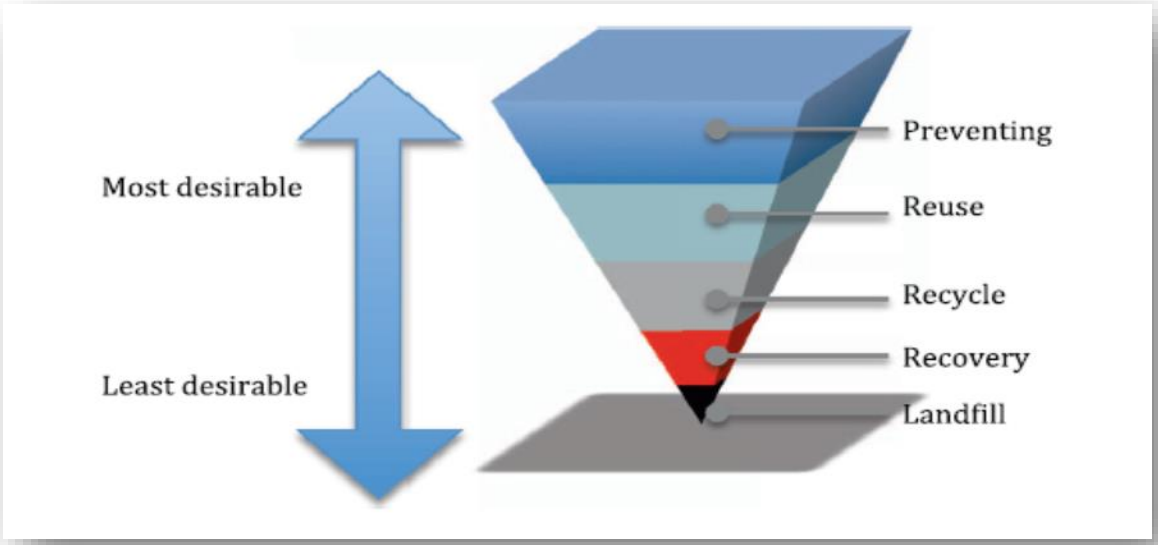

Figure 2.4: Waste management hierarchy
(Source: Adapted from Cucchiella, D'Adamo, Massimo Gastaldi, 2014:710)

The first step is to reduce the use of products or material that cannot be recycled and that contain harmful substances. The second step is to reuse material, for example, paper can be reused as scrap paper for printing on the unused side and for children's activities such as colouring or drawing. The main reason to use paper as scrap paper is to reduce the production of paper made from wood pulp, which leads to negative environmental impacts such as deforestation and soil erosion (Hong & Li, 2012:264). The third step is to recycle the material (paper, glass or cans) to produce new products or to recover the same waste material (Samakovlis, 2004:104; Teo, 2011:14). The advantage of implementing this green practice is mainly to reduce waste, save costs and reduce negative environmental impacts (soil erosion, air, and water pollution).

2.6.1.3 Opting for fewer additional items

Fast-food packaging is seen as one of the materials that cause a large amount of litter. This results from opting for additional items when ordering takeaways, therefore it is important that individuals inform the waiter when ordering a takeout what they will need and what they will not need (e.g. napkins, flatware or condiments). The benefit of opting for fewer additional items is that the amount of waste produced from one takeaway is reduced (Cheeseman, 2011).

2.6.1.4 E-billing/online payments/electronic devices/smartphone

An electronic mechanism was developed to assist in reducing waste and this led to the use of smartphones for this purpose as well. According to Lee, Lee, Ko, Lee, Kim, Yang, Yatani, Chung and Song (2014), the use of smartphones is increasing day by day and becoming a part of individuals' lives. The implementation of smartphones as green practice offers individuals an option of using mobile apps to pay utility bills, using notepads or notes when taking notes in meetings or to write to-do lists (iFactor Consulting, 2015:2). The main advantages of using electronic devices are the reduction of the use of paper and costs, and saving of time (iFactor Consulting 2015:4).

2.6.2 Energy management

Energy is seen as one of the basic needs of households and makes up a significant proportion of the total household expenditure. However, in the research that was conducted, it was found that the majority of households in urban areas use electricity, charcoal, and gas, while households in the rural areas use firewood and kerosene as a way to reduce the cost of energy and improve their living conditions (Lee, 2013:253).

2.6.2.1 Energy alternatives

Various energy alternatives can be implemented in every household, and have the ability to reduce energy consumption. These alternatives include the use of solar energy and switching to LED bulbs (Devabhaktuni, Alam, Depuru, Green, Nims & Near, 2013). Solar energy is defined as the radiant energy from the sun caused by nuclear fusions in the sun's core (Little, 2014:4). This type of energy is used as a substitute for using electricity to heat water. The main aim with the use of solar energy as a green practice is to reduce the cost of energy consumption and reduce emissions (Niu, Zhang, Zhao, Ding, Niu, Christensen, 2011:1435). Furthermore, solar energy is seen to be cheap, reliable and quiet (Agar, 2012:8).

LEDs (light emitting diodes) are described as a "solid-state lighting component that converts electricity into light by semiconductors instead of filament or gas" (Talebian,

2012:12). Using LED lights reduces operating costs because LED lights use 50 to 90 per cent less energy than normal light bulbs. LED lights last three times longer, have a wide colour temperature range, contain a control option (a sensor to control the shutdown process and resume operation), contain no toxic chemicals, can perform well in cold seasons, are brighter and compact in size (Quick & Carter, 2011:22–23).

2.6.2.2 Earth Hour

Due to the increasing demand for energy in South Africa, implementing the green practices required during Earth Hour is important to conserve and protect the biological diversity and use renewable natural resources in a sustainable manner. Earth Hour is described *as a "*coordinate-mass effect to reduce the use of electricity for one hour one day per year*"* (Olexsak & Meier, 2014:159). The Earth Hour is one of the green practices that involves people from various households. They are urged to turn off all lights and electrical appliances for one hour (Solomon, 2008:2).

2.6.2.3 Gas appliances

Nowadays people are shifting from the use of electric appliances to gas appliances such as modern gas or biogas water heaters, cooking ranges and LPG (liquefied petroleum gas or liquid petroleum gas) appliances as alternatives to safe electricity (Eskom Integrated Demand Management, 2010:2–3; Mullen, Li & Singer, 2012:5). Biogas or gas is a methane-rich fuel produced by the anaerobic digestion of organic material, such as waste, dung and crop residues. The advantage of using gas or biogas appliances is that they are seen as a type of clean burning gas that reduces greenhouse gas emissions (Maes & Verbist, 2012:20-21).

2.6.2.4 Natural ventilation

Natural ventilation is seen as an effective green practice, but not everyone understands the importance of not using cooling fans and opting for natural ventilation (Schulze & Eicker, 2012:221). Ventilation is described as the free entry and circulation of air in a

confined space such as a room (Eskom Integrated Demand Management, 2010:4). The main purpose of implementing natural ventilation is to reduce indoor air pollution, improve the quality of indoor air and indoor thermal conditions and reduce energy consumption from using air conditioners (Allard & Chiaus, 2012:13-14).

2.7.3 Water management

Water is seen as an extraordinary natural resource and is a key to the chemistry of life. “If it wasn’t for water’s unique properties, such as its abilities to dissolve other substances, life could not exist on our planet. Indeed, life was thought to have started in water and currently more than half of the plants and animal species live in water” (Sammuel & McMartin, 2014:835). The following are the various green practices that can be implemented by households in order to save water and reduce water consumption.

2.7.3.1 Water catchment

Over the years, the collection of rainwater was seen as a way of ‘linking human beings and the environmental systems in a mutually reinforcing health or relationship’ (Kinkade-Levario, 2013:1). This led to the introduction of a green practice that was used years ago, known as water catchment or rainwater collection.

Water catchment is described as the process whereby rain water that falls on the roof is stored and reused (BuiltSmart Resources, 2015). It is, therefore, an ideal green practice to save water and reuse the water for gardening, washing the car and/or for bathing (Anon., 2015). The advantage of using a water catchment tank is that it provides a new source of water supply, reduces the cost of pumping groundwater and is easy to operate and maintain (Kinkade-Levario, 2013:1 & 16–17).

2.7.3.2 Micro-irrigation watering system

Because water scarcity is a major concern in many countries, including South Africa, an alternative green practice has been introduced not only in the agricultural industry but

also in the management of water in households. This green practice is known as the micro-irrigation system (Kumar, Kumar, Kumar, Mishra, Sigh, Saharawat & Gathala, 2013:348). Micro-irrigation is defined as the application of water by use of emitters that can be placed above or below the surface of the soil at a small operating pressure of 20 to 200 kPA (0,2 to 2,0 kg/cm) (Rajput & Patel, 2012:1). The main purpose of using a micro-irrigation system is to reduce water consumption and save on the cost of water use every day (Zou, Li, Cremades, Gao & Qi, 2013:18).

2.7.3.3 Saving water alternative

Water shortage in households is increasingly seen to be a social and economic issue, and extensive measures are needed to decrease the demand for water. As South Africa is one of the countries that has been predicted to experience water scarcity by 2050, turning off taps and fixing leaky taps are seen as green practices that can effectively reduce the overuse of water (Mee, Instone, Williams, Palmer & Vaughan, 2014:369). Green practices that can be implemented to save water include making sure that the taps are closed tightly and not dripping, and turning off the tap while brushing teeth (Onyenankeya, Caldwell & Okoth, 2015:180), fixing leaks that result from worn toilet washers, dripping taps and other leaking valves in homes. Leaks are seen to be every expensive and can waste up to 5 000 liters of water every year (Lowe, Lynch & Lowe, 2015:2 & 4). The importance of implementing these green practices is mainly to assist in saving tens of thousands of liters of clean water in a year and save costs (Gunson, Klein, Verga & Dunbar, 2012:72).

2.7.3.4 Grey water

Grey water is described as the collection of water from domestic use, such as laundry, shower or bath water. Grey water can be reused for watering the garden, or to flush toilets, which is estimated to save between 29% and 35% of consumed water per flush (Mourad, Berndtsson & Berndtsson, 2011:2447). Grey water can be recycled and used for showering with the aim of reducing the use of clean water (Sterwart, Willis, Panuwatwanich & Sahin 2013:696).

2.8.4 Other green practices: green commitments

Commitment is described as a form of ‘self-control, the utility of which depends on reversals of preference from time to time’ (Rachlin & Green, 1972). Commitment is further defined as the feeling and thoughts that shape the behaviour in which an individual persists to maintain all types of relationships (e.g. personal-environment relationship). The level of green commitment to the environment can be seen from the level of satisfaction with the environment, the willingness to invest in the environment, and the level of commitment to implement green practices as an alternative way to reduce environmental impacts (Coy, Farrell, Gilson, Davis & Le, 2013:50). The increased commitment to greening of festival attendees at their respective homes can be seen in the purchasing of environmentally friendly products and organic and free-range food, planting trees on Arbour Day, making use of green transport alternatives and making financial contributions to green initiatives.

2.8.4.1 Environmentally friendly products

Over a period of 40 years, concern about the environment has been one of the most important topics researched, and it has become more critical because of the increased concern about creating a sustainable and healthy environment. Environmentally friendly products are organic food, biodegradable packaging, reusable grocery bags, LED lights and cleaning aids, to name a few (Royne, Levey & Martinez, 2011:329). The reasons for purchasing environmentally friendly products are to protect the ozone layer, to reduce littering and to promote a healthier community and environment (Anwar, Chaudhry, Nazeer, Zaman & Azam, 2015:130).

2.8.4.2 Organic and free-range alternatives

Recently individuals have been encouraged to purchase organic food instead of non-organic food because organic food is eco-friendly. Organic food is free of synthetic fertilisers, pesticides, steroids and other chemicals that have a negative impact on the natural environment. This type of food is known to be grown in environmentally friendly

soil where the use of water for irrigation is reduced to allow for slow growth (Almadani, 2012:26).

The term organic refers to food that is grown in safe soil without the use of pesticides, bioengineered products, also known as GMOs, and any kind of fertiliser (Robinson, Segal & Segal, 2016). The main goal of introducing organic food is to reduce the negative impact of agriculture and to increase awareness about the nutritional value of food, health, and food security. The benefits that arise from choosing organic and free-range alternatives are that organic food is fresher than non-organic food and easily accessible, reduces the chemical load, reduces water pollution and builds soil fertility, and has more flavour than non-organic food.

In order to encourage individuals to purchase organic food, local supermarkets have to make the organic food visible enough to grab the attention of the buyers to make it an everyday purchase habit (Hjelmar, 2011:338). Furthermore, it is important to promote and encourage festival attendees to understand the importance of planting trees or having their small garden in their homes if they have to spend more on buying organic food and reducing the increase of carbon dioxide in the process.

2.8.4.3 Arbor Day

Arbour Day is a green event that started in 1872 in the United States and was introduced by Mr J Sterling Morton, who was interested in the beauty and significance of trees in the environment (SA National Biodiversity Institute, 2008). In South Africa, Arbour Week has been celebrated under the theme “Our Forest – Our Future” from 1 to 7 September every year since 1983. This celebration is mainly to promote a better understanding of indigenous plants, point out the significance of plants for the environment, the society’s standard of living and sustainable development, and lastly, to effectively raise awareness of South Africa’s urban green initiative (South Africa. Department of Environmental Affairs, 2013:2). In terms of this campaign, every household is required to plant one tree, which will act as a carbon sponge to absorb carbon dioxide and turn it into oxygen (Forest, 2013).

2.8.4.4 Transport alternatives

Transport is an important basis for economic and private activities and is seen as an important part of society. The high demand for transport leads to more traffic, and this leads to negative environmental problems such as traffic congestion and an increase in carbon dioxide emissions (Helms, Pehnt, Lambrecht & Liebich, 2010:113).

Various transport alternatives identified in previous studies are ideal to reduce negative environmental impacts. These include carpooling and hybrid/energy-efficient vehicles. Carpooling is described as an activity that involves two or more people sharing a private vehicle from their places of residence to their places of employment, for example (Dewan & Ahmand, 2007:3). Carpooling as a transport alternative is a green practice that is used to reduce traffic congestion and carbon dioxide emissions.

The second type of transport is the use of hybrid/energy-efficient vehicles. This is a type of vehicle that has a quiet engine that is more or less emission free and has the ability to make use of renewable or other energy sources (Helms *et al.,* 2010:113). Both carpooling and hybrid/energy-efficient vehicles have the advantage of reducing travelling miles, reducing traffic congestion and reducing costs (Wilkwska, Farrokhikhiavi, Ziefle & Vallee, 2014:401.

2.8.4.5 Financial contributions

Green financial contributions are described as contributions that help to manage the operation of green projects such as water treatment projects, renewable energy projects, biodiversity conservation projects, recycling projects and education and training projects (Emerton, Bishop & Thomas, 2006:76). Individuals who are environmentally conscious are those who are more likely to make financial contributions to support the initiative to protect and conserve the environment and natural resources. Financial contributions can be made by subscribing to green or eco-friendly blogs and purchasing green products (Royne, Levy & Martinez, 2011:329 & 330).

2.9 GREEN AWARENESS ABOUT ENVIRONMENTAL IMPACTS AND GREEN PRACTICES

Over the years the importance of raising awareness has increased and effective ways to get the message across to the audience have become essential (Live Long Programme, 2015:10). This has led to event stakeholders involved in hosting green events having to plan ways to raise awareness of how the event proposes to implement green practices in a sustainable manner during the production (Mehta & Patel, 2013:77). Raising awareness is defined as "to inform and educate people about a topic or issue with the intention of influencing their attitude, behaviours and beliefs towards the achievement of a defined purpose or goal*"* (Sayers, 2006:10). Rocking the Daisies in South African is a practical example of a music events that promotes and raises awareness about the implementation of green practices not just at the festival but at attendees respective homes as well (Steadfast Greening, 2012; Steadfast Greening, 2014).

There are various ways to raise awareness about green initiatives, for example, energy saving, water saving, the use of green transport alternatives, waste management, payment of a green fee, the reduction of pollution (air, land, noise) and environmental rehabilitation. The first effective way to raise awareness is by selling bracelets or green awareness ribbons or bands to event attendees at the main entrance and donating the proceeds to various local green initiatives. Secondly, an action or raffle can be planned whereby local businesses can donate gift certificates and environmentally friendly or green products. Thirdly, festivals can make use of billboards to advertise the event and incorporate the green practices that will be implemented to reduce environmental impacts. A slogan that summarises the use of green practices can be included. Lastly, the event further raises awareness via the festival's Facebook page, Twitter handle, Instagram, blogs, short radio ads and short television advertisements (Schaefer, Nelson, Brown, Benson, McConkey, Schuller, Gammel & Wesely, 2014:36-38).

The aim of raising awareness is to increase brand association, build strong relationships with the community, festival attendees, sponsors and other important stakeholders, and improve festival attendees' online interaction with the event brand. Furthermore, the advantage of raising awareness is to educate the community or festival attendees on the green practices that are implemented at festivals (e.g. waste management, water management, green commitment practices and the use of greener transportation) and

possible green practices (e.g. waste management, water management, green commitment practices and the use of greener transportation) that can be implemented in households. Moreover, raising awareness about green practices can make festival attendees or individuals think about the sustainability of the local natural environment, enable the community to start their own local green campaigns and enable the community to refrain from destroying the environment (Weaver, 2013:5 & 10; Live Long Programme, 2015:7; Dan & Dan, 2011:9; Thomas & Sharp 2013:7; Fehr, Kamm & Jager, 2014:3).

The following are examples of international and South African green awareness campaigns that are indicated in the environmental and social consciousness calendar: (1) World Wetlands Day (2 February), (2) National Water Week (18–24 March), (3) World Forestry Day (22 March), (4) Earth Hour (23 March), (5) International Biological Diversity Day (22 May), (6) National Environmental Week (03–09 June), (7) World International Day (05 May), (8) World Ocean Day (08 June), (9) World Day to Combat Desertification and Drought (17 June), (10) Arbour Day/Arbour Week/Arbour Month (1–7 September), (11) World Water Week (1-6 September), (12) International Day for the Preservation of the Ozone Layer (16 September), (13) National Clean-up Week (16-21 September), (14) World Water Monitoring Day (18 September), (15) National Recycling Day (20 September), (16) International Coastal Clean-up Day (21 September), and (17) Clean up the World Week (21-22 September) (Green Works., 2013:1).

Events and festivals awareness campaigns/initiatives include: (1) No Trace' or Love Your Tent' initiative aim is to engage attendees in picking up waste at the festival camping sites; (2) Green Traveller which aims to encourage attendees make use of public transport by offering incentives (discount on meals and free festival t-shirt); (3) Priority Car Park and GoCarShare initiative aims to encourage attendees to share rides to and from the festival; (4) Bring a Bottle initiative and aims to encourage attendees to bring their own bottles due to the banned sale of beverages in disposable bottles; (5) Making waves campaign encourages festivals to reduce the use of disposable waste and promotes the use of reusable stainless steel water bottles (Powerful Thinking, 2014:21-26-30).

2.10 CONCLUSION

Arts festivals play an important role in the events industry and the tourism industry. The literature review revealed how sustainability fits in the greening of events, discussed the concept greening and revealed the relationship and the difference between the concept sustainability and greening. The literature review identified the role players that play a significant role in greening of events and the advantages of greening events. The literature review further identified possible green practices that can be implemented by arts festivals as a means to reduce negative environmental impacts that include water management, energy management, waste management, greener transport options and other green commitment practices. Finally, possible green that can be implemented at home, including water management, energy management, waste management and green commitment practices and the ways and the importance of raising awareness about green practices were identified.

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CHAPTER 3

ATTENDEES' ATTITUDE TOWARDS SUPPORTING GREEN PRACTICES AT FESTIVALS – A COMPARISON BETWEEN TWO AFRIKAANS ARTS FESTIVALS

"Attitude is a little thing that makes a big difference."

– Winston Churchill

ATTENDEES' ATTITUDE TOWARDS SUPPORTING GREEN PRACTICES AT FESTIVALS – A COMPARISON BETWEEN TWO AFRIKAANS ARTS FESTIVALS

ABSTRACT

The growth of arts festivals and the increase in the number of attendees who visit events over a certain period of time have resulted in a greater environmental impact on arts festival areas and host communities. Festival organisers should implement practices that promote greener and more sustainable alternatives, such as environmentally friendly transport systems, and creative substitutes to reduce waste, water, and energy. Implementing green practices is a process that requires a change in the mindsets and habits of both festival organisers and attendees. However, this is easier said than done. The involvement of festival attendees in the greening of festivals, or more specifically, their attitude towards supporting green practices, is crucial. It is therefore important to investigate the inclination of these festival attendees to support the implementation of green practices at South African Afrikaans arts festivals. By understanding which green practices these attendees are inclined to support, festival organisers will have greater insight into which green initiatives and valuable resources should be allocated.

A research survey was conducted at the Clover Aardklop National Arts Festival in Potchefstroom in North West in October 2015, and another at the Innibos Lowveld National Arts Festival in Mbombela, Mpumalanga during June/July 2016. Four hundred and forty-three (443) and four hundred (400) questionnaires respectively were completed and used for analyses. A confirmatory factor analysis was done on each of the festivals' datasets. The five factors for each dataset were labelled as Greener transport, Waste management, Water management, Energy management and Green commitment. *T*-test analyses revealed a significant difference between the two festivals with respect to the factor of waste management.

Keywords: ***Arts festivals, Clover Aardklop National Arts Festival, Innibos Lowveld National Arts Festival, green practices, festival attendees, attitude, and behaviour***

3.1 INTRODUCTION

Festival attendees in South Africa have various arts festivals to choose from as a result of the rapid growth of arts festivals in recent years (Viviers & Slabbert, 2012:1109). Most of these arts festivals are Afrikaans arts festivals (Van Heerden, 2009:5). The aim of these arts festivals is to celebrate and showcase various art forms and activities within a limited period (Mair, 2011:10).

Arts festivals attract large numbers of attendees to a destination for a certain period of time. However, this often leads to negative impacts on the environment, and more specifically on the festival area/terrain and its host community. Examples of these negative environmental impacts of festivals include water pollution (35%), soil degradation (waste 68%), air pollution (80% of Carbon dioxide emissions), overcrowding, traffic congestion and noise pollution (Zhong, Buckley, Wardle & Wang, 2015:221; George, 2007:309–310; Parker, Ballantyne & Hughes, 2014; Powerful Thinking, 2014:2).

Globally it has become more important for festival managers to manage these negative impacts in order to make their festivals greener and ultimately more sustainable (Mair & Laing, 2012:683). This is confirmed by Getz (2009:70), who indicated that the implementation of green practices at festivals is part of the movement to reduce negative environmental impacts and therefore it is important to take the environment into consideration when planning and organising arts festivals (Getz, 2009:70). Festival organisers should therefore implement practices that promote greener and more sustainable alternatives such as environmentally friendly transport systems and creative substitutes to reduce waste, water and energy consumption (Costi, Minciardi, Robba, Rovatti & Sacile, 2004:277; Rico-Amoros, Sauri, Olcina-Cantos & Vera-Rebollo, 2013:553; Beirão & Cabral, 2007:478; Ahmad, Rashid, Razak, Yusof & Shah, 2013:332).

Implementing green practices is a process that requires a change in the mindsets and habits of both festival organisers and attendees. However, this is easier said than done (Griffin, 2009:43; Ahmad *et al.,* 2013:331). Although some festivals implement one or two green practices, many still fail to meet the basic green requirements of reducing overconsumption of water, electricity and reduce waste (Katzel, 2007:15). This problem can be more effectively addressed by identifying and better understanding the use of green practices at arts festivals, and the intention of festival attendees to support these practices. This will provide valuable insights that will assist arts festival organisers to

address ignorant and irresponsible behaviour at these festivals and to emphasise and promote greener alternatives and practices. With the lack of understanding and communication about the implementation of green practices at arts festivals, the goals of arts festivals being green will not be effectively achieved.

The question this research aims to address is: what is the inclination of festival attendees to support the implementation of specific green practices at South African Afrikaans arts festivals? Such endeavours have energy, cost and time implications, which could be wasted if festival attendees are not inclined to support these initiatives. Understanding which green practices these attendees are inclined to support will assist festival organisers in better allocating valuable resources to the green initiatives that are more likely to be supported.

3.2 LITERATURE REVIEW

According to Dobson (2010:2), the concepts of sustainability and going green can be traced back to 1949 to the very first international gathering at the United Nations Scientific Conference on the Conservation and Utilization of Resources, where environmental issues were discussed. This conference was hosted with the main aim of addressing the increase in environmental degradation (Allu, Gabbard & Timmons, 1950:95). Later a number of conferences and summits such as the United Nations Conference on Environment and Development (AGENDA21) (1992), the Rio Summit (1992), the Green Economy Summit (2010), the Earth Summit (2012), to mention a few, were hosted with the aim to address environmental issues and identify ways in which the increase in the degradation of the environment can be minimised.

The term sustainability emerged in the 1970s/1980s and its meaning has evolved since then. The usage of the word sustainability is very significant and should be investigated to provide a better understanding of the term going green (Dobson, 2010:2). Although the words sustainability and going green are often used interchangeably, one should note that these two words do not mean the same thing (Garrett & Raisch, 2016:463). Sustainability is defined widely by Laing and Frost (2010:262) as not only focusing on environmental issues, but also taking into account the economic and socio-cultural concerns (Dobson, 2010:4).

More applicable to this study is the concept of going green, which is described as raising awareness about environmental issues caused by individuals' everyday activities and implementing green practices as a means to reduce environmental damage (Dobson, 2010:4). In the context of festivals, Getz (2009:70) defines a green festival as a festival that adopts green practices into its management and operations. Dobson (2010:4) agrees with this and highlights that a green festival is a festival that is properly designed, organised, managed and staged as part of sustainability principles.

Viviers (2010) identified a number of studies on the social and economic impacts of South African arts festivals, with a few studies that have looked into the greening of arts festivals. Costi, Minciardi, Robba, Rovatti and Sacile (2004:277), Rico-Amoros, Sauri, Olcina-Cantos and Vera-Rebollo (2012:553), Beirão and Cabral (2007:478) and Ahamad *et al.* (2013:332) state that the implementation of green practices such as waste management, water management, energy management and the use of greener options of transportation results in benefits that can be enjoyed by the attendees. From an in-depth literature study, green practices implemented at different festivals and events in South Africa and internationally that contribute to the greening of events are captured in Table 3.1.

Table 3.1: Festivals and events that implement green practices

SOUTH AFRICA	GREEN PRACTICES	SOURCES
1. Rocking the Daisies	• Recycling bins (two-bin system) • Biodegradable packaging • Digital and e-marketing • Item-refundable system • Grey water system • Mobile/composting toilets • Carpooling • Bicycle rental services or walking • LED lights	Steadfast Greening (2012)
2. Klein Karoo National Arts Festival	• Trapsuutjies Tent, which enables attendees to determine the carbon dioxide attendees emitted while travelling	Dobson and Snowball (2012)
3. 2010 FIFA World Cup	• Recycling bins (two-bin system) • LED lights • Natural air ventilation • Rehabilitation programmes (removal of waste and fertilising the grass)	Anon (2010)
4. The Hi-Tec Walking Festival	• Well-planned walking routes	Anon (2016d)

5. Eco Mobility Festival	• Greener transportation • Walking • Carpooling • Metros (Gautrain) • Trams • Scooter	Sandton Central Management District (2015)
6. Old Mutual Two Oceans Marathon	• Biodegradable cups	Anon (2015a)
7. Innibos Lowveld National Arts Festival	• Green audit to reduce green washing • Recycling • Water-bottle filling stations	Dobson and Snowball (2012)
8. My Coke Fest (Rock Music Festival)	• Recycling • Recycling bins (six-bin system: glass, paper, plastic, organic material and landfill waste)	Van Hoorn (2008)
9. Renewable Energy Festival	• Raising awareness about climate change, environmental degradation and energy crises in South Africa	Anon (2015b)
10.The Happy Earth Festival	• Raising awareness about the importance of conserving biodiversity (natural environment and plants)	SAMBI (2014)
INTERNATIONAL	**GREEN PRACTICES**	**SOURCE**
11. Home County Folk Festival	• Biodegradable products (reusable stainless steel plates)	Anon (2016b)
12. London Rib-Fest and SunFest	• Biodegradable products or packaging (wooden or plastic spoons, water bottles)	Benedict (2008)
13. The Ottawa Cisco Bluefest	• Biodegradable products or packaging (wooden or plastic spoons, water bottles) • Cycling	Graci and Dodds (2008)
14. Winnipeg Folk Festival	• Composting beverage cups	
15. Harvest Jazz and Blues Festival	• Recycling • Composting beverage cups • Digital and e-marketing • Shuttle services	
16. The Dubrovnik Summer Festival	• Electronic ticketing system	Majstorovic (s.a)
17. The Buddhafield Festival	• Recycling waste • Public transportation • Carpooling or lift sharing	Triratra Buddhafield (2016)
18. The Reading and Leeds Festival	• Gel hand sanitiser • Recycling waste • Biodegradable food packaging • Use of biodiesel	Julies's Bicycle (2016)
19. Britannia Park Festival	• Parking fines • Increased parking fees to encourage attendees to use bicycles	Dodds and Graci (2008)

20. The Rania Festival	• Provided designated smoking areas to eliminate the chances of cigarettes causing fires	Anon (2016c)

(Author's own compilation)

Based on the literature and the green practices identified in the studies and reports listed in Table 3.1 the following green categories were identified for arts festivals. The categories, their subsequent practice, and associated benefits are discussed in the sections that follow.

3.2.1 Green practices at events

Implementing green practices are seen as an effective way for events to be considered as sustainable or green events and reduce negative environmental impacts seen after events. Thus, implementing green practices such as water management, waste management, energy management, environmental rehabilitation and using transport that produces less emissions can assist to achieve events green goals.

- **Energy management**

To reduce overconsumption of energy, arts festival organisers can implement the use of solar panels as an energy alternative, use LED lights (light emitting diode), which are known to use less energy on the festival terrain during productions, and use natural air ventilation instead of air conditioners by opening windows or doors at indoor areas at the festivals (Devabhaktuni, Alam, Depuru, Green & Near, 2013:556; Singh, 2013:2; Khare, Nema & Baredar, 2013:1; Zhang, Shen & Chan, 2012:241; Bhutto, Bazmi & Zahedi, 2012:2762).

- **Waste management**

A three-bin recycling system, which involves the use of colour-coded bins for different types of wastes such as tins, bottles and paper, can be implemented at arts festivals.

Only biodegradable packaging such as compostable cups, spoons and water bottles can be used. The use of digital and e-marketing such as Facebook, Twitter, YouTube, Blog, MySpace, and websites can be implemented. An item-refundable system can be implemented, where attendees purchase a beverage, then after use return the cup/bottle/can to receive a certain amount of money. Another example is getting attendees to pick up waste and in return get a free beverage. The electronic ticketing system (purchasing of tickets with a barcode online) can be implemented. All the practices can assist to reduce waste (Karkanias, Perkoulidis, Grigoriadis, Stafylas, Dagilelis, Feleki & Moussiopoilos, 2014:288; Poirier, Brain & Barajas, 2013:1; Andrews, Gregoire, Rasmussen & Witowich, 2013:531; Hanani, Ross & Kerry, 2014:94; Rossi, Cleeve-Edwards, Lundquist, Schenker, Dubois, Humbert & Jolliet, 2015:133; Masmoundi, Bessadok, Dammak, Jaziri & Ammar, 2016:3; Scott, 2013:21; Mendes, Wittmann, & Battistella, 2012:18; Mut-Puigserver, Payeras-Capellà, Ferrer-Gomila, Vivers-Guasch & Castellà-Roca, 2012:2).

- **Greener transport options**

Traffic congestion and noise and air pollution can be reduced by implementing greener transportation options. For instance, festivals can collaborate with other green organisations and use the Trapsuutjies Tent (at Aardklop) to determine the carbon dioxide emitted by attendees while they were travelling. Organisers can provide shuttle services for attendees to the festival and to use at the festivals, bicycle rental services can be offered to attendees to use to travel to festivals. Attendees can also be encouraged to use carpooling transport alternatives, walking and public transportation (taxis and buses) to travel to the festival instead of using personal cars (Handy, Van Wee & Kroesen, 2014:4; Pooley, Horton, Scheldeman, Mullen, Jones, Tight, Jopson & Chrisholm, 2013:67; Heesch, Giles-Corti & Turrell, 2014:29; Hingmire, Pedneker, Naik & Gupta, 2016:29; Neoh, Chipulu & Marshall, 2015:2; Woodcock, Osmond, Begley & Frankova, 2014:309; Redman, Friman, Gärling & Hartig, 2013:119).

- **Green commitment**

Rehabilitation/restoration programmes can be implemented at the festivals as a means to restore the festival terrain, incorporating parking fines to charge attendees who park on protected or designated areas, capping the number of attendees (this means that festivals will only target and allow a limited number of attendees on the festival terrain), and providing more designated smoking areas. Well-planned walking routes can also be implemented at festivals. These green practices will assist in minimising soil compression, soil erosion and disruption of tranquillity, and reduce the risk of fire and environmental tobacco smoke (Naiman, 2013:392; Maikhuri, Rawat, Nautiyal, Negi, Pharswan & Phondani, 2013:561; Wenneman, Roorda & Habib, 2014:1; Wenneman, Habib & Roorda 2015:3; Travaille, Salinas-de-Leon & Bell, 2015:149; Stillman, Soong, Kleb, Grant & Navas-Acien, 2015:528; Joossens & Raw, 2013:7).

- **Water management**

Overconsumption of water can be minimised by implementing the use of gel hand sanitiser, described as a hand cleaning technology that requires a gel and a dispenser product. Mobile/composting toilets that use less water per flush can be implemented. Grey water can also be used in shower facilities (Müller, 2016; Priest, McKenzie, Audas, Poore, Bronton & Reeves, 2012:2; Liu, Butler, Memon, Makropoulos, Avery & Jefferson, 2010:2).

3.2.2 Benefits of implementing green practices at events/festivals

The following benefits can be derived from implementing green practices at arts festivals that aim to become more green:

- **Increased awareness**

Implementing green practices at festivals is a process that happens behind the scenes and people are keen to get information on what green initiatives will be implemented and

executed. The media can assist at festivals in raising awareness about negative environmental impacts over the radio or on television and other social media platforms, and about green practices that will be implemented to reduce such impacts and how the community or attendees can be involved. This will result in getting attendees to support the initiative, and in the process educate and encourage them to be pro-environmentally active (City of Cape Town, 2010:28; Mair, 2015:103–107).

- **Cost-saving opportunities**

There are cost-saving opportunities that arise from implementing green practices at festivals, for example waste management, water management, energy management and the use of greener transportation, which have a role in reducing the cost of purchasing energy, water and fuel for the festival operations or production. These opportunities also save on recycling waste (Mathiyazhagan, Govindan, NoorulHaq & Geng, 2013:283; Graci & Dodds, 2008:258).

- **Economic benefits**

Greening arts festivals by implementing green practices can be a great opportunity economically, not only for festival organisers but for the host region as well. The community members can receive benefits, including job opportunities such as cleaning the festival terrain (waste removal) and cleaning toilet facilities. Partnerships with local recycling projects, local farms or suppliers and eco-friendly accommodation establishments can also be formed. This can create future investments for local businesses (Stettler, 2011:11; City of Cape Town, 2010:18; Katzel, 2007:9).

- **Social benefits**

The process of implementing green practices at arts festivals not only results in protecting the natural environment and conserving natural resources, but can have a few benefits for the host region too. Hosting festivals that implement green practices can provide

opportunities for the community to take part in greening/implementing of green practices, where the host community can be educated on how green practices will be implemented. This will instil change in people's attitude and behaviour in the process (Frediline, Deery & Jago, 2005:3; City of Cape Town, 2010:18; Mair, 2014:89; Ahmad *et al.,* 2013:333).

- **Environmental benefits**

Environmental opportunities such as implementing waste management, energy management, water management, biodiversity conservation and making use of greener transport options alternatives can assist in reducing negative environmental impacts such as land, water, air and noise pollution. As a result, indigenous plants and endangered species where the festivals are hosted will be conserved and protected (Fam, Mosley, Lopes, Mathieson, Morison & Connellan, 2008:11).

- **Competitive advantage**

Arts festivals implementing basic green practices such as water management, energy management, and waste management, which assist in reducing negative environmental impacts, have a competitive advantage over festivals that do not implement green practices. Green practices can result in a cost-saving competitive advantage that requires attracting stakeholders who behave in a sustainable manner to reduce waste and reduce the cost of recycling. This can further result in a differentiated competitive advantage that requires festivals to offer green products or implement green practices that competitors do not implement. Examples of green practices are selling biodegradable or recyclable products at the festivals, which can be of value to attendees who are aware of environmental issues (Henderson, 2011:13; Mair & Jago, 2012:684; Koukkanen, 2013:98–103).

- **Influencing decision-makers**

Arts festival stakeholders include festival organisers, sponsors, co-workers, the community and attendees. When deciding to host a green festival, some of these stakeholders may not agree with or support the idea at first and may cause conflicts. However, providing information about the benefits that will arise from implementing green practices or greening festivals, providing detailed research that supports ideas, and forming good partnerships with stakeholders with the same shared aims and vision will assist in reducing conflict, encouraging and promoting effective communication and building a long-term relationship (Laing & Frost, 2010:265).

- **Positive reputation**

The process of implementing green practices at festivals creates a platform to increase a positive image or reputation for festivals, which results from the reduction of costs, the increased competitive image, the social and economic benefits provided for the local or host communities and the new opportunities to attract new markets (Peng, & Lin, 2008:202).

3.3 PROBLEM STATEMENT

A festival attendee is described as a visitor who visits a specific destination for longer than 24 hours or less, and these attendees can either be tourists who spend more than 24 hours at a destination, or the host community or other communities from other regions (George, 2007:5; Roodt, 2008:8). A large number of attendees at arts festivals cause negative environmental impacts that are seen during and after arts festivals. Examples are the increase in traffic congestion, littering, overconsumption of water, overuse of energy, noise pollution, air pollution and loss of biodiversity (Dodds & Graci, 2012:3; Getz, 2009:70; Tang, 2015:11; Fontes, Pereira, Fernandes & Coelho, 2015:296). This leads to an increasing number of arts festivals implementing green practices as a means to reduce such impacts.

However, for arts festivals to become green, entails the involvement of various role players, including the festival attendees, who have a crucial role to play in the successful implementation of green practices at arts festivals (Van Zyl, 2013:32). Actively involving attendees who have a sense of environmental responsibility and satisfaction with respect to the implementation of green practices at arts festivals sets a platform to determine whether green practices should be implemented at festivals or not (Merilees & Marles, 2011:6 & 8; Chen & Chai, 2010:30).

As it is costly to implement green practices at arts festivals, organisers usually find it appropriate to increase the ticket fees (where green fees are included in the ticket purchase) in order to have funds to manage the implementation of green practices in the future (Cummings, 2016:177; Dobson, 2010:7). This might lead to a slight variation in the number of attendees and in attendees supporting the festival's green initiatives as a result of a lack of awareness about the sudden change with festivals implementing green practices and going green (Mair, 2015).

Therefore, it is important to establish if attendees will support the implementation of green practices at arts festivals by determining if attendees agree and are ready for the tremendous change of arts festivals going green in the future (Chen & Chai, 2010:30). Receiving attendees' support for implementing green practices at arts festivals will show that attendees have a positive attitude towards the implementation of green practices and that attendees seek the opportunity to take part in the green-related activities and programmes such as making use of greener transport options, reducing waste and reducing the consumption of water. In return, festivals implementing green practices are perceived by attendees to be socially responsible and to contribute to environmental sustainability. Hence involving attendees will lead to the successful implementation of green practices at arts festivals (Wong, Wan & Qi, 2015:297–298).

Failing to reduce the impacts caused by arts festivals can result in damaging the environment and increasing the depletion of natural resources. This means that sustainability principles will not be successfully implemented in the future (Smith, 2014:5). Reducing such impacts requires the adoption of sustainability principles, including the main one of minimising negative environmental impacts (Getz, 2009:71). The findings of this research will indicate which green practices attendees will be more inclined to support and provide insight into further assisting arts festival organisers to be greener in the future, and alternatively to be more sustainable.

3.4 RESEARCH METHOD

Festival attendees were surveyed at Aardklop on 6 to 10 October 2015, and at Innibos on 29 June to 3 July 2016. The research method that was followed is discussed under the following sections: development of the questionnaire, research design and method of collecting data, sampling method, and the statistical analysis.

3.4.1 Development of the questionnaire

The questionnaire consisted of three sections. Section A consisted of the 22 aspects/green practices identified in the literature, measuring the extent to which respondents implemented these green practices at home. The measurement was done by means of a five-point Likert scale, where 1 = *Never*; 2 = *Rarely*; 3 = *Sometimes*; 4 = Often; 5 = *Always* (this section was predominantly used for Article 2).

Section B measured 30 aspects/green practices, also identified in the literature, that measured the extent to which respondents will be inclined to support the implementation of these green practices at arts festivals. The measurement was also done by means of a five-point Likert scale, where 1 = *Not at all*; 2 = *Less likely*; 3 = *Maybe*; 4 = *Most probably*, and 5 = *Definitely.*

Section C firstly captured demographic aspects such as gender, age, home language, province of origin, level of education, and secondly behavioural aspects, including the number of times the respondents had previously attended the festivals, length of stay at the festival, number of tickets bought for productions at the festival, type of accommodation respondents stayed at during the festival, how green respondents considered the festival to be, and how green respondents considered themselves to be. Section B and Section C were predominantly used for the purpose of this article.

3.4.2 Research design and method of collecting data

This quantitative study made use of a self-administered questionnaire to collect the data (Burns & Bush, 2016:149). The data was collected at two different Afrikaans arts festivals in South Africa. The first data was collected over a period of five days during the first week (6 to 10) of October 2015 at the Clover Aardklop National Arts Festival, held annually in Potchefstroom, North West. The second set of data was collected at the Innibos Lowveld National Arts Festival over the period of four days during the last week of June (29 June to 3 July) 2016 in Mbombela, Mpumalanga.

Three fieldworkers were selected to collect data at Aardklop and 5 five fieldworkers were selected to collect the data at Innibos. All the fieldworkers were trained and informed about the purpose of the survey in order to briefly explain the purpose of the research to respondents. Stratified sampling was used to conduct the survey at both Aardklop and at Innibos (Fowler, 2013:37). This was done by dividing the entire population into separate areas or strata on the two festival terrains (e.g. food stall areas, arts and craft stall areas; and venues where different shows/theatre productions were hosted).

3.4.3 Sampling

The data for this article consists of primary data collected at Aardklop in 2015 and at Innibos in 2016. Four hundred and fifty questionnaires were distributed at each of the festivals. A total of 443 and 400 fully completed and usable questionnaires were collected at Aardklop and Innibos respectively. These questionnaires were used in the analyses. According to Israel (2006:6), from the population of 50 000 (N), 397 respondents (n) would result in a 95% level of confidence with ± 5% sampling error. Therefore, in the population of 150 000 (N) attendees at Aardklop in 2015 and 100 000 (N) attendees at Innibos in 2016, the number of questionnaires collected (n = 443 for Aardklop and n = 400 for Innibos) were adequate for the analyses (Anon., 2015; Anon., 2016).

3.4.4 Statistical analysis

Microsoft Excel™ was used to capture the collected data and SPSS® (Statistical Package for Social Sciences) was later used to analyse the data. For the purpose of this study three stages analyses were performed. Firstly, a descriptive analysis (frequency tables) was used to compile the attendees' demographic and behavioural profiles. Secondly, two separate confirmatory factor analyses were performed on the 30 green practice items for both Aardklop and Innibos. This was done by pulling all the items listed under water management, waste management, green transport options and green commitment headings to check which items can be used together as a factor. This analysis was used to identify which factor (green practice) attendees were more inclinced and less inclined to support at festivals. This was done in order to verify the number of factors and the inter-factor relationship using a path diagram and the CFA goodness-of-fit index. A reliability coefficient was further computed to provide the Cronbach's Alpha coefficient, inter-item correlation, the mean values and the corrected item-total correlation for each factor. Lastly a *t*-test analysis was done to explore the possible significant difference between attendees' inclination to support the implementation of green practices at Aardklop and Innibos.

3.5 RESULTS

The results are discussed in three sections. Firstly, the profile of attendees to Aardklop and Innibos is presented. Secondly, the results from the two confirmatory factor analyses are reported. Lastly the results from the *t*-test analyses are provided.

3.5.1 Profile of attendees' at Aardklop and Innibos

The first objective of this research was to determine the profile of the attendees at Aardklop and Innibos in order to establish their demographic characteristics and their festival behaviour.

- **Profile of Aardklop attendees**

The results displayed in Table 3.2 indicate that most of the attendees at Aardklop were females, 32 years old, who predominantly spoke Afrikaans. Attendees who attended Aardklop originated from North West and Gauteng and were well educated, with a matric certificate and a postgraduate/professional qualification. Attendees attended the festivals between two and four times, on average for 2.6 days, and stayed at their own homes and with family and friends. Attendees at Aardklop considered the festival to be somewhat green and also considered themselves to be somewhat green.

- **Profile of Innibos attendees**

Innibos attendees were females, 38 years old, and predominantly spoke Afrikaans. Attendees who attended Innibos mostly came from Gauteng and Mpumalanga. The majority of the attendees were well educated, with a matric certificate and a postgraduate/professional qualification. Attendees attended Innibos between two and four times, on average for 2.9 days, and stayed at a guesthouse or bed and breakfast. A few stayed with family and friends. Attendees at Innibos considered the festival to be somewhat green and also considered themselves as somewhat green.

Table 3.2: Demographic profile and festival behaviour of festival attendees (combined set)

DEMOGRAPHIC CHARACTERISTICS	CATEGORY	AARDKLOP	INNIBOS
Gender	Male	40%	34%
	Female	**60%**	**66%**
Age	Average age	**32 years**	**38 years**
Language	Afrikaans	**92%**	**95%**
	English	8%	4%
	Other	1%	1%
Province	North West	**43%**	39%
	Gauteng	30%	**42%**
	Free State	10%	3%
	Limpopo	5%	-
	Mpumalanga	3%	1%
	KwaZulu-Natal	2%	2%
	Northern Cape	1%	3%
	Eastern Cape	1%	5%

	Western Cape	3%	3%
	Outside RSA borders	2%	2%
Level of education	Matric	29%	36%
	Diploma, degree	**36%**	**38%**
	Postgraduate/professional	35%	26%
FESTIVAL BEHAVIOUR	**CATEGORY**	**PERCENTAGE**	**PERCENTAGE**
Number of times attended	1st time	21%	33%
	2–4 times	**42%**	**38%**
	5–9 times	25%	17%
	10+	12%	12%
Length of stay	Average number of days	**2.6 days**	**2.9 days**
Number of tickets bought	Average number of tickets bought	**3.4 tickets**	**4.9 tickets**
Type of accommodation	**Own home**	**55%**	**31%**
	Staying with family and friends	22%	19%
	Guesthouse or B&B	12%	25%
	Hotel or lodge	4%	18%
	Camping	3%	6%
	Other	5%	-
How green do you consider Aardklop to be? / How green do you consider Innibos to be?	Green	25%	17%
	Somewhat green	**65%**	**75%**
	Not green at all	10%	8%
How green do you consider yourself to be?	Very green	15%	16%
	Somewhat green	**67%**	**75%**
	Not green at all	18%	9%

(Author's own compilation)

3.5.2 Results from the confirmatory factor analyses (CFA)

- **Aardklop CFA results**

The second objective of this article was to determine if attendees at Aardklop and Innibos were inclined to support the implementation of green practices at arts festivals. A survey was conducted and attendees were asked to indicate on a five-point Likert scale to what extent they would be inclined to support the identified green practices at the festival (where 1 = *Not at all* and 5 = *Definitely*). The confirmatory factor analysis using the path diagram identified five factors that were labelled according to the categories identified in the literature (Table 3.2). All five factors had a high Cronbach's Alpha coefficient ranging

from 0.813 to 0.889, which is highly reliable (Namdeo & Rout, 2016:1374; Dunbach, 2013:184; Tavakol & Dennick, 2011:54).

The corrected inter-item correlation coefficient ranged from 0,488 to 0,727, which indicated the consistency of the five factors. Table 3.2 presented the following green factors with which attendees at Aardklop indicated the strongest agreement/support: (1) Green transport, (2) Waste management, (3) Water management, (4) Energy management and (5) Green commitment. Energy management (Factor 4) at Aardklop obtained the highest mean value of 3.69, a Cronbach's Alpha coefficient of 0.889 and an inter-item correlation of 0,727. Waste management (Factor 2) at Aardklop had the second highest mean value of 3.65, a Cronbach's Alpha coefficient of 0.885 and an inter-item correlation of 0,463, followed by Green commitment (Factor 5) at Aardklop, with a mean value of 3.53, a Cronbach's Alpha coefficient of 0.878 and an inter-item correlation of 0.478. Water management (Factor 3) at Aardklop received a mean value of 3.32, a Cronbach's Alpha coefficient of 0.813 and an inter-item correlation 0.466. Lastly, Greener transport options (Factor 1) at Aardklop received the lowest mean value of 3.07, a Cronbach's Alpha coefficient of 0.828 and an inter-item correlation of 0.488. From the results it was evident that the attendees to Aardklop were more inclined to support the implementation of the following green practices: Energy management, Water management and Green commitment practices.

- **Innibos CFA results**

Table 3.3 further reveals the results of the confirmatory factor analysis. The path diagram identified five factors from the data collected at the Innibos Lowveld National Arts Festival. The identified factors had a Cronbach's Alpha coefficient ranging from 0.882 to 0.652, which is statistically reliable (Namdeo & Rout, 2016:1374; Dunbach, 2013:184; Tavakol & Dennick, 2011:54). The corrected inter-item correlation coefficient ranged from 0.351 to 0.711, which indicates the consistency of the five factors.

The following are the green factors that were revealed in the analysis: (1) Green commitment (Factor 5) at Innibos, with the highest mean value of 3.89, a Cronbach's Alpha coefficient of 0.887 and an inter-item correlation of 0.508. This was followed by (2) Waste management (Factor 2) at Innibos, which received the second mean value of 3.50,

a Cronbach's Alpha coefficient of 0,882 and an inter-item correlation of 0.459. (3) Water management (Factor 3) at Innibos obtained a mean value of 3.49, a Cronbach's Alpha coefficient of 0.825 and inter-item correlation of 0.491. (4) Energy management (Factor 4) at Innibos received a mean value of 3.43, a Cronbach's Alpha coefficient of 0.880 and inter-item correlation of 0.711. Lastly, (5) Greener transport options (Factor 5) at Innibos received the lowest mean value of 2.25, a Cronbach's alpha coefficient of 0.652 and an inter-item correlation of 0.351. This indicates that attendees at Innibos were more inclined to support the implementation of the following green practices: Green commitment, Waste management, Water management and Energy management greening practices.

Table 3.3: Confirmatory factor analyses for Aardklop and Innibos

GREEN FACTORS		CORRECTED ITEM-TOTAL CORRELATION	
FACTOR 1: GREENER TRANSPORT OPTIONS		**AARDKLOP**	**INNIBOS**
1	I will use a bicycle rental service offered by the festival during the festival period	**0.486**	**0.454**
2	I will use a shuttle service offered by the festival to travel to the festival	0.760	0.355
3	I will use a shuttle service offered by the festival at the festival	0.775	0.552
4	I will make use of well-planned walking routes with clear signage to get to various show venues at the festival instead of using my car	0.626	0.476
5	I will support the idea that larger groups travelling in one vehicle pay less for parking	0.494	0.471
CRONBACH'S ALPHA CORRELATION		0.828	0.652
INTER-ITEM CORRELATION		0.488	0.351
MEAN		3.07	2.25
FACTOR 2: WASTE MANAGEMENT			
6	I will use a recycling-bin system at the festival to reduce littering	0.637	0.652
7	I support the use of only biodegradable packaging by all stall owners at the festival	0.538	0.621
8	I will support a refundable cup/bottle system for drinking beverages at the festival	0.709	0.683
9	I will support the exclusive use of electronic festival programmes downloaded on personal electronic devices to reduce paper usage	0.694	0.689
10	I insist that the festival make use of digital marketing rather than printed posters to reduce littering	0.621	0.599
11	I will pay a R5 levy at the entrance for services rendered by the community members to pick up litter on the festival terrain	0.491	0.534
12	I insist that the festival organisers not allow junk mail via flyers on car windows to reduce littering	0.599	0.607

13	I insist that the festival use e-marketing as opposed to promotional flyers to reduce littering	0.659	0.661
14	I insist that the festival arrange for regular waste removal on the festival terrain for bad odours and hygienic purposes	0.672	0.643
CRONBACH'S ALPHA CORRELATION		0.885	0.882
INTER-ITEM CORRELATION		0.463	0.459
MEAN		3.65	3.50
FACTOR 3: WATER MANAGEMENT			
15	I am happy to pay R5 for toilet facilities that use less water	0.581	0.584
16	I am happy to pay a green fee included in the entrance fee to show my support towards the festival's green initiatives	0.665	0.676
17	I insist that the festival organisers promote only accommodation partners who implement water-saving practices at their establishments	0.691	0.669
18	I will support the use of gel hand sanitiser instead of water and soap at the festival	0.513	0.518
19	I insist that the festival initiate a water-saving campaign to raise awareness	0.566	0.674
CRONBACH'S ALPHA CORRELATION		0.813	0.825
INTER-ITEM CORRELATION		0.466	0.491
MEAN		3.32	3.49
FACTOR 4: ENERGY MANAGEMENT			
20	I insist that the festival raise awareness about ways to save energy	0.704	0.674
21	I insist that the festival implement the use of only LED and CFL light bulbs during productions to reduce energy usage	**0.844**	0.678
22	I insist that the festival implement the use of only LED and CFL light bulbs on the festival terrain	0.804	0.862
CRONBACH'S ALPHA CORRELATION		0.889	0.880
INTER-ITEM CORRELATION		0.727	0.711
MEAN		3.69	3.43
FACTOR 5: GREEN COMMITMENT			
23	I support the concept that from midnight disturbance of the peace and quiet is not permitted (e.g. loud music)	0.558	0.553
24	I support the concept that penalties/fines are issued for parking in undesignated areas to reduce the impact on the natural environment	0.587	0.623
25	I insist the festival resort to the use of natural light and ventilation at venues as far as possible	0.652	0.737
26	I insist that the festival regulate the number of attendees per day on the festival terrain to reduce soil compression	0.586	0.606
27	I insist that the festival initiate a rehabilitation programme of the natural surroundings after the festival	0.721	**0.755**
28	I insist that the festival make use of ways to reduce soil compression on the festival terrain (e.g. scattering of wood shavings)	0.674	0.716

29	I insist that the festival designate only certain areas on the festival terrain for smoking to reduce fire risks	0.670	0.663
30	I insist that the festival management ensure the use of only environmentally friendly/safe cleaning products	0.688	0.673
CRONBACH'S ALPHA CORRELATION		0.878	0.887
INTER-ITEM CORRELATION		0.478	0.508
MEAN		3.53	3.89

(Author's own compilation)

3.5.3 Result of the t-test analysis

The third objective of the article was to determine if there was a difference between the inclination to support green practices at Aardklop and Innibos in order to point out which attendees between Aardklop and Innibos were more inclined to support the implementation of green practices at these arts festivals. The *t*-test analysis revealed that there was a significant difference that existed between greener transport, waste management, water management and energy management at Aardklop and Innibos (see Table 3.4). This means that the attendees at Innibos were more inclined to support the implementation of greener transport, water management waste management and energy management green practices than attendees at Aardklop and Innibos.

Table 3.4: *t*-test for comparison of green practices that attendees will be inclined to support at Aardklop and Innibos

VARIABLES						
FACTORS	**AARDKLOP**		**INNIBOS**		**SIG. (2-TAILED) (P-VALUE)**	**EFFECT SIZE**
	MEAN	**STD DEVIATION**	**MEAN**	**STD DEVIATION**		
Greener transport	3.07	1.06	3.31	1.19	0.002	0.20
Waste management	3.65	0.84	3.94	0.84	**0.000**	0.31
Water management	3.32	0.98	3.54	1.01	0.002	0.21
Energy management	3.69	1.08	3.85	1.10	0.041	0.14
Green commitment	3.53	0.93	3.61	1.01	0.216	0.08

(Author's own compilation)

3.5.4 Results from the *t*-test analysis

The last objective was to determine if there was a significant difference that existed between different individual green aspects that attendees would be inclined to support at Aardklop and Innibos. The *t*-test analyses revealed that there were no practical significant differences that existed between the individual green aspects that attendees were inclined to support at both festivals. This means that the market at both festivals was homogeneous towards supporting the implementation of green practices at the festivals. Attendees at Aardklop were inclined to support waste removal (4.39), no junk mail (4.12), recycling bins (4.12), and the refundable bottle system (4.01). The item that attendees were less inclined to support was the use of bicycle rental services at the festivals (2.26) (Figure 3.1).

A very similar picture was found at Innibos, where attendees were mostly inclined to support waste removal (4), no junk mail (3.8) recycling-bin system (3.8) and the refundable bottle system (3.7). They were not really supportive of bicycle rental services (3.5) (Figure 3.1).

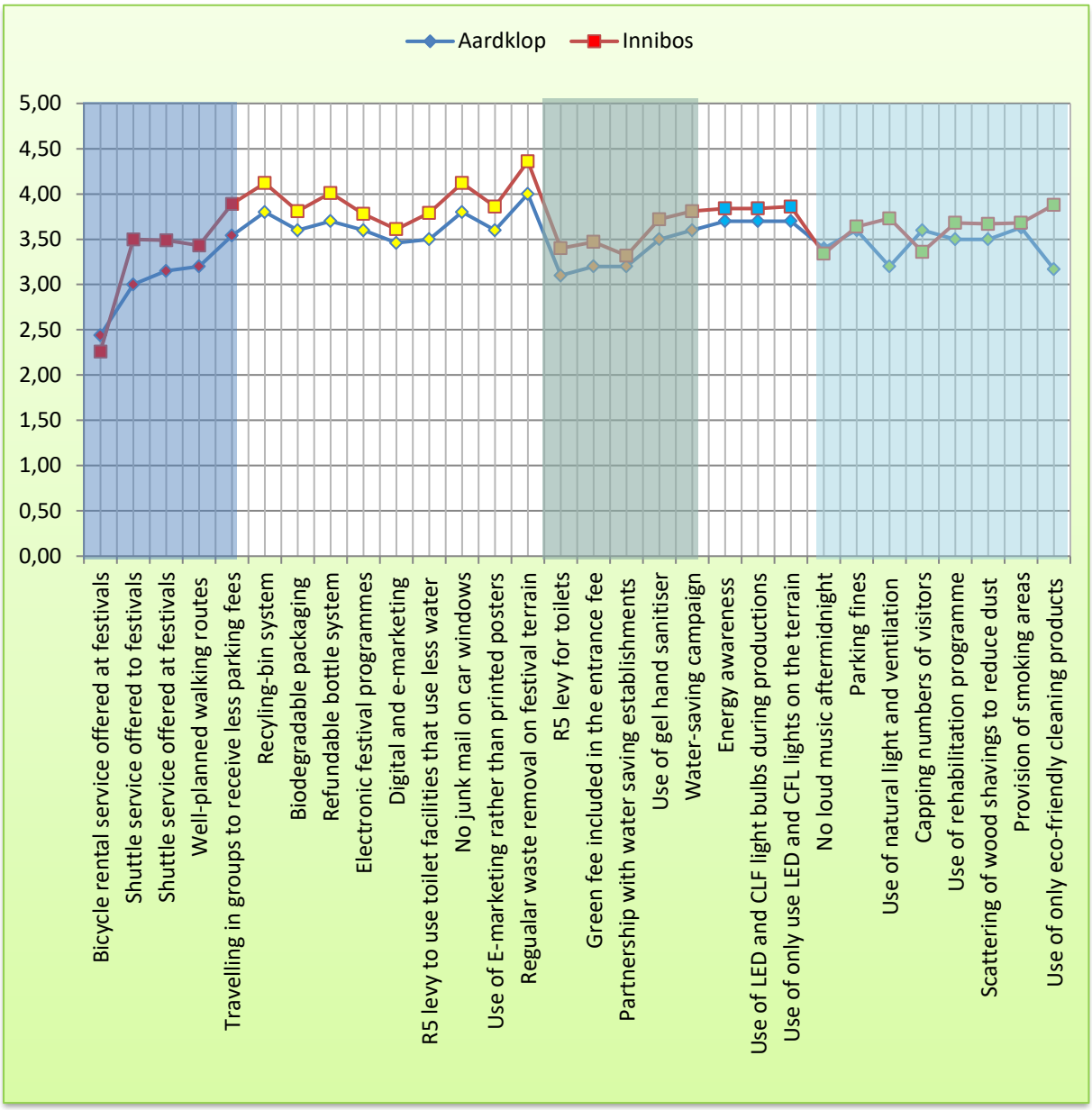

Figure 3.1: Different green individual aspects attendees are inclined to support at Aardklop and Innibos

(Source: Author's own compilation)

3.5.5 Correlations between "how green do you consider yourself to be" and green factors

Table 3.5: How green do you consider yourself to be?

FESTIVALS	1. NOT GREEN AT ALL	2. SOMEWHAT GREEN	3. VERY GREEN
Aardklop	18%	**67%**	15%
Innibos	9%	**75%**	16%

(Author's own compilation)

The fifth objective of this article was to ask attendees to rate how green they considered themselves to be, with 1 = *Not green at all*, 2 = *Somewhat green* and 3 = *Very green*. The results in Table 3.5 reveal that at Aardklop 18% of the attendees considered themselves to be not green at all, 67% considered themselves to be somewhat green and 15% considered themselves to be very green. On the other hand, 9% of the attendees at Innibos considered themselves to be not green at all, 75% considered themselves to be somewhat green and 16% considered themselves to be very green.

A Spearman rank order correlation was employed on the combined data set to reveal the significant correlations that exist between how green attendees considered themselves and the green practices attendees were inclined to support (factors) at Aardklop and Innibos. The results presented in Table 3.6 indicate that there is a medium correlation between the attendees' green consideration of themselves and greener transport options (r_s = (797) = 0.97**, p = 0,006), waste management (r_s = (795) = 0.149**, p = 0,000), water management (r_s = (794) = 0.213**, p = 0.000), energy management (r_s = (790) = 0.129**, p = 0.000) and green commitment (r_s = (7 950) = 0.153**, p = 0.000) practices at Aardklop and Innibos. This indicates that the greener attendees consider themselves to be, the more inclined they were to support the implementation of green practices at festivals, and vice versa.

Table 3.6: Spearman rank order correlation for how green the attendees considered themselves to be and the green support factors (combined dataset of Aardklop and Innibos)

GREEN FACTORS		HOW GREEN DO YOU CONSIDER YOURSELF?
GREEN PRACTICES AT ARTS FESTIVALS		
Greener transport options	Correlation coefficient	**0.097****
	Sig. (2-tailed)	0.006
	N	797
Waste management	Correlation coefficient	**0.149****
	Sig. (2-tailed)	0.000
	N	795
Water management	Correlation coefficient	**0.213****
	Sig. (2-tailed)	0.000
	N	794
Energy management	Correlation coefficient	**0.129****
	Sig. (2-tailed)	0.000
	N	790
Green commitment	Correlation coefficient	**0.153****

	Sig. (2-tailed)	0.000
	N	795

(Author's own compilation)

3.6 FINDINGS

This study investigated whether attendees would be inclined to support the implementation of certain green practices at Afrikaans arts festivals. The results from the confirmatory factor analysis revealed the green practices attendees would be most inclined to support and would be least inclined to support. The *t*-test analyses that were done determined the differences between green practices that attendees would be inclined to support at Aardklop and Innibos. The findings were as follows:

- Firstly, the results from the survey done at Aardklop revealed that all five factors' mean values were above 3.00, which meant that the festival attendees most probably were inclined to support the implementation of the majority of green practices at the festival according to the five-point Likert scale. The factors that were revealed (in order of support from the highest mean) included Energy management (Factor 4), Waste management (Factor 2), Green commitment (Factor 5), Water management (Factor 3) and transportation options (Factor 1). The finding supports those of the study done by Jin, Zhang, Ma and Connaughton (2011:292) that attendees have a strong positive attitude towards the supporting the implementation of green practices at festivals/events.

- Secondly, the results from the survey conducted at Innibos revealed that four factors' mean values were above 3.00, with one factor with a mean value of 2.25. These four factors (in order of support from the highest mean) included Green commitment (Factor 5), Waste management (Factor 2), Water management (Factor 3), and Energy management (Factor 4). The factor that was below 3 was Greener transport options (Factor 1). This indicates that attendees were inclined to support the implementation of green practices at the festival, but were less likely to support the implementation of the use of greener transport options at the festival according to the five-point Likert scale. The findings supported those of studies done by Laing and Frost (2010:263), where the majority of the attendees at the Sidmouth Folk Festival used their own cars

to travel to the festival. Attendees at the All Points West Music and Arts Festival supported the recycling initiative by exchanging plastic bottles and cans for incentives.

- Thirdly, on the basis of the results from the confirmatory factor analysis, Aarkdlop and Innibos attendees indicated they were less inclined to support the use of greener transportation options at the festivals. This supports the studies done by Barber, Kim and Barth (2014:613) and Corazza, Guida, Musso and Tozzi (2016:26-27), who reported that attendees do not consider the use of public transportation to and at festivals and that although individuals have knowledge about the use of green transports options, there are individuals who are not environmentally conscious and aware of the importance of using green transport options. This indicates the need for more green awareness.

- Fourthly, on the basis of the results of the *t*-test analysis, there was a significant difference that existed between waste management green practices at Aardklop and Innibos. The results indicated that attendees at Innibos were inclined to support the implementation of waste management green practices than attendees at Aardklop. This finding supports those of the study done by Laing and Frost (2010:263) that revealed that at the All Points West Music and Arts Festival attendees supported the implementation of waste management practices at the festival because the festival offered incentives for recycling, with attendees being allowed to exchange their plastic bottles and cans for a free t-shirt.

- Fifthly, the results from the *t*-test analyses revealed that there was no practically significant difference between the 30 individual green aspects attendees were inclined to support at Aardklop and Innibos. This means that attendees are inclined and less inclined to support similar green aspects at both festivals. This supports the findings by Laing and Frost (2010:262) that attendees' green attitude towards the implementation of green practices at festivals were homogeneous.

- Lastly, the results from the Spearman rank order correlation revealed that significant correlations existed between how green attendees considered themselves to be and their inclination to support green practices at Aardklop and Innibos. This finding supports the findings of Song, Lee, Kang and Boo (2012:1419), who found that

attendees who were more environmentally conscious were more likely to support the implementation of green practices. Moreover, the study done by Kil, Holland and Stein (2014:17) also confirmed that individuals with strong environmental attitudes were more likely to support the implementation of green practices.

3.7 IMPLICATIONS

From the results and the findings this study identified and presented, a number of implications were identified:

- The findings for both festivals revealed four green practices (factors) that attendees were inclined to support, with mean values above 3,00 and one green practice below 3,00. This implies that there is still room for improvement with regard to getting more support from attendees with the implementation of green commitment practices at arts festivals. The attendees' attitude towards the implementation of the factor of green commitment at both festivals was positive and the majority of attendees were inclined to support the implementation of green commitment practices at Aardklop and Innibos. Festival organisers can do more to gain more support from attendees and can implement the following elements within this green commitment factor.

- Firstly, the findings revealed that attendees at both festivals were inclined to support the implementation of user-friendly products such as toilet seat gel sanitiser and ozone-friendly air freshener in toilet facilities. Secondly, attendees supported the idea that festival organisers can cap or reduce the number of the attendees to help reduce soil compression by selling only a certain number of tickets. Thirdly, attendees supported the practice of making use of natural air ventilation by opening windows at art show venues or restaurants at the festival instead of using air conditioners. Fourthly, attendees' further supported the green practice of having wooden shavings scattered on the festival grounds for dust control. Fifthly, organisers could place signs at parking areas that anyone who parked in undesignated areas would be fined a certain amount. Lastly, attendees

supported the implementation of rehabilitation programmes by organisers after the festival as a means to preserve the natural environment.

- The results showed that the organisers of Aardklop and Innibos can create and innovate water-saving and energy-saving initiatives/campaigns at the festivals. This can be done by effectively displaying posters at toilet facilities to create awareness about the amount of water that is saved per flush in mobile/composting toilets, how grey water can be used as an alternative, and the overall importance of saving water. Furthermore, the big screens on the stage at Innibos where the information about the sponsors, big artists performing and information about the history of the festival is presented can also be used to raise awareness about the energy-saving green practices the festival is implementing to reduce the overconsumption of energy.

- Considering the five green practices that attendees were inclined to support, attendees at both festivals were less likely support the implementation of greener transport options. They need to develop strategies to gain support from attendees with regard to the implementation of transport options. This can be done by firstly forming a partnership with the public transportation system and having a team that will develop a campaign to raise awareness about the benefits of using green transport options. Secondly, public transport such as taxis, buses and shuttle services can have the festival's theme and colours on removable stickers to make the transportation more appealing. Thirdly, well-known Afrikaans music can be played inside the vehicles to increase the vibe. Fourthly, organised buses can design a small photo booth were attendees can take free pictures to enhance the experience of using public transport. Fifthly, public transport should be user-friendly for disabled people, clean and safe. Sixthly, organisers can develop a lucky ride concept, whereby attendees who make use of the cycling rental service and other public transport can win festival food vouchers, free festival t-shirts or free show tickets. Lastly, a competition can be launched by having attendees who use a carpool take a picture or video and upload it on Facebook or Instagram using a specific hash tag, or send the picture or video to the festival's competition number.

The top three winners (per carpool) can win festival food vouchers or tickets for shows.

- Since results further indicated that Innibos attendees were more inclined to support the implementation of waste-management practices, the organisers at Aardklop need to develop a strategy to make the waste-management green practices visible and gain more support from the attendees. This can be done by making waste-management green practices visible on the festival grounds or show venues by placing recycling bins with clear labels indicating whether they are for paper, plastic, bottles or cans at every point at the festival to educate attendees about different waste produced at the festivals. Signs can be displayed on each food stall that makes use of biodegradable food packaging, indicating that a certain amount of the attendee's purchase is contributed to community green projects (e.g. recycling projects). Organisers can involve the attendees in picking up waste and in return they receive a beverage. Attendees can return empty beverage bottles and in return receive a certain amount back. Moreover, organisers can advertise on the festival's website and on other social media platforms (e.g. Facebook) that festival programmes and posters will not be printed to help reduce paper usage – only electronic festival programmes will be available and digital technologies (digital billboards) will be used to communicate with attendees. One or two festival crew members can also have a small stall at the entrance and ask attendees to donate any amount to support the service rendered by the community to pick up litter at the festival.

- In this research, it is important to note that attendees were more inclined to support the implementation of water management, waste management, energy management and green commitment practices and less inclined to support the implementation of greener transport options at Aardklop and Innibos. This implies that organisers at both festivals can form a partnership to develop an in-depth greening plan that consists of strategies that can be used to gain support from attendees with regard to the implementation of green practices at the festivals. The partnership will assist to save costs, time and resources.

- The results finally revealed that attendees at Aardklop and Innibos considered themselves somewhat green. This implies that the organisers from both festivals can educate and raise more awareness about green practices on the festival's website or Facebook page among attendees who considered themselves to be not green at all. This is necessary to make them aware of the significant role their support towards the implementation of water management, energy management, waste management, green commitment and greener transport options plays in the greening process of arts festivals. This means that the more educated attendees are about green practices, the more green they will be at the arts festivals.

3.8 CONCLUSIONS

This research significantly contributes to the literature on the greening of events, especially in the South African arts festival context. The findings revealed which green practices arts festivals attendees were more or less inclined to support. These findings provide festival organisers with insight and recommendations on which green practices can be incorporated in the greener festival management initiatives and operations in order to host greener arts festivals in the future.

The purpose of this chapter (Article 1) was to determine the festival attendees' inclination to support the implementation of green practices at two arts festivals in South Africa. This was the first type of research to be conducted at Aardklop and Innibos and the research provides a long-term development and improvement view, and contributes to the sustainability and greening of arts festivals. It is recommended that further research be done at different arts festivals to determine attendees' overall experience and motivations with respect to festivals that implement green practices. As less research has been done on attendees' green attitude and behaviour regarding greening of arts festivals, it is recommended that correlations between attendees' inclination to support green practices and behaviour towards implementing green practices at home should be determined. This will create a platform and provide insight for festival organisers into which green practices attendees implement at home and whether attendees' attitude and behaviour at home will influence their inclination to support the implementation of green practices at arts festivals.

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CHAPTER 4

DO WORDS SPEAK LOUDER THAN ACTIONS? DETERMINING THE CORRELATION BETWEEN ATTENDEES' BEHAVIOUR AT HOME AND THEIR INCLINATION TO SUPPORT GREEN PRACTICES AT ARTS FESTIVALS

"Keep your thoughts positive because your thoughts become your words. Keep your words positive because your words become your behaviour. Keep your behaviour positive because your behaviour becomes your habits. Keep your habits positive because your habits become your values. Keep your values positive because your values become your destiny."

- Mahatma Gandhi

DO WORDS SPEAK LOUDER THAN ACTIONS? DETERMINING THE CORRELATION BETWEEN ATTENDEES' BEHAVIOUR AT HOME AND THEIR INCLINATION TO SUPPORT GREEN PRACTICES AT ARTS FESTIVALS

ABSTRACT

Going green and implementing green practices are becoming a global topic. Negative environmental impacts caused by households increase every day. These negative impacts have driven individuals to be more green at their respective homes. This greener lifestyle attempts to reduce harmful activities, for example, the use of harmful cleaning products, the overuse of electricity, the overuse of water and increase of purchasing of non-organic food. Kil, Holland and Stein (2014:17) confirm that individuals with a strong environmental attitude and a more green attitude at home are more likely to support the implementation of green practices elsewhere.

The aim of this article is to determine Afrikaans arts festival attendees' green behaviour at home, and whether this behaviour correlates with their inclination to support the implementation of green practices at arts festivals in South Africa. A research survey was conducted at the Clover Aardklop National Arts Festival in Potchefstroom in North West in October 2015, and another at the Innibos Lowveld National Arts Festival in Mbombela, Mpumalanga. The festivals' data sets comprised 443 and 400 questionnaires respectively. The two data sets were then combined and two different confirmatory factor analyses were performed, one on green practices at home and another on attendees' inclination to support green practices at arts festivals.

The four factors for the green practices at home (combined data set) were labelled Water management, Waste management, Energy management and Green commitment. A *t*-test analysis revealed a significant difference between the implementation of green practices at home and the supporting green practices at arts festivals regarding water management, waste management and energy management and green commitment.

Keywords*: Attitude, behaviour, arts festival attendees, behavioural predictors, green lifestyle and green practices*

4.1 INTRODUCTION

In the past few decades, the human race has become increasingly attentive to improving and protecting their natural environment (Chen, 2001:251; Crane, 2001:362; Torjusen, Lieblein, Wandel & Francis, 2001:2.7). This increased concern about the environment and a feeling of responsibility towards society has led to remarkable growth in the global market for environmentally friendly products (Hunt & Dorfman, 2009). At the heart of this trend, which is often referred to as ethical consumerism or green consumption (Anderson & Cunning-ham, 1972:24; Kinnear, Taylor & Ahmed, 1974:20), lies the assumption that purchasing choices express not only price and quality preferences (Monroe, 1976:42), but also norms, values and beliefs (Caruana, 2007:291; Irwin & Baron, 2001:178). This assumption has motivated a stream of research focusing on identifying a green consumer by means of sociodemographic variables, personality measures, or values that are directly related to environmental consciousness (Schlegelmilch, Bohlen & Diamantopoulos, 1996:38; Shrum, McCarty & Lowrey, 1995:72; Mbasera, 2015; Pickett-Baker & Ozaki, 2008:282; Haytko & Matulich, 2008:2; Steinig & Butts, 2009:65; Kruger & Saayman, 2013; Du Plessis, Van der Merwe & Saayman, 2013:189).

A variety of environmental issues have driven individuals to be more green at their respective homes (Van Vugt & Griskevicious, 2013:312). This resulted in individuals changing their lifestyle by changing their everyday activities (Lorenzen, 2012:95). According to Lorenzen (2012:95), this change in lifestyle can be referred to as a green lifestyle, which is a way of living that reduces harmful everyday activities for the environment.

Whitmarsh and O'Neill (2010), for example, found that a green lifestyle relates to water and domestic energy conservation, waste reduction and eco-shopping. However, according to Cooper (2000:49), some individuals find it difficult to change to a greener lifestyle because they are reluctant to give up on their usual lifestyles that are not focused on consuming less.

The broader literature on pro-environmental behaviour highlights the diversity of factors that influence different environmentally significant behaviours. These can include norms, values, and beliefs. Although environmental values or concern may play a role, other motivations and structural factors (incentives, economic impacts) often play a greater role (Bamberg & Schmidt, 2003:14; Jackson, 2005:138; Kollmuss & Agyeman, 2002:240;

Schultz, Oskamp & Mainieri, 1995:105-106; Steg, Vlek & Slotegraaf, 2001:151-152). It is important to consider that pro-environmental behaviour may not be motivated by environmental concern or values at all (Stern, 2000:408). Whitmarsh and O'Neill (20010:5), for example, found that the proportion of the public taking action explicitly out of concern for climate change was much lower than the portion claiming to conserve energy. Further, energy conservation was more commonly motivated by financial or health benefits than by environmental concern.

However, Muster and Schrader (2011:141) state that an individual's green attitude and behaviour at home can influence their green attitude and behaviour at work or in public. For instance, an individual's positive green behaviour at home can influence a positive green behaviour at work, or vice versa. Chen and Tung (2014:221) further indicate that adopting a green lifestyle has an influence on individuals choosing hotel accommodation that implements green practices over accommodation that does not implement green practices. However, Whitmarsh and O'Neill (2010:305) point out that individuals' attitude and behaviour regarding the use of certain green practices at home can have a negative influence on their travel habits. For example, if an individual does not recycle at home, their travel habits regarding recycling will not change.

This growing movement of going green is not only visible within people's everyday activities at home and at work, but also spills over to businesses and industries (Singal, 2013:2; DiPietro, Gregory & Jackson, 2013:140; Lo, 2013:94; Bramwell & Lane, 2013:1). The tourism industry has incorporated a lot of green practices, especially within its accommodation sector (Mabasera, 2015; Tzeschentke, Kirk & Lynch, 2008; Grove, Fisk & Pickett, 1996; Parry, 2012; Nicholls & Kang, 2012; Baker, Davis & Weaver, 2013; Cheng & Tung, 2014). The festival and event sector within the tourism industry is also pressured to become more green and to reduce its negative environmental impacts (Mair & Jago, 2010:684). To accomplish this, the support of various role players is necessary (e.g. festival organisers, the government, sponsors/suppliers at the events/festivals and also attendees) (Mair & Jago, 2010:688).

When festivals and similar events gain support from their attendees, these events can more easily attain the green goals, and being more green leads to an array of benefits. These include creating increased environmental awareness, gaining a competitive advantage by implementing green practices, enjoying cost-saving opportunities,

economic benefits for local communities by means of job creation, and for festival organisers by means of reduced cost in implementing green practices, environmental benefits, social benefits and a positive reputation among competitors. Rocking the Daisies music event is a practical example of an event that was able to attain the green gaols and gain support from attendees and the local community (Bohdanowicz, 2006:663; Christmann, 2000:664; Epstein & Buhovac, 2014:22; Steadfast Greening, 2012).

Therefore, a better understanding of the possible correlations between festival attendees' green attitudes and behaviour across their different life domains (at home/private life and work life) is extremely beneficial. Festival organisers can utilise this information to encourage green behaviour and to manage and reduce these negative environmental impacts caused by these events and their attendees (Oke, 2015:7176).

According to Song, Lee, Kang and Boo (2012:1419), festival attendees who are more environmentally conscious are more likely to support the implementation of green practices at arts festivals. Moreover, the study done by Kil, Holland and Stein (2014:17) also confirms that individuals with a strong environmental attitude are more likely to support the implementation of green practices. However, Pickett-Baker and Ozaki (2008:282) state that although attendees seem to be concerned about the environment, their behaviour at arts festivals does not necessarily reflect this. The two authors research reveal that the lack of communication and awareness about being environmentally conscious they are less likely to support the implementation of green practices. Thus, it is important to effectively raise awareness about the festival goals to be green and why it is significant for attendees to support the implementation of green practices.

The literature on attendees' green attitude and behaviour towards greening of festivals and implementing of green practices is still limited, especially in the case of South African Afrikaans arts festivals (Van Niekerk & Coetzee, 2011:348). Therefore, the research question that needs to be addressed is whether Afrikaans arts festival attendees are green conscious at their homes and whether this lifestyle correlates with their inclination to support the implementation of green practices at arts festivals.

4.2 LITERATURE REVIEW

When identifying individuals' green lifestyles, it is important to understand the relationship between behaviour and attitude. There has been a great deal of research into predictors of pro-environmental behaviour. However, the empirical findings regarding the relationship between attitudes and environmental behaviour are contradictory. Some studies have reported a positive relationship between environmental attitude and pro-environmental behaviour (Kim & Choi, 2003; Kollmuss & Agyeman, 2002:240; Schlegelmilch *et al*., 1996:35-36; Straughan & Roberts, 1999:556; Tilikidou, 2007:122), while others find a negative relationship (Cottrell, 2003:541). However, despite the plethora of studies on pro-environmental behaviour, there is still disagreement regarding how pro-environmental behaviour can be predicted from attitudes and other variables (Bamberg & Moser, 2007:15; Kollmuss & Agyeman, 2002:240; Mobley, Vigias & DeWarde, 2010:3-4).

Milfont and Duckitt (2010:80) define environmental attitude as a psychological tendency expressed by evaluating the natural environment with some degree of favour or disfavour. However, other authors refer to environmental attitudes as environmental concern (Dunlap & Jones, 2002). Behaviour, on the other hand, is defined as "an attempt of an individual to bring about the state of affairs" (Beiveau, Rhehgner, Rowell & Xarras, 2010:148). It is, however, a very difficult task to explain an individual's behaviour (Ajzen, 1991:179; Sparks & Shepherd, 1992:388). Concepts such as social attitude and personality play a crucial role in predicting and explaining individuals' behaviour (Ajzen, 1991:179).

Sparks and Shepherd (1992:388) explain the relationship between attitudes and behaviour by using the theory of reasoned action and the theory of planned behaviour. The theory of reasoned action is described as a theory of attitude-behaviour relationship that links attitudes, subjective norms, behavioural intentions, and behaviour in a fixed casual sequence (Sparks & Shepherd, 1992:388). The relationship between the theory of reasoned action and the theory of planned behaviour indicates the process on how to determine individuals' green behaviour by firstly determining the relationship between one's attitudes, secondly one's subjective norms and lastly one's behavioural intentions (Montano & Kasprzyk, 2015:98). Therefore, individuals' attitudes result from the

combination of an individual's beliefs about the results of doing an activity and the evaluation of the results from the activity (Sparks & Shepherd, 1992:388; Montano & Kasprzyk, 2015:98). In the context of green lifestyle behaviour, the attitude towards adopting a green lifestyle increases the intention to implement green practices (Song *et al.,* 2012:125).

Secondly, individuals' subjective norms arise from the combination of the individual's perception with respect to performing or not performing a specific task which results from social pressure (family, friends, colleagues and significant others) (Sparks & Shepherd, 1992:388; Montano & Kasprzyk, 2015;97; Song, Lee, Kang & Bo, 2012:125). In a green lifestyle context, when an individual realises that people close to them support the idea of adopting a green lifestyle, they are more likely to adopt the green lifestyle. Therefore, individuals will also be more likely to implement green practices at home and at other places (Song *et al.,* 2012:125).

Lastly, perceived behavioural control results from individuals' perception of the ease or difficulty of performing the behaviour concerned (Ajezen, 1991:183). However, behaviour results from behavioural intention, which is the combination of individuals' attitude towards performing a task and the perceptions of social pressure (subjective norm) put on individuals to perform behaviour (Sparks & Shepherd, 1992:388). With regard to adopting a green lifestyle, it was found that the easier the individual finds a task to be, the more likely they will be to support and implement the green practices associated with a green lifestyle. Also, the more difficult the process of adopting a green lifestyle is, the less likely they are to support and implement the associated green practices (Song *et al.,* 2012:126).

Table 4.1 below presents an overview of research studies that identified variables which can influence individuals' green behaviour.

Table 4.1: Previous studies conducted on green lifestyle and green behaviour influencers

PREVIOUS STUDIES	FINDINGS	SOURCES
What affects green consumer behaviour in China? A case study from Qinqdao	Values, demographics, attitudes and environmental values play a crucial role in influencing individuals' behaviour	Zhao, Gao, Wang and Zhu (2014)
Green consumption: behaviour and norms	Attitudes, beliefs and values influence change in individuals' behaviour	Peattie (2010)

Re-examining green purchase behaviour and the green consumer profile: new evidence	Socio-demographic characteristics play a role in determining individuals' behaviour	Akerhurst, Afonso and Goncalves (2012)
The profile of the green consumer in Greece	Age, income, gender, and education assist in determining consumers' green behaviour	Abeliotis, Koniari and Sardianou (2010)
The influential factors on choice behaviour regarding green products based on the theory of consumption values	Behaviour is found to be influenced by social, emotional, conditional and epistemic values	Lin and Huang (2012)
Sex, personality, and sustainable consumer behaviour: elucidating the gender effect	Personality traits and demographics can influence individuals' attitude and behaviour	Luchs and Mooradian (2012)
Greening due to environmental education? Environmental knowledge attitudes, consumer behaviour and everyday pro-environmental activities of Hungnan high school and university students	Individuals' behaviour is affected by attitudes, knowledge and values	Zsòka, Szerényini, Széchy and Kocsis (2013)
Developing an extended theory of behaviour model to predict consumers' intention to visit green hotels	An individual's willingness to perform a certain behaviour is connected to their personal feeling of moral obligation	Chen and Taung (2014)
Can socio-demographics still play a role in profiling green consumers? A review of the evidence and an empirical investigation	Socio-demographics assist in understanding individuals' attitude and behaviour regarding environmental consciousness	Diamantopoulos, Schlegelmilch, Sinkovics and Bohlen (2003)
Green consumption or sustainable lifestyle? Identify the sustainable consumer	It has been found that environmental values and concerns have an impact on an individual's behaviour	Gilg, Barr and Ford (2005)
Environmental knowledge and other variables affecting pro-environmental behaviour: comparison of the university students from emerging and advanced countries	Education is found to be one of the influencers to help understand individuals' behaviour	Vicente-Molina, Fernández-Sáinz, and Izagirre-Olaizola (2013)
What is behaviour? And so what?	The concept of identity or self-identity assists in predicting an individual's behaviour	Bergner (2011)
What are beliefs?	Beliefs are a state of mind that something can be true or false	Churchland and Churchland (2013)
The influence of consumers' environmental beliefs and attitudes on energy-saving behaviours	The process of understanding individuals' green behaviour is the process of understanding individuals' beliefs and norms	Gadenne, Sharma and Smith (2011)
The theory of planned behaviour: reactions and reflections	Past behaviour is one of the best influencers of behaviour	Ajezen (2011)
Self-determination theory and consumer behaviour change:	Individuals' self-determined motivations have an effect	Webb, Soutar, Mozzarol and Saldaris (2013)

evidence from a household energy-saving behaviour study	on the intention that influences their behaviour	
The role of anticipated emotions in purchase intentions	Consumers take their emotions into consideration before and after they purchase something	Bagozzi, Belanche, Cassalo and Flavian (2016)
Self-identity and the theory of planned behaviour: assessing the role of identification with green consumerism	An individual's behaviour is influenced by their self-identity	Sparks and Shepherd (1992)
Identity-based consumer behaviour	Self-identity is one of the drivers of behaviour	Reed, Forehand, Punton and Warlop (2012)
Green identity, green living? The role of pro-environmental self-identity in determining consistency across diverse pro-environmental behaviour	Individuals' behaviour and adoption of green products are strongly linked to identity or self-identity	Whitmarsh and O'Neill (2010)
GREEN LIFESTYLE		
Going green: the process of lifestyle change	Individuals' adopting a green lifestyle is based on their intentions to become pro-environmentally active	Lorenzen (2012)
Green marketing: a study of consumers' attitude towards environmentally friendly products	Individuals' actions are predicted by their attitudes	Cherian and Jacob (2012)
Product development implications of sustainable consumption	Environmental factors or knowledge plays a role in consumers' choice to purchase green products	Cooper (2000)
Constructing a green lifestyle consumption and environmentalism in an eco-village	Self-identity plays a role in an individual's choice to adopt a green lifestyle	Chitewere (2006)

(Author's own compilation)

4.2.1 Variables influencing green behaviour

The influencing variables that can clearly be derived from Table 4.1 above can be categorised according to demographics, environmental knowledge, values, beliefs, self-identity and anticipated emotions (past behaviour and intentions). The relationship between the following variables is determined by use of the Theory of planned behaviour, Theory of reasoned action and the Theory of Integrated behavioural model. These are discussed in more detail bellow.

- **Demographics**

Socio-demographic variables such as gender, age and level of education are the most important variables that can influence attendees' green behaviour (Diamantopoulos, Schlegelmilch, Sinkovics & Bohlen, 2003:467; Peatti, 2010:121). It has been revealed that individuals who are older (age 35 or older) are usually more green (Abeliotism, Koniari & Sardianou, 2009:155).

Abeliotis *et al.* 2009:154) and Gilg, Barr and Ford (2005:502) indicate that females are more environmentally conscious and will more likely adopt a green lifestyle than males. However, Reizenstein, Hill and Philpot (1974) found that only men were more willing to pay more to control air pollution, and Balderjahn (1998) states that the relationship between attitudes and the use of environmentally conscious products was more intense in men than in women. Vicente-Molina, Fernández-Sáinz and Izagirre-Olaizola (2013) further point out that individuals' level of education plays a significant role in determining individuals' green behaviour, and therefore the more educated individuals are, the more inclined they are to adopt a green lifestyle.

- **Environmental knowledge**

Environmental knowledge is usually assumed to be the main influencer for attendees to consider when adopting a green lifestyle and influences individuals' green behaviour (Pattie, 2010:206). It has been identified that there is a significant relationship between the concept of knowledge and behaviour (Zsóka *et al.,* 2013:127). Environmental knowledge is described as the knowledge and the awareness that individuals receive about environmental issues and green practices (Zsóka *et al*., 2013:127). Researchers such as Akehurst *et al.* (2012:977), Zsóka *et al*. (2013:127), Fraj-Andrés and Martínez-Salinas (2007:77), and Vicente-Molina, Fernández-Sáinz, and Izagirre-Olaizola (2013:130) revealed that individuals who have more knowledge about negative environmental impacts or environmental issues are more likely to adopt a green lifestyle and implement green practices such as energy management, water management, recycling and using public transport.

- **Values**

Values are desirable trans-situational goals that vary in importance and serve as a guiding principle in one's life (Schwartz, 1992:1). They are likely to develop early in life (Stern, Dietz & Guagnano, 1995). Values are abstract and general and remain stable over time (Feather, 1995; Stern, 2000:411). Biospheric values are particularly important for understanding and predicting environmental behaviour (Steg & De Groot, 2012). People who strongly endorse biospheric values care for nature and the environment as such, and more strongly base their judgments and decisions to engage in particular actions on the consequences of their behaviour for nature and the environment. The stronger people endorse biospheric values, the more environmentally friendly they judge and act (Schultz & Zelezny, 1998; Steg & De Groot, 2012).

- **Self-identity**

Self-identity is found to be another significant influencer of individuals' green behaviour. Self-identity is described as a way in which an individual labels or describes themselves, which is influenced by personal motivations (Sparks & Shepherd, 1992:389; Reed, Forehand, Puntoni & Warlop, 2012:310). The correlation between self-identity and green behaviour is that if an individual considers or sees themself as a green person, an individual is more likely to implement green practices than those who do not consider themselves green (Whitmarsh & O'Neill, 2010:7). For instance, you can strongly value the environment, but if you always go to work by car instead of by bicycle because you live far from your work, you may not see yourself as an environmentally friendly person. Green self-identity is seen as an important predictor for green behaviour with regard to green practices such as waste management, energy management, water management and other green commitments such as purchasing of organic food (Whitmarsh & O'Neill, 2010:18).

- **Beliefs**

According to Gadenne, Sharma and Smith (2011:7685) individuals who have strong beliefs about environmental issues are most likely to implement green practices. It is further indicated that individuals with a positive attitude and behaviour and strong beliefs and values about implementing green practices believe that green practices can assist in reducing negative environmental impacts and protect the environment and natural resources (Peattie, 2010:207; Zhao, Bukley, Warden & Wang, 2015:145).

- **Anticipated emotions (past behaviour and intentions)**

Individuals' past behaviour and intention are found to be the best influencers of green behaviour (Ajezen, 2011:1120; Webb, Soutar, Mozzarol & Saldaris, 2013:59). Behaviour is seen as the combination of the anticipated emotional consequences linked with a decision to do something, and the anticipated feeling after the current decision of doing the activity (Bagozzi, Belanche, Cassalo & Flavian, 2016:629–630). For instance, the stronger the self-determined motivation an individual has towards energy saving, the more the intention to implement energy-saving green practices will increase (Webb *et al*., 2013:61).

The measurement of behaviour and attitude and all the different variables that can influence green behaviour is currently a much-debated issue in the literature (Kim & Choi, 2003; Kollmuss & Agyeman, 2002; Schlegelmilch *et al.,* 1996; Straughan & Roberts, 1999; Tilikidou, 2007). However, all the above literature indicated that a green or pro-environmental behaviour or attitude leads to a greater likelihood in an individual to implement green practices than in those who do not consider themselves green. Therefore, it is highly important for festival organisers to understand individuals' green lifestyle behaviour in order to determine if attendees will be inclined to support the implementation of green practices at festivals. Knowing what green practices festival attendees implement in their own homes can be a direct indication of what attendees will be inclined to support at arts festivals (Gram-Hanssen, 2014:93), and will perhaps be a more accurate and practical indication of green behaviour.

4.2.2 Possible green practices that can be implemented at home

The literature indicated that the most common green practices that individuals can implement at home can be divided into four categories: waste-management practices, energy-saving practices, water-saving practices and green-commitment practices. Table 4.2 indicates these practical green practices as identified from the literature within each of the four categories.

Table 4.2: Possible green practices that can be implemented at home

GREEN PRACTICES	DESCRIPTION OF GREEN PRACTICES	SOURCES
1. WASTE MANAGEMENT		
Grocery shopping bags	A grocery bag is a type of plastic or cloth bag that can be used more than once, can easily decompose and can be recycled.	Muthu, Li, Hu and Mok (2011); Ayalon, Goldrath, Rosenthal and Grossman (2009); Chung (2008); Ellis, Kantner, Saab and Watson (2005); Rayne (2008);
Recycling	Recycling is described as a practice of reusing waste to produce a similar or different product	Nakamura and Kondo (2003); Bench, Woodard, Harder and Stantzos (2005); Lu, Zhang, Zhong, Ren, Tobias, Mu, Ma, Geng and Xue (2015); Waite (2013); Song, Wang and Li (2012);
Opting for fewer additional items	Requesting fewer additional items such as cutlery, serviettes, pepper or salt when ordering a takeaway.	Karanth (2014)
E-billing/online payment/ electronic devices/smartphones	This practice is described as the use of electronic devices to pay utility bills and to take notes	Concil (2016) iFactor Consulting (2015)
2. ENERGY MANAGEMENT		
Energy alternatives	Energy alternatives include energy-saving light bulbs, making use of solar energy and gas appliances.	Poulet, Massa, Marrow, Bourget, Wheeler and Mitchell (2014); Rossi, Bonamente, Nicolini, Anderini and Cotana (2016); Quasching (2016)
Earth Hour	Earth Hour is described as an initiative to reduce energy consumption in one hour by	Khan and Borgstrom-Hanssion (2016); Olexsak and Meier (2014)

	switching off lights and appliances.	
Gas appliances	This is the implementation of gas stoves and heaters that make use of biogas or liquefied petroleum gas.	Adria and Bethge (2013); Mullen, Li and Singer (2012)
Natural ventilation	Natural ventilation is described as a practice of opening windows and doors to allow fresh outdoor air in a room.	D'Oca, Fabi, Corgnati and Andersen (2014); Tong, Chen, Malkawi, Lui and Freeman (2016); Aflaki, Mahyuddin, Mahmoud (2015)
3.WATER MANAGEMENT		
Water catchment	A water-catchment tank, either small or big, is used to store rainwater, which can later be used for watering plants or bathing.	Aldaya, Chapagain, Hoekstra and Mekonnen (2011); Moy (2011)
Micro-irrigation watering system	This system is described as the use of sprinklers when watering the garden.	Palanisami, Mohan, Kukumanu and Raman (2011); Swamy, Rajesh, Krishma, Pooja and Krishna (2013); Shock (2013); Viswanathan, Pathak and Bahinipati (2016)
Water-saving alternatives	Water-saving alternatives are simple household practices that can be used to reduce water consumption.	Garci-Cuerva, Berlglund and Binder (2016); McEvoy (2014)
Grey water	Grey water is a type of water that can be used more than once.	Leung, Li, Yu, Chui, Lee, Loosdreccht and Chen (2012)
4. GREEN COMMITMENT		
Environmentally friendly products	These are cleaning products such as sprays and washing detergents that are environmentally friendly.	Cherian and Jacob (2012); Royne, Levy and Martinez (2011)
Organic and free-range alternatives	These are fruits and vegetables that are produced naturally.	Denver and Jensen (2014)
Arbor Week	Arbor Week is a week that is celebrated in South Africa as a campaign to promote the importance of planting trees**.**	Bennett (2013); Cohen (2004); Guthrie and Shackleton (2006); South Africa. Department of Environmental Affairs (2013)
Transport alternatives	Transport alternatives include the use of shuttle services,	Paulssen, Temme, Vij and Walker (2014); Dietz, Stern and Weber (2013); Dietz, Gerald,

	taxis, buses, carpooling and using hybrid vehicles.	Gardner, Gilligan, Stern and Vandenbergh (2009); Ehsani and Emadi (2009); Li, Lopes and Williamson (2009)
Financial contributions	This practice can be described as donating a certain amount to support recycling initiatives and subscribing to green websites.	Fennel and Weaver (2005)

(Author's own compilation)

4.3 PROBLEM STATEMENT

The movement of going green is emerging and nowadays starting to be visible across individuals' everyday activities in their private life (at home) and work (Bramwell & Lane, 2013:1). It has been found that there is a link between an individual's green lifestyle across different life domains. For instance, an individual's green behaviour activities at home can spill over to work-related activities and tourism-related activities (Barr, Shaw, Coles & Prollwitz, 2010:5). As indicated in the literature, there is an array of variables that can influence green behaviour among individuals across life domains. Afrikaans arts festival organisers are currently facing a problem of not knowing if the Afrikaans arts festival market portrays a green behaviour in their day-to-day operations. Also, if this is the case, whether their green behaviour will have a negative or a positive influence on their inclination to support the implementation of green practices at festivals.

Incorporating and implementing green practices is costly and time consuming, therefore to address the above-mentioned problems, it is important to investigate if attendees will support the implementation of green practices at festivals and which green practices attendees are inclined to support. However, although attendees seem to be concerned about the environment and indicate that they will be inclined to support the implementation of green practices at festivals, their physical behaviour at these festivals does not necessarily reflect this (Pickett-Baker & Ozaki, 2008:282).

The research question that this article will address is therefore whether Afrikaans arts festival attendees' green behaviour at home correlates with their inclination to support the implementation of green practices at arts festivals. The next part of the article discusses the research methodology that was used to address this question.

4.4 METHOD OF RESEARCH

A discussion of the research method that was followed is provided in the following sections: development of the questionnaire, the research design and method of collecting data, sampling and statistical analysis.

4.4.1 Development of the questionnaire

The questionnaire that was designed consisted of three sections. Section A captured 22 green practices identified and discussed in the literature that measured the extent to which respondents implement these green practices at home. The measurement was done by means of a five-point Likert scale (1 = *Never*, 2 = *Rarely*, 3 = *Sometimes*, 4 = *Often*, and 5 = *Always*).

Section B measured 30 green practices, also identified and discussed in the literature, measuring the extent to which respondents will be inclined to support the implementation of these green practices at arts festivals. The measurement was also done by means of a five-point Likert scale (1 = *Not at all*, 2 = *Less likely*, 3 = *Maybe*, 4 = *Most probably*, and 5 = *Definitely*).

Section C firstly captured demographic aspects such as gender, age, home language, province of origin and level of education. Secondly it asked about behavioural aspects, including the number of times the festival was attended before, length of stay at the festival, number of tickets bought for productions at the festival, type of accommodation respondents stayed at during the festival, how green respondents considered the festival to be, and how green respondents considered themselves to be. Section A, Section B, and Section C were predominantly used for the purpose of this second article.

4.4.2 Research design and method of collecting data

This quantitative study made use of a self-administered questionnaire to collect the data (Burns & Bush, 2016:149). The data was collected at two different Afrikaans arts festivals in South Africa. The first survey was conducted at the Clover Aardklop National Arts

Festival held over a period of five days, from 6 to 10 October 2015, in Potchefstroom, North West. The second survey was conducted over a period of four days, from 29 June to 3 July 2016, at Innibos Lowveld National Arts Festival in Mbombela, Mpumalanga.

Three fieldworkers were selected to collect data at Aardklop and for Innibos five fieldworkers were selected. All fieldworkers were trained and informed about the purpose of the survey, and to briefly explain the purpose of the research to respondents who were willing to complete the survey. A stratified sampling method was used to conduct the survey at both Aardklop and at Innibos (Fowler, 2013:37). This was done by dividing the entire population into separate areas or strata on the two festival terrains. These areas included food stall areas, arts and craft stall areas, and venues where different shows/theatre productions were hosted.

4.4.3 Sampling

Four-hundred and fifty questionnaires were distributed at each of the festivals, and 443 and 400 fully completed and usable questionnaires were gathered at Aardklop and Innibos respectively and used in the analyses. According to Israel (2006:6), from the population of 50 000 (N), 397 respondents (n) would result in a 95% level of confidence, with ± 5% sampling error. Therefore, in the population of 150 000 (N) attendees at Aardklop in 2015 and 100 000 (N) attendees at Innibos in 2016, the number of questionnaires collected (n = 843) is adequate for the analyses (Anon., 2015; Anon., 2016).

4.4.4 Statistical analysis

Microsoft Excel™ was used to capture the two different data sets of each festival. After the data had been captured, the two data sets were merged. SPSS® (Statistical Package for Social Sciences) was used for further analyses. The statistical analysis was done in five stages. Firstly, descriptive analysis (frequency tables) was employed to compile the attendees' demographic and festival behavioural profiles. Secondly, cross-tabulation was employed to determine if there was a difference between the market for Aardklop and Innibos.

Thirdly, two different combined confirmatory factor analyses were performed on the 22 green practices at home, and another one on the 30 green practices that festival attendees can support at arts festivals. This was done by pulling all the items listed under waste management, energy management, water management, green commitment headings to identify aspects which can be used together as a factor. The purpose of this analyses was to reveal the factors (green practices) which attendees implement and do not implement at their respective homes. A reliability coefficient was further computed to provide the Cronbach's alpha coefficient, inter-item correlation, the mean values and the corrected item-total correlation for each factor. And lastly, an independent *t*-test was done to explore the possible differences between the green practices (waste management, water management, green commitment practices and the use of greener transportation) attendees implemented at home (waste management, water management, energy management and green commitment green practices) and the implementation of green practices that attendees could support at arts festivals.

The next section reveals the results.

4.5 RESULTS

The results are discussed in three sections. Firstly, the combined profile of attendees at Aardklop and Innibos is presented. Secondly, the results from the two confirmatory analyses are reported. And lastly, the results from the independent *t*-test analysis are provided.

4.5.1 A combined profile of attendees at Aardklop and Innibos

The first objective of this research was to present a combined profile of the attendees at Aardklop and Innibos with the aim of determining attendees' demographic profile and attendees' general festival behaviour. Table 4.3 indicates that the majority of the attendees at these festivals were females (63%), attendees were older (on average 35 years old) and predominantly Afrikaans speaking (94%). The respondents were mostly from North West and Gauteng, they indicated that their highest qualification obtained was matric, a diploma, a degree or a postgraduate/professional qualification. Moreover,

respondents attended both festivals between two and four times, on average for 2.8 days. Respondents stayed at their own homes, with family and friends, in guesthouses and in B&Bs. And lastly, respondents considered both festivals to be somewhat green and considered themselves to be somewhat green as well. A chi-square test and Cramer's v together with cross-tabulation analysis (second objective) was done and revealed no practical differences between the two markets (Aardklop and Innibos), and that is why the decision was made to combine the two data sets.

Table 4.3: Profile of attendees at the Aardklop National Arts Festival and Innibos Lowveld National Arts Festival (combined data sets)

DEMOGRAPHIC CHARACTERISTICS	CATEGORY	PERCENTAGE
Gender	Male	37%
	Female	**63%**
Age	**Average age**	**35 years**
Language	**Afrikaans**	**94%**
	English	6%
	Other	1%
Province	**North West**	**41%**
	Gauteng	**35%**
	Free State	7%
	Limpopo	3%
	Mpumalanga	**4%**
	KwaZulu-Natal	3%
	Northern Cape	3%
	Eastern Cape	2%
	Western Cape	3%
	Outside RSA borders	2%
Level of education	**Matric**	**37%**
	Diploma, degree	33%
	Post-graduate/professional	30%
FESTIVAL BEHAVIOUR	**CATEGORY**	**PERCENTAGE**
Number of times attended	1st time	27%
	2–4 times	**40%**
	5–9 times	22%
	10+	11%
Length of stay	**Average number of days**	**2.8 days**
Number of tickets bought	**Average number of tickets bought**	**4.04 tickets**
Type of accommodation	**Own home**	**44%**
	Staying with family and friends	21%
	Guesthouse or B&B	16%
	Hotel or lodge	10%
	Camping	3%
	Other	6%

How green do you consider arts festivals to be?	Green	21%
	Somewhat green	**70%**
	Not green at all	9%
How green do you consider yourself to be?	Very green	15%
	Somewhat green	**71%**
	Not green at all	14%

(Author's own compilation)

4.5.2 Results from the confirmatory factor analysis of green practices at home

The third objective of this research was to do a confirmatory factor analysis on the combined data set to determine the green practice factors that the festival attendees implemented at their respective homes. Table 4.4 contains the results of the confirmatory factor analysis. The four factors were labelled according to the categories as identified from the literature. The Cronbach's alpha coefficient ranged from 0613 to 0.767, which was considered statistically reliable (Dumbach, 2013:184; Tavakol & Dennick, 2011:54). The corrected inter-item correlation coefficient ranged from 0.182 to 0.395, which indicated the consistency of the factors.

The following green factors were identified: Water management, Waste management, Energy management and Green commitment. Water management (Factor 1) received the highest mean value of 3.31, a Cronbach's alpha coefficient of 0.613, and an inter-item correlation of 0.182. Energy management (Factor 3) at home received the second highest mean value of 3.18, a Cronbach's alpha coefficient of 0.662 and an inter-item correlation of 0.284. Waste management at home received the third highest mean value of 3.31, a Cronbach's alpha coefficient of 0.752, and an inter-item correlation of 0.182. This was followed by Green commitment (Factor 4) at home, which obtained the lowest mean value of 2.62, a Cronbach's alpha coefficient of 0.794 and an inter-item correlation of 0.395. It is evident that respondents at Aardklop and Innibos were more inclined to support the implementation of Water-management, Energy-management and Waste-management green practices at their respective homes.

Table 4.4: Confirmatory factor analysis of Aardklop and Innibos attendees' green practices at home (combined data set)

GREEN PRACTICES AT HOME		CORRECTED ITEM TOTAL CORRELATION	GREEN INDIVIDUAL ASPECTS MEAN VALUES
FACTOR 1: WATER MANAGEMENT			
1	My actions are focused on saving water (e.g. showering instead of bathing, using grey water)	0.345	3.8
2	I use a water catchment tank at home to collect rainwater for household use	0.227	2.6
3	I turn off the tap when brushing my teeth to save water	0.269	4.1
4	I don't delay in fixing leaking taps in my home	0.326	3.8
5	I use micro-irrigation for watering the garden	0.279	2.8
CRONBACH'S ALPHA CORRELATION		0.613	
INTER-ITEM CORRELATION		0.182	
MEAN		3.31	
FACTOR 2: WASTE MANAGEMENT			
6	I recycle waste by separating glass, plastic and paper from each other	0.395	2.6
7	I use reusable cloth bags instead of plastic bags when buying groceries	0.484	2.6
8	I request e-bills and make online payments to reduce paper usage and postal costs	0.435	3.6
9	I use scrap paper for printing all drafts or unofficial documents	0.584	3
10	I reduce waste by not opting for additional items that I don't need when ordering take always (e.g. napkins, condiments or flatware)	0.557	2.8
11	I use the notepad function on electronic devices to reduce paper usage	0.496	3.3
CRONBACH'S ALPHA CORRELATION		0.752	
INTER-ITEM CORRELATION		0.336	
MEAN		3.02	
FACTOR 3: ENERGY MANAGEMENT			
12	I make use of energy-saving practices in my home (e.g. LED light bulbs, switching off the geyser at certain times)	0.440	3.9
13	I make use of solar and/or wind-power alternatives (e.g. solar-panel geysers)	0.350	2.3
14	I use a fan or natural ventilation instead of air conditioning for cooling	0.416	3.1
15	I switch off all lights and appliances during International Earth Hour Campaign	0.394	3.2
16	I use gas appliances rather than electrical appliances at home (e.g. heaters, stoves, ovens, etc.)	0.486	3.2
CRONBACH'S ALPHA CORRELATION		0.662	
INTER-ITEM CORRELATION		0.284	
MEAN		3.18	
FACTOR 4: GREEN COMMITMENT			
17	I buy environmentally friendly products to reduce pollution (e.g. ozone-friendly sprays, environmentally friendly cleaning aids)	0.458	3.1

18	I make financial contributions to support environmentally friendly/green initiatives	0.478	2.5
19	I buy organic and free-range alternatives when grocery shopping	0.588	2.9
20	I plant a tree every year on Arbor Day to reduce air pollution	0.588	2.5
21	I drive a hybrid/energy-efficient vehicle	0.507	1.8
22	Members of our household make use of carpooling to travel to work/school	0.509	2.7
CRONBACH'S ALPHA CORRELATION		0.794	
INTER-ITEM CORRELATION		0.395	
MEAN		2.62	

(Author's own compilation)

4.5.3 Different individual green aspects that attendees implement at home

To investigate the different green aspects within the factors even further, the aspects were plotted on a line graph together with the mean values reveals visually which aspects attendees often implement at their respective homes and which aspects attendees never implement. Figure 4.1 reveals that attendees often implemented turning the tap off when brushing teeth (41), showered instead of bathing and used grey water (3.8) and often made use of online payments (3.6). Attendees sometimes used the note pad function on electronic devices (3.3), switched off all lights during International Earth Hour (3.2), used gas appliances instead of electric appliances (3.2), bought environmentally friendly products (3.1), used natural ventilation instead of air conditioning (3.1), and used scrap paper for printing all drafts and unofficial documents (3).

The green practices that attendees implemented to a lesser extent at their respective homes included the buying of organic or free-range food (2.9), the use of micro-irrigation for watering the garden (2.8), not opting for additional items when ordering takeaways (2.8), the use of carpooling to travel to work/school (2.7), making use of water-catchment tanks to collect rainwater (2.6), recycling waste (separating glass, plastic and paper) (2.6), the use of reusable cloth bags when buying groceries (2.6), making financial contributions for green initiatives (25) and planting a tree on Arbor Day (2.5). Lastly, attendees rarely made use of solar/wind-power alternatives (2.3) and rarely drove hybrid/energy-efficient vehicles (1.8).

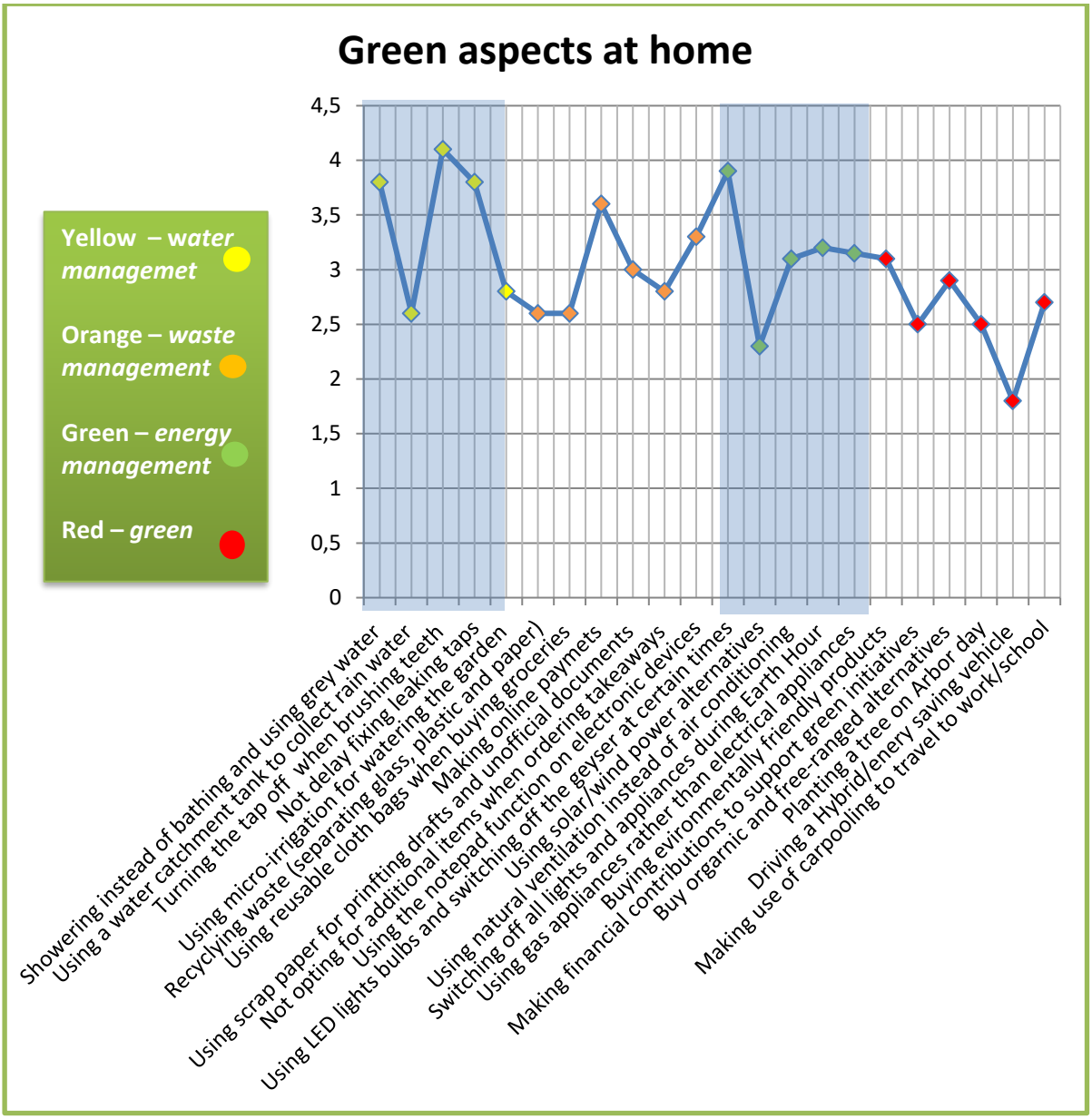

Figure 4.1: Different green aspects that attendees implemented at home (Author's own compilation)

4.5.4 Results from the confirmatory factor analysis on the inclination to support green practices at arts festivals

The fourth objective of this research was to do a confirmatory analysis that captured attendees' inclination to support the implementation of green practices at arts festivals. The confirmatory factor analysis using the path diagram was employed to identify five factors that were labelled according to the categories as identified from the literature (refer to 2.4 for a full discussion). The five factors presented had a high Cronbach's alpha coefficient ranging from 0.886 to 0.736, which is regarded as statistically reliable (Namedeo & Rout, 2016:1374). The consistency of the five factors was indicated by an

inter-item correlation coefficient that ranged from 0.392 to 0.720. The results presented in Table 4.5 indicate that Waste management (Factor 2) received the highest mean value of 3.79, a Cronbach's alpha coefficient of 0.886 and an inter-item correlation of 0.467. This was followed by Energy management (Factor 4) with the second-highest mean value of 3.77, a Cronbach's alpha coefficient of 0.885 and an inter-item correlation of 0.720. Water management (Factor 3) received a mean value of 3.43, a Cronbach's alpha coefficient of 0.821 and an inter-item correlation of 0.480. Finally, Greener transport (Factor 1) received a mean value of 3.18, a Cronbach's alpha coefficient of 0.736 and an inter-item correlation of 0.392. The results revealed that respondents were inclined to support the implementation of all five festival greening practices (Waste management, Energy management, Water management and Green commitment), with all the factor mean loadings above 3.

Table 4.5: Confirmatory factor analysis of green practices that attendees were inclined to support at Aardklop and Innibos (combined data set)

GREEN PRACTICES AT FESTIVAL		CORRECTED ITEM TOTAL CORRELATION	INDIVIDUAL GREEN ASPECTS MEAN VALUES
FACTOR 1: GREENER TRANSPORT			
1	I will use a bicycle rental service offered by the festival during the festival period	**0.455**	**2.6**
2	I will use a shuttle service offered by the festival to travel to the festival	**0.470**	**3.2**
3	I will use a shuttle service offered by the festival at the festival	**0.659**	**3.3**
4	I will make use of well-planned walking routes with clear signage to get to various show venues at the festival instead of using my car	**0.550**	**3.3**
5	I will support the idea that larger groups travelling in one vehicle pay less for parking	**0.486**	**3.7**
CRONBACH'S ALPHA CORRELATION		0.736	
INTER-ITEM CORRELATION		0.392	
MEAN		3.18	
FACTOR 2: WASTE MANAGEMENT			
6	I will use a recycling-bin system at the festival to reduce littering	**0.652**	**4**
7	I support the use of only biodegradable packaging by all stall owners at the festival	**0.636**	**3.7**
8	I will support a refundable cup/bottle system for drinking beverages at the festival	**0.703**	**3.8**
9	I will support the exclusive use of electronic festival programmes downloaded on personal electronic devices to reduce paper usage	**0.693**	**3.7**

10	I insist that the festival make use of digital marketing rather than printed posters to reduce littering	**0.610**	**3.5**
11	I will pay a R5 levy at the entrance for services rendered by the community members to pick up litter on the festival terrain	**0.518**	**3.7**
12	I insist that the festival organisers not allow junk mail via flyers on car windows to reduce littering	**0.611**	**3.9**
13	I insist that the festival use e-marketing as opposed to promotional flyers to reduce littering	**0.663**	**3.7**
14	I insist that the festival arrange for regular waste removal on the festival terrain for bad odours and hygienic purposes	**0.665**	**4.2**
CRONBACH'S ALPHA CORRELATION		0.886	
INTER-ITEM CORRELATION		0.467	
MEAN		3.79	
FACTOR 3: WATER MANAGEMENT			
15	I am happy to pay R5 for toilet facilities that use less water	**0.587**	**3.2**
16	I am happy to pay a green fee included in the entrance fee to show my support towards the festival's green initiatives	**0.673**	**3.3**
17	I insist that the festival organisers promote only accommodation partners who implement water-saving practices at their establishments	**0.680**	**3.3**
18	I will support the use of gel hand sanitiser instead of water and soap at the festival	**0.518**	**3.6**
19	I insist that the festival initiate a water saving campaign to raise awareness	**0.618**	**3.7**
CRONBACH'S ALPHA CORRELATION		0.821	
INTER-ITEM CORRELATION		0.480	
MEAN		3.43	
FACTOR 4: ENERGY MANAGEMENT			
20	I insist that the festival raise awareness about ways to save energy	0.693	3.8
21	I insist that the festival implement the use of only LED and CFL light bulbs during productions to reduce energy usage	0.853	3.8
22	I insist that the festival implement the use of only LED and CFL light bulbs on the festival terrain	0.790	3.8
CRONBACH'S ALPHA CORRELATION		0.885	
INTER-ITEM CORRELATION		0.720	
MEAN		3.77	
FACTOR 5: GREEN COMMITMENT			
23	I support that from midnight, disturbance of the peace and quiet is not permitted (e.g. loud music)	**0.554**	**3.4**
24	I support the concept that penalties/fines are issued for parking in undesignated areas to reduce the impact on the natural environment	**0.604**	**3.6**
25	I insist that the festival resort to natural light and ventilation at venues as far as possible	**0.694**	**3.7**
26	I insist that the festival regulate the number of visitors per day on the festival terrain to reduce soil compression	**0.599**	**3.3**
27	I insist that the festival initiate a rehabilitation programme of the natural surroundings after the festival	**0.738**	**3.6**
28	I insist that the festival make use of ways to reduce soil compression on the festival terrain (e.g. scattering of wood shavings)	**0.695**	**3.6**
29	I insist that the festival designate only certain areas on the festival terrain for smoking to reduce fire risks	**0.666**	**3.7**

30	I insist that the festival management ensure the use of only environmentally friendly/safe cleaning products	**0.680**	**3.8**
CRONBACH'S ALPHA CORRELATION		**0.883**	
INTER-ITEM CORRELATION		**0.492**	
MEAN		**3.57**	

(Author's own compilation)

4.5.5 Results from the independent sample t-test analyses

The fifth and last objective of this research was to determine if a significant difference existed between the implementation of green practices at the attendees' respective homes and the attendees' inclination to support the implementation of green practices at festivals. To determine this, an independent sample *t*-test was conducted. The four factors with the same titles (water management, waste management, energy management and green commitment) for green practices at home and attendees' inclination to support green practices at arts festivals were used in the analysis. The use of greener transport factor options at festivals had to be dropped because it did not have a correlating factor.

Table 4.6 reveals that a significant practical difference exists between waste management at home and waste management at festivals (p = 0.000; effect size 0.78), energy management at the home and at festivals (p = 0.00; effect size 0.52), green commitment at home and at festivals (p = 0.000; effect size 0.97). Lastly, a significant difference was also found between water management at home and water management at festivals (p = 0.005; effect size 0.11). This proves that attendees were inclined to support the implementation of green practices at festivals more than at home. However, the results still indicated that attendees implemented green practices at their respective homes as well.

Table 4.6 Independent-sample *t*-test analyses

VARIABLES						
GREEN FACTORS		MEAN	STD DEVIATION	CORRELATIONS	SIG. (2-TAILED) (P-VALUE)	EFFECT SIZES
Pair 1	Home – Water management	3.31	0.80	0.273	0.005	0.11
	Festival – Water management	3.43	1.00			
Pair 2	Home – Waste management	3.02	0.96	0.454	0.000	0.78
	Festival – Waste management	3.79	0.88			

Pair 3	Home – Energy management	3.18	0.91	0.399	0.000	0.52
	Festival – Energy management	3.77	1.09			
Pair 4	Home – Green commitment	2.62	0.93	0.302	0.000	0.97
	Festival – Green commitment	3.57	0.97			

(Author's own compilation)

4.6 FINDINGS

The research presented in this article sought to determine if attendees' implementation of green practices at their respective homes correlated with their inclination to support the implementation of green practices at arts festivals in South Africa. The findings revealed the following:

- Firstly, the results of the combined profile data set revealed by the cross-tabulation analysis identified no significant practical differences between the general profiles of the two different festival markets. This means that the different Afrikaans arts festival markets are very homogeneous. This finding is in line with the study done by Pissoort and Saayman (2007:265), which found that visitor profiles of arts festivals such as Vryfees and Innibos are very similar. Slabbert, Viviers and Erasmus (2013:88–89) revealed that the demographic profile of residents who attended the KKNK and Aardklop were similar (more females, between young to middle-aged, had matric, had a professional position or were self-employed).

- Secondly, festival attendees had a certain form of green lifestyle where the respondents indicated that they sometimes (3.31 on the Likert scale) implemented green practices at their respective homes. This supported findings by Song, Lee, Kang and Boo (2012:1417) that people are becoming more green at home. This finding is in line with that of Gould, Ardoin, Biggar, Cravens and Wojcik (2016), that people are concerned about the environment and more pro-environmentally active about waste disposal.

  Thirdly, festival attendees mostly implemented water-saving practices at their respective homes. The water-saving practices that attendees at festivals incorporated the most at their respective homes (according to the green individual aspects mean

values on the Likert scale) were to turn off the tap while brushing teeth (mean value of 4.1), showering instead of bathing (mean value of 3.8), and not delaying fixing leaking taps (with a mean value of 3.8). The two water-saving practices that respondents implemented the least were micro-irrigation systems (with a mean value of 2.8) and the use of water-catchment tanks (with a mean value of 2.6). This is in line with the finding by Martínez-Espiñeira and García-Valiñas (2013:401) that the majority of households implement water-management green practices. This supports the findings of Randolph and Troy (2008:451 & 454) that respondents in households are on the edge of trying to reduce water consumption by taking shorter showers and reducing watering gardens. A number of respondents also indicated they had reduced the number of times they washed their cars. The finding reported by Grafton, Ward, To and Kompas (2011:15) revealed that household members turn off the tap while brushing teeth, take showers instead of bathing, implement the use of low-flow shower heads and low-volume or dual-flushing toilets. The finding further supports the finding by Farbotko, Walton, Mankad and Gardnder (2014) that households make use of rainwater tanks.

- Fourthly, the attendees at Afrikaans arts festivals implemented energy-saving practices at their respective homes. The energy-saving practices attendees implemented the most according to the results on the Likert scale were the use of LED light bulbs and switching off their geysers at certain times (with a mean value of 3.9), natural air ventilation (mean value of 3.1), switching off lights and appliances at home during Earth Hour (mean value of 3.2), and using gas appliances (mean value of 3.15). The respondents rarely implemented the use of solar or wind power alternatives (with a mean value of 2.3) at their respective homes.

  This finding supports the results of Chetty, Tran and Grinter (2008:245–246) that household owners use energy-efficient practices such as energy-efficient light bulbs, using a programmable thermostat, turning off lights when not in use and unplugging electronic devices when not in use. This finding is also in line with findings by Abrahamse, Steg, Vlek and Rothengatter (2007:273) that households switched off lights in rooms that were not occupied and unplugged appliances not being used. This finding also correlates to some extent with the findings revealed by Mills and Schleich (2012:24), that a number of households do not implement energy-saving green

practices due to financial constraints. However, the finding contradicts the finding by Paulin, Diette, Scott, McCormack, Matsui, Curtin-Brosnan, Williams, Kidd-Taylor, Shea, Breysse and Hansel (2014:4) that households are replacing gas stoves with electric stoves.

- Fifthly, attendees indicated on the five-point Likert scale (2.62) that they rarely implemented green commitment practices (the factor) at their respective homes. The green commitment aspect that the respondents used the least was the driving of a hybrid/energy-saving vehicle. According to Beliveau, Rehberger and Xarras (2010:50), people do not use hybrid vehicles because of their performance and cost. In addition, the findings by Dooman (2010:40-41) indicate that people rarely use hybrid vehicles because they are concerned about the cost of fixing the car.

- Sixthly, the results revealed that attendees will most probably support the implementation of the following green practice factors at festivals: Waste management (3.79), Energy management (3.77), Green commitment practices (3.57) and Greener transport (3.18). The following are individual green practices/aspects that respondents would be inclined to support more: waste removal on the festival terrain (4.2), using recycling bins (4), not allowing junk mail via flyers (3.9), use of the refundable cup/bottle system (3.8), awareness about ways to save energy (3.8), use of LED and CFL light bulbs during a production (3.8), use of LED and CFL light bulbs on the festival terrain (3.8), use of only environmentally friendly cleaning products (3.8), the idea that larger groups travelling in one vehicle pay less for parking (3.7), use of electronic festival programmes (3.7), use of only biodegradable packaging by all stall owners (3.7), paying a R5 levy at the entrance for services rendered by the community (3.7), use of e-marketing (3.7), a water-saving campaign to raise awareness (3.7), use of natural light and ventilation at venues (3.7), use of gel hand sanitiser (3.6), parking penalties/fines (3.6), scattering wood shavings (3.6), use of a rehabilitation programme (3.6), provision of smoking areas on the festival terrain (3.6) and use of digital marketing (3.5) at arts festivals. The findings are also in line with those of O'Rourke, Irwin and Straker (2013:352) that the majority of attendees attend festivals that promote going green issues because attendees are inclined to support the implementation of green practices at festivals.

- Lastly, the results from the independent *t*-test revealed that there was a significant difference between attendees' behaviour towards implementing green practices at home and attendees' inclination to support the implementation of green practices at arts festivals. This indicated that attendees were inclined to be more green at festivals than at their respective homes. This contradicts the findings by Miao and Wei (2013:108) that people are more pro-environmentally active at home than at hotels. This finding supports the finding by Shirren and Lewis (2016:8) that "talking about 'going green' is very different from actually going green. Talk is cheap."

4.7 IMPLICATIONS

Based on the results and findings revealed in this article, the following are proposed implications:

- The first finding revealed that these two Afrikaans arts festival markets were relatively homogenous. This finding indicates that Aardklop and Innibos festival organisers can work together and develop the same green festival strategies on how to incorporate green practices on water management, green commitment, energy management, greener transport options and waste management because the markets are very similar. Forming such a partnership will save time, resources and costs in the future.

- The results indicated that the festival attendees were implementing green practices at their respective homes. However, most of the mean values were a point 3 on the Likert scale. This implies that there is still room for improvement with regard to getting attendees to be more green at their respective homes. Firstly, this can be done by developing green marketing campaigns to raise awareness. Campaigns on especially water and energy-saving practices can help to make people more aware of different practices that they can implement at home. Festivals can implement huge barometers at the festival terrain that indicate the energy and water use at the festival. These barometers can then be implemented at different arts festivals and a competition can be launched to see which festival saves the most water and energy. This will not only make attendees more aware of saving water and energy, but will properly motivate attendees in a fun way not to overconsume these valuable resources.

- Environmental knowledge and green education need to be offered to children from a very young age for them to realise the importance of saving the environment. People need to be educated to incorporate green practices not only at home, but across the board in all areas of life to become a green individual at home with a green lifestyle who will adopt green behaviour in all domains of life. Festivals can host shows with an environmental or green message to educate their attendees. Puppet shows that teach children the importance of green practices can be showcased daily at the festival terrain.

- From the findings, it was clear that Afrikaans festival attendees mostly implemented the green practices at home that seem to be affordable and not that expensive. This was also to be seen in their inclination to support green practices at a festival. Festival organisers need to realise that green practices implemented at festivals must not be difficult or inconvenient for the attendees. Attendees are also not keen on spending large amounts of money on green practices. Attendees indicated that green practices that festival organisers can implement are waste removal on the festival terrain, using recycling bins, not allowing junk mail via flyers, using the refundable cup/bottle system, awareness about ways to save energy, using LED and CFL light bulbs during production, using LED and CFL light bulbs on the festival terrain, and using only environmentally friendly cleaning products.

- Attendees seemed to implement green practices that have a certain kind of reward. “If I save water and energy, I also save money”. Attendees need to receive a direct benefit when supporting green practices. Festival organisers can work together with retail partners to improve their festival’s green status. For example, if festival attendees use public transport at the festival, the e-ticketing system and recycling bins, they can earn green points on their Smart Shopper card at Pick n Pay and get a discount on eco-friendly cleaning products and organic or free-range grocery products. This will not only help attendees to be more green at a festival, but will also cause a spill-over effect to be more green at their respective homes.

- Festivals can also implement a green-flag system where Afrikaans arts festivals can receive green-flag status when they incorporate a certain number of green practices. This may also motivate attendees to support these green practices to help the festival achieve a green-flag status.

- The results indicated that attendees were more inclined to support the implementation of green practices at festivals than implementing green practices at home. This means that attendees would rather be green at festivals than at home, which is a very good sign that arts festivals have a potential market that is ready for the tremendous change of festivals implementing green practices and going green.

- However, the results revealed that attendees indicated that they implemented green practices at home, but their green behaviour at home and their inclination to support green practices at festivals did not have the same intensity. This indicates that talk is cheap and actions count. This implies that festival organisers need to increase awareness and make it a priority to educate and encourage attendees to be more green. Green behaviour remains a psychological thing that is influenced by norms, values, people around you and self-identity, to name a few. Therefore, festival organisers must not only implement these green practices but must constantly educate, inform and express the importance of saving the environment. People who believe in something and receive results or compensation are more inclined to put words and actions together.

4.8 CONCLUSIONS

The main purpose of this chapter was to answer the question of whether words do speak louder than actions by determining if festival attendees' green attitude and behaviour at home correlate with their inclination to support the implementation of green practices at Afrikaans arts festivals in South Africa. The findings revealed that the arts festival market is homogeneous, that attendees rarely or sometimes implement green practices at home, will maybe and most probably support the implementation of green practices at arts festivals, and will be more inclined to support the implementation of green practices at

arts festivals than at their respective homes. These findings provide arts festival organisers with insight into attendees' green attitude and behaviour at home and at arts festivals and provide recommendations on which green practices need to be implemented to make arts festivals more sustainable in the future. It is highly recommended that further research be conducted on attendees' green attitude and green behaviour at other festivals.

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CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

"If you want to change attitudes, start with a change in behaviour."

- Katharine Hepburn

5.1 INTRODUCTION

The aim of this study was to investigate possible green practices that can be implemented at South African arts festivals. The study further determined whether attendees will be inclined to support the implementation of the identified green practices at the Clover Aardklop National Arts Festival and the Innibos Lowveld National Festival in South Africa. Further analysis was done to determine if there was a significant difference between attendees' green attitude and behaviour at home and their inclination to support the implementation of green practices at arts festivals.

The purpose of this chapter is to indicate the conclusions regarding the objectives set for this study. This chapter also makes recommendations to festival organisers in order to assist them in making their festivals more green and ultimately making festivals more sustainable in the future.

The main aim of this study was to determine attendees' green attitude and behaviour at arts festivals.

The following objectives were set to achieve this main aim:

Objective 1

The first objective was to provide an in-depth literature review on the greening of events under the following headings:

- The concept of sustainability (cf. 1.6.2.1).
- The concept of greening and the significance of the concept in festivals through green practices (cf. 1.6.2.1).
- The difference and the relationship between sustainability and greening (cf. 1.6.2.1).
- The advantages of greening events (cf. 1.6.2.1).
- Identification of possible green practices that can be implemented at festivals (cf. 1.6.2.1).
- Identification of possible green practices that can be implemented at festival attendees' homes (cf. 1.6.2.1).
- Awareness about environmental impacts and green practices (cf. 1.6.2.1).

Objective 2

The second objective was to determine if festival attendees will be inclined to support the implementation of green practices at arts festivals (cf. 1.6.2.2).

Objective 3

The third objective was to determine if festival attendees' green attitude and behaviour at home correlate with their inclination to support green practices at arts festivals (cf. 1.6.2.3)

Objective 4

The last objective was to draw conclusions and make recommendations concerning attendees' green attitude and behaviour with respect to the implementation of green practices at arts festivals (cf. 1.6.2.4).

5.2 CONCLUSIONS

The conclusions below were drawn from the identified objectives.

5.2.1 Conclusions with respect to Objective 1

- **Conclusions regarding the term sustainability (cf. 2.2.1)**
  - Sustainability involves being environmentally responsible, economically viable and socially beneficial (cf. 2.2.1).
  - Sustainability takes the three pillars, including economic, social and environmental factors that need to be effectively balanced, into account when developing, planning and making decisions (cf. 2.2.1; Figure 2.1).
  - The term sustainability was changed to sustainable development (cf. 2.2.1).
  - Sustainable development is defined as the development that meets the needs of the present without compromising the ability of future generations to meet their own needs (cf. 2.2.1).

- **Conclusions regarding the term greening and the use of green practices (cf. 2.2.2)**
  - Greening is described as the implementation of green practices or environmentally friendly practices (cf. 2.2.2).

- The greening process is mainly focused on improving or protecting the environment (cf. 2.2.2).
- A green festival or event is defined as a festival/event that makes use of green practices that reduce negative environmental impacts (cf. 2.2.2).
- Greening festivals is a suitable way of approaching environmental management issues, including festival/event organisers and attendees as part of the overall environmental responsibility of festivals/events (cf. 2.2.2).

- **Conclusions regarding the difference between sustainability and greening (cf. 2.2.2)**
  - The main focus of the term greening is on protecting the environment, and sustainability focuses on economic vitality, environmental health and social equity (cf. 2.2.2).
  - The process of greening involves the implementation of green practices, including water management, energy management, waste management, green commitment practices and the use of greener transport options (cf. 2.2.2).
  - This implies that taking the three pillars of sustainability into account requires certain practices that can be implemented as a means to minimise negative environmental impacts, reducing the cost of decreasing such impacts and, in the process, conserving the natural heritage (cf. 2.2.2).
  - This means that greening by means of green practices mainly focuses on one pillar that spills over to other pillars (cf. 2.2.2).

- **Conclusions regarding the advantages of greening events (cf. 2.3)**

The following are the possible benefits that can arise from implementing green practices at arts festivals.

- **Increased awareness (cf. 2.3.1)**

Implementing green practices at events/festivals can be an effective way to assist raising awareness about environmental issues and green issues through various social media platforms. This will educate attendees about how environmental impacts can be minimised by implementing the green practices (cf. 2.3.1).

- **Cost-saving opportunities (cf. 2.3.2)**

In the literature, it was pointed out that it is costly to implement green practices. However, events/festival organisers can receive cost-saving opportunities relating to the cost of purchasing energy, the cost of paying water bills and cost of purchasing fuel for vehicles during the festival production (cf. 2.3.2).

- **Economic benefits (cf. 2.3.3)**

By greening events/festivals, the community can receive benefits from job opportunities (e.g. waste-separation projects and cleaning the festival terrain) and long-term investments in the future (cf. 2.3.3).

- **Social benefits (cf. 2.3.4)**

The host community can enjoy benefits, including receiving education about green issues and environmental issues and be part of shared experiences (cf. 2.3.4)

- **Environmental benefits (cf. 2.3.4)**

The main reason for implementing green practices is to reduce negative environmental impacts caused by festivals during production. This assists in reducing littering, water, and noise pollution and traffic congestion, and in the process conserving and protecting the natural environment and its natural resources and sustaining the natural ecosystem in the long run (cf. 2.3.5).

- **Competitive advantage (cf. 2.3.6)**

Implementing green practices gives events/festivals a competitive advantage over events/festivals that do not implement basic green practices. Cost-saving competitive advantages such as the reduced cost of recycling waste and reduced use of water and energy are one of the advantages. A differentiated competitive advantage by using green or environmentally friendly products is another advantage (cf. 2.3.6).

- **Influencing decision-makers (cf. 2.3.7)**

The implementation of green practices involves a strong relationship between stakeholders, including attendees (visitors) and the community members. This creates a strong partnership with stakeholders who share the same vision and aims regarding the greening of events/festivals. In the process, conflict is reduced (cf. 2.3.7).

- **Positive reputation (cf. 2.3.8)**

  Implementing green practices at events/festivals is an effective way to create a positive reputation for all stakeholders. A platform must also be created for new collaborations with other stakeholders and for an opportunity to attract new markets (cf. 2.3.8).

- **Conclusions regarding possible green practices that can be implemented at events (cf. 2.4)**

Based on the literature study, the possible green practices that can be implemented at arts festivals are indicated below. The associated benefits of each practice are also indicated.

  - **Practices involving waste management (cf. 2.4.1)**
    - **Recycling-bin system (cf. 2.4.1.1)**
      - A recycling bin system is described as the use of a standard colour-coded and labelled type of bin (2.4.1.1).
      - These bins can be labelled for tins, paper, cans and glass material and colour codes can be yellow, blue, black and green (cf. 2.4.1.1).
      - The benefit of implementing these practices is to raise awareness about different types of waste and ways to separate waste to reduce littering (cf. 2.4.1.1).
    - **Biodegradable packaging (cf. 2.4.1.2)**
      - The term biodegradable describes the type of chemical that allows the material to degrade easily by means of micro-organisms (cf. 2.4.1.2).
      - Implementing this practice can reduce pollution because of the soft, heat-sealed and transparent material (cf. 2.4.1.2).
    - **Digital marketing and e-marketing (cf. 2.4.1.3)**
      - These practices are used as an effective method of communication between the events/festival organisers and the attendees (cf. 2.4.1.3).
      - Digital marketing and e-marketing are implemented by sharing relevant event/festival information on various social media platforms (cf. 2.4.1.3).

- **Item-refundable system (cf. 2.4.1.4)**
  - An item-refundable system is described as an activity whereby an individual purchases a beverage in a cup/can/bottle and then returns the empty bottle for a refund (cf. 2.4.1.4).
  - This green practice can help minimise littering (cf. 2.4.1.4).
- **Electronic ticketing system (cf. 2.4.1.5)**
  - An electronic ticketing system is described as the use of a digital contract between attendees and the service provider.
  - This practice is used to purchase event tickets using wireless mobile devices (cf. 2.4.1.5).
  - This practice assists in decreasing costs and time and reduces the use of paper tickets (cf. 2.4.1.5).

- **Water management (cf. 2.4.2)**

The following practices can effectively assist in reducing overconsumption of water at arts festivals:

- **The use of grey water (cf. 2.4.2.1)**
  - Grey water is defined as water that has been used and can be reused for other activities (cf. 2.4.2.1).
  - Grey water can be reused in toilet facilities and shower facilities and for plant treatment (cf. 2.4.2.1).
- **The use of mobile/composting toilets (cf. 2.4.2.2)**
  - Mobile/composting toilets are facilities that make use of less water per flush (cf. 2.4.2.2).
  - They help to reduce the use of clean water (cf. 2.4.2.2).
- **The use of gel hand sanitiser (cf. 2.4.2.3)**
  - An alternative hand-cleaning technology that requires a gel and dispenser product (cf. 2.4.2.3).
  - This practice makes use an alcohol-based gel (cf. 2.4.2.3).
  - The implementation of this practice will assist in reducing overuse of water (cf. 2.4.2.3).

- **Greener options for transportation (cf. 2.4.3)**

To reduce traffic congestion, noise, and air pollution, the identified use of transportation is seen as environmentally friendly or green.

  - **Hybrid vehicles (cf. 2.4.3.1)**
    - Vehicles that use energy from fuel cells and battery packs that deliver propulsive power through an electronic motor (cf. 2.4.3.1).
    - The use of such vehicles will assist in reducing the increase of carbon dioxide and noise pollution and other gases in the atmosphere (cf. 2.4.3.1).
  - **Carpooling (cf. 2.4.3.2)**
    - This is a type of transportation that requires individuals to share their vehicle with more than one person (cf. 2.4.3.2).
    - The use of this transport option will assist in reducing independent parking, traffic congestion and vehicle travel miles (cf. 2.4.3.2).
  - **Bicycle rental services or walking (cf. 2.4.3.3)**
    - The use of bicycle rental services is promoted to provide an alternative mode of transport (cf. 2.4.3.3).
    - This type of transport option has fewer negative impacts on the environment, prevents traffic congestion, takes up less space on the road and at parking areas and is cheap (cf. 2.4.3.3).
  - **Shuttle services (cf. 2.4.3.4)**
    - The use of shuttle services at events/festivals will assist in reducing traffic jams, overcrowding, illegal parking, excessive idling of vehicles, air and noise pollution (cf. 2.4.3.4).
    - This transport is cheap and an effective service (cf. 2.4.3.4).

- **Energy management (cf. 2.4.4)**

Implementing the use of the following practices or alternatives can assist in reducing overuse of energy during festival productions:

  - **LED lights (cf. 2.4.4.1)**
    - LED stands for light emitting diodes (cf. 2.4.4.1).
    - This is described as a solid-state lighting component that converts electricity into light by using semiconductors instead of filament or gas (cf. 2.4.4.1).

- The benefits of using LED lights are that they are highly efficient, have colour quality, constantly switch frequencies, are highly reliable and have smaller filters (cf. 2.4.4.1).

- **Natural ventilation (cf. 2.4.4.2)**
  - This is described as a system whereby the internal air of an enclosed space is continuously replaced by fresh external air through open windows and doors for better thermal comfort and good indoor air quality without applying any forced flow (cf. 2.4.4.2).
  - This practice serves as an alternative way of cooling an area (cf. 2.4.4.2).
  - This practice assists in reducing energy consumption (cf. 2.4.4.2).

- **Green commitment: implementation at arts festivals (cf. 2.5.5)**

There are other green practices that can be implemented at arts festivals to assist in protecting the environment and preserving natural resources. These practices include the following:

- **Biodiversity conservation (cf. 2.5.1)**
  - Protected areas occupy 11.5% to 13% of the earth's surface (cf. 2.5.1).
  - These areas are natural areas that are a home or habitat to animals and small living organisms and areas that need to be managed effectively (cf. 2.5.1).
  - Therefore, it is important to develop green products and implement green practices that can assist in reducing environmental impacts (cf. 2.5.1).
- **Rehabilitation/restoration programmes (cf. 2.5.2)**
  - Rehabilitation is defined as the actions that are taken to restore the area or habitat to its beneficial use, and in the process recovering the ecosystem that has been degraded, damaged, or destroyed (cf. 2.5.2).
  - This practice assists in ensuring that all the waste is removed from the event/festival terrain (cf. 2.5.2).
  - The benefits of implementing this practice are to protect indigenous plants and allow the environment to recover (cf. 2.5.2).

- **Parking fine (cf. 2.5.3)**
  - Parking fines/penalties are a certain amount that attendees will pay if they park in restricted areas or designated areas on the event/festival terrain where the natural environment can be harmed (cf. 2.5.3).
- **Capping the number of attendees (cf. 2.5.4)**
  - Implementing the use of this practice will assist in reducing the disturbance of the peace and quiet of the area and reducing soil compression/compacting (cf. 2.5.4).
- **Smoking area/designated smoking area (cf. 2.5.5)**
  - Arts festivals are required to designate certain areas on the festival terrain for smoking with notices and signs that illustrate or indicate where smoking is permitted and where it is not permitted (cf. 2.5.5).
  - The provision of designated smoking areas will reduce the risk of fire and reduce environmental tobacco smoke (cf. 2.5.5).
- **Well-planned walking routes (cf. 2.5.6)**
  - The aim of developing well-planned walking routes is to manage and ensure the long-term protection and maintenance of biological diversity and in the process providing a sustainable flow of natural products and services to meet the community needs (cf. 2.5.6).
  - This practice can be implemented by placing signage to give clear and understandable information to the event/festival attendees to manage their movement and behaviour (cf. 2.5.6).

- **Conclusions regarding possible green practices that can be implemented at home (cf. 2.6)**

The literature study further identified possible green practices that festival attendees can implement at home as a means to reduce negative environmental impacts caused by attendees' everyday activities. These green practices include the following:

- **Waste management (cf. 2.6.1)**

Waste management is an effective way of assisting households to reduce the amount of plastic, paper and takeaways littering their home.

- **Grocery shopping bags (cf. 2.6.1.1)**
  - A grocery bag is a type of bag that is made of a material that can be used more than once (cf. 2.6.1.1).
  - The grocery bag has an indication outside that it is recyclable or compostable (cf. 2.6.1.1).
  - The use of such grocery bags will assist in reducing non-reusable plastic-bag footprints (cf. 2.6.1.1).
- **Recycling (cf. 2.6.1.2)**
  - Recycling is described as the use of waste to produce a similar product (cf. 2.6.1.2).
  - Material that can be recycled includes plastic, cans and glasses (cf. 2.6.1.2).
  - The implementation of recycling can assist in saving costs and preventing negative environmental impacts (cf. 2.6.1.2).
- **Opting for fewer additional items (cf. 2.6.1.3)**
  - Opting for fewer additional items when ordering takeaways includes not requesting napkins, flatware and condiments (cf. 2.6.1.3).
  - This will assist in reducing the takeaway footprint (2.6.1.3).
- **E-billing/online payments/electronic devices/smartphone (cf. 2.6.1.4)**
  - The use of electronic devices allows individuals to make use of various mobile apps to pay utility bills and take notes (cf. 2.6.1.4).
  - This practice will help to reduce the use of paper and save costs (cf. 2.6.1.4).

- **Energy management (cf. 2.6.2)**

Households are one of the contributors to the overconsumption of energy. However, various researchers and organisations identified the following green practices as a means to save energy at home:

- **Energy alternatives (cf. 2.6.2.1)**
  - Energy alternatives include the use of solar energy and switching to the use of LED bulbs (cf. 2.6.2.1).
  - Solar energy is defined as the energy generated from the sun caused by nuclear fusions in the sun’s core (cf. 2.6.2.1).

- LED (light emitting diodes) lights are described as a solid-state lighting component that converts electricity into light through semiconductors instead of filaments or gas (cf. 2.6.2.1).
- Both alternatives assist in reducing the cost of purchasing energy and reducing emissions (cf. 2.6.2.1).

▪ **Earth Hour (cf. 2.6.2.2)**

- Earth Hour is the world's largest collective environmental action that involves communities, individuals, businesses, and governments all around the world (cf. 2.6.2.2).
- This initiative involves the collaboration of people switching off all the lights and unplugging all appliances for one hour (cf. 2.6.2.2).
- This initiative helps to save energy (cf. 2.6.2.2).

▪ **Gas appliances (cf. 2.6.2.3)**

- Gas appliances include biogas water heaters and gas stoves (cf. 2.6.2.3).
- The gas appliances include LPG (liquefied petroleum gas or liquid petroleum gas) appliances (cf. 2.6.2.3).
- The use of such appliances saves energy, produces burning gas and reduces the increase in greenhouse gas emissions (cf. 2.6.2.3).

▪ **Natural ventilation (cf. 2.6.2.4)**

- Natural ventilation is the use of outdoor air for cooling (cf. 2.6.2.4).
- The use of natural ventilation assists reducing the indoor air pollution (cf. 2.6.2.4).
- It also improves the quality of indoor air and indoor thermal conditions and reduces energy consumption (cf. 2.6.2.4).

o **Water management (cf. 2.7.3)**

Water scarcity is a serious problem in South Africa and households use large amounts of water every day. The water management practices below can assist in reducing the amount of water used in households.

▪ **Water catchment (cf. 2.7.3.1)**

- A water catchment tank is used to collect and store rainwater (cf. 2.7.3.1).
- The rainwater can be used for watering plants, bathing or showering and other activities that make use of water (cf. 2.7.3.1).
- This practice can help save water (cf. 2.7.3.1).

- It can reduce the cost of pumping groundwater (cf. 2.7.3.1).
- It is easy to operate and maintain (cf. 2.7.3.1).

- **Micro-irrigation watering system (cf. 2.7.3.2)**
  - A micro-irrigation system assists in reducing water consumption (cf. 2.7.3.2).
  - It saves on the cost of water (cf. 2.7.3.2).
- **Water-saving alternatives (cf. 2.7.3.3)**
  - Water-saving alternatives include closing taps tightly and fixing leaking taps (cf. 2.7.3.3).
  - This practice will assist in reducing water usage (cf. 2.7.3.3).
- **Grey water (cf. 2.7.3.4)**
  - Grey water is described as used domestic water, including laundry water and bath water (cf. 2.7.3.4).
  - Grey water can be used for watering the garden, and to flush toilets (cf. 2.7.3.4).
  - The use of grey water can assist in reducing water consumption (cf. 2.7.3.4).

- **Green commitments (cf. 2.8.4)**

Household members attempting to reduce negative environmental impacts such as traffic congestion, air pollution and land pollution caused by their everyday activities can implement the green practices below to reduce these impacts.

- **Environmentally friendly products (cf. 2.8.4.1)**
  - Environmentally friendly products include organic food, the use of biodegradable packaging, reusable grocery bags, LED lights, and cleaning aids (cf. 2.8.4.1).
  - The use of these products assists in reducing littering (cf. 2.8.4.1).
- **Organic and free-range alternatives (cf. 2.8.4.2)**
  - The term organic refers to food that is grown without the use of pesticides, bioengineered genes (GMOs) and any kind of fertiliser (cf. 2.8.4.2).
  - Organic foods are fresh, easily accessible and have more flavour than non-organic food (cf. 2.8.4.2).

- **Arbor Day (cf. 2.8.4.3)**
  - Arbor Day is a week that has been celebrated under the theme “Our Forest – Our Future” in South Africa from 1 to 7 September every year since 1983 (cf. 2.8.4.3).
  - This campaign involves planting trees to reduce global warming as a means to reduce heat stored on the planet (cf. 2.8.4.3).
- **Transport alternatives (cf. 2.8.4.4)**
  - Transport alternatives involve the use of carpooling and hybrid/energy-efficient vehicles (cf. 2.8.4.4).
  - Carpooling involves household members sharing a vehicle to work or when taking children to school (cf. 2.8.4.4).
  - A hybrid/energy-efficient vehicle is a type of vehicle that has a quiet engine and produces fewer emissions (cf. 2.8.4.4).
  - These two transport alternatives assist in reducing traffic congestion and carbon-dioxide emissions (cf. 2.8.4.4).
- **Financial contributions (cf. 2.8.4.5)**
  - Green financial contributions support green initiatives such as water-treatment projects, renewable-energy projects, biodiversity-conservation projects, recycling projects and education and training projects (cf. 2.8.4.5).
  - These contributions assist in protecting and conserving the environment and natural resources (cf. 2.8.4.5).
  - Financial contributions can be made by subscribing to green or eco-friendly blogs and purchasing green products (cf. 2.8.4.5).

- **Green awareness (cf. 2.9)**

Raising awareness is an effective way of educating attendees about the implementation of green practices that can be implemented at arts festivals and at homes/households as a means to reduce negative environmental impacts. From the literature, the following are possible ways to raise awareness and the benefits that arise from raising awareness.

- **Raising awareness (cf. 2.9)**
  - Raising awareness is defined as informing and educating people about a topic or issue with the intention of influencing their attitude, behaviours and beliefs towards the achievement of a defined purpose or goal (cf. 2.9).
  - **The following are ways to raise awareness about environmental issues and green issues**:

    - Selling bracelets or green awareness ribbons or bands and donating the proceedings to local green initiatives (cf. 2.9).
    - Creating an action or raffle to support local green businesses (cf. 2.9).
    - Advertising on billboards about the festival's green initiatives (cf. 2.9).
    - Making use of various social media platforms to advertise environmental messages (cf. 2.9).

  - **The following are the advantages of raising awareness (cf. 2.9):**

    - Raising awareness can assist in educating the community or festival attendees about green practices (cf. 2.9).
    - This is an effective way of encouraging individuals to be pro-environmentally active (cf. 2.9).
    - This can enable the local community to start their own local green campaigns to assist in reducing the depletion of the natural environment (cf. 2.9).

5.2.2 Conclusions with respect to Objective 2

The conclusions below can be drawn regarding attendees' inclination to support the implementation of green practices at the Aardklop National Arts Festival and Innibos National Arts Festival.

- The first confirmatory factor analysis that was employed revealed that attendees at Aardklop were inclined to support the implementation of energy management, waste management, green commitment and water management practices (cf. 3.6).
- The second confirmatory factor analysis that was employed revealed that attendees at Innibos were inclined to support the implementation of green

commitment, waste management, water management and energy management (cf. 3.6).

- The results from both confirmatory factor analyses revealed that attendees at Aardklop and Innibos were less likely to support the use of greener transport options (cf. 3.6).
- The *t*-test analysis that was conducted revealed that attendees at Aardklop were less inclined to support waste management practices than attendees at Innibos (cf. 3.6).
- A further *t*-test analysis revealed no statistically significant differences between Aardklop and Innibos regarding individual green aspects that attendees were inclined to support (cf. 3.6).
- The Spearman rank order correlation revealed a significant correlation between how green attendees considered themselves to be, and their inclination to support the implementation of green practices at Aardklop and Innibos. This implies that the more attendees consider themselves to be green, the more inclined they will be to support the implementation of green practices at arts festivals (cf. 3.6).

5.2.3 Conclusions with respect to Objective 3

The conclusions below can be drawn regarding the correlation between attendees' green attitude and behaviour at home and their inclination to support the implementation of green practices at arts festivals.

- The results from the chi-square test and Cramer's v together with cross-tabulation analysis revealed no significant differences between the general profiles of the two different festival markets (Aardklop and Innibos). Therefore, these markets are seen to be very homogeneous (cf. 4.6).
- The combined confirmatory factor analysis revealed that respondents sometimes implemented green practices at their respective homes (cf. 4.6).
- The results revealed by the combined confirmatory factor analysis revealed that festival attendees mostly implemented water-saving practices at their respective homes (cf. 4.6).
- Furthermore, the combined confirmatory factor analysis revealed that attendees at Afrikaans arts festivals implemented energy-saving practices at their respective homes (cf. 4.6).

- Moreover, the results from the combined confirmatory factor analysis revealed that festival attendees rarely implemented green commitment practices at their respective homes (cf. 4.6).
- The combined confirmatory factor analysis revealed that attendees at Aardklop and Innibos will most probably support the implementation of waste management, energy management, green commitment practices and green transport options at festivals (cf. 4.6).
- And lastly, the *t*-test analysis results revealed that there was a significant difference between attendees' attitude towards implementing green practices at home and attendees' inclination to support the implementation of green practices at arts festivals. This means that attendees are more inclined to support the implementation of green practices at festivals than at home (cf. 4.6).

5.3 RECOMMENDATIONS TO ARTS FESTIVALS/FESTIVAL ORGANISERS AND THE EVENT INDUSTRY

- Afrikaans arts festival attendees are positive about supporting green practices, but unfortunately, festival attendees are more inclined to support the implementation of green practices that are easy to use and are less costly. They are also more inclined to support green practices at home and at festivals if they receive personal benefits from them, like saving money or receiving something in return for their efforts. Festival-wise the attendees indicated that the individual green practices that they were more inclined to support were regular waste removal on the festival terrain (4.2), no allowing junk mail via flyers on car windows (3.9), supporting a refundable cup/bottle system (3.8), festivals raising awareness about energy saving (3.8), festivals using LED lighting (3.8), and the festival using environmentally friendly cleaning products (3.8). This indicates clearly that attendees are inclined to support green practices for which they are not personally responsible. Nevertheless, festivals can implement all six of the above-mentioned practices as a starting point for being more green. From this finding it is also clear that attendees have a certain expectation of the festival to incorporate green practices and also do their bit to save the environment.
- The results indicated that Afrikaans arts festival attendees are still reluctant to give up their usual lifestyle and are not yet prepared to commit to a full green lifestyle.

Therefore, it is recommended that different festival organisers form partnerships with environmentally friendly organisations that can help them to promote green awareness and develop strategies to make the use of green practices more appealing. Attendees need to be confronted more intensively with the dangers of overconsuming natural resources like water and energy. An example of such a campaign can be to turn off all the lights in show venues and to leave attendees in the dark for a few minutes before a production starts. This will indicate to them that the art and show productions need energy to survive and that everyone has a responsibility to save electricity. Festivals can also include productions that educate children and adults about the advantages of supporting green practices in their festival programmes.

- The findings revealed that attendees are less inclined to support the use of greener transport options at the festivals and rarely use/drive a hybrid/energy-saving vehicle at home. To address these issues, it is recommended that festival organisers form a partnership with the public transport operators to develop an awareness campaign about the importance and the benefits of using public transport, and to make public transport more appealing, clean and safe to use. In addition, it is recommended that to get attendees to use public transport to festivals, competitions and a “lucky ride” concept can be incorporated where attendees can receive a free festival/show ticket or food vouchers when they use public transport at a festival. By implementing these recommendations, attendees will be effectively encouraged to use greener transportation.

- Attendees at arts festivals are more inclined to support the implementation of green practices because of the rewarding benefits. Therefore, it is recommended that arts festival organisers and supermarkets such as Pick n Pay, Woolworths, DisChem and Clicks work together and develop a system where attendees can earn points on their loyalty cards when, for example, they download the festival programme electronically, use e-tickets, pay for the use of water-saving toilet facilities at the festival area or use public transport or bicycle rental services at the festival. Attendees can then use these points to receive discount on eco-friendly cleaning and electronic products at these supermarkets.

- It is also recommended that festivals not only implement green practices within one category of greening. Attendees indicated that they were inclined to support green practices across all five categories (water management, waste management, energy

management, green transport, as well as other green commitment practices). Therefore, festival organisers should identify practices within each of the different categories and not only focus on one. Currently attendees are more inclined to support waste-management and energy-saving practices, but to ensure sustainability the festivals cannot neglect the other greening categories.

- The ultimate recommendation for Afrikaans arts festivals is to practically implement a variety of these green practices that have been identified within this study and to test and do experiments to see first-hand what green practices attendees actually support. As indicated in this study, Afrikaans arts festival attendees' green behaviour at home differs from their green attitude at the festival, and what people say and what they do are sometimes two different things. These findings will benefit arts festivals orgnaisers in the sense that production costs related to energy use, water consumption, petrol and environmental rehabilitation cost will be effectively used and saved in the procces. Futhermore, partnership with the attendees, local community and business that implement green practices will be developed and the goals set in the develop strategies will be achieved in the process.

- Therefore, untimately the event industry will effectively benefit from the develop strategies to implement green practices to reduce negative environmental impacts caused by festivals and events which will assist the industry as a whole to achieve the goal of being considered as an industry that hosts events with minorecological footprint.

5.4 RECOMMENDATIONS FOR FUTURE RESEARCH

The following are recommendations that need to be considered for future research:

- Firstly, it is recommended that future research on the attendees' inclination to support green practices should be extended to English-language arts festivals in South Africa adopting the same measuring instrument used in this study.
- Secondly, a comparative study can be conducted between South African and international festivals and events to determine the trend of going green.

- Thirdly, further research can be conducted at festivals and events that are hosted in permanent structures to determine the negative environmental impacts and which green practices can be implemented.
- Fourthly, it is recommended that a study be conducted on the process of greening festivals or events by focusing on the supply side.
- Fifthly, experiments should be done at different arts festivals to see if arts festival attendees really support certain green practices.
- And lastly, it is recommended that research on attendees' overall experience at and motivation to attend green festivals or events that already implement green practices must be conducted. A case study can be done on the Rocking the Daisies music event, which is known as a green music event in South Africa.

5.5 LIMITATIONS OF THE STUDY

This study focused on two Afrikaans arts festivals only. Targeting other festivals in South Africa will provide a broader perspective of green attitudes and behaviour among attendees.

The research focused on only one stakeholder (festival attendees). A recommendation is to conduct research on other stakeholders who play a role in greening of festivals to also incorporate their viewpoint and support of green practices.

5.6 CONTRIBUTION OF THE RESEARCH

The research done in this study significantly contributed to arts festival literature, as well as to the events industry. The contributions are set out below.

Firstly, the research done in this study made a contribution to the literature by conducting an in-depth review of greening of events by identifying possible green practices that can be implemented at certain events.

Secondly, the measuring instrument that was used was designed in such a way that it can be used further at other festivals and events to determine attendees' inclination to

support the implementation of green practices and determine which green practices attendees implement at home.

Thirdly, this research made a practical contribution by identifying which practices attendees were inclined to support and less inclined to support at festivals.

Lastly, a significant contribution was made by determining attendees' green behaviour at home, and whether this behaviour correlated with their inclination and attitude to support the implementation of green practices at arts festivals.

5.7 CONCLUSION

This study made a significant contribution to South African arts festival literature and has set a platform for a greater awareness regarding the benefits associated with practices aimed at the greening of events such as arts festivals. It also contributed towards a better understanding of the green attitude and behaviour of festival attendees and the identification of green practices that are likely to be supported by attendees when implemented at arts festivals by arts festival organisers. This research therefore provides a step in the right direction by enabling arts festival organisers of Aardklop and Innibos to better manage the environmental impact of these events, and to initiate greener practices at operational levels. It further assists in encouraging not only green behaviour at the events that these attendees visit, but overall green behaviour and greener lifestyles. This ultimately contributes to more responsible tourism management practices and a more sustainable festival industry within the South African events sector.

APPENDICES

APPENDIX: A

QUESTIONNAIRES

CLOVER AARDKLOP NATIONAL ARTS FESTIVAL

GREEN PRACTICES SURVEY 2015

Rate your green practices at home by evaluating the following statements

SECTION A

5. Always

4. Often

3. Sometimes

2. Rarely

1. Never

Water management						
1	My actions are focused on saving water (e.g. showering instead of bathing, using grey water)	1	2	3	4	5
2	I use a water catchment tank at home to collect rain water for household use	1	2	3	4	5
3	I turn off the tap when brushing my teeth to save water	1	2	3	4	5
4	I don't delay in fixing leaking taps in my home	1	2	3	4	5
5	I use micro-irrigation for watering the garden	1	2	3	4	5
Waste management						
6	I recycle waste by separating glass, plastic and paper from each other	1	2	3	4	5
7	I use reusable cloth bags instead of plastic bags when buying groceries	1	2	3	4	5
8	I request e-bills and make online payments to reduce paper usage and postal costs	1	2	3	4	5
9	I use scrap paper for printing all drafts or unofficial documents	1	2	3	4	5
10	I reduce waste by not opting for additional items that I don't need when ordering take-aways (e.g. napkins, condiments or flatware)	1	2	3	4	5
11	I use the notepad-function on electronic devices to reduce paper usage	1	2	3	4	5
Energy management						
12	I make use of energy saving practices in my home (e.g. led light bulbs, switching off the geyser at certain times)	1	2	3	4	5
13	I make use of solar-and/or wind power alternatives (e.g. solar panel geyser)	1	2	3	4	5

14	I use a fan or natural ventilation for cooling instead of air conditioning	1	2	3	4	5
15	I switch off all lights and appliances during the international earth hour campaign	1	2	3	4	5
16	I use gas appliances rather that electric appliances at home (e.g. heaters, stoves, ovens etc.)	1	2	3	4	5
Green commitment						
17	I buy environmentally friendly products to reduce pollution (e.g. ozone friendly sprays, environmentally friendly cleaning aids)	1	2	3	4	5
18	I make financial contributions to environmentally-friendly / green initiatives	1	2	3	4	5
19	I buy organic and free-range alternatives when grocery-shopping	1	2	3	4	5
20	I plant a tree every year or on arbour day to reduce air pollution	1	2	3	4	5
21	I drive a hybrid / energy efficient vehicle	1	2	3	4	5
22	Members of our household make use of car-pooling to travel to work/school	1	2	3	4	5

Indicate to what extent you will support the following green practices at the Clover Aardklop National Arts Festival

Evaluate the following statements:

SECTION B

5. Definitely
4. Most probably
3. Maybe
2. Less likely
1. Not at all

Transport						
1	I will use a bicycle rental service offered by Aardklop during the festival period	1	2	3	4	5
2	I will use a shuttle service offered by Aardklop to travel to the festival	1	2	3	4	5
3	I will use a shuttle service offered by Aardklop at the festival	1	2	3	4	5
4	I will make use of well-planned walking routes with clear signage to get to various show venues at the festival instead of using my car	1	2	3	4	5
5	I will support the idea that larger travel groups travelling in one vehicle pay less for parking	1	2	3	4	5
Waste management						
6	I will use a recycling bin system at the festival to reduce littering	1	2	3	4	5
7	I support the use of only biodegradable packaging by all stall owners at the festival	1	2	3	4	5

8	I will support a 'refundable cup/bottle system' for drinking beverages at the festival	1	2	3	4	5
9	I will support the exclusive use of electronic festival programmes downloaded on personal electronic devices to reduce paper usage	1	2	3	4	5
10	I insist that the festival makes use of digital marketing rather than printed posters to reduce littering	1	2	3	4	5
11	I will pay a R5 levy at the entrance for service rendered by the community members to pick up litter	1	2	3	4	5
12	I insist that the festival organisers do not allow junk mail via flyers on car windows to reduce littering	1	2	3	4	5
13	I insist that the festival uses e-marketing as opposed to promotional flyers to reduce littering	1	2	3	4	5
14	I insist that the festival arranges for regular waste removal on the festival terrain for bad odours and hygienic purposes	1	2	3	4	5
Water management						
15	I am happy to pay R5 for toilet facilities that use less water	1	2	3	4	5
16	I am happy to pay a green fee included in the entrance fee to show my support towards the festival's green initiatives	1	2	3	4	5
17	I insist that the festival organisers promote only accommodation partners who implement water-saving practices at their establishments.	1	2	3	4	5
18	I will support the use of gel hand sanitiser instead of water and soap at the festival	1	2	3	4	5
19	I insist that the festival initiates a water saving campaign to raise awareness	1	2	3	4	5
Energy saving						
20	I insist that the festival raises awareness about ways to save energy	1	2	3	4	5
21	I insist that the festival implements the use of only LED and CFL light bulbs during productions to reduce energy usage	1	2	3	4	5
22	I insist that the festival implements the use of only LED and CFL light bulbs on the festival terrain	1	2	3	4	5
Green commitment						
23	I support that from midnight, the disturbance of the peace and quiet is not permitted (e.g. loud music)	1	2	3	4	5
24	I support the concept that penalties/fines are issued for parking on undesignated areas to reduce the impact on the natural environment	1	2	3	4	5
25	I insist that the festival resorts to natural light and ventilation at venues as far as possible	1	2	3	4	5
26	I insist that the event regulates the number of visitors per day on the festival terrain to reduce soil compression	1	2	3	4	5
27	I insist that the festival initiates a rehabilitation programme of the natural surroundings after the event	1	2	3	4	5
28	I insist that the festival makes use of ways to reduce soil compression on the festival terrain (e.g. scattering of wood shavings)	1	2	3	4	5

29	I insist that the festival designates only certain areas on the festival terrain for smoking to reduce fire risks	1	2	3	4	5
30	I insist that the festival management ensures the use of only environmentally friendly/safe cleaning products	1	2	3	4	5

SECTION C: DEMOGRAPHIC PROFILE

1. Gender

M	1
F	2

2. Which year were you born?

3. Home language?

Afrikaans	1
English	2
Other (Specify)	3

4. Province of origin?

North West	1
Gauteng	2
Free State	3
Limpopo	4
Mpumalanga	5
KwaZulu-Natal	6
Northern Cape	7
Eastern Cape	8
Western Cape	9
Outside RSA borders, please specify your country of origin	10

5. Including 2015, how many times have you attended the Aardklop?

6. How many tickets have you purchased at the Aardklop show? [ ]

7. Type of accommodation

Own home	YES	NO
Staying with family and friend	YES	NO
Guesthouse or B&B	YES	NO
Hotel or Lodge	YES	NO
Camping	YES	NO
Other (specify):	YES	NO

8. Level of education

Scholar	1
Matric	2
Diploma, degree	3
Post-graduate	4
Professional	5
Other, specify	6

9. How green do you consider Aardklop to be?

Green	1
Somewhat green	2
Not green at all	3

10. How green do you consider yourself to be?

Very green	1
Somewhat green	2
Not green at all	3

11. Length of stay at the festival? [ ]

12. What practices do you suggest the festival can incorporate to be greener?

THANK YOU FOR YOUR TIME AND COOPERATION

INNIBOS LOWVELD NATIONAL ARTS FESTIVAL

GREEN PRACTICES SURVEY 2016

Rate your green practices at home by evaluating the following statements

SECTION A

5. Always

4. Often

3. Sometimes

2. Rarely

1. Never

Water management						
1	My actions are focused on saving water (e.g. showering instead of bathing, using grey water)	1	2	3	4	5
2	I use a water catchment tank at home to collect rain water for household use	1	2	3	4	5
3	I turn off the tap when brushing my teeth to save water	1	2	3	4	5
4	I don't delay in fixing leaking taps in my home	1	2	3	4	5
5	I use micro-irrigation for watering the garden	1	2	3	4	5
Waste management						
6	I recycle waste by separating glass, plastic and paper from each other	1	2	3	4	5
7	I use reusable cloth bags instead of plastic bags when buying groceries	1	2	3	4	5
8	I request e-bills and make online payments to reduce paper usage and postal costs	1	2	3	4	5
9	I use scrap paper for printing all drafts or unofficial documents	1	2	3	4	5
10	I reduce waste by not opting for additional items that I don't need when ordering take-aways (e.g. napkins, condiments or flatware)	1	2	3	4	5
11	I use the notepad-function on electronic devices to reduce paper usage	1	2	3	4	5
Energy management						
12	I make use of energy saving practices in my home (e.g. led light bulbs, switching off the geyser at certain times)	1	2	3	4	5
13	I make use of solar-and/or wind power alternatives (e.g. solar panel geyser)	1	2	3	4	5

14	I use a fan or natural ventilation for cooling instead of air conditioning	1	2	3	4	5
15	I switch off all lights and appliances during the international earth hour campaign	1	2	3	4	5
16	I use gas appliances rather that electric appliances at home (e.g. heaters, stoves, ovens etc.)	1	2	3	4	5
Green commitment						
17	I buy environmentally friendly products to reduce pollution (e.g. ozone friendly sprays, environmentally friendly cleaning aids)	1	2	3	4	5
18	I make financial contributions to environmentally-friendly / green initiatives	1	2	3	4	5
19	I buy organic and free-range alternatives when grocery-shopping	1	2	3	4	5
20	I plant a tree every year or on arbour day to reduce air pollution	1	2	3	4	5
21	I drive a hybrid / energy efficient vehicle	1	2	3	4	5
22	Members of our household make use of car-pooling to travel to work/school	1	2	3	4	5

Indicate to what extent you will support the following green practices at the inniBOS Lowveld National Arts Festival

Evaluate the following statements:

SECTION B

5. Definitely
4. Most probably
3. Maybe
2. Less likely
1. Not at all

Transport						
1	I will use a bicycle rental service offered by Innibos during the festival period	1	2	3	4	5
2	I will use a shuttle service offered by Innibos to travel to the festival	1	2	3	4	5
3	I will use a shuttle service offered by Innibos at the festival	1	2	3	4	5
4	I will make use of well-planned walking routes with clear signage to get to various show venues at the festival instead of using my car	1	2	3	4	5
5	I will support the idea that larger travel groups travelling in one vehicle pay less for parking	1	2	3	4	5
Waste management						
6	I will use a recycling bin system at the festival to reduce littering	1	2	3	4	5

7	I support the use of only biodegradable packaging by all stall owners at the festival	1	2	3	4	5
8	I will support a 'refundable cup/bottle system' for drinking beverages at the festival	1	2	3	4	5
9	I will support the exclusive use of electronic festival programmes downloaded on personal electronic devices to reduce paper usage	1	2	3	4	5
10	I insist that the festival makes use of digital marketing rather than printed posters to reduce littering	1	2	3	4	5
11	I will pay a R5 levy at the entrance for service rendered by the community members to pick up litter	1	2	3	4	5
12	I insist that the festival organisers do not allow junk mail via flyers on car windows to reduce littering	1	2	3	4	5
13	I insist that the festival uses e-marketing as opposed to promotional flyers to reduce littering	1	2	3	4	5
14	I insist that the festival arranges for regular waste removal on the festival terrain for bad odours and hygienic purposes	1	2	3	4	5
Water management						
15	I am happy to pay R5 for toilet facilities that uses less water	1	2	3	4	5
16	I am happy to pay a green fee included in the entrance fee to show my support towards the festival's green initiatives	1	2	3	4	5
17	I insist that the festival organisers promote only accommodation partners who implement water-saving practices at their establishments.	1	2	3	4	5
18	I will support the use of gel hand sanitiser instead of water and soap at the festival	1	2	3	4	5
19	I insist that the festival initiates a water saving campaign to raise awareness	1	2	3	4	5
Energy saving						
20	I insist that the festival raises awareness about ways to save energy	1	2	3	4	5
21	I insist that the festival implements the use of only LED and CFL light bulbs during productions to reduce energy usage	1	2	3	4	5
22	I insist that the festival implements the use of only LED and CFL light bulbs on the festival terrain	1	2	3	4	5
Green commitment						
23	I support that from midnight, the disturbance of the peace and quiet is not permitted (e.g. loud music)	1	2	3	4	5
24	I support the concept that penalties/fines are issued for parking on undesignated areas to reduce the impact on the natural environment	1	2	3	4	5
25	I insist that the festival resorts to natural light and ventilation at venues as far as possible	1	2	3	4	5
26	I insist that that the event regulates the number of visitors per day on the festival terrain to reduce soil compression	1	2	3	4	5
27	I insist that the festival initiates a rehabilitation programme of the natural surroundings after the event	1	2	3	4	5

28	I insist that the festival makes use of ways to reduce soil compression on the festival terrain (e.g. scattering of wood shavings)	1	2	3	4	5
29	I insist that the festival designates only certain areas on the festival terrain for smoking to reduce fire risks	1	2	3	4	5
30	I insist that the festival management ensures the use of only environmentally friendly/safe cleaning products	1	2	3	4	5

SECTION B: DEMOGRAPHIC PROFILE

1. Gender

M	1
F	2

2. Which year were you born?

3. Home language?

Afrikaans	1
English	2
Other (Specify)	3

4. Province of origin?

Mpumalanga	1
Gauteng	2
Free State	3
Northern Cape	4
Eastern Cape	5
Western Cape	6
KwaZulu-Natal	7
Limpopo	8
North West	9
Outside RSA borders, please specify your country of origin	10

5. Including 2016, how many times have you attended the Innibos?

6. How many tickets have you purchased at the Innibos show? [ ]

7. Type of accommodation

Own home	YES	NO
Staying with family and friend	YES	NO
Guesthouse or B&B	YES	NO
Hotel or Lodge	YES	NO
Camping	YES	NO
Other (specify):	YES	NO

8. Level of education

Scholar	1
Matric	2
Diploma, degree	3
Post-graduate	4
Professional	5
Other, specify	6

9. How green do you consider Aardklop to be?

Green	1
Somewhat green	2
Not green at all	3

10. How green do you consider yourself to be?

Very green	1
Somewhat green	2
Not green at all	3

11. Length of stay at the festival? [ ]

12. What practices do you suggest the festival can incorporate to be greener?

_____

_____

_____

_____

_____

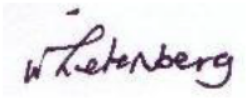
THANK YOU FOR YOUR TIME AND COOPERATION

APPENDIX: B

Language editing declaration form and Checking of bibliography declaration letter

LANGUAGE EDITOR DECLARATION

I hereby declare that I completed the text editing of Chapters 1 to 5 and the abstract/opsomming of this dissertation, entitled *Determining attendees' attitude and behaviour at arts festivals in South Africa,* submitted in partial fulfilment of the requirements for the degree Magister Artium in Tourism Management at the North-West University, Potchefstroom Campus, for Eva Mabatshidi Marumo, 23044527.



Wilna Liebenberg

MA Applied Linguistics

SATI Accredited Editor and Translator

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2531

12 December 2016

Ms Eva Marumo

NWU (Potchefstroom Campus)

POTCHEFSTROOM

CHECKING OF BIBLIOGRAPHY

Hereby I declare that I have checked the technical correctness of the Masters Bibliography of Ms Eva Marumo according to the prescribed format of the Senate of the North-West University.

Yours sincerely

Prof CJH LESSING