

# Unveiling the Secrets of Popular Music Festivals

Exploring the Key Aspects of Differential  
Popularity in Music Events

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**ABSTRACT**

*Music festivals have been growing in popularity and attracting more and more attendees over the past couple of years. A change in revenue structure for musicians and a developing experience economy are driving this over growth of the music event market. With this increasingly competitive market, it is becoming more and more important to know how to attract your audience and guarantee popularity of your festival as organizers. This study will provide an insight into what the key factors are contributing to the differential popularity of Dutch music festivals, specifically examining the impact of festival content, format and social aspects. To come to a meaningful conclusion a survey has been compiled for the top ten biggest music festivals in the Netherlands. These events have been scored by attendees of the 2022 edition based on several variables based on the festival's content, format and social aspect. The results of this questionnaire have been used in a statistical analysis together with the variable for popularity which has been combined by using statistics for level of sold-out tickets, online interaction and event capacity. Ultimately, the statistical analysis resulted in a significant positive effect for the variables ticket price, atmosphere and escapism and in a significant negative effect for location. For the other variables included no significant effects were found. From these results can be concluded that providing in the overall festival experience seems to be key in attracting and mostly retaining customers. The creation of a safe and fun atmosphere in which people express themselves freely and escape from daily life is the most important aspect in providing this experience. However, this study comes with significant statistical limitations which limits the generalizability and reliability of the results. Therefore further research is needed to confirm this finding and to answer the follow-up question on how to create such an atmosphere.*

KEYWORDS: *Popularity, Music Festival, Content, Format, Social*

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## Chapter 1: Introduction

Music festivals have changed a lot over the years. Where at the beginning these events solely functioned as cultural meetings for people enjoying the same taste in music, they are now turned into commercially viable products for the masses (Gajanan, 2019). Going to music festivals is almost the norm for the younger generations, and the festivals are much more than only music nowadays. Festivals have become more and more complete entertainment and social experience, with additional services such as eating, sleeping and all sorts of entertainment. With the change in popularity, it has become increasingly important for festival organizers to know what aspects are important to guarantee an audience. This thesis will try to provide in this matter by answering the following research question: "What are the key factors that contribute to the differential popularity of music festivals, specifically examining the impact of festival content, format and social aspects." To do this it is first important to look at the various factors that drove this shift in both popularity, commercial viability and the design of festivals.

One important trend that is noticed by researchers over the last years is the change in consumer preferences from owning material assets to buying experiences. 78% of the main audience for music festivals, millennials, would rather pay for an experience than for material goods (Poll & Eventbrite, n.d.). In the meantime, festivals have evolved to foresee this demand. The events have evolved into complete cultural experiences with multiple days of programmed music performances, sleeping arrangements, dozens of food trucks (or sometimes even restaurants), cinemas, art installations and nightclubs. This shift in consumer behavior and adjustment in festival design are of course linked together and are a major factor in the increasing popularity of music festivals in general. This craving for experiences is reflected in increasingly fast selling out of all the tickets for the most popular festivals (RTL Nieuws, 2023).

Furthermore, the revenue model for musicians has significantly changed since the beginning of this century. When the music festivals as we know them first started, musicians were mostly dependent on the sales of record music, live performances served as promotion to boost the album sales. However, with the introduction of digital music, this drastically changed. With the leading position of streaming platforms in the music industry opportunities for music artists have been reduced to make a significant earning from selling records (Yonata, 2022). With the emergence of these streaming platforms live performance became more important for artists to generate revenue and in this way, the division between recorded and live music got reversed (Statista, 2022a). This change in revenue model is fueling the growth in live performance from the supply side. These live performances are of course partly done by concerts of the respective artists, but more and more music festivals are also benefiting from this change in revenue structure. The European music festival market has become so big that the biggest of American superstars can plan entire tours in the summer based solely on these events.

On the organizing side things have also changed over the years. The increase in popularity is surging more and more competitors in the market (Dinesh & Roshan, 2022). The amount of Dutch music festivals almost doubled over the course of a couple of years from only 774 in 2013 to 1115 in 2019 (EM-Cultuur, 2019). Additionally, expenses are rising as well. Partly due to the change in revenue for artists, which results in higher costs for booking artists. But most cost rises have a relation to the COVID pandemic. During this extremely tough time for the industry, lots of the smaller companies involved in organizing the festivals unfortunately went bankrupt or people who worked in the industry were forced to switch (Skirkowski, 2022). This now results in scarcity in the market for material rental, festival workers and technicians, while on the other hand, the demand for festivals has only increased over this two-year span of social event drought. Basic economic thinking in this situation would suggest that ticket prices will increase in this situation. And that is indeed the case, prices for

this upcoming summer have already been announced and research by the site festivalfans shows that prices of tickets increased by 14% (Timmermans, 2023).

With these rising prices and fierce competition, it is increasingly important for organizers to know how to successfully organize one of these events. What aspect of festivals is highly valued by attendees and which business decisions are important in guaranteeing customers? Prior research in this field is mostly concerned with the motivation for attending music festivals rather than looking at what aspects make certain festivals popular. Some earlier conducted studies look at what influences the success of music festivals, but success in the cultural sector is quite a subjective term, which depends on a lot of circumstances (Hiller, 2015; Leenders et al, 2005). Knowing what factors are important in organizing a successful festival is both important for consumers as well as suppliers in this regard. An overall better understanding of how to satisfy your target audience as an organizer will not only directly lead to more consumers, but also to more returning customers. If some festivals use this knowledge to gain more attendees, other festivals are inclined to follow this trend. As a result, an overall increase in perceived festival quality will be the result, which benefits the consumers as well. Ultimately this thesis will provide insight into what the key factors are contributing to the differential popularity of music festivals, specifically examining the impact of festival content, format and social aspects.

These content, format and social aspects of festivals will be further explained and analyzed in the second chapter, the literature review. In this chapter, the theoretical foundation for this thesis will be built, based on prior research in the field of music festivals. Subsequently, the design of this study will be introduced and explained in the third chapter. This methodology chapter is included to make you, the reader, familiar with the research methods chosen and used. Decisions made in terms of methodology will be explained to ensure transparency. The fourth chapter on the results will highlight the statistical outcome of this study. Decisions made and all the tests performed will once again be explained, to ensure transparency. All statistical testing has been done via SPSS and the most crucial test performed is the multiple regression analysis. The fifth and final chapter will be one of concluding remarks and discussion. In this chapter, the limitations of these studies will be highlighted to prevent any misconceptions about the reliability of this research. Additionally, recommendations for further research will be made based on the limits and results of this study. To conclude the results of this thesis will be analyzed and further discussed. The answer to the question of what the key factors are contributing to the differential popularity of music festivals will be provided and theoretical and organizational implications will follow from this answer.

## Chapter 2: Literature Review

### 2.1 Popularity of festivals

This study aims to explain the difference in level of popularity of the biggest Dutch music festivals. To effectively do this the term of popularity has to be described in the context of music festivals. Unfortunately, research on the popularity of festivals is very limited, but there are some studies that focus on related concepts. The most notable variable used in these studies is success. While there are still few articles that explain the success of certain festivals, there are some. The research by Hiller (2015) which focused on the commercial success of the festivals was not focused on the motivation of the attendees like many other studies, but more on the quality of the festival. The study focused on four big American music festivals and defined success by the profitability of the festivals. Defining overall success of festivals purely on the economic gains can be highly problematic. Although profit can definitely be seen as a parameter of economic success, it does not cover the widespread interpretations of success in the cultural sector. Not every festival has a focus on being highly profitable, some festivals might value the social role of festivals over their own monetary

gains. Additionally, the focus audience and genre can highly influence the potential to be profitable.

Another way to describe the success of festivals is based on the number of attendees the festival attracts per year. Research by Leenders et al (2005) uses this definition of success and additionally adds the perspective of time, by using the growth in the attendee numbers over several years. Although this does seem like a better alternative to the earlier discussed profitability ratio it still does not fully cover the term success. Once again since festivals might differ in what they value when organizing the event. The term success seems to be problematic in the context of music festivals, mainly because the term can be interpreted in so many different ways in the cultural sector. Additionally, the studies mentioned fail to elaborate on what success completely means in their research and rather stick with only describing the variable of success.

In contrast, popularity seems to be more suitable for research on music festivals. Theory for this concept is derived from sociological research not only because research on this concept which directly relates to music festivals is not available, but also because it gives a clear definition of the term. Popularity is a social construct that relies on the collective perception and consensus of a group's feelings toward an individual or object (Scott & Judge, 2009). When assessing popularity, individuals gauge the extent to which a particular person or thing is widely liked or admired. It is a reflection of the level of attention and recognition something receives based on the number of advocates or claims that it is highly regarded. The concept of popularity emphasizes the importance of group dynamics and the influence of public opinion. The more people express their support or claim that something or someone is highly liked, the greater the attention it garners, resulting in increased perceived popularity. Judging from this sociological perspective the earlier mentioned parameter of the number of attendees rather explains the popularity of the event instead of its success. The definition allows for a more arbitrary measurement since it reflects in the collective attention and recognition which can be converted into numbers more easily. When applying this to music festivals this can lead to popularity based on attendee numbers, growth of the festival, overall media coverage or online interactions.

## 2.2 Festival content

Now that the popularity has been defined by prior research it is important to look at the music festivals themselves. What are important characteristics of festivals and what are the decisions that can make or break these events? Most of the studies in this field are of motivational nature, which means that they analyze the reason for attendance of (certain) festivals. However, these studies fail to connect this motivation to the potential difference in popularity or success of these festivals. From these studies three important sub-groups can be derived that are important to the festival organization and the festival attendees.

The first sub-group that has relevance in the context of festival organization is the content one. Content refers to the core activities of music festival organizations, which in base is the programming of music and other entertainment. The quality of programming has an overall positive effect on customer satisfaction which will be converted into behavioral intentions (Yan et al., 2012). These behavioral intentions can be described as loyalty towards the event or organization and will therefore lead to re-visitors in the coming years. Furthermore, the article by Yan et al (2012) highlights the importance of good programming not only for further editions of the event, but also for the current one. The article shows that programming will positively affect multiple other departments of the festival organization, like planning, logistics and marketing.

Several academic papers have shown that live music is one of the motivations for attending music festivals (Perron-Brault et al., 2020; Brown & Sharpley, 2019; Slager, 2021; Pegg &

Patterson, 2010; Ballantyne et al., 2014; Vinnicombe & Sou, 2017). However, this does not mean that every visitor wants to listen to the same musician. Some prefer to see superstars while others tend to prefer to discover new artists during music festivals (Perron-Brault et al., 2020). Festival line-ups usually cover a wide range of artists ranging in means of popularity to provide different festival experiences, based on your own preferences. One theoretical concept that is particularly interesting for the content sub-group is one which focuses on this distinction between superstars and the new, lesser-known, artists. The superstar effect is the phenomenon where a small portion of the leading figures in the market has the biggest part of the revenue distribution (Adler, 1985; Rosen, 1981). This leaves the market with a skewed income distribution between the superstars and the rest of the market. This phenomenon is particularly dominant in the cultural industries including the music industry. From a theoretical perspective the popularity of these artists will generate success for the festivals in terms of the number of attendees and attention. Previous research did show a significant relation between star performers and the motivation to attend the festival, but also showed a relationship for artist discovery (Perron-Brault et al., 2020). These results indicate that both superstars, as well as lesser-known artists, are important in programming an attractive line-up for the festival. However, the question remains if a line-up that has been classified as good by the target audience, would automatically lead to more popularity for the music festival hosting this program.

Festivals are not only differentiated in terms of music programming, but also in terms of programming of other entertainment. The importance of providing more than only music seems to be growing in the Netherlands (Van Der Linden, 2015). Entertainment like theater, poetry, movies, art, public speaking and games are being programmed at festivals regularly, but also food and drink options, sanitary facilities and sleeping arrangements are an addition to the overall 'festival' experience. Audience awards for the best Dutch festivals by festileaks, which is a Dutch website focused on all the news surrounding (dutch) music festivals, even includes one category for side-programming (Boeijenga, 2022). Additionally, academic research shows the importance of this other entertainment during music festivals. Both generic and specific entertainment features have proven positive effects on the satisfaction of the attendee and make them more likely to revisit the event (Baker & Crompton 2000). Several studies show that the impact of this side program is positive towards the festival quality and experience of the event's attendees (Baker and Crompton, 2000; Brown & Sharpley, 2019; Chen et al., 2012; Cole & Illum, 2006; Yoon et al., 2010). The growing attention and the positive signs in prior research emphasize the importance of these programming decisions for festival organizations. All these factors indicate that attendees attach more and more value to quality side programming.

### 2.3 Format decisions

In addition to programming decisions, festival managers need to take multiple other organizational decisions that have an impact on the potential target audiences and their festival experiences. These decisions are usually described in prior research as decisions about the format of the festival. Where content decisions are concerned about the entertainment programmed, format decisions are concerned with the question on how to display this entertainment.

One of these important decisions is the one about the location of the festival. Choosing the right location is important in attracting the right crowd (Leenders et al., 2014). Additionally, the accessibility of the location matters to the potential festival attendees. However, the importance of location seems to be something that is more important for smaller festivals than it is for large music festivals. The article by Leenders et al (2014) indicates that there is a positive relationship between the size of festivals and the willingness to travel. The bigger the festival, the further the audience is willing to travel to the event. This might also indicate that smaller festivals which are located in more remote places suffer from this choice



resulting in lower popularity. However, a side note has to be made in regard to the smaller festivals. These events only need to attract a smaller crowd and it could therefore be the case that the local population could be enough for the festival to sell the majority of the tickets.

Another aspect of the location to take into consideration is the fact that creative clusters tend to form in the music industry or the creative industries in general. The fact that the Netherlands does have multiple of these clusters and that different genres tend to be dominant in different clusters might affect the success of the festival (Brandellero & Pfeffer, 2015). A good example of this is the recent move of the Netherlands' biggest hip-hop festival, Rolling Loud (formerly known as Woo Hah!) moved from festival ground Beekse Bergen in Hilvarenbeek to Ahoy in Rotterdam. Camiel le Rutte who is a project manager at MOJO (the organizing party behind the festival) explained in an interview with 3voor12 the reasoning behind this move. He states that the "*Randstad*" is way better suited for a hip-hop festival, since the target audience is clustered in this urban area. The intent is that more people feel attracted to the festival and more people are able to travel to the location of the event (Pisart, 2022). It still has to be seen if this reasoning is sound since at the time of writing this research the event has not been held yet and therefore no data on attendance can be gathered. But the decision has been criticized by the current fan base on the social-media page of the festival (Rolling Loud Rotterdam, 2022). Potential the festival organizers factored in this negative effect on their current fan base, but predict a larger stream of new fans from the urban area which in turn will outweigh this lost audience. What can be concluded from this example is that location is an important variable for event organizations and consumers and that these two parties sometimes have conflicting ideas and interests concerning this festival's characteristics. Therefore, it can be expected that the location does play a role in the popularity and attendance numbers of a festival.

A concept that is strongly related to the festival location is the atmosphere of a festival. This concept is hard to define since it has to do with the feeling that certain festivals can give attendees, resulting in a subjective character. Generally, a festival atmosphere can be created by an overarching festival theme, supported by esthetics, stage placement and technological aspects (Slager, 2021). The article by Slager (2021) not only included this concept, but also found that it is a big motivation for people to attend certain techno festivals. Additionally, 55% of people that visited at least one music festival per year stated that that atmosphere was one of the key reasons for attending (Leenders et al, 2014). As mentioned, the atmosphere of the festival does relate to the location where it is held, but this does not mean it is the same. More than once a location of a festival is used for multiple festivals over the span of a festival season and this does not mean that all these festivals have the same atmosphere. Take for example the festival grounds of Beekse Bergen in Hilvarenbeek. This terrain hosts in one summer four different festivals, Best Kept Secret, Woo Hah!, Awakenings and Decibel (Podiuminfo, n.d.). All of which have different focus genres and will therefore create another atmosphere on the same location. It is probable to assume that the organizers of these festivals used the earlier mentioned decisions in esthetics, stage placement and technology to create different atmospheres during these festivals. The earlier mentioned example of Rolling Loud Rotterdam does also apply to atmosphere, since a lot of fans have criticism that the new location will not bring the same 'vibe' to the festival. From these examples and prior research can be concluded that this festival atmosphere is important to potential attendees and different decisions in terms of esthetics, stage placement and technology can create different atmospheres on the same festival ground.

Important in the decision making of consumers will always be the price of the product. Up until current knowledge there are no significant effects found in motivational studies on ticket price, but the economic decisions making can still be seen as important. One of the factors for the growth of festivals in general is the increasing disposable income of the population over the years (Frey, 1994). This emphasizes that people do take the money factor into

consideration when it comes to music festivals. Therefore, the ticket prices of the live music performance events might have an impact on the success. Most definitely if you take into account that the ticket prices of live music performance have been rising up until the COVID-19 pandemic and that these prices are expected to rise even further as a result of the loss of income in this period. (Statista, 2022b). Festival prices for 2023 have already been announced for the major summer festivals and research by the site festivalfans shows that prices of tickets increased by 14% (Timmermans, 2023). Rises like this will limit the disposable income of the consumers and result in more competition in the festival event market. Consumers are less likely to attend multiple expensive festivals with these rising prices. Therefore, cheaper festivals might benefit from this overall price rise and this can result in more popularity for the event.

#### 2.4 Social character of music festivals

One aspect of the festival that can not be underestimated is the social one. The events do not only qualify as a way to see musicians perform their music discographies, but also as a social gathering of like-minded people. During these social events, you can party with your friends, meet new people and make memories in ways you can not do at regular nights or days out. Researches focused on the motivation of attendees at music festivals seem to agree with the relevance of the social aspects. Several studies found significant effects of social variables on the motivation to attend the festival (Ballantyne et al., 2014; Davina, 2021; Gelder & Robinson, 2009; Mulder & Hitters, 2021; Perron-Brault et al., 2020; Slager, 2021). Additionally, the social aspect of the festival does not only benefit the attendees during the festival, but also after the event has ended. Research shows that the social facet of these events brings psychological and social well-being for attendees under 29 years old, which lasts longer than the duration of the festival. Which only emphasizes the importance of the social aspect of the festivals.

An important theoretical concept that lays the foundation for this social aspect of festivals is the theory of social capital. This concept has been broadly discussed in many different academic papers and therefore there are many different definitions of the term. However, the definition of the theory that will be used in this research is that shared values or resources will lead to mutual benefit (Putnam 2000, Wilks 2011). In turn, the mutual benefits will in theory lead to the bridging of social capital. Important social capital theorist, Robert Putnam (2000) suggests that the arts can be of great value to bring diverse groups of people together through this shared value. He claims that arts events can be used to break social barriers and new connections can be made based on this shared value, which in this case is music. More recent research which explicitly focuses on social capital for music festivals by Wilks (2011) shows that festivals are indeed bases for reinforcing existing connections. But, this study did not find any significant effect for bridging social capital. In this case the festivals did not seem to be breeding grounds for new social relations as Putnam suggested. This conflict on the importance of socialization can also be seen in other articles that do not directly talk about social capital, but take a broader approach to the social aspect. Most of these studies tend to agree that art events like music festivals are great places to break social barriers and diversify your network. Research by Perron-Brault et al (2020), Mulder & Hitters (2021) and Gelder & Robinson (2009) all characterized socialization as one of the main reasons for festival-goers to attend the event. While research by Vinnicombe & Sou (2017) notes the social aspect is less important for festival attendance and seems to agree with Wilks (2011) in this regard. Overall, the important socialization aspect of festivals has been discussed in many different articles and the fact that this does play a role for the attendees cannot be denied. A question that stays unanswered in these studies is if festivals that provide better opportunities for this social interaction are therefore more popular.

The book "Music Festival in the UK" by Chris Anderton (2018) describes festivals as events where so-called '*meta-sociality*' can take place. This phenomenon is described by the author

as: “an overarching and loosely-shared sense of togetherness that is related to the festival’s event image, but may not be characterized as either neo-tribal or bund-like in form.” The key concept in this definition seems to be togetherness, which in itself can be described as the feeling of wanting to spend time together with friends, family or other like-minded people. This strongly relates to the earlier explained concept of social capital. Spending time with your close friends and relatives can be seen as a valuable asset and research shows that this does influence the reason for attending festivals. A literature study by Abreu-Novais and Arcodia (2013), focused on motivation for attending events, and concluded that family togetherness was the second most present variable among the existing literature reviewed. Research by Perron-Brault et al (2020) included the family togetherness variable in a study of six Canadian music festivals. Results of the study showed that this variable was one of the significant relationships to the motivation to attend one of the six music festivals. Additionally, research on two festivals organized in the United Kingdom also found that togetherness with family and friends was one of the two main motivations for people to attend these events (Gelder & Robinson, 2009). Overall, it can be concluded that togetherness is an important motive for people to attend music festivals.

A combination of this social character and the festival's entertainment value leads to the opportunity for people to forget their daily struggles and ascend in the festival. This phenomenon can be described as escapism. In general, festivals are regarded as good events to provide for this need of escaping. The earlier cited literature study by Abrea-Novais and Corcodia (2013) also names escapism as one of the predominant factors in reasons for attending cultural events. Additionally, the research by Perron-Brault et al (2020) which focused on only music festivals found escapism to be one of the three social motivations for people to attend the music events. However, these studies do not make the connection to potential growth in popularity for festivals when providing better in this need of escaping daily life. Expected can be that festivals that offer more complete 'experiences' might be rated as more enjoyable and this would therefore lead to more returning customers and popularity for the event.

## Chapter 3: Methodology

### 3.1 Studied festivals

For this study, a list of the top ten biggest music festivals in the Netherlands has been compiled based on the festival capacity. This is the maximum number of festival visitors that can be on the festival terrain at one and the same day. The decision to only include the top ten festivals has been made out of both practicalities as well as to make a more comprehensive comparison within the result section. The practical reason behind this decision is the fact that the smaller the festival the harder it will be to find reliable data sources. Additionally, these festivals essentially compete for the same big crowds. As discussed in the literature review the increase in annually held music festivals can be explained by the increase in disposable income (Frey, 1994). Since this income is still limited, therefore it could be that most people will have to choose one or two festivals they would like to attend out of these big festivals.

For this top ten only festivals with paying consumers are allowed, as a result, festivals like *'bevrijdingsfestival'* and *'parkpop'* are excluded since they are free to enter. Since these festivals are free they do not possess the economically limiting factor in the decision making of the potential customers, like the other big festivals. Most people's main motivation to go to these types of festivals would presumably be the fact that they are a free activity rather than for example the content, format or social aspect. Therefore inclusion of these festivals will most likely lead to interference of the reliability of the results of this study. Only festivals that

program three-days of paid entertainment or more are included in this data set. Therefore festivals like 'decibel outdoor' and 'sensation' are excluded. Exclusion of these types of festivals has been done to keep the results comparable and reliable. An important factor in this study which has been discussed in the literature review is the festival experience, this concept will be quite different during one or two-day festivals. This will result in different management and organizational decisions, which in turn makes comparing the effectiveness of different strategies hard. '*Oeral Festival*' has also been excluded from the dataset. Even though it has ten days of programmed paid entertainment, this special festival has a more broad focus on arts and culture in general. While there is some music programming, this is deemed to be too little to be compared to big multi-day music festivals. Side programming and main programming are hard to distinguish from one and other in this regard, which will limit the reliability of most of the format and context variables.

### 3.2 Research and sampling method

The data collection for the earlier explained subgroups has been done with a primary method. For this section, a survey has been made and spread under the attendees of the festivals present in this study. Preferably the data collection would have happened during the festivals that will be studied, but unfortunately during the time of writing this thesis the festival season has only just begun and the big festivals which have been included in this study have still to take place. This approach would have been more suitable as it effectively eliminates the likelihood of spurious responses and enhances the significance of the qualitative findings through meticulous observation. However, during the timeframe of this thesis the annual '*bevrijdingsdag*' festivals were held all over the Netherlands. During the Rotterdam edition attendees were asked to fill out the questionnaire relating to this study. Unfortunately, this method of collecting data is not as ideal as collection at the respective festivals itself, it still enables the researcher to reach potential respondents. After all, these are people that visit festivals and are therefore likely to have visited one of the festivals studied. A note has to be made that this method of the sample might lead to potential selection bias by the researcher, during the sampling people were approached as randomly as possible to limit this bias. Additionally, the survey has been spread via festival forums and festival social media channels, this can be described as the best alternative way to reach potential attendees and to ensure random sampling. Since this study focuses on ten different festivals with different groups of attendees and organizers the survey method has been deemed to be most effective. With a survey it is easier to reach a higher volume of responses compared to structured interviews or other qualitative methods. Structured interviews could reveal hidden layers of motivations for people to prioritize one festival over the other whereas surveys can not. Although, this is a limitation of using a survey, the fact that this research needs a higher volume of responses to come to a generalizable conclusion outweighs this con. Additionally, prior literature on the motivation of festival attendance used the method of structured interviews and did not find any underlying reason for attending that has not been included in this study's variables. The complete questionnaire can be found in Appendix A.

### 3.3 Popularity of the festival

The most ideal way to compare the popularity of music festivals would be the exact amount of attendees per festival in the given year. After inquiries with multiple festival related organizations it was deemed to be impossible to get the exact number of festival attendees per festival. The main reason for this is that festival organizers do not disclose these numbers. Unfortunately this will be a limiting factor in accurately assessing the popularity of certain festivals.

#### 3.3.1 Sold out score

Instead of the number of attendees this study will use a combination of a sold-out score, online interaction score and a score based on the festival capacity. The sold-out score has

been based on the percentage of sold-out tickets for the festival. Since the exact amount of tickets sold is not available, the only two options here are sold-out or not sold-out. The data for all the weekend and individual day tickets have been gathered through secondary data collection with the help of multiple festival websites. If festivals sold out their weekend tickets they have been awarded 0.5 points, while selling out day tickets will result in 0.5 divided by the amount of paid festival days. Therefore a maximum score will be 1. A total of six festivals sold-out the entire festival and therefore received the maximum score.

### 3.3.2 Online interaction

To complement the sold-out score the amount of online interaction with the respective festival will be taken into account. Interaction can take place in two different ways (Dessart et al., 2015; Dessart et al., 2016). Firstly, in terms of interaction with the brand itself. To measure this category of interaction two metrics have been used, the first of which is the google trends data. This data provides insights into people's behavior with the search engine of Google. With google trends, multiple search terms can be compared based on the popularity of the term in a given time period. To compare the terms google trends uses scores ranging from zero to a hundred. For this study, all festival names were added in google trends and the overall score for the year 2022 was compared. Lowlands noted a score of eight which is marked as highest among these festivals. The lowest score in this sample of festivals is two which is recorded by both Mysteryland as well as North Sea Jazz. The second metric used to account for the interaction with the brand is the engagement ratio of the Instagram accounts for the respective festivals. Instagram engagement rate is a statistic used by online influencers and marketers to see what percentage of your following is interacting with the content you are posting (Worb, 2022). The engagement rate is usually calculated as follows:  $(\text{likes} + \text{comments}) / \text{followers} * 100$ . Online there are multiple free calculators, but unfortunately, all these calculators only measure the engagement over the last eight to twenty posts. Using only recent posts might influence the reliability and comparability of this statistic since festivals have different event dates, which makes their cycle of posting content different from each other. Festivals that are closer to their hosting date can expect more engagement from their audience than festivals that are held at the end of their. To account for this effect the engagement rate for Instagram has been manually calculated based on the statistics of the entire year of 2022. Since not all festival Instagram accounts posted the same amount of content in the timespan of a year the formula for the engagement rate had to be adjusted. This resulted in the following formula:  $((\text{likes} + \text{comments}) / \text{amount of posts}) / \text{followers} * 100$ . The highest outcome recorded for this analysis is an engagement rate of 5.44 for Woo Hah! x Rolling Loud, which is quite high when compared to the global music industry average of 1.63 (Tan et al., 2022). Two notes have to be made here, however. Firstly, smaller Instagram accounts tend to score higher on engagement rate since the dividing factor of followers is simply lower. When gaining higher amounts of followers it almost always results in lower engagement. Secondly, Woo Hah has been collaborating with the international festival organization of Rolling Loud, which organizes hip-hop festivals all over the world (*Rolling Loud*, n.d.). The Rolling Loud brand can be described as the biggest global player in organizing hip-hop festivals. The collaboration with this international brand resulted in some shared posts on Instagram and a joint name of the festival Woo Hah! x Rolling Loud. This shared use of media channels might have increased the engagement of the Woo Hah Instagram pages, definitely if you take into account the relatively small size (74600 followers) compared to the attention of 1.7 million people following the Rolling Loud Instagram account. Overall all festivals scored quite high compared to the industry average, most likely because of the earlier explained effect of their smaller sizes. The lowest score however was recorded by North Sea Jazz with an engagement rate of .95.

The second category of interaction can be labeled as interaction within the community (Dessart et al., 2015; Dessart et al., 2016). The earlier explained Instagram engagement rate

can not only be used for interaction with the brand itself, but also for interaction within the community. The comment section of Instagram posts is a place where people can tag their friends and discuss the announced line-up for example. Additionally, discussion forums will be used to measure this interaction within the community. On the website *festileaks.com* festival fans discuss rumors, announcements and tips for the given festival. For the included festivals the main forum page for that festival was used and data on views and reactions were collected. To create comparable results within the online interaction score the individual scores were divided by the highest score in their respective fields. As a result, a scale from 0 to 1 was formed based on the number of views or reactions. Both of these scores have been combined into one forum score with equal weight for both views and reaction scores. Unfortunately, three festivals had no forum page for the 2022 edition of the festivals which resulted in a score of 0. The site of *festileaks* seems to have more community members of the pop-oriented festivals which resulted in higher scores for these festivals. Unfortunately, there are no other Dutch forum sites that categorize yearly editions, views and reactions in this way to balance this bias. Finally, all the scores per category have been turned into comparable statistics by dividing the individual score by the highest score in their category, which results in a scale from 0 to 1. To compute the score for overall online interaction both the google trends score, Instagram engagement score and forum score have been combined using equal weights. A visual representation of all the statistics used to compute the online interaction score can be found in Table 1.

Festival	Views score	Reaction score	Forum score	Google Trends	GT Score	Instagram Engagement	IE Score	Online Interaction Score
Pinkpop	1.000	1.000	1.000	7	.875	2.269	.417	.764
Lowlands	.526	.444	.485	8	1.000	1.844	.339	.608
Woo Hah! X Rolling Loud	.004	.002	.003	3	.375	5.440	1.000	.459
Concert at Sea	.000	.000	.000	4	.500	3.254	.598	.366
Down The Rabbit Hole	.191	.111	.151	3	.375	2.022	.372	.299
Paaspop	.022	.018	.020	3	.375	2.476	.455	.283
Zwarte Cross	.017	.006	.011	4	.500	1.419	.261	.257
Defqon.1	.000	.000	.000	3	.375	1.669	.307	.227
Mysteryland	.000	.000	.000	2	.250	1.163	.214	.155
North Sea Jazz	.064	.003	.034	2	.250	.951	.175	.153

Table 1: Visualization of the creation of the online interaction score

### 3.3.3 Event capacity

The event capacity has been explained earlier, but also has been reworked to a score matching the other values in this variable. Once again the highest score has been used as a divider of the individual numbers to create a scale from 0 to 1. In this case, the highest score of 1 is recorded for the festival with the biggest capacity which is North Sea Jazz. The lowest-scoring festival in this category is Concert at Seas with a score of .571. In table X the results for the three sub-groups of the online interaction score have been combined.

### 3.3.4 Computing the popularity variable

The ranking of the festivals based on polarity has been done by prioritizing the sold-out score with a weight of 60%, then the online interaction score with a weight of 30% and then the festival capacity with a weight of 10%. The sold-out scores indicate the level of economic commitment to the event and are the most direct sign of popularity available. For this reason,

the sold-out score has been granted the highest weight in the process of computing the popularity variable. The online interaction score does indicate some popularity, but online interaction can be both positive and negative and is therefore less reliable for judging the popularity of the festival. However, the amount of interaction does still imply interest in the festival and is therefore valuable to the overall popularity score. Ultimately the weight of 30% has been granted based on the fact that it is deemed to be less important than selling tickets, but also to ensure a somewhat logical and fair ordering of the festivals. Increasing the weight would result in some festivals that were only partly sold-out ranked would rank higher than events that were completely sold out. In some cases, this would even lead to non-sold-out festivals ranking as second best in popularity. As discussed before, selling tickets has been marked as most important and should be leading when it comes to ranking the festival based on popularity. However, with a weight of 30%, it is still possible for non-sold-out events to improve in ranking if they show a significantly higher level of online interaction in comparison with their peers. The event capacity alone is not useful to judge the festival's popularity because some festivals might just be limited due to the festival location or government regulations, but in combination with the sell-out score, it does show an extra dimension. When festivals score the same on both sell-out as well as social interaction the festival capacity will provide another layer of depth. A festival that sells out an event of 60000 can be described as more popular than an event that sells 40000 tickets. Below in Table 2 a visualization of this ranking has been made, with all the scores relevant included.

<b>Festival</b>	<b>Event Capacity</b>	<b>Capacity Score</b>	<b>Sold Out Score</b>	<b>Online Interaction Score</b>	<b>Popularity Variable</b>
Lowlands	55000	.786	1,000	.608	.861
Zwarte Cross	65000	.929	1,000	.257	.770
Concert at Sea	40000	.571	1,000	.366	.767
Down the Rabbit Hole	42500	.607	1,000	.299	.750
North Sea Jazz	70000	1.000	1,000	.153	.746
Mysteryland	60000	.857	1,000	.155	.732
Pinkpop	68000	.971	.667	.764	.726
Paaspop	50000	.714	.917	.283	.706
Defqon 1	55000	.786	.750	.227	.597
WOO HAH! x Rolling Loud	42500	.607	.167	.459	.299

*Table 2: Ranking of the ten festivals included based on the created popularity variable*

### 3.4 Independent variables

#### 3.4.1 Line-up

The variable based on the line-ups of the festivals has been established using the qualitative data from the survey. The survey comprises multiple queries that concentrate on appraising the festival's lineup based on a seven-point Likert scale. The questions have been based on the theory discussed in the previous chapter. This independent variable has been based on three survey questions. First of which asks the respondents to rate the headliners programmed at the festival. Secondly, the aspect of artist discovery has been covered by a question that rates the opportunity to discover new artists at the respective festival. Finally, the enjoyability of the schedule per festival has been inquired. This has been done by asking the respondents how enjoyable the scheduling of the line-up was based on flow, pacing and potential clashes. Deriving from prior literature and rational thinking can be that a better rated line-up would lead to more popularity for the respective festival. Therefore the hypothesis for this variable is as follows.

- **H1:** *The line-up of the studied festival will positively influence the overall popularity of the event*

#### 3.4.2 Side programming

The variable pertaining to the side programming of festivals was operationalized using primary data derived from the survey. Within the questionnaire, four items were utilized to assess the festival's ancillary programming based on a seven-point Likert scale. One question was used to assess the non-music entertainment of the festival. While another was used to rate the food and beverage options at the respective festival. Additionally, the last two questions were used to look at two complementary services, which are sanitary options and sleeping arrangements. As explained in the previous chapter, side programming is becoming increasingly important for festivals to attract and retain customers. Only offering music programming during these big events is almost out of the question in today's market. Therefore the following relationship between this independent and the dependent popularity variable can be tested.

- **H2:** *The side-programming of the studied festival will positively influence the overall popularity of the event*

#### 3.4.3 Location

To determine the variable of location the primary data gathered by the survey has been used. Three questions which used a seven-point Likert scale focused on determining the fact if the location was according to the attendees' demands. The first inquiry was on the overall accessibility of the festival location. The second question asked respondents to rate the overall scenery and environment of the festival grounds. And the final inquiry was made to assess the fit of the location with the values and culture of the audience. As discussed in the literature section of this thesis the judgment of what is a 'good' location for a festival can differ quite a bit depending on which group you ask this question. However, expected can be that locations that are ranked as pleasant by the attendance will lead to more popularity for the festivals. Derived from this assumption can be the following hypothesis.

- **H3:** *The location of the studied festival will positively influence the overall popularity of the event*

#### 3.4.4 Atmosphere

The concept of atmosphere is one that is hard to gauge, but prior research showed that it was an important motivator for people to attend festivals. Factors of lighting, decoration, aesthetics and stage placement show connection with the concept of atmosphere. Based on these findings four questions related to these aspects of festivals have been included in the questionnaire which used a seven-point Likert scale. The first question was about festival aesthetics elements like lighting, stage design and art installations. Secondly, the respondents were asked how comfortable they felt in the festival's environment. Thirdly, the over vibe and energy were scored by the respondents. And lastly, stage placement was taken into account to assess flow (ease of moving around the festival terrain) of the festival. As mentioned prior research highlighted the importance of these aspects as a reason for attending festivals. Therefore the following relationship will be tested in this study.

- **H4:** *The atmosphere of the studied festival will positively influence the overall popularity of the event*



#### 3.4.5 Ticket price

The variable for ticket price is the only independent variable that has been derived from secondary data collection. Including this variable in the survey would not have made any sense, since ticket prices are just objective values that can be attracted from the internet. To do this the festival sites of festileaks, partyflockers and festivalfans have been used (.; Festileaks, n.d.; Festival Fans, n.d.; *Partyflock*, n.d.). From these sites, the weekend ticket price of the 2022 edition for each of the ten festivals has been derived. With the earlier mentioned limited disposable income of festival audiences it is to be expected that a higher price will lead to less popularity of the event. Therefore the following hypothesis has been formalized for this variable.

- **H5:** *The ticket price of the studied festival will negatively influence the overall popularity of the event*

#### 3.4.6 Social togetherness

The variable that most notably will account for the important social character of music festivals is the social togetherness one. This variable once again has been compiled from the results from the questionnaire data which used a seven-point Likert scale. In this survey, five items measuring opportunities for social interaction and the feeling of togetherness were included. A question on if the respondents felt included and welcome has been added to the questionnaire. As well as an inquiry on how comfortable the respondents were in interaction with strangers in comparison to their everyday life. Additionally, the questionnaire included questions focussing on feeling connected with other attendees as well as one which zoomed in on the potential strengthening already existing bonds with friends and relatives. Finally, the respondents were asked if they agreed or disagreed with the following statement: "This festival provides a sense of community and togetherness". Much prior research has highlighted the importance of the social aspects during music festivals, following this line of thought the following hypothesis has been formulated.

- **H6:** *The level of social togetherness of the studied festival will positively influence the overall popularity of the event*

#### 3.4.7 Escapism

The final variable included in this study is the escapism variable. This concept focuses on the desire to escape daily life. Festivals seem to be good opportunities to cater to this need. Once again the survey data which has been based on a seven-point Likert scale has been used to compute this variable. The three questions included in the survey that concern this variable tried to unveil the possibilities of the festival to 'escape'. One inquiry directly focuses on the concept by asking the respondents if attending the respective festival allowed them to escape their daily lives. Another question was used to see if the respondents would disconnect from technology and social media which has become almost vital in our everyday lives. And finally, respondents were asked if the festival gave them the opportunity to fully express themselves during the festival. Because festivals seem to be perfect opportunities to satisfy this need to forget about day-to-day life, the relationship that will be tested for this variable and the dependent variable will be as follows.

- **H7:** *The level of escapism of the studied festival will positively influence the overall popularity of the event*

## Chapter 4: Results

### 4.1 Descriptive statistics

Overall the survey resulted in 187 individual respondents which together account for 301 individual festival attendances. Descriptive statistics which can be seen in Table 3, show that most respondents visited Lowlands (N=100), Pinkpop (N=57) and Down the Rabbit Hole (N=46). Additionally, the descriptive table on festival attendance shows that four festivals have gathered insufficient observations to result in generalizable results. Defqon.1 (N=8), Mysteryland (N=2), Zwarte Cross (N=6) and Concert at Sea (N=6) are therefore removed from the data set and are not further analyzed. The low response rate for these festivals might indicate attendees of these festivals are not as well represented on the forum sites used to distribute the survey. Additionally, they were also not reached during the collection of respondents during the “bevrijdingsfestival”. A potential reason for this could be that these festivals have different target audiences that do not use these forums or visit these festivals

Festivals	N	Percent
Defqon.1	8	2.7%
Lowlands	100	33.2%
Paaspop	21	7.0%
Down the Rabbit Hole	46	15.3%
Mysteryland	2	0.7%
Zwarte Cross	6	2.0%
Pinkpop	57	18.9%
WOO HAH! x Rolling Loud	23	7.6%
North Sea Jazz	32	10.6%
Concert at Sea	6	2.0%
<b>Total</b>	<b>301</b>	<b>100%</b>

Table 3: Descriptive table based on the following survey question: Which of the following music festivals did you attend last year (2022)?

The descriptive cross table for age in relation to gender which is shown in Table 4, shows that males are overrepresented in this sample with 130 responses being male in comparison to 47 responses being female. The overall population for music festivals shows that 59% percent of attendees are male, in this sample, 69% of the respondents have indicated that they are male (Grate, 2022). This overrepresentation will affect the generalizability of the results of this study.

Age/Gender	Male	Female	Other	Prefer not to say	Total
18-20	6	1	0	0	7
21-29	62	21	0	4	87
30-39	34	11	3	3	51
40-49	15	8	0	0	23
50-59	11	5	0	0	16
60 or older	2	1	0	0	3
<b>Total</b>	<b>130</b>	<b>47</b>	<b>3</b>	<b>7</b>	<b>187</b>

Table 4: Descriptive cross table between the deviation in age and gender between the respondents

As previously described the survey allowed for multiple observations per response. This resulted in 301 observations by 187 individual people. To make the dataset workable and adjusted to the variables popularity and ticket price the set has been split based on all 301 observations rather than the 187 respondents. Unfortunately, the data set was proven to be unworkable in the original condition since the variables would not match the dimension of the

dataset. The observations with the festivals that have been included in the analysis have been matched with the corresponding ticket price and value for popularity.

#### 4.2 Excluding and removing data

As mentioned four entire festivals have been deleted due to low observations, which rendered their results useful for the continuation of this study due to the lack of generalizability. Additionally, the dataset has been checked for missing data. Two cases have been removed due to much missing data. The most likely reason for this missing data is that two respondents recorded for multiple festivals in the question which specifies which festival they attended last year, but only continued to fill in one of these festivals selected for the entire survey.

Subsequently, the individual items have been tested on internal reliability before establishing the eventual variables. To do this Cronbach's Alpha for all the variables has been computed with all the items included as intended. As a rule of thumb, a Cronbach's Alpha above .7 will indicate that these variables are internally reliable (Bryman, 2012). If the test for the respective items results in a score lower than .7 then the internal reliability is relatively low and the validity of the concept is no longer guaranteed. While testing for the Cronbach's Alpha the 'if-deleted' function will be used to see if one of the items included in the variable is lowering the outcome.

For the line-up variable, the initial score with all the items included is .551. When the item concerning the enjoyability of the headliners is removed the variable scores .677. Unfortunately, this score is just below the threshold of 0.7. The fact that deletion of the item for headliners leads to a significant increase in the Cronbach's Alpha indicates that this question was not appropriate for measuring the line-up. A possible explanation for this could be found in the sample of the study festivals. All of these festivals are reasonably big and therefore program big international artists. For these big artists, the festival organizers are dependent on the touring plans of the artists and only a handful will decide to do a festival tour in Europe each year. Considering this differentiation in this category could possibly be difficult. Therefore the concept of line-up seems to be more concerned with the discoverability of new talent and the scheduling of the different artists throughout the duration of the festival. Ultimately, the score is still too low to guarantee the validity of the concept with the deletion of the headliners item. Instead of asking the respondents to rate only the headliners a broader question rating the total line-up would have improved the internal reliability of this concept to the desired amount. The Alpha for side programming with all the queries included resulted in .442, when the items for sanitary and sleeping options were excluded the score showed improvement to .590. However, this is still below the desired score. The result shows that complementary services like sanitary options and sleeping arrangements should be in their own category and not grouped with side programming. Additionally, the inquiries on the side-programming could have been more complete by not grouping all the side-programming activities as one non-music entertainment group, but rather assessing each form of entertainment separately. Unfortunately, these results indicate low internal reliability and the validity of the concept is not warranted.

For location, the score when all the items are included resulted in .470. A small improvement was made when excluding the query inquiring about the accessibility of the location, the resulting score is .472. A possible explanation can be found in the list of festivals included in this study. All these events can be ranked as big multi-day festivals. In the Netherlands, there are limited places that can host large numbers of people at the same time and guarantee their safety. These spots are most of all chosen based on these aspects of safety and the potential of having a large number of people present. Factors like accessibility and the beauty of the environment are definitely part of the concept, but to completely cover it safety and capacity are likely more important. For atmosphere, the score with all the items included

resulted in .729, which is above the desired score. The score could have been improved to .751 by removing the item about stage placement and flow, but the decision was made to keep the item since the internal reliability has already been established.

The variable explaining the concept of escapism records a Cronbach's Alpha of .682 with all the items included. This score has been improved to .762 by excluding the question focusing on escaping from social media during the events. This indicates that disconnecting from technology and social media is not part of the concept of escapism. Rather escapism focuses on the feeling of wanting to escape daily life and the possibility to truly express yourself during the event. For social togetherness, all the items have been included since this resulted in an Alpha of .828 which could not be improved in any way. This indicates that the internal reliability is established by the items included and the concept's validity is high.

Finally, the dataset has been controlled for outliers. This has been done using the boxplot method. All the boxplots for the combined variables have been generated (which can be found in Appendix B1). and all outliers have been identified. All these extreme results have been removed from the dataset to create more accurate results.

### 4.3 Multiple regression assumptions

The model will be further investigated using a multiple regression analysis. However, to make sure the results from these analyses are reliable some assumptions related to the regression will be tested.

Firstly the linearity assumption has to be checked. The sample size of the study is greater than twenty cases per independent variable in this model which is the first rule of thumb for linearity. In addition to this base rule a probability plot has been generated to evaluate the linearity of the model, this plot can be found in Appendix B2. The probability plot does show a relatively linear line which implies that the relation between the dependent and independent variables is linear.

Multicollinearity occurs when two or more independent variables in a regression model are highly correlated with each other. It can lead to inflated standard errors, unstable and unreliable regression coefficients, and difficulties in interpreting the individual effects of the variables. To assess multicollinearity, one commonly used measure is the Variance Inflation Factor (VIF). As a rule of thumb, a VIF-value of five or higher can be seen as problematic for the model. As shown by Table 5 the highest score in this regard is 3.135 for the variable atmosphere. This implies that there is no multicollinearity in this model and that the assumption is passed.

Variable	Tolerance	VIF
Line up	.575	1.739
Side programming	.579	1.727
Location	.796	1.257
Atmosphere	.319	3.135
Ticket price	.770	1.298
Social togetherness	.485	2.104
Escapism	.475	2.104

Table 5: Collinearity statistics

Finally, the data has been tested for the assumption of homoscedasticity. Testing the data for homoscedasticity will confirm the assumption that the residuals at all of the predictors have the same variance (Field, 2013). To do this a scatterplot has been generated as can be seen

in Appendix B3. Unfortunately, this plot has more signs of heteroscedasticity than homoscedasticity. To confirm this suspicion a Breusch-pagan test with the residuals of the regression has been conducted. To this, the unstandardized residuals of the original regression had to be squared. These squared residuals functioned as a new dependent variable in the regression, the independent variables remained the same, however. The ANOVA resulted from the regressions analyzed, when the significance of the ANOVA is below .05 in this test the data are heteroscedastic. In this case, the score was  $< .001$  as can be seen in Appendix B4 and therefore heteroscedasticity can be assumed. This is most likely caused by the different dimensions of the data as mentioned earlier. The variable for popularity is stable for every observation with the same festival, while other variables are differing between every individual observation, this most likely resulted in heteroscedasticity.

#### 4.4 Multiple regression results

Firstly the adjusted R Square has been analyzed. The test resulted in a score of .461 as can be seen in Appendix B5, which indicates that the model explains 46.1 percent of the dependent variable. This result is relatively normal, but also indicates that there is much more left to discover when it comes to explaining the popularity of music festivals. Below all the relations for the individual independent variables will be discussed based on the regression results that can be seen in Table 6.

##### 4.4.1 Line-up

Earlier conducted research showed that one of the reasons for attending was the love for music. Based on this the assumption was made that the line-up would also positively influence the popularity of the festival. Unfortunately, the regression analysis showed no significant result for line-up on the dependent variable popularity, with a P-value of .538. Unfortunately, this means no significant evidence was found to support the expected positive relationship between the programmed line-up and the popularity of the festival. The insignificant result might be caused by the earlier mentioned lower than ideal score for the Cronbach's Alpha. This low score indicates that the questions used to measure this concept were not sufficient to completely capture all the aspects of programming a festival line-up.

##### 4.4.2 Side programming

With the growing importance of providing a complete experience during the festival a positive effect of the side program was expected prior to this research. The regression analysis recorded a P-value of .469, which is above the desired value of .05. This means that no significant evidence was found to support the hypothesis formulated for the effect of this independent variable on the dependent variable of popularity. Since there is no significant effect found in the regression no further conclusion on the nature of the relationship between side programming and popularity can be made. Again, the low score for Cronbach's Alpha indicates that this concept is not fully measured and this might have affected the results, which ultimately led to an insignificant relation in the model.

##### 4.4.3 Location

Prior research on the concept of festival location showed that accessibility and connection to the audience were important in attracting and retaining an audience. However, the papers referred to in the literature review already indicated that this was more important for smaller festivals. Still, this study expected that a positive rating of accessibility, environment and fitting of the festival grounds would lead to more popularity. The opposite seems to be true, however, since the regression analysis of this dataset showed a small negative effect of location on the popularity of music festivals. With a p-value of  $< .001$  and a standardized beta of  $-.208$ , the relation can be described as significantly negative. This means that the hypothesis has been rejected. The earlier mentioned lower reliability of the measurement of this concept is once again important to consider in this result. This concept recorded the

lowest value for the Cronbach's Alpha and therefore a measurement with queries that measure the concept in a more complete manner could result in a different outcome. A possible explanation for this relationship could be found in the trade-off in the location and size of the festival. Growing in size as a festival limits the potential locations for the festival in which the safety of the attendees can be guaranteed. These locations might not have the best environment or fit with the values of the visitors, but they are the best based on capacity limits and safety issues. Missing this angle on location has been a limiting factor in correctly measuring the concept as shown by the low internal reliability.

#### 4.4.4 Atmosphere

Another concept with a significant effect recorded in the regression analysis is the variable for atmosphere. With a p-value of  $<.001$  the variable has a significant effect on the popularity of music festivals. The standardized beta of .535 indicates that this relationship is positive. The atmosphere of music festivals is something which is hard to gauge, but prior research claimed that it has been an important motivation for people to attend music festivals. These results support these claims and the earlier stated hypothesis on this relationship is supported by these findings. This shows that creating a good 'vibe' during the event can increase the popularity of the festival and will attract and retain customers.

#### 4.4.5 Ticket price

For the relationship between the price of the weekend tickets and the popularity of the festival, a negative effect was expected, based on economic reasoning. However, the regression resulted in a positive effect for ticket price on the popularity of festivals with a standardized coefficient beta of .301. The effect can be marked as significant with a p-value of  $<.001$ . Based on these results the earlier stated hypothesis for this variable has to be rejected. A possible explanation for this effect can be found in the connection between the ticket price and the potential budget of the festival. It could very well be that higher prices indicate more budgetary room for festival organizers to spend on important aspects of the festival. Unfortunately, the budget of festivals was not taken into account in this study so the correlation between these two concepts can not be measured at this stage.

#### 4.4.6 Social togetherness

As mentioned before, the social role of festivals can not be understated. The music events are important opportunities to connect with friends, connect with like-minded people and strengthen bonds with your relatives. In this line of thought it could be expected that festivals that provide better in this need for social interaction would be ranked as more popular. Unfortunately, the regression results show no significant relationship between this independent variable and the dependent popularity variable. Noting a p-value of .859 is way too high to meet the threshold of .05. Unfortunately, this means that there is no evidence to support the earlier stated hypothesis and no further conclusion about the relation between social togetherness and the popularity of music festivals can be drawn.

#### 4.4.7 Escapism

The relationship between the concept of escapism and the popularity could be described as positive based on the statistical analysis. The variable noted a standardized beta of .252 with a p-value of  $<.001$ , this can be described as a significant positive effect. The earlier cited research did indeed emphasize that escapism was one of the social reasons for people to attend festivals. In line with this prior work, the hypothesis was therefore that escapism would have a positive effect on the popularity of music festivals. These results show significant proof to support this hypothesis. The outcome suggests that providing people with complete experiences in which they can forget about day-to-day life is important in guaranteeing customers for your event.

Variable	Un- standardized Beta	Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
(Constant)	-.111	.086		- 1.286	.200
Line up	-.006	.010	-.038	-.617	.538
Side programming	-.005	.007	-.044	-.724	.469
Location	-.029	.007	-.208	- 3.977	<.001
Atmosphere	.091	.014	.535	6.480	<.001
Ticket price	.002	.000	.301	5.673	<.001
Social togetherness	.002	.010	.012	0.178	.859
Escapism	.033	.009	.252	3.723	<.001

Table 6: Multiple regression coefficients

## Chapter 5: Conclusion and discussion

### 5.1 Festival programming decisions

Unfortunately, this thesis failed to find any significant effect for the content sub-group on the popularity of music festivals. As mentioned previously this has most likely been a result of the lower validity of both the line-up as well as the side-programming variable. Since no significant effect has been found in this study, no final conclusion can be drawn on the effect of content on the popularity of music festivals. However, this does not mean that these concepts are not related at all. Prior research hints at the importance of these concepts in regard to motivation for attending and customer satisfaction. Therefore further research which completely and correctly measures these concepts is needed to find the true relationship between content variables and music festivals' perceived popularity.

### 5.2 Decisions on festival format

For the second subgroup of variables, significant effects were found as explained during the results chapter. One of the most obvious format decisions might be the price of the festival. This study found a significant effect of price on the popularity of music festivals. The positive effect resulting from the regression analysis indicates that a higher price results in more popularity in this case. A possible explanation can be found in the suspected connection between price and budget. Festivals that ask higher prices might do so based on the expenses they are expected to make organizing the event. This higher budget can in turn lead to higher overall quality of the festival which results in higher popularity. However, an important note has to be made in arguing for this explanation. This study only included six festivals in the final results, which are all quite big events. If a larger sample would have been included in the results, the earlier stated argument of lower prices leads to more attendees could still be true. However, future research would have to provide an answer in this regard.

Another important content decision is the one of location. As discussed during the results chapter a significant effect was found on the popularity, but not the one that was assumed. From the results can be concluded that the better the location the less popular the festival will be. As mentioned this result was not expected, potential explanations could be found in the limitations of this study. The Cronbach's Alpha was not above the desired score of 0.7 for all the variables, this was partially true for the variable of location. Within this low validity, a possible explanation for this relationship can be found. As earlier stated the trade-off

between size and location could be important in this case. A larger number of attendees limits the available places to safely host the festival. These bigger festival grounds might not be the most aesthetically pleasing or the ones that fit the best with the desired growth, but they are the most optimal location for hosting these big crowds. To truly discover the relation between the chosen location and the popularity of the festival more research is needed with a better definition of the concept

The concept of atmosphere, which as described is quite related to the festival's location, also showed a significant relationship to the dependent variable. In previous motivational studies, the atmosphere of festivals was commonly described as one of the reasons for people to attend certain festivals. This concept ties into the complete experience and the experience economy that festivals provide. This study supports the prior research in this field and found that a good atmosphere can improve the popularity of music festivals. This indicates that it is important for organizers to think about how to foster this atmosphere. The aesthetics of festivals and stage placement seemed important in creating an atmosphere for the festivals, as they have been included in the questionnaire for this study. Additionally, the two most popular festivals out of the six included are both only selling weekend tickets and no day tickets. This could imply that only having all-weekenders could lead to improvement in atmosphere. However, the concept of atmosphere is still hard to completely gauge and therefore more research on the concept and on how to improve it could lead to more benefits for event organizers.

#### 4.3 Social character of music festivals

The final sub-group of variables was formed based on the social character of the events. For this group, mixed results were found in the statistical analysis. Firstly, the variable for escapism has shown a significant positive effect on the popularity of music festivals. Concluded from this can be that providing opportunities for attendees to express themselves and to forget about daily life could lead to more consumers. This could be linked to the experience that festivals offer, but also very well to an earlier positive effect of atmosphere. Creating an inner culture for the event in which people can express themselves fully, looks to be important in guaranteeing popularity.

The final variable included in this study is the one of social togetherness. Many studies underlined the importance of the social aspect of music festivals. However, this research failed to find any significant proof that this social togetherness concept helps improve the popularity of the festival. In this regard, the lower number of festivals included could have caused this insignificant result. However, this does not mean that the social aspect is of no importance to festival organizers. Further research should try to find significant results in this field to provide clarity on this aspect of music festivals.

#### 4.4 Overall conclusion and implications

Throughout this study, the term experience has been characterized as important numerous times in relation to the music festivals. The events evolved from cultural gatherings of people with the same taste in music to multi-day social entertainment events where anything is possible. Overall this study proves the importance of providing this festival experience, mainly in the aspect of creating an atmosphere in which people can fully express themselves and forget about daily life. Aspects like line-up, side programming and social togetherness yielded no significant results during this study and can therefore not be linked to this experience at this current time. Based on this study the festival organizers should focus on the overall improvement of the complete experience in which the attendees can be free. In this department, festivals can make a difference and therefore attract more people via word of mouth or retaining a loyal fan base which will ensure sold-out editions year after year. A great example in this regard is Lowlands and to a lesser extent Down the Rabbit Hole. Both



festivals sold out their tickets in record times this upcoming edition and this has mostly to do with the loyal fan bases they have built over the years. Judging from these studies, the atmosphere created during these festivals can very well be the cause of that.

#### 4.5 Limitations and further study

Overall this study showed promising results which could be valuable for festival organizers or organizers of events in general. But these results have to be treated with caution since there are numerous limitations holding back these outcomes. First of all the population of the study was not evenly represented in the sample used. This limits the generalizability of the results earlier explained. However, this misrepresentation was of minor scale. Initially, this study included the top ten of the biggest music festivals in the Netherlands, but unfortunately, four of these events noted too few observations during the data collection to delve relevant conclusions. Additionally, some of the concepts that have been included in this study like line-up, side-programming and location were not as accurately represented in the questionnaire as initially intended. The lower-than-desired scores for the Cronbach Alpha's on these concepts showed that these concepts should have been better analyzed and specified before and during the research. As a result, the relationships might be misleading and less valid than ideally would be the case. Finally, the dataset was proven to be heteroscedastic as discussed in the results chapter. This unfortunately influences the reliability and validity of the multiple regression analysis. This means that the conclusions drawn from this study could be wrong influenced by this difference in variance in the dataset.

Further statistically valid research is therefore required to confirm or refute the conclusions made in this study. Finding respondents for more festivals would in this case be important to create a better overview of the industry and maybe find significant effects of variables that were proven to be insignificant with the inclusion of only big music festivals. Additionally, the results also showed that these variables explained about 46% of the relationship. Therefore more studies should be focused on what components are important to festivals in positive, but also negative ways. Resulting in a broader and more complete overview of what is necessary for festival organizers to guarantee popularity for the events. This study aimed to provide insight into what factors are important in organizing a popular multi-day music festival. Creating an immersive experience with a good atmosphere that enables people to forget about their lives at home was proven to be important. However, this research did barely scrape the tip of the iceberg on how to create such an atmosphere. Visual aesthetics, and stage placement seem to be important, but in what way and how to improve them stay unclear. Therefore further research is important in defining the concept of atmosphere, what specific factors are important for this festival vibe and how can organizers improve to guarantee popularity?

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## Appendices

### Appendix A: Survey questions

Q1 Which category below includes your age?

- 17 or younger
- 18-20
- 21-29
- 30-39
- 40-49
- 50-59
- 60 or older

Q2 What is your gender?

- Male
- Female
- Other
- Prefer not to say

Q3 How many times a year (on average) do you attend a multi-day festival?

- 5 or more
- 4
- 3
- 2
- 1

Q4 Which of the following festivals did you attend last year (2022)?

- Defqon.1
- Lowlands
- Paaspop
- Down the Rabbit Hole
- Mysteryland
- Zwarte Cross
- Pinkpop
- WOO HAH! x Rolling Loud
- North Sea Jazz
- Concert at Sea

Q5 How would you rate the headliners programmed at the festival?

	Extremely bad	Bad	Somewhat bad	Neither good nor bad	Somewhat good	Good	Extremely good
Defqon.1	•	•	•	•	•	•	•
Lowlands	•	•	•	•	•	•	•
Paaspop	•	•	•	•	•	•	•
Down the Rabbit Hole	•	•	•	•	•	•	•
Mysteryland	•	•	•	•	•	•	•
Zwarte Cross	•	•	•	•	•	•	•
Pinkpop	•	•	•	•	•	•	•
WOO HAH! x Rolling Loud	•	•	•	•	•	•	•
North Sea Jazz	•	•	•	•	•	•	•
Concert at Sea	•	•	•	•	•	•	•

Q6 How would you rate the opportunities to discover the lesser-known and up-and-coming acts at the festival?

	Extremely bad	Bad	Somewhat bad	Neither good nor bad	Somewhat good	Good	Extremely good
Defqon.1	•	•	•	•	•	•	•
Lowlands	•	•	•	•	•	•	•
Paaspop	•	•	•	•	•	•	•
Down the Rabbit Hole	•	•	•	•	•	•	•
Mysteryland	•	•	•	•	•	•	•
Zwarte Cross	•	•	•	•	•	•	•
Pinkpop	•	•	•	•	•	•	•
WOO HAH! x Rolling Loud	•	•	•	•	•	•	•
North Sea Jazz	•	•	•	•	•	•	•
Concert at Sea	•	•	•	•	•	•	•

Q7 How much did you enjoy the scheduling of the lineup, in terms of pacing, flow and potential clashes?

	Not at all	Very little	A little	A moderate amount	A lot	A great deal	To the fullest extent
Defqon.1	•	•	•	•	•	•	•
Lowlands	•	•	•	•	•	•	•
Paaspop	•	•	•	•	•	•	•
Down the Rabbit Hole	•	•	•	•	•	•	•
Mysteryland	•	•	•	•	•	•	•
Zwarte Cross	•	•	•	•	•	•	•
Pinkpop	•	•	•	•	•	•	•
WOO HAH! x Rolling Loud	•	•	•	•	•	•	•
North Sea Jazz	•	•	•	•	•	•	•
Concert at Sea	•	•	•	•	•	•	•

Q8 How much did you enjoy the non-music side activities offered at the festival, such as workshops, art exhibits, theater, movies, etc?

	Not at all	Very little	A little	A moderate amount	A lot	A great deal	To the fullest extent
Defqon.1	•	•	•	•		•	•
Lowlands	•	•	•	•		•	•
Paaspop	•	•	•	•		•	•
Down the Rabbit Hole	•	•	•	•		•	•
Mysteryland	•	•	•	•		•	•
Zwarte Cross	•	•	•	•		•	•
Pinkpop	•	•	•	•		•	•
WOO HAH! x Rolling Loud	•	•	•	•		•	•
North Sea Jazz	•	•	•	•		•	•
Concert at Sea	•	•	•	•		•	•

Q9 How would you rate the food and beverage services at the festival? Based on availability, diversity and taste?

	Extremely bad	Bad	Somewhat bad	Neither good nor bad	Somewhat good	Good	Extremely good
Defqon.1	•	•	•	•	•	•	•
Lowlands	•	•	•	•	•	•	•
Paaspop	•	•	•	•	•	•	•
Down the Rabbit Hole	•	•	•	•	•	•	•
Mysteryland	•	•	•	•	•	•	•
Zwarte Cross	•	•	•	•	•	•	•
Pinkpop	•	•	•	•	•	•	•
WOO HAH! x Rolling Loud	•	•	•	•	•	•	•
North Sea Jazz	•	•	•	•	•	•	•
Concert at Sea	•	•	•	•	•	•	•

Q10 How would you rate the availability and quality of sanitary facilities at the festival?

	Extremely bad	Bad	Somewhat bad	Neither good nor bad	Somewhat good	Good	Extremely good
Defqon.1	•	•	•	•	•	•	•
Lowlands	•	•	•	•	•	•	•
Paaspop	•	•	•	•	•	•	•
Down the Rabbit Hole	•	•	•	•	•	•	•
Mysteryland	•	•	•	•	•	•	•
Zwarte Cross	•	•	•	•	•	•	•
Pinkpop	•	•	•	•	•	•	•
WOO HAH! x Rolling Loud	•	•	•	•	•	•	•
North Sea Jazz	•	•	•	•	•	•	•
Concert at Sea	•	•	•	•	•	•	•

Q11 How would you rate the availability and quality of sleeping arrangements at the festival, such as camping, easycamp or glamping options?

	Extremely bad	Bad	Somewhat bad	Neither good nor bad	Somewhat good	Good	Extremely good	N/A
Defqon.1	•	•	•	•	•	•	•	•
Lowlands	•	•	•	•	•	•	•	•
Paaspop	•	•	•	•	•	•	•	•
Down the Rabbit Hole	•	•	•	•	•	•	•	•
Mysteryland	•	•	•	•	•	•	•	•
Zwarte Cross	•	•	•	•	•	•	•	•
Pinkpop	•	•	•	•	•	•	•	•
WOO HAH! x Rolling Loud	•	•	•	•	•	•	•	•
North Sea Jazz	•	•	•	•	•	•	•	•
Concert at Sea	•	•	•	•	•	•	•	•



Q12 How would you rate the accessibility of the festival's location?

	Extremely bad	Bad	Somewhat bad	Neither good nor bad	Somewhat good	Good	Extremely good
Defqon.1	•	•	•	•	•	•	•
Lowlands	•	•	•	•	•	•	•
Paaspop	•	•	•	•	•	•	•
Down the Rabbit Hole	•	•	•	•	•	•	•
Mysteryland	•	•	•	•	•	•	•
Zwarte Cross	•	•	•	•	•	•	•
Pinkpop	•	•	•	•	•	•	•
WOO HAH! x Rolling Loud	•	•	•	•	•	•	•
North Sea Jazz	•	•	•	•	•	•	•
Concert at Sea	•	•	•	•	•	•	•

Q13 How would you rate the surroundings of the festival location, such as the scenery and natural environment?

	Extremely bad	Bad	Somewhat bad	Neither good nor bad	Somewhat good	Good	Extremely good
Defqon.1	•	•	•	•	•	•	•
Lowlands	•	•	•	•	•	•	•
Paaspop	•	•	•	•	•	•	•
Down the Rabbit Hole	•	•	•	•	•	•	•
Mysteryland	•	•	•	•	•	•	•
Zwarte Cross	•	•	•	•	•	•	•
Pinkpop	•	•	•	•	•	•	•
WOO HAH! x Rolling Loud	•	•	•	•	•	•	•
North Sea Jazz	•	•	•	•	•	•	•
Concert at Sea	•	•	•	•	•	•	•

Q14 To what extent did you feel that the festival location reflects the values and culture of the community attending it?

	Not at all	Very little	A little	A moderate amount	A lot	A great deal	To the fullest extent
Defqon.1	•	•	•	•		•	•
Lowlands	•	•	•	•		•	•
Paaspop	•	•	•	•		•	•
Down the Rabbit Hole	•	•	•	•		•	•
Mysteryland	•	•	•	•		•	•
Zwarte Cross	•	•	•	•		•	•
Pinkpop	•	•	•	•		•	•
WOO HAH! x Rolling Loud	•	•	•	•		•	•
North Sea Jazz	•	•	•	•		•	•
Concert at Sea	•	•	•	•		•	•

Q15 How much did you enjoy the visual aesthetics of the festival, such as stage designs, art installations, and lighting?

	Not at all	Very little	A little	A moderate amount	A lot	A great deal	To the fullest extent
Defqon.1	•	•	•	•		•	•
Lowlands	•	•	•	•		•	•
Paaspop	•	•	•	•		•	•
Down the Rabbit Hole	•	•	•	•		•	•
Mysteryland	•	•	•	•		•	•
Zwarte Cross	•	•	•	•		•	•
Pinkpop	•	•	•	•		•	•
WOO HAH! x Rolling Loud	•	•	•	•		•	•
North Sea Jazz	•	•	•	•		•	•
Concert at Sea	•	•	•	•		•	•

Q16 How comfortable were you in the festival environment?

	Extremely uncomfort able	Uncomfort able	Somewhat uncomfort able	Neither comfortab le nor uncomfort able	Somewh at comfort able	Comfort able	Extremel y comfort able
Defqon.1	•	•	•	•	•	•	•
Lowlands	•	•	•	•	•	•	•
Paaspop	•	•	•	•	•	•	•
Down the Rabbit Hole	•	•	•	•	•	•	•
Mysteryl and	•	•	•	•	•	•	•
Zwarte Cross	•	•	•	•	•	•	•
Pinkpop	•	•	•	•	•	•	•
WOO HAH! x Rolling Loud	•	•	•	•	•	•	•
North Sea Jazz	•	•	•	•	•	•	•
Concert at Sea	•	•	•	•	•	•	•

Q17 How would you rate the overall energy and vibe of the festival?

	Extremely bad	Bad	Somewhat bad	Neither good nor bad	Somewhat good	Good	Extremely good
Defqon.1	•	•	•	•	•	•	•
Lowlands	•	•	•	•	•	•	•
Paaspop	•	•	•	•	•	•	•
Down the Rabbit Hole	•	•	•	•	•	•	•
Mysteryland	•	•	•	•	•	•	•
Zwarte Cross	•	•	•	•	•	•	•
Pinkpop	•	•	•	•	•	•	•
WOO HAH! x Rolling Loud	•	•	•	•	•	•	•
North Sea Jazz	•	•	•	•	•	•	•
Concert at Sea	•	•	•	•	•	•	•

Q18 How would you rate the stage placement and the associated flow (ease of moving around the festival terrain) of the festival?

	Extremely bad	Bad	Somewhat bad	Neither good nor bad	Somewhat good	Good	Extremely good
Defqon.1	•	•	•	•	•	•	•
Lowlands	•	•	•	•	•	•	•
Paaspop	•	•	•	•	•	•	•
Down the Rabbit Hole	•	•	•	•	•	•	•
Mysteryland	•	•	•	•	•	•	•
Zwarte Cross	•	•	•	•	•	•	•
Pinkpop	•	•	•	•	•	•	•
WOO HAH! x Rolling Loud	•	•	•	•	•	•	•

North Sea Jazz	•	•	•	•	•	•	•	•
Concert at Sea	•	•	•	•	•	•	•	•

Q19 To what extent do you feel that attending this festival allows you to disconnect from technology and social media during the event?

	Not at all	Very little	A little	A moderate amount	A lot	A great deal	To the fullest extent
Defqon.1	•	•	•	•	•	•	•
Lowlands	•	•	•	•	•	•	•
Paaspop	•	•	•	•	•	•	•
Down the Rabbit Hole	•	•	•	•	•	•	•
Mysteryland	•	•	•	•	•	•	•
Zwarte Cross	•	•	•	•	•	•	•
Pinkpop	•	•	•	•	•	•	•
WOO HAH! x Rolling Loud	•	•	•	•	•	•	•
North Sea Jazz	•	•	•	•	•	•	•
Concert at Sea	•	•	•	•	•	•	•

Q20 To what extent do you feel that attending this festival allows you to be yourself and express yourself freely without fear of judgment during the event?

	Not at all	Very little	A little	A moderate amount	A lot	A great deal	To the fullest extent
Defqon.1	•	•	•	•	•	•	•
Lowlands	•	•	•	•	•	•	•
Paaspop	•	•	•	•	•	•	•
Down the Rabbit Hole	•	•	•	•	•	•	•
Mysteryland	•	•	•	•	•	•	•
Zwarte Cross	•	•	•	•	•	•	•
Pinkpop	•	•	•	•	•	•	•
WOO HAH! x Rolling Loud	•	•	•	•	•	•	•

North Sea Jazz	•	•	•	•	•	•	•
Concert at Sea	•	•	•	•	•	•	•

Q21 To what extent do you feel that attending this festival allows you to escape from your day-to-day life?

	Not at all	Very little	A little	A moderate amount	A lot	A great deal	To the fullest extent
Defqon.1	•	•	•	•	•	•	•
Lowlands	•	•	•	•	•	•	•
Paaspop	•	•	•	•	•	•	•
Down the Rabbit Hole	•	•	•	•	•	•	•
Mysteryland	•	•	•	•	•	•	•
Zwarte Cross	•	•	•	•	•	•	•
Pinkpop	•	•	•	•	•	•	•
WOO HAH! x Rolling Loud	•	•	•	•	•	•	•
North Sea Jazz	•	•	•	•	•	•	•
Concert at Sea	•	•	•	•	•	•	•

Q22 How comfortable were you interacting with strangers at the festival compared to everyday life?

	Extremely uncomfortable	Uncomfortable	Somewhat uncomfortable	Neither comfortable nor uncomfortable	Somewhat comfortable	Comfortable	Extremely comfortable
Defqon.1	•	•	•	•	•	•	•
Lowlands	•	•	•	•	•	•	•
Paaspop	•	•	•	•	•	•	•
Down the Rabbit Hole	•	•	•	•	•	•	•
Mysteryl and	•	•	•	•	•	•	•
Zwarte Cross	•	•	•	•	•	•	•
Pinkpop	•	•	•	•	•	•	•
WOO HAH! x Rolling Loud	•	•	•	•	•	•	•
North Sea Jazz	•	•	•	•	•	•	•
Concert at Sea	•	•	•	•	•	•	•

Q23 Did you feel connection with attendees of the same festival during the event?

	Not at all	Very little	A little	A moderate amount	A lot	A great deal	To the fullest extent
Defqon.1	•	•	•	•		•	•
Lowlands	•	•	•	•		•	•
Paaspop	•	•	•	•		•	•
Down the Rabbit Hole	•	•	•	•		•	•
Mysteryland	•	•	•	•		•	•
Zwarte Cross	•	•	•	•		•	•
Pinkpop	•	•	•	•		•	•
WOO HAH! x Rolling Loud	•	•	•	•		•	•
North Sea Jazz	•	•	•	•		•	•
Concert at Sea	•	•	•	•		•	•

Q24 Did you feel included and welcomed by other festival-goers?

	Not at all	Very little	A little	A moderate amount	Very much	Extremely	To the fullest extent
Defqon.1	•	•	•	•	•	•	•
Lowlands	•	•	•	•	•	•	•
Paaspop	•	•	•	•	•	•	•
Down the Rabbit Hole	•	•	•	•	•	•	•
Mysteryland	•	•	•	•	•	•	•
Zwarte Cross	•	•	•	•	•	•	•
Pinkpop	•	•	•	•	•	•	•



WOO HAH! x Rolling Loud	•	•	•	•	•	•	•
North Sea Jazz	•	•	•	•	•	•	•
Concert at Sea	•	•	•	•	•	•	•

Q25 How much do you agree or disagree with the statement "This festival provides a sense of community and togetherness"?

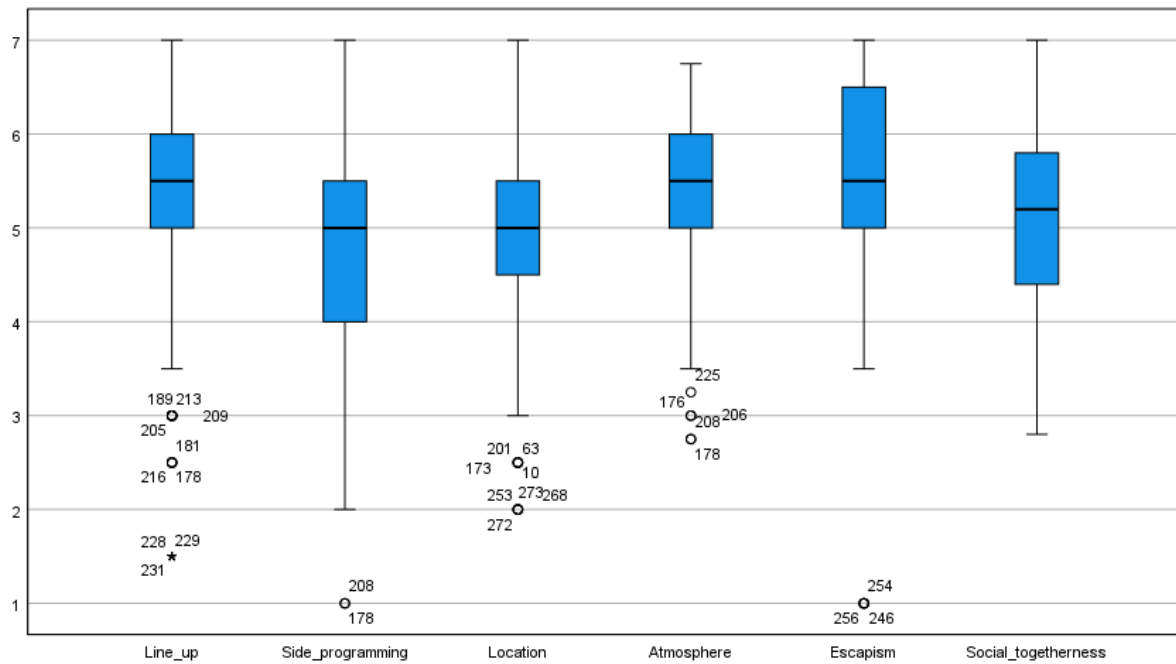
	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
Defqon.1	•	•	•	•	•	•	•
Lowlands	•	•	•	•	•	•	•
Paaspop	•	•	•	•	•	•	•
Down the Rabbit Hole	•	•	•	•	•	•	•
Mysteryland	•	•	•	•	•	•	•
Zwarte Cross	•	•	•	•	•	•	•
Pinkpop	•	•	•	•	•	•	•
WOO HAH! x Rolling Loud	•	•	•	•	•	•	•
North Sea Jazz	•	•	•	•	•	•	•
Concert at Sea	•	•	•	•	•	•	•

Q26 To what extent do you feel that attending the festival strengthened your relationships with your relatives and friends with whom you attended the event?

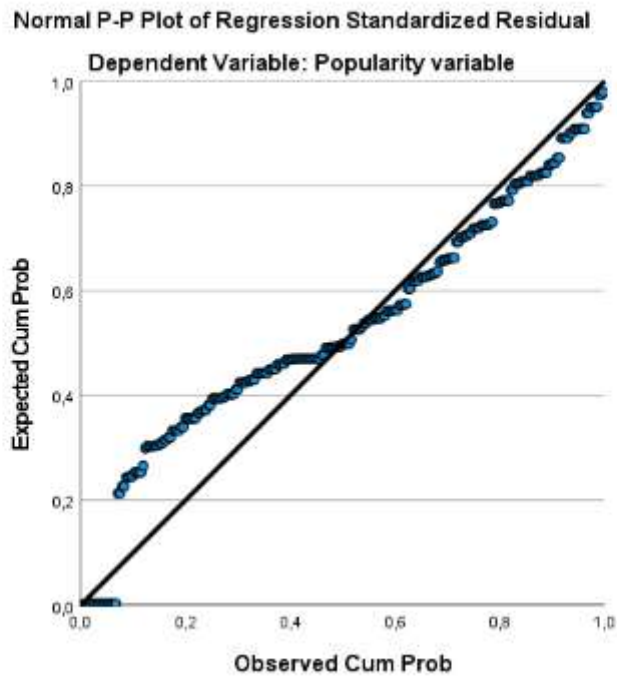
	Not at all	Very little	A little	A moderate amount	A lot	A great deal	To the fullest extent
Defqon.1	•	•	•	•		•	•
Lowlands	•	•	•	•		•	•
Paaspop	•	•	•	•		•	•
Down the Rabbit Hole	•	•	•	•		•	•
Mysteryland	•	•	•	•		•	•
Zwarte Cross	•	•	•	•		•	•
Pinkpop	•	•	•	•		•	•
WOO HAH! x Rolling Loud	•	•	•	•		•	•
North Sea Jazz	•	•	•	•		•	•
Concert at Sea	•	•	•	•		•	•

## Appendix B - Statistical analysis

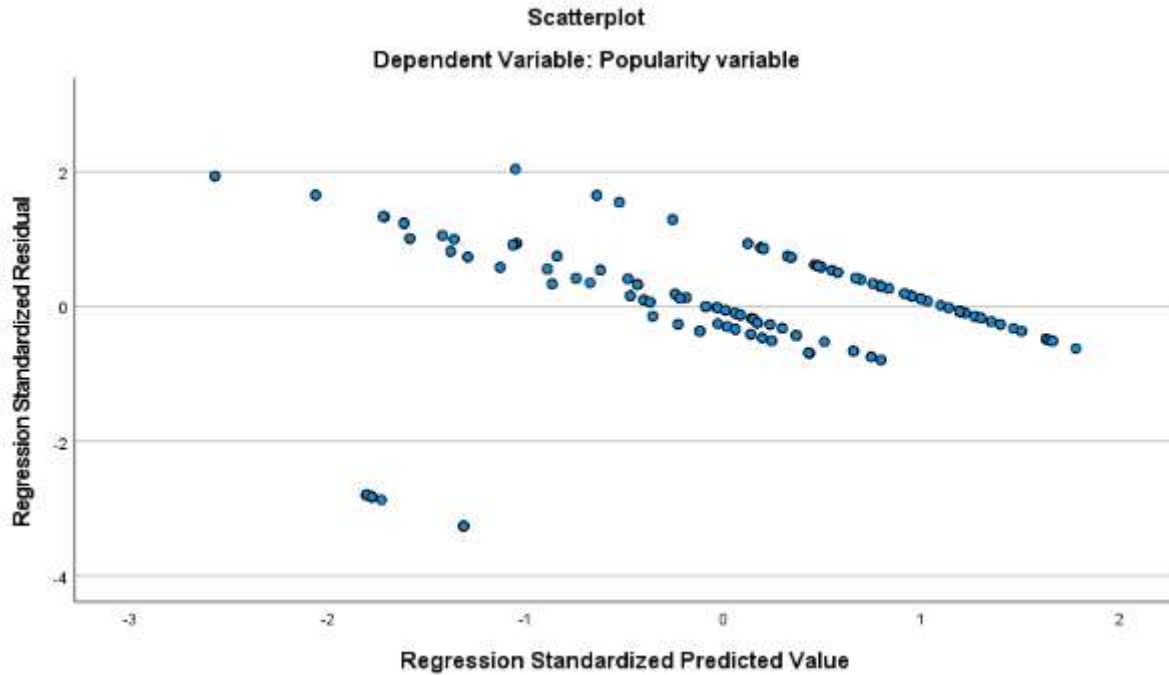
Appendix B1: Boxplots used for removing outliers from dataset.



Appendix B2: Probability plot used to assess linearity of the data model



Appendix B3: Scatterplot



Appendix B4: ANOVA results of Breusch pagan which confirms heteroscedasticity

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,050	7	,007	23,079	<,001 <sup>b</sup>
	Residual	,075	241	,000		
	Total	,125	248			

a. Dependent Variable: squ

b. Predictors: (Constant), Social\_togetherness, Ticket price (weekend), Location, Side\_programming, Line\_up, Escapism, Atmosphere

Appendix B5: Model summary and R Squared results

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,690 <sup>a</sup>	,477	,461	,10129829887

a. Predictors: (Constant), Social\_togetherness, Ticket price (weekend), Location, Side\_programming, Line\_up, Escapism, Atmosphere

b. Dependent Variable: Popularity variable