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Bachelor's Thesis

Attendees beliefs and behavior in relation to sustainable practices at music festivals in Germany and The Netherlands

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Abstract

This research aims to explore attendees beliefs and behavior at music festivals in Germany and The Netherlands in perspective of sustainable practices in place. With awareness of sustainability, especially among the younger generation, the increasing need to better understand the impact of these practices grows with it. Music festivals, often located in or close by nature, show direct risks to its environment, such as waste generation and carbon emission through energy consumption and transportation. This study follows a mixed-method approach by building onto existing literature covering sustainable methods and attendee influence at festivals and combining it with a qualitative and quantitative survey among festival-goers in 2023/24, exploring their beliefs and behavior. The survey focuses on attendees transportation patterns, waste and consumption habits, views on energy management and the individuals environmental consciousness. Existing literature shows the significant impact festivals have on their environment, including carbon emissions through transportation and high energy demands paired with waste generation through residuals and consumption. Alternatives like biodiesel and hydrogen concerning energy management and more attendee-focused initiatives such as recycling and composting and more sustainable travel options by shared transport are widely discussed. The results of the conducted survey have shown a general trend towards pro-environmental behavior of respondents. Most respondents indicate awareness of their environmental impact and the willingness to take action supporting greener festivals. The core concepts explored in this study, covering waste and consumption, transportation and energy management reflect the beliefs and behavior of festival-goers, explored through the survey, to a great extent. The research conducted through the survey shows limitations in terms of the rather small sample size, amounting to 33 respondents. Overall, this study seeks to provide insights into the effectiveness of current sustainable practices at festivals and the influence of attendee engagement in environmental issues.

keywords: *sustainability, attendee behavior, attendee beliefs, pro-environmental behavior, transportation, energy, consumption and waste, music festivals*

1. Introduction

With climate issues becoming more and more prominent, awareness for sustainability in society has increased, especially among the younger generation which has to deal with the implications of climate change (Lee *et al.*, 2020). Social values often reflect ecological and environmental aspects which includes the spaces people live and spend time in (Majhi, 2020). While changes in everyday life are often already part of a routine, such as conserving energy or separating trash, there is an increasing need to also translate such changes in spaces for leisure time. One of these spaces are music festivals, where often hundreds or thousands of people come together for many days to enjoy performances, workshops and foods (Cavagnaro et. al, 2012). Music festivals, often being temporarily set up in nature or semi-nature environments, pose a risk to its natural surroundings. This impact includes issues such as waste generation, extensive energy consumption and carbon emission through transport. The typical music festival emits 500 tons of carbon dioxide, equal to the weight of a three story house, resulting in around 25kg of emissions per attendee (CEPSA, 2023). According to a study by Larasti (2020), 7% of carbon emissions of music festivals consist of waste, 13% of energy consumption and 80% of attendees' travels. Whilst energy management widely concerns the organizers side of responsibilities, there are many opportunities for attendees to impact waste and transport management with their behaviors and can influence practices with their beliefs. The attendees beliefs regarding environmental problems are shaped through the individual's environmental consciousness and ultimately results in pro-environmental behavior.

In pursuit of creating leisure experiences, namely music festivals, that are more sustainable, this research aims to tackle both social and organizational contributors towards greener festivals. It does so by understanding the behavior and beliefs of its attendees in relation to contemporary sustainable practices put forward by music festivals. Furthermore, it will provide information on the engagement attendees show towards sustainability and highlight possible improvements to be made. In conclusion, this research integrates the organizational aspects by providing an overview of current day sustainable practices present at music festivals, while integrating social dynamics by exploring the role and impact of its attendees in achieving sustainable practices through pro-environmental behavior. Previous studies have explored these aspects each in their own but their relationship has yet to be explored more in depth (Collins & Cooper, 2021; Jago *et al.*, 2005; Kautish & Sharma, 2019). Therefore, this research will attempt to answer the following research questions:

Main research question: *"How do sustainable practices at music festivals in the Netherlands and Germany relate to their attendees behavior and beliefs?"*

Sub-research questions:

1. "What does environmental consciousness mean in the context of music festivals?"
2. "What modes of transportation are used and how can it be made more sustainable?"
3. "What type of waste is generated and how is it treated?"
4. "What kind of energy is used and how sustainable is it?"

1.1 Reading-guide

In the beginning, the theoretical framework of this study will be presented, serving as the foundation of the theories used. This section will highlight what environmental consciousness means in the context of music festivals, followed by the three main environmental themes: 'Transport management', 'Waste and consumption' and 'Energy management'. The next section will showcase the methodology, explaining in detail how the empirical research with a survey among festival attendees was conducted to test the literature. Next, the study will present the results of the empirical research and connect it to the literature covered. Lastly, the findings are elaborated upon during the discussion section and further recommendations and limitations covered in the conclusion at the end.

2. Theoretical Framework

The theoretical framework provides an overview of the main theories serving as a foundation for this research study. Both academic literature for the core concepts and non-academic literature to give background information concerning the research at hand is used during the research. In the discussion section of this study, this framework will be used to tie into the results of the survey conducted.

2.1 Environmental Challenges

Planning and hosting music festivals, no matter if rural or urban, small or big, is always connected to significant environmental challenges, specifically in the areas of waste, transportation and energy (Luoma, 2018). The generation of substantial waste, including plastics and food residuals, pose serious pollution problems to its environment, as explored in a study by Alonso-Vasquez and Ballico (2021). Furthermore, the influx of attendees and artists results in high amounts of carbon emissions due to mostly unsustainable modes of transport, such as cars and planes (Collins & Potoglou, 2019). Lastly, the high energy demand for lighting and sound is of significant concern, as it is often sourced by non-renewable resources (Marchini, 2013).

When presenting the academic findings concerning the issues, this study makes use of the conceptual framework developed for this research depicted in *Fig. 1*. Its basis is formed by the increasing environmental impact music festivals have (biophysical), which then is moderated by the behavioral aspects of attendees, through the scale of environmental consciousness and pro-environmental behavior, and organizational aspects in the form of environmental measures taken by festivals. This impacts and influences the management of waste, transportation and energy, eventually leading to an increase in environmental awareness and sustainable measures, ultimately resulting in lower carbon emissions.

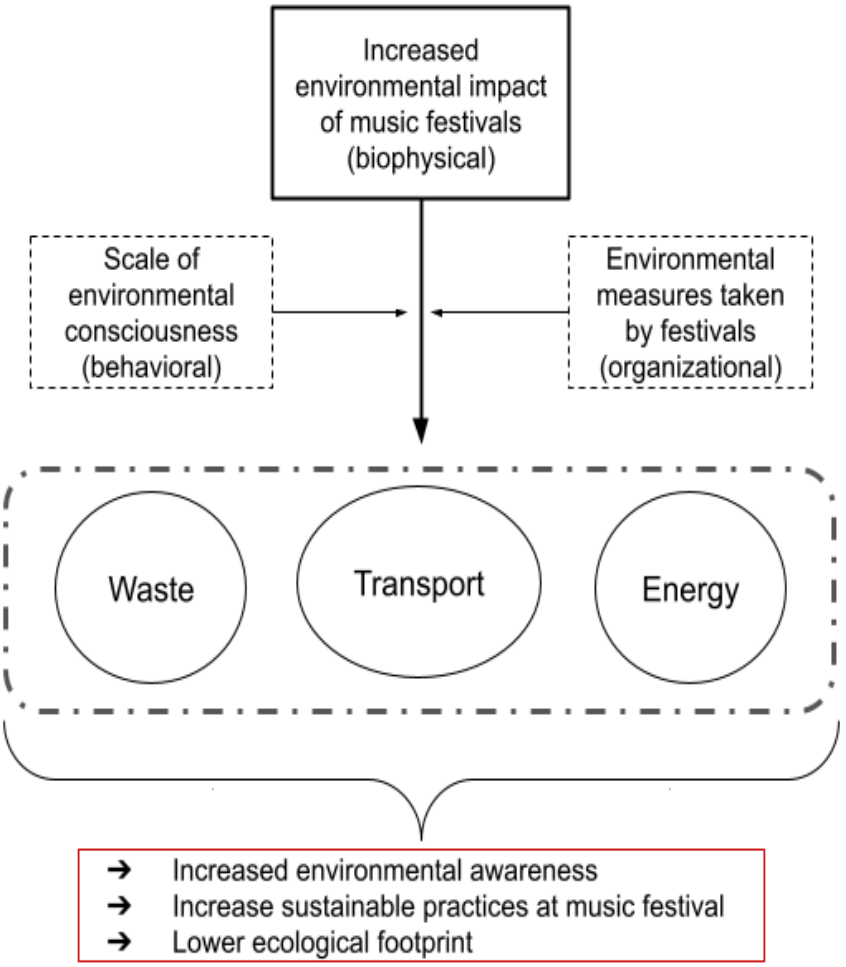

Figure 1: Conceptual model; From environmental impact to lower ecological footprint

2.2 Festivals towards carbon-neutrality

There are already many festival organizers moving towards carbon-neutral festivals with great efforts. One festival in the Netherlands, DGTL Festival, has been especially successful in becoming a circular festival, which refers to the principles of a circular economy. This includes sharing, repairing, recycling and generally just using materials and products as long as possible (Rizos, 2017). In this context, a circular festival aims to reduce waste, minimize its environmental impact and promote sustainability. One key aspect here is to get a detailed overview of the material flow in order to know where waste can be minimized and improvements can be made (Metabolic, 2023). Other festivals, such as Paradise City Festival in Belgium, Flow Festival in Helsinki or Doolin Folk Festival in Northern Ireland have similar approaches (Denver, 2022). Pro-environmental actions and sustainable measures taken by music festivals most often first stem from a heightened environmental consciousness, relating to the general awareness and concern about the health of the environment (Sharma and Bansal, 2013).

2.3 Environmental Consciousness

Environmental Consciousness (EC) is "... the willingness to become aware of environmental problems, to support efforts to solve environmental problems, and to personally commit and act to solve these problems" (Kim and Lee, 2023). The social aspect of this research will rely on the EC model derived from G&K (2009). As depicted in *Fig. 2*, their model of EC builds upon three main indicators. The first indicator being personal importance, measuring the level of importance an individual has towards environmental problems, directly influences the information level an individual seeks to obtain regarding environmental matters. Individuals who deem environmental issues as important gather knowledge around the topics of their interest and hence increase the level of information they possess (Golob and Kronegger, 2009). This leads to indicator two, acknowledging the individual's responsibilities and the costs involved, meaning the societal and economical impact environmental problems have on the individual. Once the course of action and its implications are known the last step can be pursued: pro-environmental behavior. This approach is also supported by Kautish and Sharma (2019) stating that environmentally conscious consumer behavior is highly influenced by the consumer's environmental knowledge and perceived environmental consequences. Additionally they mention the willingness to be environmentally friendly as an indicator which goes in line with personal importance and responsibilities.

Both studies focus on consumer behavior in the market, referring to goods to be purchased. Yet, this research takes a novel approach with EC, applying it to festival-goers as consumers and music festivals as a co-creation of value through goods and services (Raja, 2017; Werner, Griese and Faatz, 2019b). In the following sections the energy used for powering stages and other necessary functions, the waste generated through consumption and the transport needed to get to music festivals can be seen as goods and services where the environmental consciousness model applies. In the survey conducted various forms of the indicators were used to ask several questions about beliefs and behaviors, ultimately being derived from the individual's EC.

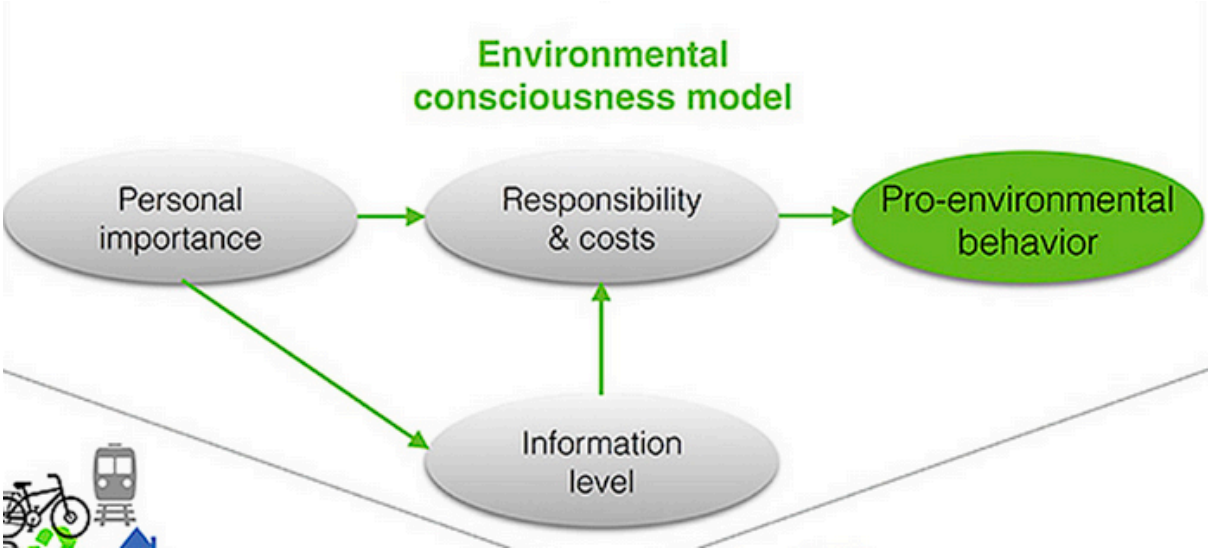

Fig. 2 Environmental consciousness model by Golob and Kronegger (2019)

2.4 Transport Management

In their article, Collins and Potoglou (2019) talk about environmental challenges festivals face especially regarding carbon emissions through transport. Their main concern is the influence festival-goers have when choosing their mode of transport to and from the festivals. According to Collins and Potoglou the motivation for certain modes of transport has various reasons, including personal, societal and practical factors. Even though the awareness for sustainability is increasing, often the decision on what transport to use is more guided by factors such as convenience, costs and time spent traveling. Here, the authors already established the inconsistency between the attendees' awareness towards sustainability and their actual behavior. Another study by Chirieleison and Scrucca (2017) also highlights the need for action by the festival organizers to positively influence this shift. Green initiatives and sustainable alternatives are getting more attention but there is still a lack of widespread strategies to promote sustainable transportation among attendees. A more proactive approach by providing enough information on the topic and offering support for carpooling or collaborating with public transport and other transport companies is highly suggested (Chirieleison, Montrone and Scrucca, 2019). Yet, the study also acknowledges the challenges sustainable traveling poses to attendees. While public transport and carpooling does reduce the carbon footprint it is still tied to fixed or unreliable schedules and festival-goers often prefer on-demand transport instead. This results in a greater use of private car transport to remain flexible and independent. Lastly, the possibility of implementing newer technology to help promote sustainable transport by providing online platforms or mobile applications for attendees to find more information or even readily find options to carpool on the spot is of growing interest (Collins and Potoglou, 2019).

2.5 Waste Management and Consumption

Music festivals merely being a temporary event built often within nature, the impact of activities and consumption taking place on the environment is a contributing factor to carbon emissions. This ranges from all the things attendees bring to a music festival to foods and drinks served by the festivals themselves (Alonso-Vazquez and Ballico, 2021). While residual waste such as tents amount to the largest part of waste, waste generated through consumption, in terms of kitchen waste and packaging, poses a critical threat as well (Martinho *et al.*, 2018). A study conducted by Powerful Thinking shows that a mid-scale festival with a size of around 20,000 people can produce up to 100 tons of waste. Only around 8% of waste produced is recycled and the rest usually ends up in landfills (Energy, 2023). Banning single plastic use and instead implementing a deposit-refund or token system for cups can already greatly reduce waste generated. This can be extended to general eco-friendly packaging of food bought and sold by the food stands at the festival ground (Martinho *et al.*, 2018). Providing meatless alternatives when serving food, also contributes to less carbon emission and fits into the idea of a more sustainable festival (Andersson, Jutbring and Lundberg, 2013). Recycling and composting is an effective way to reduce and properly dispose of waste generated. Here, the responsibility lies on the festivals to provide recycling stations and implement measures such as handing recycling bin bags to

attendees for proper disposal after the event. Raising awareness among attendees by hosting workshops and providing enough information on waste disposal further helps reduce waste generated. This supports the concept of value co-creation, which suggests that attendees share the feeling to contribute to a more sustainable event, by helping create such an environment through their own actions, such as recycling and composting (Werner, Griese and Faatz, 2019).

2.6 Energy Management

As for most festivals, a safe and reliable energy source is required to keep their stages and all other electricity consuming activities running, where the go-to generation of energy is done by generators. An average sized music festival can consume up to 30,000 Megawatts of electricity over two days, that being equal to the consumption of a small city. With most generators being able to power around 2,000 Kw, having a generator per stage is sufficient for most purposes. The cheapest and most accessible form of powering the generators is still by using fossil fuels, such as diesel (Festivalpro, 2023). With the rising concern about the environmental impact of music festivals, a shift to greener alternatives can be seen (Allen, 2020). A common alternative to the normal diesel powered generators is the use of biodiesel. This alternative is already adopted by many festivals and provides an overall greener source of energy. Whilst being more expensive in the supply and also possibly causing damage and therefore maintenance of biodiesel generators being more expensive, the use of those is often disliked (Festivalpro, 2023). An even greener alternative poses the use of hydrogen fuel generators. Unfortunately, there are very few applications of these, being a very niche product for such events and generally still quite costly (Smith, Bucke and Van Der Horst, 2023). Despite the downside of greater costs, the benefits of using hydrogen fuel cell generators show promising results for sustainable energy and zero environmental impact at music festivals (JP Cutler Media, 2023). Lastly, solar and wind energy sources are also more frequently seen and considered at music festivals, yet still very situational due to their limited applicability depending on the circumstances, as in physical or financial limitations. As attendees, there are some innovative technologies emerging where energy can be harvested through kinetic energy captured on dancefloors or motion-based bicycles (Forde, 2021).

3. Methodology

In this chapter, methodological decisions for this research study are discussed and described in detail. In the beginning, the research design on how to answer the research question is presented. Then, the target population and data collection are described to motivate the choice of selection. Lastly, the studies' limitations and ethical considerations will be discussed.

3.1 Research Design

This research study explores how sustainable practices at music festivals in Germany and The Netherlands relate to their attendees beliefs and behavior. A survey among festival-goers was conducted to test this by looking into the sustainable practices and their aspects established in the theoretical framework. Hence, the survey was categorized into five blocks; first five socio-demographic questions were posed, followed by five general questions about respondents' festival preferences and closed off by four sections tackling waste and consumption, transportation patterns, energy management and the individuals' environmental consciousness, each averaging 8 questions (see Appendix 1: Survey questions). The survey contained a variety of closed-questions, some with option for text input, 5-point likert-questions and open-ended questions at the end of each section for further discussion. All sections were based on academic findings discussed in the theoretical framework of the study.

3.2 Data Collection

The target population of the survey were attendees of music festivals in Germany and The Netherlands in 2022 and 2023. The two countries were chosen because of their proximity to each other and having economical similarities (*worlddata.info*, 2023). The sample of respondents for this study was gathered over a period of two months, from mid November to mid January. Next to speaking to friends directly about my survey, my main channel of distributing the survey was on social media. Overall, I posted about the survey with a link on my Instagram account three times, reaching an audience of around 500 people. Furthermore, I reached out to several Whatsapp groups related to musical events and where the link to my survey was shared as well. I sent out a last reminder on my Instagram page on the 10th of January before closing the survey to new participants. The survey was conducted through Qualtrics, a web page specialized in building adequate surveys, with direct access from my institution. As only inclusion criteria, participants needed to have visited a festival in Germany or The Netherlands in the past two years. In total, 72 people participated in the survey and 33 ended up finishing the survey in its entirety. For the later analysis of the results, SPSS was used to provide the descriptive statistics, helping to describe the data gathered in the results section.

Choosing music event-related Whatsapp groups and my own Instagram page for distribution, resulting in non-random and convenience sampling, can be seen as limitations to my survey. Even though convenience sampling was done, due to the inclusion criteria of people visiting a music festival, these groups needed to be focused in order to meet a desired outcome. Furthermore, questions about individuals' behavior and beliefs in the context of sustainability can lead to socially desirable bias and the respondents' answers have to be taken with a grain of salt. Yet, the integration of open questions gave room to further explain respondents intentions and beliefs more clearly.

4. Results

This section describes the results of the survey (See Appendix 2: Descriptive Statistics SPSS Output) conducted among festival-goers in Germany and The Netherlands in the past two years and gives insights into answering the three sub-questions of this research. First, the socio-demographic characteristics will be presented, followed by the environmental attitudes and behaviors. The latter is structured into four elements, each tackling one of the topics of the theoretical framework: Waste Management, Transportation, Energy Management and Environmental Consciousness.

4.1 Socio-Demographic characteristics

The survey involved 33 attendees, both male (n=17) and female (n=15) almost equally represented with additionally one person identifying as a third gender. Ages ranging from 18 to 34, with 25-year olds being the most stated (30.3%). Almost half of the respondents are students (48.5%), one third working full time (30.3%) and 9.1% part-time workers and unemployed respectively. Most respondents visited a festival only once per year (39.4%), but twice (24.2%) and more than 3 times per year (21.2%) were also represented frequently. Only 2 respondents have not visited a festival in the last two years. In terms of festivals visited, the respondents showed a great variety from small to big festivals in Germany and The Netherlands. Some festivals were mentioned more than once: big-scale festivals (>25.000 visitors) such as Fusion (n=3) and Awakenings (n=2); mid-scale festivals (5.000 - 25.000) such as DGTL (n=3) and Dekmantel (n=4); and small-scale festivals (<5.000) such as Paradigm (n=6). Important to mention is that some of the mid-and small-scale festivals are local to many of my respondents' current city of residence, Groningen. Nonetheless, festival-goers showed great diversity especially among small-scale festivals (See Appendix 2: Descriptive Statistics SPSS output, Table NAMEFEST).

4.2 Accommodation and Transportation

The majority of respondents indicated usually visiting festivals with a group of 4 people (36.4%), whilst 27.3% stated a groupsize of more than 5 people. Yet, three respondents (9.1%) went to festivals alone. More than half (51.5%) camp in tents at festivals, 27.3% made use of Airbnb's or other housing and one person indicated camping with a car/van. Most respondents who indicated "Others" (18.2%) only visited one-day festivals so a stay is not applicable.

In terms of transportation the vast majority of respondents favored public transport (69.7%) for traveling to and from festivals. Traveling by car amounted to 18.2% split into traveling with maximum two people (6.1%) and more than two people (12.1%). Interestingly, one festival-goer indicated traveling to festivals by bike most often. When asked for the preferred mode of transportation, public transport still emerged as the most favorable with 42.2% but closely followed by traveling by car in a group of more than two people (36.4%). Similar results were shown for traveling abroad to festivals, where car-usage is interchanged with

travels by plane. Yet, 18.2% indicated they were not traveling abroad for festivals in the past two years.

The questionnaire asked to rate the importance of five transport aspects: Price, time, dependency on friends, comfort and sustainability. A vast majority of respondents (75.8%) viewed the importance of price as 'important' or 'very important', only one respondent deemed it 'very unimportant'. For the aspect of time, more than half (57.6%) indicated its importance as 'important' or 'very important'. The dependency on friends showed its most indicated importance as 'neutral' with 42.4% and 'important' coming in second with 27.3%. In the matter of comfort opinions were spread out almost evenly with both 'important' and 'unimportant' rated by 33.3%, whilst 30.3% indicated comfort with 'neutral' importance. Transport sustainability was considered 'important' or 'very important' by 45.5%, yet almost one-third of respondents indicated 'unimportant' or 'very unimportant' (30.3%).

When asked what would encourage the respondents to use more sustainable transport, the vast majority indicated cheaper prices, greater availability, and similar traveling times as important factors. One respondent also stated that festivals should sell tickets where public transport to and from the festival is included, to make it easiest for attendees. Traveling in groups was mentioned by some respondents as well, as it is less "fun" to travel with public transport alone.

4.3 Waste and Consumption

In the survey food and beverage preferences were established. Almost half of respondents indicated that they predominantly consume food provided by the food stands at music festivals (45.5%), about the same percentage preferred bringing their own meals (42.4%). The remaining respondents indicated to not consume food at festivals. Concerning the people who bring their own food, a multiple-choice question on the type of packaging used for the food was posed. The answers were somewhat evenly distributed with plastic at 39.4%, own containers such as tupperware at 36.4%, cans at 27.3%, carton at 24.2% and only glass being rather low at 9.1%. The same question was asked for beverage packaging, where cans was chosen the most with 57.6%, followed by plastic with 39.4%, followed by carton and glass equally with 27.3%. Another 9.1% indicated that they use a reusable water bottle or stated a dependence on the type of drink they want. Overall, 24.2% of respondents said that they do not bring drinks to a festival.

A significant majority of respondents were willing to collect their own trash with 75.7% indicating 'somewhat likely' or 'extremely likely'. Only one respondent was 'extremely unlikely' to do so. The willingness to collect others' people trash was lower but still amounted to 39.4% of responses choosing 'somewhat likely' or 'extremely likely', yet almost the same amount was shown for 'somewhat unlikely' or ' extremely unlikely' with 36.4% of responses. A strong inclination towards recycling if the opportunity was given showed more than half of respondents being 'extremely likely' (54.5%) to do so and even another 30.3% being 'somewhat likely'. The remaining respondents indicated 'neutral' , which means no

respondent showed an unlikelyhood to recycle. Responses showed an almost even distribution on the importance of sustainable food in all three brackets ‘important’ and ‘very important’ with 36.4% combined, ‘neutral’ with 33.3% and ‘unimportant’ and ‘very unimportant’ with a combined 30.3%. The importance of water refill stations was undoubted among respondents with ‘important’ and ‘very important’ amounting to 94.0%. Both the importance of deposit token for cups and deposit for trash collection showed the same results in majority, being rated with 63.6% ‘important’ or ‘very important’. Tokens for cups were overall rated more important as the results show more responses for ‘neutral’ rather than ‘unimportant’. The availability of recycling station was deemed as ‘important’ or ‘very important’ by the majority of respondents (63.7%), almost all other respondents have a ‘neutral’ view on this matter. However, for composting stations the majority was indicating ‘neutral’ importance (48.5%). When incentivized, a strong majority indicated an agreement to collect their own trash (93.9%) and others trash (81.8%) ranging from ‘somewhat agree’ to ‘strongly agree’.

4.4 Energy Management

Concerning the energy use of music festivals, most respondents supported the idea of only using sustainable energy sources, such as biodiesel or solar-energy, with 39.4% ‘somewhat agreeing’ and 12.1% ‘strongly agreeing’. Still, a third of respondents positioned themselves ‘neutral’ (33.3%) to this topic and 15.2% would ‘somewhat disagree’. The willingness to actually pay more money for a festival ticket when sustainable energy is used was stated by almost half the respondents to be ‘somewhat agreeing’ (45.5%), yet the same amount indicated to be ‘neutral’ (18.2%) or even ‘somewhat disagreeing’ (27.3%). Nonetheless, when it comes to physical engagement by creating energy through motion-based practices, 60.6% of respondents would ‘somewhat agree’ or ‘strongly agree’ and 27.3% stand ‘neutral’ towards it.

4.5 Environmental Consciousness

This section in the survey aimed at analyzing respondents' environmental awareness. Many respondents indicated that the environmental impact of their choice of transportation affects their decision, with 48.5% ‘somewhat agreeing’ or ‘strongly agreeing’. Almost a third (30.3%) indicated to be ‘neutral’ and even one respondent would ‘strongly disagree’. Very similar results were shown when asking about the importance of sustainability regarding all the things festival-goers bring with them. Respondents here agreed slightly less with 39.4% ‘somewhat’ or ‘strongly agreeing’. The interest in sustainable energy and the relevance of each individual's support was agreed by the majority of respondents, with 51.5% ‘somewhat agreeing’ and 12.1% ‘strongly agreeing’. Again, almost one third (30.3%) indicated being ‘neutral’ and two people ‘somewhat’ and ‘strongly disagreeing’. Slightly more than half the respondents (51.5%) would ‘somewhat’ or ‘strongly agree’ to attend workshops at festivals to learn more about the individual impact on the environment. Still, almost a third of respondents (27.3%) would rather not attend. When asked about the influence the group

people attend a festival has on the individual's environmental awareness and behavior, answers were almost evenly distributed. A good third (36.3%) ‘somewhat’ or ‘strongly agree’ that there is an influence, 18.2% indicated being ‘neutral’ and 45.4% ‘somewhat’ or ‘strongly disagree’ with both being evenly spread.
Concluding the survey, I asked what environmental consciousness means to the individuals personally. There was a great trend towards “thinking about your own consumption choices” and “the impact behavior has on the environment”. A few respondents also mentioned that “making deliberate choices to reduce harm and preserve natural resources” is the key to “generational fairness”.

5. Findings and Discussion

This section aims at interpreting the results and tying them together with the literature covered in the theoretical framework. It will discuss commonalities and differences whilst also presenting new insights gathered through the analysis of the survey results.

According to literature, music festivals are significant contributors to environmental degradation. This is primarily due to waste generated through consumption and the activities taking place (Alonso-Vazquez & Ballico, 2021; Martinho et al., 2018). This is partly to be seen in the survey results, indicating that almost half of respondents consume food at food stands contributing to its waste generation. Yet, the vast majority of respondents also indicated that they collect their own trash and would even be more inclined to do so when incentivized. This behavior reflects the concept of co-value creation in sustainability, where attendees actively contribute to a sustainable environment (Werner, Griese & Faatz, 2019; Raja, 2017). The provision of meatless alternatives when serving food can help reduce carbon emission but is deemed of rather neutral importance by respondents. In areas such as composting or sustainable packaging improvement and increased awareness is still needed (Andersson, Jutbring and Lundberg, 2013).

The observed discrepancy between respondents sustainability awareness and transport choices highlights the environmental impact of transport at music festivals as shown by the research of Collins and Potoglou (2019). The importance of transport aspects such as price, time and convenience are considered important factors by the majority of respondents. These observations are mirrored in the literature’s findings by Chirieleison and Scrucca (2017) on practical alternatives overshadowing more sustainable transport choices. Yet, a noticeable amount of respondents use public transport which is supported by emphasis on the role of festivals to promote sustainable transport.

The literature highlights the high energy demand by music festivals and its growing shift towards greener, more sustainable alternatives (Festivalpro, 2023). As found by the results in the survey this shift is widely supported and encouraged by the respondents. However, the resulting increase in costs when using greener alternatives as stated by Smith, Bucke & Van Der Horst (2023), the respondents’ willingness to financially contribute shows limited support.

At last, the results show that nearly half of the respondents acknowledge the environmental impact of their choices and show interest in changing their actions towards more sustainable behavior. This goes in line with the study by Golob and Kronegger (2019), utilizing the model of environmental consciousness, which suggests that personal importance of environmental issues leads to increased information, acknowledgement of responsibilities and pro-environmental behavior. This model extends to the context of music festivals, treating festival-goers as consumers in a value co-creation process and therefore making them part of the responsibility chain (Raja, 2017). Yet, there is a significant neutral stance towards environmental consciousness, indicating a potential disconnect between awareness and behavior.

6. Conclusion

The current research aimed to identify the beliefs and behavior of music attendees in relation to sustainable practices at music festivals. All the material covered was based on academic findings and non-academic literature used to provide the necessary context information. Additionally a survey with 33 participants among festival-goers was conducted to explore attendees beliefs and behavior towards sustainable practices. The results showed a general awareness and consideration of the environmental impact attendees have and the willingness to take action, increasing the environmental awareness by supporting sustainable practices at music festivals, eventually leading to a lower ecological footprint.

However, in many aspects there was a rather neutral view on the individuals' environmental impact and importance of sustainable actions. This might have been caused by attendees not being informed enough about the issues causing environmental degradation or attendees valuing other aspects, such as convenience and price more. Certainly, there are also individuals who simply do not care about their environmental impact and have no interest in learning more about how to move towards greener festivals, yet this study did not identify such beliefs and behavior in the themes covered overall.

This research has shown that sustainable practices at music festivals do have an impact on their attendees behavior. If opportunities are given to pro-actively take part in greening festivals, most festival-goers are willing to show support by actively participating. Nonetheless, the study explored that attendees' beliefs are more shaped by the individual's interest in environmental issues beforehand than music festivals' engagement in sustainable practices. However, due to the small sample size of the survey it is difficult to draw definite conclusions about attendees attitudes towards pro-environmental behavior. Furthermore, this research lacks profound insights on how music festivals can engage attendees better in sustainable practices and consistently shape their beliefs about environmental issues at hand. Further research is needed to establish the role of music festivals in involving attendees in pro-environmental behavior to help achieve carbon-neutral music festivals.

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Figure 2

Golob, U. and Kronegger, L. (2019). Environmental consciousness model. *Journal of Cleaner Production*, 221, pp. 1–9. https://doi.org/10.1016/j.jclepro.2019.02.197.

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8. Appendix

Appendix 1: Survey Questions

Section 1: Demographics

"What is your gender?"_____
Male/ Female/ Third gender/ Prefer not to say

"What is your age?"_____

"In which city do you currently live?"_____

"What is your nationality?"_____

"What best describes your employment status in the last three months?"_____
Working full-time/ Working part-time/ Unemployed and looking for work/ A homemaker or stay-at-home parent/ Student/ Retired/ Other

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Section 2: General

"How often do you visit a music festival per year? (average)"_____
0/ 1/ 2/ 3/ More than 3

"Please name **all** the music festival(s) you attended in the Netherlands or Germany in the past 2 years"_____

"On average, how far did you travel to attend the festival(s) door to door? (in km)"_____

"With how many people do you attend a music festival on average including yourself? (groupsize)"_____
Alone/ 2 people/ 3 people/ 4 people/ 5 people/ More than 5 people

"What is your most common mode of staying at a festival?"_____
Camping in tents/ Camping in car or van/ Airbnb or other housing/ Others, please specify

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Section 3: Transportation

"Which mode of transportation did you use most often to travel to and from music festivals in the past two years?"_____
Public transport (train, bus)/ Shuttle organized by festival/ Car (max. 2 persons)/ Car (more than 2 persons)/ Others, please specify

"What is your **preferred** mode of transportation to travel to a festival?"_____
Public transport (train, bus)/ Shuttle organized by festival/ Car (max. 2 persons)/ Car (more than 2 persons)/ Others, please specify

"Which mode of transportation did you use most often to travel to and from music festivals **abroad** in the past two years?"_____
Public transport (train, bus)/ Shuttle organized by festival/ Car (max. 2 persons)/ Car (more than 2 persons)/ Plane/ Others, please specify

"What is your **preferred** mode of transportation to travel to a festival abroad?"_____
Public transport (train, bus)/ Shuttle organized by festival/ Car (max. 2 persons)/ Car (more than 2 persons)/ Plane/ Others, please specify/ I do not travel abroad for festivals

"How important are these factors in your choice of transport?"_____
Factors: Price, Time, Dependency on friends, Comfort, Sustainability
Very unimportant/ Unimportant/ Neutral/ Important/ Very important

"What would encourage you to switch to sustainable transport options like carpools, public transport, or shuttles? (you can use keywords in your answer)"_____

Section 4: Waste and Consumption

"What type of beverage packaging do you bring to festivals? (multiple answers possible)"___
Glass/ Plastic/ Cans/ Carton/ Other/ I do not bring beverages to festivals

"What kind of food do you consume predominantly?"_____
Food stands on the festival ground/ Food you brought yourself/ I do not consume food at festivals

"If you bring food to the festival, what type of food packaging do you bring? (multiple answers possible)"_____
Glass/ Plastic/ Cans/ Carton/ Other/ Own containers (Tupperware, etc.)/ I do not bring food to festivals

"How likely is it that you collect your trash for later disposal?"_____
Extremely unlikely/ Somewhat unlikely/ Neutral/ Somewhat likely/ Extremely likely

"How likely is it that you collect other people's trash?"_____
Extremely unlikely/ Somewhat unlikely/ Neutral/ Somewhat likely/ Extremely likely

"How likely is it that you recycle your trash if the possibility is given?"_____
Extremely unlikely/ Somewhat unlikely/ Neutral/ Somewhat likely/ Extremely likely

"How important are these factors when attending a festival?"_____

Factors: Sustainable food options at the festival (local/organic), Water refill stations, token for reusable cups, Money back for own trash collection (deposit/token), Recycling stations, Composting
Very unimportant/ Unimportant/ Neutral/ Important/ Very important

"I would collect **my own trash** if incentivized by the festivals (garbage deposit, fee incl. in ticket price for returning full garbage bag)"_____
Strongly disagree/ Somewhat disagree/ Neutral/ Somewhat agree/ Strongly agree

"I would collect **other people's** trash if incentivized by the festivals (e.g. for food or drink tokens)"_____
Strongly disagree/ Somewhat disagree/ Neutral/ Somewhat agree/ Strongly agree

"I care about festivals providing more sustainable food options"_____
Strongly disagree/ Somewhat disagree/ Neutral/ Somewhat agree/ Strongly agree

"I would pay more money for more sustainable food options if festivals are fully transparent about it"_____
Strongly disagree/ Somewhat disagree/ Neutral/ Somewhat agree/ Strongly agree

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Section 5: Energy Management

"Music festivals should only use sustainable energy sources such as biodiesel, solar or motion-based installments"_____
Strongly disagree/ Somewhat disagree/ Neutral/ Somewhat agree/ Strongly agree

"I would pay more money for the provision of such energy sources if festivals are fully transparent about it"_____
Strongly disagree/ Somewhat disagree/ Neutral/ Somewhat agree/ Strongly agree

"I would make use of bicycle-powered stages to help sustainable energy creation"_____
Strongly disagree/ Somewhat disagree/ Neutral/ Somewhat agree/ Strongly agree

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Section 6: Environmental Consciousness

"The environmental impact of my choice of transportation affects my decision"_____
Strongly disagree/ Somewhat disagree/ Neutral/ Somewhat agree/ Strongly agree

"The sustainability of the things I bring to a festival is a relevant factor for me when attending a festival"_____
Strongly disagree/ Somewhat disagree/ Neutral/ Somewhat agree/ Strongly agree

"Sustainable energy generation is of interest to me and active support from my side is relevant"_____

Strongly disagree/ Somewhat disagree/ Neutral/ Somewhat agree/ Strongly agree

"I would attend workshops on how to reduce my environmental impact on festivals if offered"_____
Strongly disagree/ Somewhat disagree/ Neutral/ Somewhat agree/ Strongly agree

"My environmental consciousness and behavior varies depending on the people I attend a festival with"_____
Strongly disagree/ Somewhat disagree/ Neutral/ Somewhat agree/ Strongly agree

"What does being environmentally conscious mean to you personally? (you can use keywords in your answer)"_____
_____

Appendix 2: Descriptive Statistics SPSS Output

GENDER

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	17	51,5	51,5	51,5
	Female	15	45,5	45,5	97,0
	Third gender	1	3,0	3,0	100,0
	Total	33	100,0	100,0	

AGE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18	1	3,0	3,0	3,0
	20	1	3,0	3,0	6,1
	21	3	9,1	9,1	15,2
	22	3	9,1	9,1	24,2
	23	4	12,1	12,1	36,4
	24	4	12,1	12,1	48,5
	25	10	30,3	30,3	78,8
	26	3	9,1	9,1	87,9
	27	2	6,1	6,1	93,9
	28	1	3,0	3,0	97,0
	34	1	3,0	3,0	100,0
	Total	33	100,0	100,0	

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CITY					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Ams	1	3,0	3,0	3,0
	Amsterdam	2	6,1	6,1	9,1
	Berlin	4	12,1	12,1	21,2
	Bonn, Germany	1	3,0	3,0	24,2
	Grand baie	1	3,0	3,0	27,3
	groningen	1	3,0	3,0	30,3
	Groningen	12	36,4	36,4	66,7
	Helsinki	1	3,0	3,0	69,7
	Netherlands	1	3,0	3,0	72,7
	New York	1	3,0	3,0	75,8
	Nicosia	1	3,0	3,0	78,8
	No residency	1	3,0	3,0	81,8
	Pforzheim	1	3,0	3,0	84,8
	rotterdam	1	3,0	3,0	87,9
	Rotterdam	1	3,0	3,0	90,9
	the netherlands	1	3,0	3,0	93,9
	The Netherlands	1	3,0	3,0	97,0
	Uppsala	1	3,0	3,0	100,0
	Total	33	100,0	100,0	

NATION					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Cyprus	1	3,0	3,0	3,0
	Finland	1	3,0	3,0	6,1

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	France	2	6,1	6,1	12,1
	Germany	16	48,5	48,5	60,6
	Hungary	1	3,0	3,0	63,6
	Indonesia	1	3,0	3,0	66,7
	Ireland	1	3,0	3,0	69,7
	Italy	1	3,0	3,0	72,7
	Netherlands	4	12,1	12,1	84,8
	Peru	1	3,0	3,0	87,9
	Poland	1	3,0	3,0	90,9
	Switzerland	1	3,0	3,0	93,9
	Turkey	1	3,0	3,0	97,0
	United States of America	1	3,0	3,0	100,0
	Total	33	100,0	100,0	

EMPLOY

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Working full-time	10	30,3	30,3	30,3
	Working part-time	3	9,1	9,1	39,4
	Unemployed and looking for work	3	9,1	9,1	48,5
	Student	16	48,5	48,5	97,0
	Other	1	3,0	3,0	100,0
	Total	33	100,0	100,0	

FREQ

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		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	2	6,1	6,1	6,1
	1	13	39,4	39,4	45,5
	2	8	24,2	24,2	69,7
	3	3	9,1	9,1	78,8
	More than 3	7	21,2	21,2	100,0
	Total	33	100,0	100,0	

NAMEFEST

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	1	3,0	3,0	3,0
	1)Indian spirit festival. 2)winter garden. 3)kopjek.. 4)Ramstein..	1	3,0	3,0	6,1
	Bucht der Träumer, Wannda Circus Open Air, other day festivals in Munich and Berlin	1	3,0	3,0	9,1
	Decibel,defqon,awakenings, tomorrowland	1	3,0	3,0	12,1
	Dekmantel (2022) Paradigm Festival Decibel Mysteryland Vroeger was alles beter Live For This! Verknipt Intercell Snowbass (2023) Rebirth Dance4Liberation	1	3,0	3,0	15,2

	Verknipt Festival Defqon 1 Verknipt AFAS Into the Woods Awakenings				
	Dekmantel, hybrid festival,	1	3,0	3,0	18,2
	dgtl, paradigm	1	3,0	3,0	21,2
	DGTL/Awakenings/Solstice Ruigoord/Motion/Liquicity/Psychedelic Rave/Draaimolen	1	3,0	3,0	24,2
	Down the Rabbit Hole, Nature One	1	3,0	3,0	27,3
	Draaimolen, Dekmantel, Into the woods	1	3,0	3,0	30,3
	Fusion & Feel Festival	1	3,0	3,0	33,3
	Fusion, Buschtanz, Pleinvrees	1	3,0	3,0	36,4
	GogBot, De reactie	1	3,0	3,0	39,4
	Kiek Beyond (Berlin) & Positivus (Riga, Latvia)	1	3,0	3,0	42,4
	Kingsland,	1	3,0	3,0	45,5
	Lentekabinet and pleinvrees	1	3,0	3,0	48,5
	lollapalooza berlin	1	3,0	3,0	51,5
	lollapalooza, splash, melt	1	3,0	3,0	54,5
	love land, fusion, campus festival, extrema noir, boiler	1	3,0	3,0	57,6

	room amsterdam, ADE, KIMIKO,				
	Melt Festival, Paradigm Festival	1	3,0	3,0	60,6
	N/a	1	3,0	3,0	63,6
	None	3	9,1	9,1	72,7
	Paradigm	2	6,1	6,1	78,8
	Pinkpop, kingsland, dance for liberty, bevrijdingsfestival, bata	1	3,0	3,0	81,8
	Rewire, Draaimolen, Le Guess Who, Dekmantel, Dekmantel Selectors	1	3,0	3,0	84,8
	Slow life (Berlin), Breakfast Club (Amsterdam), Paradigm (Gro), some others smaller ones idk	1	3,0	3,0	87,9
	Take root (gro), Rockit (gro), elbjazz (Hamburg), kingsland (Amsterdam)	1	3,0	3,0	90,9
	Tempelhof Festival, Open Ohr (Mainz), Rock am Ring	1	3,0	3,0	93,9
	Unterholz, Unifest Karlsruhe, Happiness Festival	1	3,0	3,0	97,0

	Voodoo Village, Naturklang Zürich, DGTL, Paradigm	1	3,0	3,0	100,0
	Total	33	100,0	100,0	

DIST

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	~60	1	3,0	3,0	3,0
	0	1	3,0	3,0	6,1
	100km	1	3,0	3,0	9,1
	100km i guess, like some are in Groningen but some further away like pinkpop	1	3,0	3,0	12,1
	120	1	3,0	3,0	15,2
	150	1	3,0	3,0	18,2
	1800	1	3,0	3,0	21,2
	20	1	3,0	3,0	24,2
	200	2	6,1	6,1	30,3
	200 km?	1	3,0	3,0	33,3
	2000	1	3,0	3,0	36,4
	20km	1	3,0	3,0	39,4
	210km	1	3,0	3,0	42,4
	250	1	3,0	3,0	45,5
	30	2	6,1	6,1	51,5
	300	1	3,0	3,0	54,5
	300km	1	3,0	3,0	57,6
	340-400	1	3,0	3,0	60,6

	4	1	3,0	3,0	63,6
	40	1	3,0	3,0	66,7
	5	1	3,0	3,0	69,7
	50-100	1	3,0	3,0	72,7
	500km	1	3,0	3,0	75,8
	5h	1	3,0	3,0	78,8
	60	1	3,0	3,0	81,8
	8-10h	1	3,0	3,0	84,8
	In germany/netherlands 0, in Finland aprox 900km	1	3,0	3,0	87,9
	Less than 5	1	3,0	3,0	90,9
	N/a	1	3,0	3,0	93,9
	Not applicable	1	3,0	3,0	97,0
	To the one in gro like 3 km, to the one in Hamburg in theory about 240km (but I've been staying at my parents at that time and from their place about 7km), the one in Amsterdam 190km	1	3,0	3,0	100,0
	Total	33	100,0	100,0	

GRPSIZE				
	Frequency	Percent	Valid Percent	Cumulative Percent

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Valid	Alone	3	9,1	9,1	9,1
	2 people	4	12,1	12,1	21,2
	3 people	3	9,1	9,1	30,3
	4 people	12	36,4	36,4	66,7
	5 people	2	6,1	6,1	72,7
	More than 5 people	9	27,3	27,3	100,0
	Total	33	100,0	100,0	

STAY

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Camping in tents	17	51,5	51,5	51,5
	Camping with car/van	1	3,0	3,0	54,5
	Airbnb/other housing	9	27,3	27,3	81,8
	Others, please specify	6	18,2	18,2	100,0
	Total	33	100,0	100,0	

TRANS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Public transport (train, bus)	23	69,7	69,7	69,7
	Shuttle organized by festival	1	3,0	3,0	72,7
	Car (max. 2 persons)	2	6,1	6,1	78,8
	Car (more than 2 persons)	4	12,1	12,1	90,9

	Other (please specify)	3	9,1	9,1	100,0
	Total	33	100,0	100,0	

TRANSPREF

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Public transport (train, bus)	14	42,4	42,4	42,4
	Shuttle organized by festival	3	9,1	9,1	51,5
	Car (max. 2 persons)	2	6,1	6,1	57,6
	Car (more than 2 persons)	12	36,4	36,4	93,9
	Others, please specify	2	6,1	6,1	100,0
	Total	33	100,0	100,0	

TRANSABR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Public transport (train, bus)	13	39,4	39,4	39,4
	Car (max. 2 persons)	2	6,1	6,1	45,5
	Car (more than 2 persons)	3	9,1	9,1	54,5
	Plane	8	24,2	24,2	78,8
	Other (please specify)	7	21,2	21,2	100,0
	Total	33	100,0	100,0	

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TRANSABRPREF					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Public transport (train, bus)	9	27,3	27,3	27,3
	Shuttle organized by festival	1	3,0	3,0	30,3
	Car (max. 2 persons)	1	3,0	3,0	33,3
	Car (more than 2 persons)	7	21,2	21,2	54,5
	Plane	5	15,2	15,2	69,7
	Others, please specify	4	12,1	12,1	81,8
	I do not travel abroad for festivals	6	18,2	18,2	100,0
	Total	33	100,0	100,0	

IMPPRICE					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very unimportant	1	3,0	3,0	3,0
	Neutral Importance	7	21,2	21,2	24,2
	Important	15	45,5	45,5	69,7
	Very important	10	30,3	30,3	100,0
	Total	33	100,0	100,0	

IMPTIME

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		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very unimportant	3	9,1	9,1	9,1
	Unimportant	5	15,2	15,2	24,2
	Neutral Importance	6	18,2	18,2	42,4
	Important	14	42,4	42,4	84,8
	Very important	5	15,2	15,2	100,0
	Total	33	100,0	100,0	

IMPDPNCY

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very unimportant	3	9,1	9,4	9,4
	Unimportant	3	9,1	9,4	18,8
	Neutral Importance	14	42,4	43,8	62,5
	Important	9	27,3	28,1	90,6
	Very important	3	9,1	9,4	100,0
	Total	32	97,0	100,0	
Missing	System	1	3,0		
Total		33	100,0		

IMPCOMF

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Unimportant	11	33,3	34,4	34,4
	Neutral Importance	10	30,3	31,3	65,6
	Important	11	33,3	34,4	100,0

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	Total	32	97,0	100,0	
Missing	System	1	3,0		
Total		33	100,0		

IMPSUS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very unimportant	2	6,1	6,1	6,1
	Unimportant	8	24,2	24,2	30,3
	Neutral Importance	8	24,2	24,2	54,5
	Important	13	39,4	39,4	93,9
	Very important	2	6,1	6,1	100,0
	Total	33	100,0	100,0	

BVGGLASS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Glass	9	27,3	100,0	100,0
Missing	System	24	72,7		
Total		33	100,0		

BVGPLASTIC

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Plastic	13	39,4	100,0	100,0
Missing	System	20	60,6		

Total		33	100,0		

BVGCANS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Cans	19	57,6	100,0	100,0
Missing	System	14	42,4		
Total		33	100,0		

BVGCARTON

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Carton	9	27,3	100,0	100,0
Missing	System	24	72,7		
Total		33	100,0		

BVGOTHR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Other	3	9,1	100,0	100,0
Missing	System	30	90,9		
Total		33	100,0		

BVGNONE

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		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I do not bring beverages to festivals	8	24,2	100,0	100,0
Missing	System	25	75,8		
Total		33	100,0		

FOODTYPE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Food stands on the festival ground	15	45,5	45,5	45,5
	Food you brought yourself	14	42,4	42,4	87,9
	I do not consume food at festivals	4	12,1	12,1	100,0
	Total	33	100,0	100,0	

FPKGGLASS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Glass	3	9,1	100,0	100,0
Missing	System	30	90,9		
Total		33	100,0		

FPKGPLASTIC

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		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Plastic	13	39,4	100,0	100,0
Missing	System	20	60,6		
Total		33	100,0		

FPGKCANS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Cans	9	27,3	100,0	100,0
Missing	System	24	72,7		
Total		33	100,0		

FPKGCARTON

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Carton	8	24,2	100,0	100,0
Missing	System	25	75,8		
Total		33	100,0		

FPKGOWN

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Own containers (Tupperware, etc)	12	36,4	100,0	100,0
Missing	System	21	63,6		

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Total		33	100,0		

FPKGNONE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	I do not bring food to the festival	11	33,3	100,0	100,0
Missing	System	22	66,7		
Total		33	100,0		

TRASHOWN

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Extremely unlikely	1	3,0	3,0	3,0
	Somewhat unlikely	4	12,1	12,1	15,2
	Neutral	3	9,1	9,1	24,2
	Somewhat likely	4	12,1	12,1	36,4
	Extremely likely	21	63,6	63,6	100,0
	Total	33	100,0	100,0	

TRASHOTHR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Extremely unlikely	3	9,1	9,1	9,1
	Somewhat unlikely	9	27,3	27,3	36,4
	Neutral	8	24,2	24,2	60,6

	Somewhat likely	10	30,3	30,3	90,9
	Extremely likely	3	9,1	9,1	100,0
	Total	33	100,0	100,0	

RECYCLE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat unlikely	4	12,1	12,1	12,1
	Neutral	1	3,0	3,0	15,2
	Somewhat likely	10	30,3	30,3	45,5
	Extremely likely	18	54,5	54,5	100,0
	Total	33	100,0	100,0	

IMPSUSFOOD

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very unimportant	2	6,1	6,1	6,1
	Unimportant	8	24,2	24,2	30,3
	Neutral Importance	11	33,3	33,3	63,6
	Important	10	30,3	30,3	93,9
	Very important	2	6,1	6,1	100,0
	Total	33	100,0	100,0	

IMPWTRREFILL

	Frequency	Percent	Valid Percent	Cumulative Percent

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Valid	Very unimportant	1	3,0	3,0	3,0
	Neutral Importance	1	3,0	3,0	6,1
	Important	6	18,2	18,2	24,2
	Very important	25	75,8	75,8	100,0
	Total	33	100,0	100,0	

IMPTOKECUPS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very unimportant	1	3,0	3,0	3,0
	Unimportant	1	3,0	3,0	6,1
	Neutral Importance	10	30,3	30,3	36,4
	Important	13	39,4	39,4	75,8
	Very important	8	24,2	24,2	100,0
	Total	33	100,0	100,0	

IMPTRASHDEP

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very unimportant	2	6,1	6,1	6,1
	Unimportant	2	6,1	6,1	12,1
	Neutral Importance	8	24,2	24,2	36,4
	Important	11	33,3	33,3	69,7
	Very important	10	30,3	30,3	100,0
	Total	33	100,0	100,0	

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IMPRCLSTAT					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very unimportant	1	3,0	3,0	3,0
	Unimportant	1	3,0	3,0	6,1
	Neutral Importance	9	27,3	27,3	33,3
	Important	12	36,4	36,4	69,7
	Very important	10	30,3	30,3	100,0
	Total	33	100,0	100,0	

IMPCOMPOST					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very unimportant	3	9,1	9,1	9,1
	Unimportant	6	18,2	18,2	27,3
	Neutral Importance	16	48,5	48,5	75,8
	Important	4	12,1	12,1	87,9
	Very important	4	12,1	12,1	100,0
	Total	33	100,0	100,0	

INCTRASHOWN					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat disagreee	1	3,0	3,0	3,0
	Neutral	1	3,0	3,0	6,1
	Somewhat agree	7	21,2	21,2	27,3

	Strongly agree	24	72,7	72,7	100,0
	Total	33	100,0	100,0	

INCTRASHOTHR

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	1	3,0	3,0	3,0
	Somewhat disagree	2	6,1	6,1	9,1
	Neutral	3	9,1	9,1	18,2
	Somewhat agree	7	21,2	21,2	39,4
	Strongly agree	20	60,6	60,6	100,0
	Total	33	100,0	100,0	

SUSFOODOPT

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat disagree	1	3,0	3,0	3,0
	Neutral	6	18,2	18,2	21,2
	Somewhat agree	17	51,5	51,5	72,7
	Strongly agree	9	27,3	27,3	100,0
	Total	33	100,0	100,0	

SUSFOODPAY

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat disagree	7	21,2	21,2	21,2

	Neutral	12	36,4	36,4	57,6
	Somewhat agree	7	21,2	21,2	78,8
	Strongly agree	7	21,2	21,2	100,0
	Total	33	100,0	100,0	

ENRGYSUS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat disagree	5	15,2	15,2	15,2
	Neutral	11	33,3	33,3	48,5
	Somewhat agree	13	39,4	39,4	87,9
	Strongly agree	4	12,1	12,1	100,0
	Total	33	100,0	100,0	

ENRGYPAY

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Somewhat disagree	9	27,3	27,3	27,3
	Neutral	6	18,2	18,2	45,5
	Somewhat agree	15	45,5	45,5	90,9
	Strongly agree	3	9,1	9,1	100,0
	Total	33	100,0	100,0	

ENRGYSUP

		Frequency	Percent	Valid Percent	Cumulative Percent

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Valid	Strongly disagree	2	6,1	6,1	6,1
	Somewhat disagree	2	6,1	6,1	12,1
	Neutral	9	27,3	27,3	39,4
	Somewhat agree	14	42,4	42,4	81,8
	Strongly agree	6	18,2	18,2	100,0
	Total	33	100,0	100,0	

ECTRANS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	1	3,0	3,0	3,0
	Somewhat disagree	6	18,2	18,2	21,2
	Neutral	10	30,3	30,3	51,5
	Somewhat agree	13	39,4	39,4	90,9
	Strongly agree	3	9,1	9,1	100,0
	Total	33	100,0	100,0	

ECTHINGS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	2	6,1	6,1	6,1
	Somewhat disagree	7	21,2	21,2	27,3
	Neutral	11	33,3	33,3	60,6
	Somewhat agree	8	24,2	24,2	84,8
	Strongly agree	5	15,2	15,2	100,0
	Total	33	100,0	100,0	

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ECENGRY					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	1	3,0	3,0	3,0
	Somewhat disagree	1	3,0	3,0	6,1
	Neutral	10	30,3	30,3	36,4
	Somewhat agree	17	51,5	51,5	87,9
	Strongly agree	4	12,1	12,1	100,0
	Total	33	100,0	100,0	

ECWORKSHOP					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	2	6,1	6,1	6,1
	Somewhat disagree	7	21,2	21,2	27,3
	Neutral	7	21,2	21,2	48,5
	Somewhat agree	11	33,3	33,3	81,8
	Strongly agree	6	18,2	18,2	100,0
	Total	33	100,0	100,0	

ECGROUP					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly disagree	7	21,2	21,2	21,2
	Somewhat disagree	8	24,2	24,2	45,5
	Neutral	6	18,2	18,2	63,6
	Somewhat agree	11	33,3	33,3	97,0

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	Strongly agree	1	3,0	3,0	100,0
	Total	33	100,0	100,0	