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Tourist Valuation of the Cultural Heritage on the Island of Ameland

Bachelor Project Human Geography and Planning

Abstract
This research is dedicated to investigating cultural heritage as a motivation for tourists to visit Ameland. The main research question is: ''To what extent do tourists value the cultural heritage on Ameland?''. To answer this question, questionnaires were handed out and distributed among tourists who were visiting or have visited Ameland. The results show that, in general, the main reason to visit Ameland seems to be the pleasant atmosphere in the villages Nes, Ballum and Hollum. Additionally, the results suggest that most of the respondents generally think it is important to protect the historic built environment in Nes, Ballum and Hollum in order to preserve the historic character of the villages. A further research recommendation is to investigate how tourists value cultural heritage on the other Wadden Islands. Moreover, a policy recommendation is that VVV Ameland and the municipality of Ameland could focus more on the historic built environment on the island while branding and marketing 'Ameland', and that they could improve and expand the information regarding the cultural heritage on Ameland, as cultural heritage-based tourism seems to be a type of tourism that the island is dealing with.

Picture title page: characteristic Amelander house (Dutch national monument), Burgemeester Waldastraat 4 in Nes. Construction year: 1668. Source: Rijksmonumenten (2022b); picture made by author (2022).

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Introduction

Background
The Wadden Sea region consists of the embanked coastal marshes, the Wadden Islands and the Wadden Sea of the Netherlands, Germany and Denmark (Egberts et al., 2018). This region is partially granted with the status of a UNESCO World Heritage Site (Bazelmans et al., 2012), and to be more specific, it is the Netherlands' only *natural* UNESCO World Heritage Site (Bontenbal, 2020). UNESCO aims to protect and preserve cultural and natural heritage around the world that is considered to be exceptionally valuable for humanity (UNESCO, 2022).

Enemark et al. (2018) argue that the divide between cultural and natural landscape does not apply to the Wadden Sea region. Through the past 8000 years, natural processes and human activities in the Wadden Sea region have been tightly interwoven (Ibid). Humans have colonised the salt marshes, diked large parts of the coastal areas, and converted the coastal peat bogs behind the salt marsh zone into farmland (Bazelmans et al., 2012). Therefore, it can be argued that a predominantly natural landscape was transformed into a cultural landscape (Ibid).

Furthermore, Renes (2018, p. 48) also states that ''it makes much more sense to see the Wadden Sea region as a cultural landscape that is shaped and reshaped by nature as well as by human society''. The concept of cultural landscape can help understanding the relations between nature and culture (Ibid).

As often the first association with the Wadden Sea region is a natural landscape, while humans have used this natural landscape for centuries (Renes, 2018), it is relevant to see the region from a more cultural landscape point of view. To narrow down the region, the island of Ameland can be of specific interest to be viewed as a cultural landscape. There are three areas on Ameland which have the status 'Beschermd Dorpsgezicht' (Gemeente Ameland, 2019). These areas are located in the villages Nes, Ballum and Hollum, and are shown on a map of the west side of Ameland in Figure 1, where *A* illustrates the Beschermd Dorpsgezicht of Hollum, *B* indicates the Beschermd Dorpsgezicht of Ballum, and *C* marks the Beschermd Dorpsgezicht of Nes.
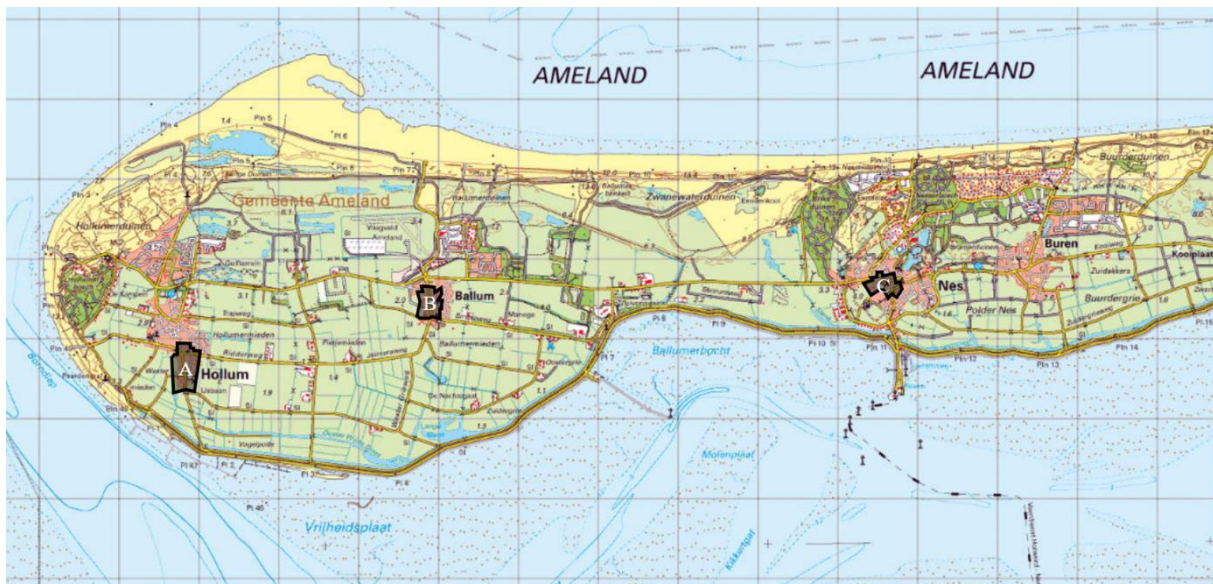
Figure 1: Map illustrating the west side of Ameland, with the three areas Beschermde Dorpsgezichten in Hollum, Ballum and Nes. Source: Gemeentelink (2022); Topotijdreis (2022).

A clearer view of the areas in Hollum (Figure 2), Ballum (Figure 3) and Nes (Figure 4) can be found on the maps below.
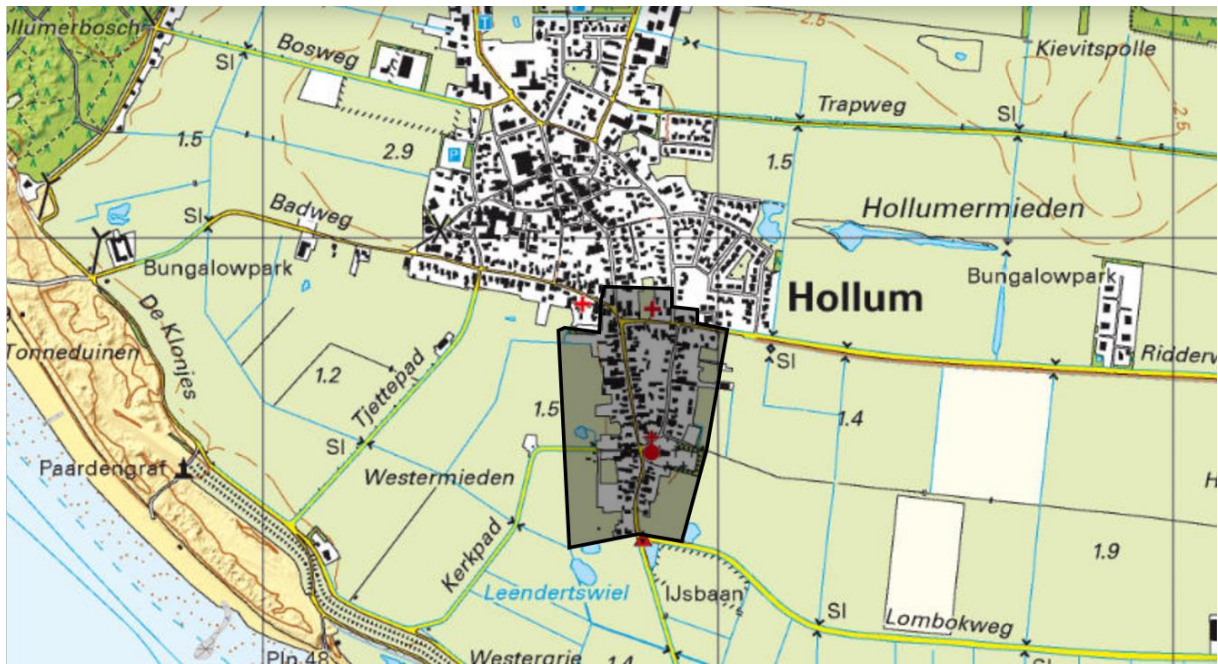
Figure 2: Map illustrating Beschermd Dorpsgezicht Hollum (since 10-06-1969; surface area of 0.16 km^2).
Source: Gemeentelink (2022); Topotijdreis (2022).
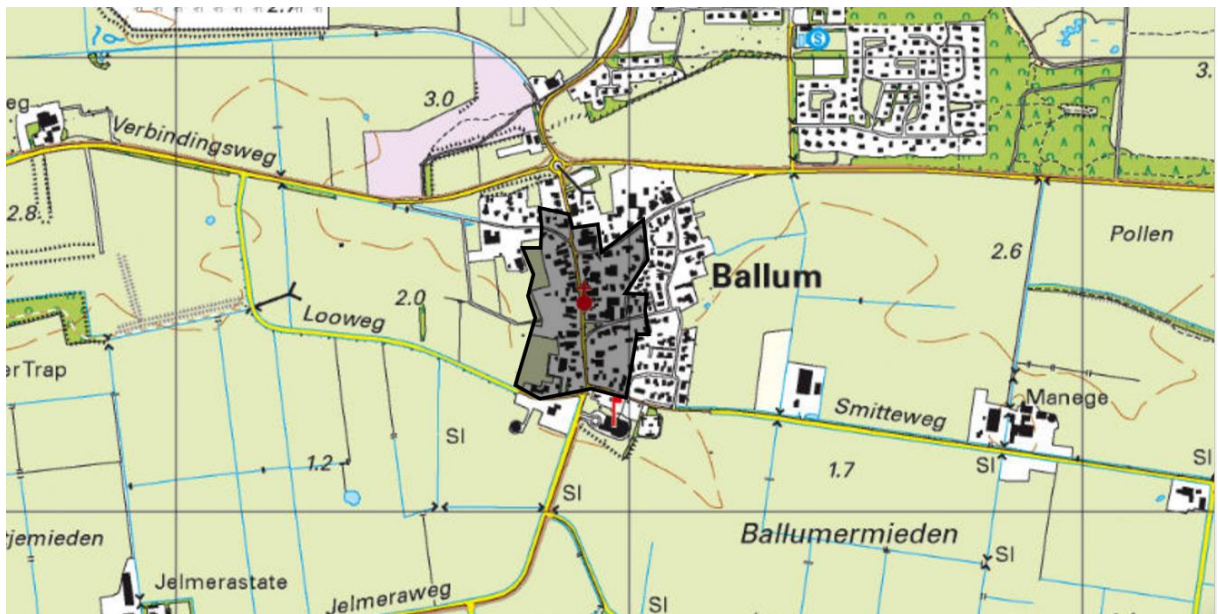
Figure 3: Map illustrating Beschermd Dorpsgezicht Ballum (since 10-06-1969; surface area of 0.08 km^2).
Source: Gemeentelink (2022); Topotijdreis (2022).
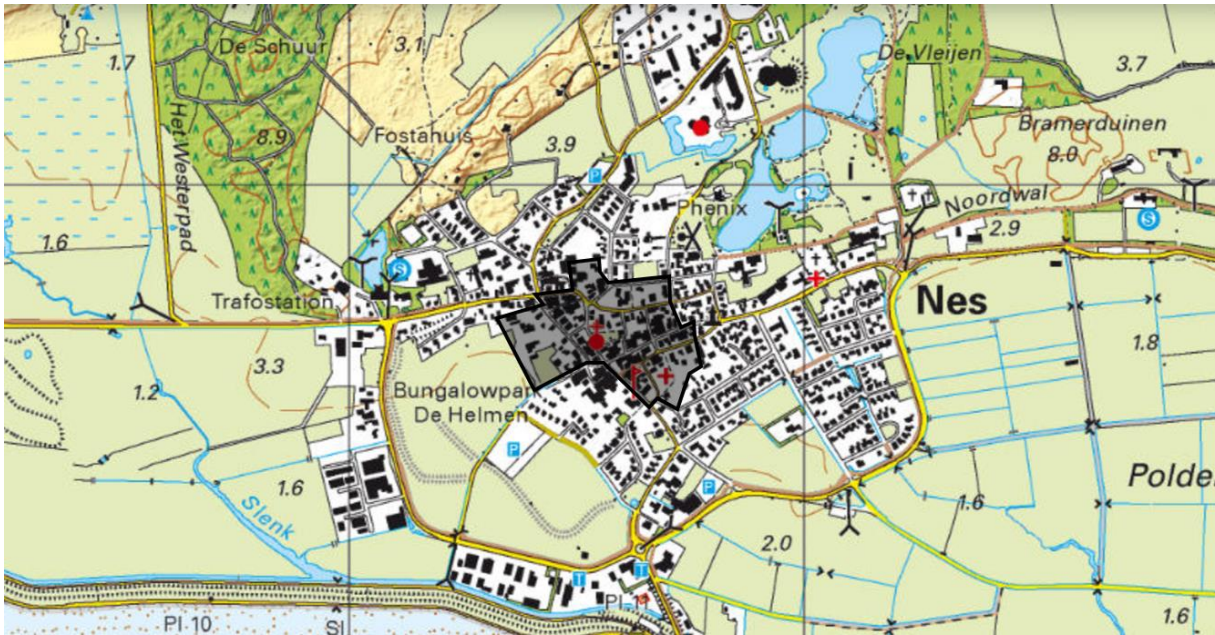
Figure 4: Map illustrating Beschermd Dorpsgezicht Nes (since 10-06-1969; surface area of 0.08 km^2). Source: Gemeentelink (2022); Topotijdreis (2022).

The status of a Beschermd Dorpsgezicht is a nationwide recognition of the cultural and historical value of an area. It is described in the Dutch Heritage Act as ''groups of immovable properties that are of general interest because of their beauty, their spatial or structural interconnection or their scientific or cultural-historical value, and in which groups one or more monuments are located.'' (Rijksdienst voor het Cultureel Erfgoed, 2022). The Beschermde Dorpsgezichten are designated parts of the villages in which the cultural-historical and spatial values are protected, and, if possible, enhanced (Gemeente Ameland, 2019). Therefore, stricter rules apply to building, renovating or demolishing in these parts of the villages to make sure the areas are protected (Gemeentelink, 2022). To give an idea of the scenery in these areas, Figures 5-7 show pictures taken in the Beschermde Dorpsgezichten on Ameland.

Figure 5: Burenlaan, Hollum (northern direction). Source: picture made by author (2022).

Figure 6: Camminghastraat, Ballum (southern direction). Source: picture made by author (2022).

Figure 7: Burgemeester Waldastraat, Nes (western direction). Source: picture made by author (2022).

As stated in the description of a Beschermd Dorpsgezicht above, there are also monuments located in the Beschermde Dorpsgezichten on Ameland. According to Rijksmonumenten (2022a), the municipality of Ameland currently has 113 entries in the Dutch national monument register, and these monuments are thus mainly located in these protected parts of the three villages. Most of these recognised monuments are houses, churches and bell towers (one of these houses is shown in the picture on the title page). Ameland is thus rich in historic built environment, which is part of its cultural heritage.

As UNESCO (2022) states: ''Heritage is our legacy from the past, what we live with today, and what we pass on to future generations. Our cultural and natural heritage are both irreplaceable sources of life and inspiration.'' Therefore, it is important to recognize and protect cultural heritage, and this research paper will be partially dedicated to investigating the historic built environment in the villages Nes, Ballum and Hollum as part of the cultural heritage of Ameland.

Additionally, there is a growing awareness of the importance of cultural heritage-based tourism worldwide (Timothy, 2020). As mentioned before, Ameland has a substantial amount of cultural heritage. Moreover, the tourism sector is of great importance to the municipality of Ameland. According to research done by the Fries Sociaal Planbureau (Omrop Fryslân, 2022), 42% of all jobs

on Ameland fall within the tourism sector, and tourism accounts for 25% of the municipality's income. Therefore, it can be of interest to examine the relationship between cultural heritage and tourism on Ameland. This research will thus focus on the value and the importance of the historic built environment of Nes, Ballum and Hollum for tourism on the island. It is important to understand the value that tourists give to the built heritage on Ameland, as the island must remain attractive to (potential) visitors by developing goods and services that meet the demand to a high extent (VVV Ameland, 2017). Goods and services that do not meet the needs of the (potential) visitors cannot sufficiently contribute to the tourist development of Ameland (Ibid). Barros and Machado (2010) also mention that tourism demand arises from the demand for the numerous goods and services offered by a tourist destination.

Thus, the results of this research will shed a light on cultural heritage as a motivation for tourism on Ameland, contributing to the existing literature about tourist motivations and cultural heritage-based tourism. When it turns out that cultural heritage attract tourists to Ameland, or that there is a need for more awareness of cultural heritage on Ameland, the results of this research can be important for developing and improving cultural heritage-based tourism by promoting and organising this kind of tourism (Schroor, 2018). This type of tourism has also been noticed by the municipality of Ameland, as the municipality describes in their Annual Report of 2020 that they want to achieve preservation and exhibition of the specific island cultural-historical heritage as part of their programme on tourism and recreation (Gemeente Ameland, 2020). Tourist organisations, like VVV Ameland, could profit from the results of this research as they provide information for tourists on the island, and can thus broaden the information about cultural heritage on Ameland. Additionally, according to a performance profile created by VVV Ameland (2017), the brand 'Ameland' is characterised by a great amount of greenery and beautiful nature with attractive opportunities for cycling and walking. Ameland is also seen as an attractive place for a holiday with a pleasant atmosphere (Ibid). However, Ameland scores relatively low in terms of historic built environment (Ibid). Thus, the performance driver of historic built environment for the brand strength of Ameland can be improved, which also relates to improving cultural heritage-based tourism.

Research Problem
The aim of this research is to give more insight into the relationship between the value and the importance of the historic built environment in the villages Nes, Ballum and Hollum on the island of Ameland as part of its cultural heritage, and tourism. Therefore, the main research question is: ''To what extent do tourists value the cultural heritage on Ameland?''. From this question arise the following sub-questions:
1. ''What are the reasons for tourists to visit Ameland?''
2. ''What do tourists think of the built environment in the villages Nes, Ballum and Hollum on Ameland?''

Structure
At first, the relevant theories and concepts for this research will be described in the theoretical framework, including a conceptual model and the expectations of the outcomes of the sub-questions. After that, more clarification is given about the research methods and the data collection process in the methodology. Additionally, ethical considerations are described in this part. Then, the results of this research are presented, including descriptive statistics and the outcomes of the performed statistical tests in SPSS. Lastly, conclusions are made based on the results of this research and put into a broader theoretical context. Moreover, a reflection of the strengths and weaknesses of this research is added to the conclusion, and recommendations for further research and policies are given.

Theoretical Framework

To get a deeper understanding of tourism and cultural heritage on Ameland, it is important to explain and clarify certain concepts that are related to this research. First of all, the discussion on the divide between natural and cultural landscape is of relevance for Ameland. Starting with the concept of landscape, Antrop (1998) defines landscape as the outcome of the interaction between the natural environment and human activities. This definition touches upon the natural and cultural side of the landscape. There could be made a distinction here between a natural landscape, meaning a landscape that exists without human interference (Renes, 2018), and a cultural landscape, which is a man-made landscape and separated from natural processes (Enemark et al., 2018). From this distinction it becomes clear that the Wadden Sea region can be seen as a combination of both the natural and cultural landscape, and arguably mainly a cultural landscape, as humans have had a major impact on the evolution of the landscape (Bazelmans et al., 2012).

However, while it can be argued that the Wadden Sea region mainly is a cultural landscape, it also has become clear that this region is still perceived as a natural landscape, contributed by the recognition of the area as a UNESCO natural heritage site, and not a cultural heritage site.

Therefore, in this research, the following distinction will be used to describe the difference between the natural landscape and the cultural landscape on Ameland, based on the differentiation made by Rösner (2018). The natural landscape is outside of the dikes, which includes the Wadden Sea, the tidal flats, the dunes and the beach, as these are mainly influenced by natural forces (Ibid). The cultural landscape is located within the dikes, including the villages and its buildings, and the agriculturally used marshland (Ibid). These villages and its buildings are relevant for this research.

Additionally, there can also be made a distinction between natural and cultural heritage. Heritage is what humans ''inherit from the past and use and value in the present day'' (Timothy, 2020, p. 3). Moreover, Ashworth and Graham (2016) describe heritage as that part of the past for which contemporary purposes are selected, whether economic or cultural, and for which is chosen to bequeath to a future. Natural heritage includes phenomena occurring in the natural landscape (Timothy, 2020), it comprises the lands, seas, soils, plants, animals, water, and air (Lowenthal, 2005). Human influence has reshaped all of these elements of natural heritage, but there is often still a distinction made between this natural heritage and cultural heritage (Ibid). Cultural heritage is the past created by humans and its various manifestations (Timothy, 2020), and includes buildings, infrastructure, languages, traditions, everything humans themselves have created from the raw materials of nature (Lowenthal, 2005). The focus of this research paper with regards to cultural heritage will be mainly on the historic built environment of the villages of Nes, Ballum and Hollum, as the areas of Beschermde Dorpsgezichten and the national monuments can be easily recognised and defined.

Furthermore, this research will concern how tourists perceive and value the historic built environment in the villages on Ameland. The concept of landscape perception is thus also of importance for this research. According to Saldias et al. (2021), human landscape perception is a complex process whereby individuals and groups categorise and distinguish landscape features according to cultural, social and personal values and preferences. Different cultures and different individuals have different lived experiences, which result in perceiving landscapes differently (Ibid). Furthermore, the tourism industry structures and organises the view of tourists at sites, which Urry (1992a) calls the 'tourist gaze'. Tourist sites are consumed through values, belief systems, stories, images, and also through tour guides and information from tourist organisations (McNamara and Prideaux, 2011). Therefore, the tourist industry has a control over the form of the tourist experience, which is how tourists understand the site, how they interact with it, and what they learn from it (Ibid). Additionally, Urry (1992a) places emphasis on visual consumption of the landscape with the concept of the tourist gaze. Tourism is often concerned with visually consuming the physical environment, and constructing this environment as a landscape for aesthetic appropriation (Ibid). Moreover, Urry (1992b) states that the tourist experience involves something that is visually extraordinary, meaning that the landscape during a tourist experience is often completely different than the landscape of everyday life. It is thus the gaze that determines the relationships between the various sensory experiences while being away, recognizing what is visually out-of-ordinary (Urry, 2003). The scenery of a landscape is thus of importance for the experience of a certain tourist destination.

Additionally, the concept of landscape as a scenery is related to this aesthetic viewing of a landscape (Howard, 2011). Howard (2011) states that visual appreciation of a landscape is an important part of interacting with a landscape. Therefore, tourists might visually consume the sceneries in the villages Nes, Ballum and Hollum and find the historic built environment aesthetically pleasing or not.

Another concept that has to be discussed for this research is the duration of stay of tourists. Barros and Machado (2010) state that a decreasing average stay is observed in tourism duration of stay. This phenomenon is also evident on Ameland, as the average duration of stay on the island has decreased in recent years, from 4,4 nights in 2011 to 3,8 nights in 2016 (VVV Ameland, 2017). Additionally, Barros and Machado (2010) describe the importance for policy purposes to examine the process behind the decisions that tourists make on the duration of their stay. Barros and Machado (2010) mention that there is a difference in visiting tourist attractions, exploring peripheral regions in comparison to central regions, and creating more diverse economic, environmental and social effects between shorter and longer stays (Ibid). VVV Ameland (2017) also mentions that overnight visitors on Ameland are becoming more and more important, as tourist turnover is increasing mainly due to an increase in overnight visitors.

Conceptual Model
Figure 8 shows a conceptual model of the most important concepts for this research. This model presents the expected relationships between cultural heritage-based tourism, the tourist gaze, which includes the experience of a tourist destination, the visual consumption of the sceneries, and the possible aesthetic appreciation that comes with this visual consumption.
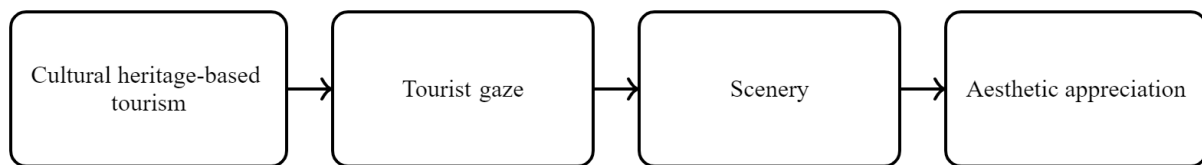
Figure 8: Conceptual model.

Expectations
Based on the literature described in the previous sections, the expectation of the outcome of the first sub-question is that tourists are mainly attracted to Ameland because of the great amount of greenery and beautiful nature with attractive opportunities for cycling and walking (VVV Ameland, 2017). Moreover, the expectation of the outcome of the second sub-question is that tourists think that the historic built environment in the villages Nes, Ballum and Hollum is an important part of the past that is fundamental to the identity of the island and therefore should be protected.

Methodology

A questionnaire was used to answer the main research question. This questionnaire contains several questions that generate answers to the sub-questions, and from these results, the main-question can be answered. The target group for this questionnaire are tourists that are currently visiting Ameland, or have visited Ameland. Appendix 1 presents a Dutch version of the questionnaire and Appendix 2 displays a German version, to accommodate both Dutch and German tourists. Questionnaires are suited for this research because this data collection instrument fits best with the idea of measuring the value that tourists give to the historic built environment in the villages on Ameland. Additionally, this data collection instrument makes it easy to approach a generous amount of people in a short time period. Therefore, it is possible to collect more data in a certain time period in comparison to extensive interviews.

The questionnaires were handed out on paper during a visit to Ameland on the 15th of April, 2022, and distributed digitally using Qualtrics on Facebook, where the questionnaire was posted on the 10th of May, 2022. These methods resulted in volunteer sampling and snowball sampling, as participants voluntarily chose to complete the questionnaire, and the post on Facebook also included an appeal to share the questionnaire with others. Before visiting Ameland, the ferry from Ameland and the locations of VVV Ameland were thought of as suitable places to find tourists, but both Wagenborg Passagiersdiensten and VVV Ameland did not give permission to hand out questionnaires on their properties. During the visit, several tourists were found on the streets of Nes and close to the beach at the west coast of Ameland, who were willing to fill in the questionnaire. However, this approach was not leading to enough participants. Therefore, the questionnaire was also distributed on Facebook, as described above, with the main supplier of participants being a German Facebook group called 'Mein Ameland - Hollum Ballum Nes & Buren'.

The questionnaire consists of quantitative questions, with questions 1-5 being general questions that can be used as control variables, and which will produce a mix of nominal, ordinal and ratio variables. These questions relate to duration of the stay on Ameland, gender, age, zip code and education level. Questions 6-14 are statements that are answered with the help of a 10-points scale, where 1 represents 'totally not agree', and 10 stands for 'totally agree', resulting in ratio variables. Questions 6-9 will give more insight to the first sub-question, as these are focused on reasons to visit Ameland. Reasons to visit Ameland include the sea and the beach, nature, walking and/or cycling, and the atmosphere in the villages. Questions 10-14 are related to the second sub-question. Question 11 focuses on the UNESCO World Heritage status of the Wadden Sea region, to see if tourists visiting Ameland are familiar with this status. Questions 10 and 12-14 aim attention at the villages Nes, Ballum and Hollum itself, mainly at the scenery and the historic built environment of the villages. The data that resulted from the questionnaires was exported from Qualtrics into two separate SPSS files, one file from the Dutch questionnaire, and one file from the German questionnaire. The data was then cleaned up in the two separate files to be suitable for descriptive statistics and to perform statistical tests in SPSS. This data clean-up was done by removing all cases that had missing values, or contained outcomes that were not usable for the research. Additionally, the education levels were categorised in the same way in each SPSS file, as the education levels in the Netherlands and in Germany differ. After that, the two SPSS files were merged together to have one data set that contains all the responses. One variable was added to show the distinction in nationality, Dutch or German. This variable is easier to work with than the variable that contains the different Dutch and German zip codes. Another variable was added through recoding the variable of duration of the stay on Ameland to make the data suitable for statistical testing. This variable includes one group representing a 1-3 day(s) stay, one group characterizing a 4-7 days stay, and another group shows a 8 days or longer during stay.

Table 1 shows the data analysis scheme for the statistical tests that are performed with the data. Additionally, descriptive statistics of questions 6-14 will give more insights into the means of the variables.

Questions	Type of variables	Appropriate tests
Questions 1, 6-9	Question 1: (recoded) nominal variable Questions 6-9: ratio variables	Kruskal-Wallis test: the recoded variable provided by question 1 is used as grouping variable, and the variables provided by questions 6-9 are the test variables.
Questions 2, 3, 5, 9, 12-14	Questions 2, 3 and 5: (control) nominal, ordinal and ratio variables Questions 9, 12-14: ratio variables	Multiple linear regression test: question 9 provided the dependent variable, all other variables were used as independent variables, with questions 2, 3 and 5 providing control variables.

Table 1: Data analysis scheme.

A Kruskal-Wallis test is used to see whether the duration of the stay on Ameland matters for agreeing to a certain extent on a statement regarding the reasons to visit the island. Thus, to see if there is difference between tourists staying 1-3 days, which are likely day and weekend trips, staying 4-7 days, which are likely mid-week and week trips, and then tourists staying 8 days or more. The null hypothesis for this statistical test is: ''In the population, the mean rank based on *the scale of agreeing on the statement*, is equal amongst the groups differentiated based on duration of the stay on Ameland.'' The statements used for this test are provided by questions 6-9, giving reasons to visit the island.

A multiple linear regression test is used to determine whether there is a relationship between going to Ameland for the pleasant atmosphere in the villages (question 9), and the attractiveness of the villages Nes, Ballum and Hollum and their historic built environment. The null hypothesis for this test is: ''In the population, there is no linear relationship between the dependent variable on the one hand, and the independent variables on the other hand.''

Ethical Considerations
To ensure that participants of the questionnaires were treated ethically correct, their privacy was protected by treating their answers with care and making sure that they will stay anonymous, as the answers to the questions in the questionnaire cannot lead to the identification of the participants due to not asking for names and specific personal details. Additionally, participants were approached calmly and they were well informed about the research and what was expected from them. Lastly, it was also made clear to the participants that their participation is of great value for the completion of this research.

The possibility of overgeneralization must also be taken into account. When asking participants about their perceptions of, and valuations on the historic built environment in the villages Nes, Ballum and Hollum, their answers do not apply to all tourists going to Ameland. The representativeness of the sample is discussed further in the Results.

Results

Descriptive Statistics
The sample consists of 299 valid cases. Figure 9 shows the proportion of Dutch and German respondents to the questionnaire. From the 299 responses, 81,6% is German. This extensive difference is due to the main supply of participants of the German Facebook group, and the willingness of these German group members to participate. Data of VVV Ameland (2017) shows that from the 2.020.000 overnight stays on Ameland in 2016, 35% was German. This percentage does not correspond to the percentage of German respondents in the sample of this research, and therefore this sample is not entirely representative for the population. However, the German tourist is of great value to the economy of Ameland, and is also described by the director of VVV Ameland as the desired guest of the island (Pennewaard, 2020). Additionally, data of VVV Ameland (2017) suggests that German tourists stay two times as long as Dutch tourists, and that the share of German tourists is becoming increasingly more important. Therefore, the sample is still interesting for this research.
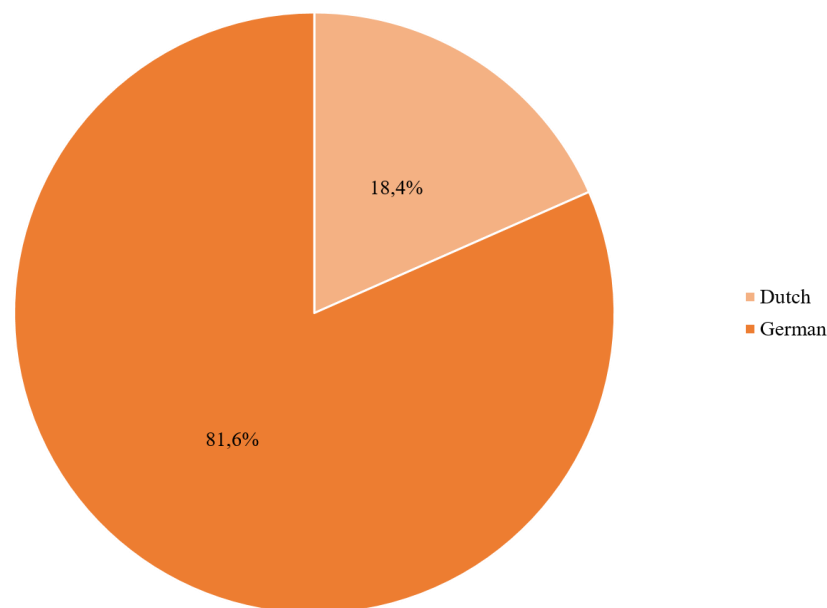
Figure 9: Pie chart nationality.

From these 299 cases, 65,9% is female (see Figure 10). According to Green et al. (2021), this overrepresentation of females in questionnaire participation is common and can be explained by gender differences in communication. Questionnaires demand for a willingness to reveal some personal information and to engage in more socio-emotional behaviours, and these are traits historically characterized by females and can therefore contribute to their greater participation in questionnaires (Ibid). Additionally, Green et al. (2021) state that when it comes to internet use, and thus also Facebook use, female users are more likely to give information and communicate, whereas male users prefer to seek for information.
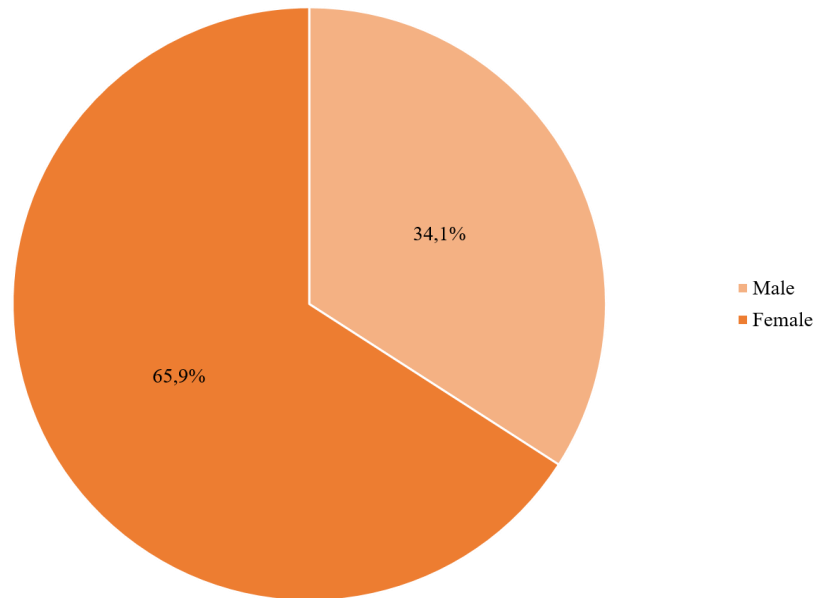
Figure 10: Pie chart gender.

In Figure 11, the proportions of education level of the respondents is presented. There is a quite equal distribution between the education levels, with a somewhat larger share that has attended Higher Vocational Education or University Education.
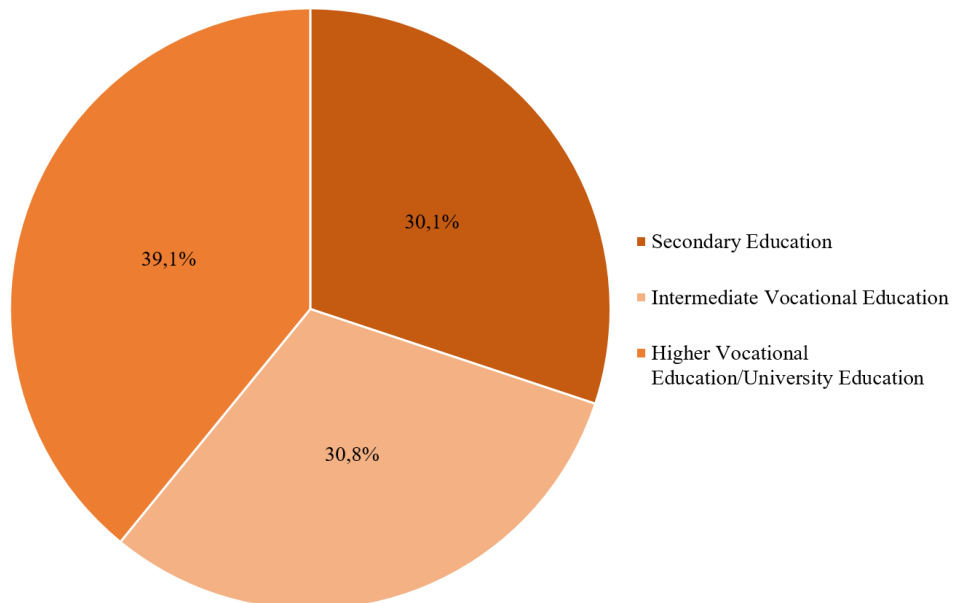
Figure 11: Pie chart education level.

The other control variables were the duration of the stay on Ameland and age. The descriptive statistics of these variables can be found in Table 2. From these descriptive statistics becomes clear that the mean duration of a stay on Ameland is around 11 days, and the mean age of the tourists is around 46 years old in this sample. According to VVV Ameland (2017), the average duration of a stay on the island was 3,8 nights in 2016 for all nationalities, but 7,3 nights on average for German tourists in 2016. The mean duration of a stay in the sample comes thus closer to the average stay of German tourists, which is a logical consequence of the great number of German participants of the questionnaire.

	N	Minimum	Maximum	Mean	Std. Deviation
How long will your stay on Ameland last? (in days)	299	1	150	11,26	10,658
What is your age?	299	18	80	45,88	12,823

Table 2: Descriptive statistics 'duration stay' and 'age'.

Table 3 displays the descriptive statistics of questions 6-9 of the questionnaire. These statements are related to the first sub-question.

	N	Minimum	Maximum	Mean	Std. Deviation
I mainly go to Ameland because of the sea and the beach.	299	1	10	7,96	1,990
I mainly go to Ameland because of the nature.	299	1	10	8,07	1,865
I mainly go to Ameland for walking and/or cycling.	299	1	10	7,32	2,253
I go to Ameland, because I think the villages Nes, Ballum and Hollum have a pleasant atmosphere.	299	1	10	8,54	2,009

Table 3: Descriptive statistics questions 6-9.

From these descriptive statistics becomes clear that on average, most of the respondents are leaning towards totally agreeing on the reasons to visit Ameland. In general, it seems that the main reason to visit Ameland is the pleasant atmosphere in the villages of Nes, Ballum and Hollum. However, nature, and the sea and the beach are also clear reasons to visit Ameland. Walking and/or cycling also seems to be a reason for most of the tourists to visit the island, but the mean (7,32) is lower than the means of the other reasons for visiting Ameland.

Table 4 shows the descriptive statistics for questions 10-14, related to the second sub-question. These descriptive statistics show that the respondents are on average not agreeing or disagreeing on the statement of visiting the villages Nes, Ballum and Hollum for the facilities only. From the descriptive statistics in Table 3 it became clear that respondents do like to go to these villages because of the pleasant atmosphere. It seems that this atmosphere is not necessarily created by the facilities. However, from the descriptive statistics in Table 4, it appears that most respondents think that the atmosphere is partly determined by the historic built environment, with a mean of 8,83. Additionally, according to most respondents, the villages Nes, Ballum and Hollum look attractive. Lastly, with the highest mean of all the statements (9,37), it seems that most of the respondents generally think it is important to protect the historic built environment in Nes, Ballum and Hollum in order to preserve its historic character, which is a relevant outcome for the second sub-question, and also for the main research question.

	N	Minimum	Maximum	Mean	Std. Deviation
I only visit the villages Nes, Ballum and Hollum for the facilities (shops, restaurants, etc.).	299	1	10	5,16	2,644
I am familiar with the UNESCO World Heritage status of the Wadden Sea region.	299	1	10	8,82	2,384
The villages Nes, Ballum and Hollum look attractive.	299	1	10	8,59	1,823
The atmosphere in the villages Nes, Ballum and Hollum is partly determined by the historic built environment.	299	1	10	8,83	1,641
I think it is important to protect the historic built environment in Nes, Ballum and Hollum in order to preserve its historic character.	299	1	10	9,37	1,530

Table 4: Descriptive statistics questions 10-14.

Statistical Tests
At first, an ANOVA test was thought of as a suitable test to compare means between the groups based on duration of stay on Ameland. However, as can be seen in Table 5, the groups have sharply different sample sizes.

	Frequency	Percent
1-3 days on Ameland	24	8,0
4-7 days on Ameland	116	38,8
8 or more days on Ameland	159	53,2
Total	299	100,0

Table 5: Frequency table variable 'Groups duration stay on Ameland'.

A requirement for doing the ANOVA test is then to have normally distributed data. A Kolmogorov-Smirnov test is done to see if the requirement of normally distributed data is met. The null hypothesis for the Kolmogorov-Smirnov is: ''The distribution is equal to a normal distribution in the population.'' The results are shown in Table 6, and these results demonstrate that the test is significant, and therefore the null hypothesis is rejected and the variable is thus not normally distributed. Therefore, the data fails the requirements for an ANOVA test, and the non-parametric alternative was chosen, which is the Kruskal-Wallis test.

	Groups duration stay on Ameland
N	299
Mean	2,45
Std. Deviation	0,640
Test Statistic	0,336
Asymp. Sig. (2-tailed)	0,000

Table 6: Results Kolmogorov-Smirnov test.

The Kruskal-Wallis test was performed on each of the statements regarding reasons to visit Ameland separately (questions 6-9). The null hypothesis is: ''In the population, the mean rank based on *the scale of agreeing on the statement*, is equal amongst the groups differentiated based on duration of the stay on Ameland.''

The results of the Kruskal-Wallis test performed with the data of the statement ''I mainly go to Ameland because of the sea and the beach.'' (question 6) can be seen in Table 7.

	I mainly go to Ameland because of the sea and the beach.
Kruskal-Wallis H	1,871
df	2
Asymp. Sig.	0,392

Table 7: Results Kruskal-Wallis test question 6.

The results show that the test is not significant (0,392 > 0,05), and therefore the null hypothesis is not rejected, meaning that it can be assumed that the mean rank is equal amongst the groups. Thus, the duration of the stay on Ameland does not influence how tourists think of the sea and the beach as a reason to visit Ameland.

The next statement (question 7) that was tested is: ''I mainly go to Ameland because of the nature.'' The results are presented in Table 8.

	I mainly go to Ameland because of the nature.
Kruskal-Wallis H	10,057
df	2
Asymp. Sig.	0,007

Table 8: Results Kruskal-Wallis test question 7.

This test was significant (0,007 < 0,05), and thus the null hypothesis is rejected. It can be assumed that the mean rank is not equal amongst the groups, and therefore, the duration of the stay on Ameland can have an influence on how tourists think of nature as a reason to visit the island.

The results of the test performed with the statement ''I mainly go to Ameland for walking and/or cycling.'' (question 8) are shown in Table 9.

	I mainly go to Ameland for walking and/or cycling.
Kruskal-Wallis H	3,956
df	2
Asymp. Sig.	0,138

Table 9: Results Kruskal-Wallis test question 8.

The results show that the test is not significant (0,138 > 0,05). The null hypothesis is not rejected, and it thus can be assumed that the mean rank is equal amongst the groups. The duration of the stay on Ameland does not influence how tourists think of cycling and/or walking as a reason to visit Ameland.

The last statement that was tested comes from question 9: ''I go to Ameland, because I think the villages Nes, Ballum and Hollum have a pleasant atmosphere.'' The results can be seen in Table 10.

	I go to Ameland, because I think the villages Nes, Ballum and Hollum have a pleasant atmosphere.
Kruskal-Wallis H	28,382
df	2
Asymp. Sig.	0,000

Table 10: Results Kruskal-Wallis test question 9.

This test was significant (0,000 > 0,05) and therefore the null hypothesis is rejected, meaning that it can be assumed that the mean rank is not equal amongst the groups. The duration of the stay could thus be of influence on how tourists think of the pleasant atmosphere in the villages as a reason to visit the island.

Thus, the performed Kruskal-Wallis tests show that the duration of the stay on Ameland does not influence how tourists think of the sea and the beach, and cycling and/or walking as reasons to

visit Ameland. It can therefore be assumed that it does not matter if tourists take one day, weekend, (mid-)week or longer trips to Ameland if it comes to the sea and the beach, and cycling and/or walking as reasons to visit the island. However, the results demonstrate that the duration of the stay does influence how tourists think of nature and the atmosphere in the villages Nes, Ballum and Hollum as a reason to visit Ameland. Thus, it can be assumed that tourists think differently of nature and the atmosphere in the villages as reasons to visit the island if their stay lasts a certain amount of days.

Additionally to the Kruskal-Wallis tests, a multiple linear regression test was performed with the data of questions 2, 3, 5, 9, 12-14 of the questionnaire. Question 9 provided the dependent variable. This statement was chosen as dependent variable to see if there is a relationship between going to Ameland for the pleasant atmosphere in the villages, and the attractiveness and historic built environment of the villages. The statements regarding the attractiveness and historic built environment are included in questions 12-14. The other questions provided control variables, being age, gender and education level. The null hypothesis is: ''In the population, there is no linear relationship between the dependent variable on the one hand, and the independent variables on the other hand.''

At first, the Model Summary table is of interest to be checked (see Table 11). From this table, the R^2 of the test can be read, which is 0,489, meaning that 48,9% variance of the dependent variable is explained by the model.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,700	0,489	0,479	1,450

Table 11: Model Summary table multiple linear regression.

Next, to see if the test is significant, the ANOVA table should be interpreted (see Table 12). As can be observed in the table, the test is significant (0,000 > 0,05) and therefore, the null hypothesis is rejected. It can be assumed that there is a linear relationship between the dependent variable on the one hand and the independent variables on the other hand.

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	588,405	6	98,067	46,645	0,000
Residual	613,903	292	2,102		
Total	1202,308	298			

Table 12: ANOVA table multiple linear regression.

Lastly, the Coefficients table (Table 13) of this test can be interpreted to see which independent variables can predict the outcome of the dependent variable. The table shows that the statements regarding the attractiveness and the historic built environment of the villages on Ameland are all significant (0,000; 0,004; 0,013 < 0,05). These results show that the variables provided by questions 12-14 statistically significantly can predict the outcome of the dependent variable, meaning that the attractiveness and the historic built environment play a role in visiting Ameland for the atmosphere in the villages Nes, Ballum and Hollum.

Model	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	0,740	0,756		0,979	0,328		
What is your gender?	0,158	0,183	0,037	0,862	0,390	0,931	1,075
What is your age? (in years)	0,011	0,007	0,067	1,553	0,122	0,926	1,080
What is your education level?	-0,205	0,104	-0,085	-1,966	0,050	0,946	1,057
The villages Nes, Ballum and Hollum look attractive.	0,348	0,077	0,316	4,537	0,000	0,360	2,778
The atmosphere in the villages Nes, Ballum and Hollum is partly determined by the historic built environment.	0,300	0,104	0,245	2,879	0,004	0,241	4,150
I think it is important to protect the historic built environment in Nes, Ballum and Hollum in order to preserve its historic character.	0,235	0,094	0,179	2,502	0,013	0,342	2,923

Table 13: Coefficients table multiple linear regression.

Conclusions
To conclude this research, the main research-question is answered in the following section, and the findings are placed in a broader theoretical context.

The results of this research show that, as expected, tourists do like to go to Ameland because of the nature and the attractive opportunities for cycling and walking. Additionally, the sea and the beach were also a highly rated reason to go to the island. However, the pleasant atmosphere in the villages Nes, Ballum and Hollum were valued the highest compared to the other reasons to visit Ameland. Tourists thus seem to appreciate both the cultural and natural landscape of the island. It also seems that the choice of tourists to visit Ameland is influenced by the duration of their stay with regards to nature and the atmosphere in the villages as a reason to go to the island.

Furthermore, tourists visiting Ameland think that the villages Nes, Ballum and Hollum look attractive, and that the atmosphere in the villages is partly determined by the historic built environment. Additionally, tourists seem to highly value the protection of the historic built environment in the villages in order to preserve its historic character, which is in line with the expectation that tourists think that the historic built environment in the villages Nes, Ballum and Hollum is an important part of the past that is fundamental to the identity of the island and therefore should be protected. The historic built environment thus plays a significant role in the overall cultural heritage of Ameland

Therefore, to come back to the concepts used in the conceptual model (Figure 8), it seems that Ameland is experiencing cultural heritage-based tourism, as tourists like to visit the island for the historic built environment in the villages. Tourists seem to positively experience the sceneries in the villages, and aesthetically appreciate the looks of the villages. It is likely that the tourist gaze in this case can be influenced by the information that the tourist industry linked to Ameland is giving about the cultural heritage on the island.

Thus, the answer to the main research-question, being ''To what extent do tourists value the cultural heritage on Ameland?'', is that tourists appreciate the cultural heritage on Ameland, as the villages of Nes, Ballum and Hollum are a clear reason to come to the island, and they also find it important that the specific island cultural-historical heritage is protected.

Strengths and Weaknesses
One of the strengths of this research is the quite substantial amount of cases, as 299 responses is often enough to perform several statistical tests, even when the data is not normally distributed. However, most of the respondents were recruited via a German Facebook group and this is a possibility for bias. Despite having around 5000 members, these members are not randomly chosen tourists. This research is thus partly based on volunteer sampling within a specific group that may not represent the full population of tourists going to Ameland. As mentioned before in the Results, the sample is not completely representative for the population due to overrepresentation of German respondents and females.

The advantage of using a non-parametric test like the Kruskal-Wallis tests ran in this research is that the requirements are less strict, which was needed with the available data. However, there also come disadvantages with using a non-parametric test, as these sort of tests are less powerful and the available information is used less efficiently.

Recommendations for Further Research and Policies
As this research is a case study of Ameland, a further research recommendation could be to investigate how tourists value cultural heritage on the other Wadden Islands, or other specific places or regions in the Netherlands.

Furthermore, this research has shown that most tourists visiting Ameland think that the villages Nes, Ballum and Hollum look attractive, and that the historic built environment in these villages contribute to the pleasant atmosphere. Therefore, the VVV Ameland and the municipality of Ameland could focus more on the historic built environment while branding and marketing 'Ameland', as tourists also find these aspects important, along with aspects such as nature and attractive opportunities for cycling and walking. Cultural heritage-based tourism seems to be a type of

tourism that Ameland is dealing with, and thus the information regarding cultural heritage on Ameland could be expanded and improved, as there is a clear demand for it.

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Appendix 1: Dutch Version of the Questionnaire

Beste meneer/mevrouw,
Mijn naam is Iris van der Til en ik ben momenteel bezig met het afronden van mijn bachelor Sociale Geografie en Planologie aan de Rijksuniversiteit Groningen door middel van het schrijven van een scriptie. Hiervoor onderzoek ik de relatie tussen toerisme en cultureel erfgoed op Ameland met behulp van enquêtes. De enquête is anoniem en de resultaten van deze enquête zullen met zorg worden behandeld om uw privacy te waarborgen. De enquête heeft 14 vragen en zal ongeveer 5 minuten in beslag nemen. Als u nog vragen heeft, stelt u deze dan gerust en wilt u later nog contact met mij opnemen, dan kan dat via i.y.van.der.til@student.rug.nl. Alvast bedankt voor het invullen van de enquête!

1. Hoelang duurt uw verblijf op Ameland?

    ☐☐☐ dag(en)

2. Wat is uw geslacht?
    - ○ Man
    - ○ Vrouw
    - ○ Anders

3. Wat is uw leeftijd?

    ☐☐☐ jaar

4. Wat zijn de vier cijfers van uw postcode?

    ☐☐☐

5. Wat is uw opleidingsniveau?
    - ○ Basisonderwijs
    - ○ Voortgezet onderwijs
    - ○ MBO
    - ○ HBO
    - ○ WO

De volgende stellingen kunt u beoordelen op een schaal van 1 tot en met 10, waarbij 1 staat voor helemaal niet mee eens, en 10 voor helemaal mee eens.

6. Ik ga voornamelijk naar Ameland vanwege de zee en het strand.

    1   2   3   4   5   6   7   8   9   10

7. Ik ga voornamelijk naar Ameland vanwege de natuur.

    1   2   3   4   5   6   7   8   9   10

8. Ik ga voornamelijk naar Ameland om te wandelen en/of te fietsen.

    1   2   3   4   5   6   7   8   9   10

9. Ik ga naar Ameland, omdat ik de dorpen Nes, Ballum en Hollum zo sfeervol vind.

    1   2   3   4   5   6   7   8   9   10

10. De dorpen Nes, Ballum en Hollum bezoek ik alleen voor de voorzieningen (winkels, horeca, etc.).

    1   2   3   4   5   6   7   8   9   10

11. Ik ben bekend met de UNESCO Wereld Erfgoed status van de Waddenzee regio.

    1   2   3   4   5   6   7   8   9   10

12. De dorpen Nes, Ballum en Hollum zien er aantrekkelijk uit.

    1   2   3   4   5   6   7   8   9   10

13. De sfeer in de dorpen Nes, Ballum en Hollum wordt mede bepaald door de historische bebouwing.

    1   2   3   4   5   6   7   8   9   10

14. Ik vind het belangrijk dat de historische bebouwing in Nes, Ballum en Hollum wordt beschermd om het historische karakter te behouden.

    1   2   3   4   5   6   7   8   9   10

Dit is het einde van de enquête. Heel erg bedankt voor het invullen!

Sehr geehrte Damen und Herren,
mein Name ist Iris van der Til und ich studiere Human Geografie und Stadtplanung an der Universität Groningen. Im Rahmen meiner Bachelorarbeit untersuche ich, anhand einer Umfrage, den Zusammenhang zwischen Tourismus und Kulturerbe auf Ameland. Die Umfrage ist anonym und Ihre Antworten werden sorgfältig behandelt, um Ihre Privatsphäre zu schützen. Die Umfrage besteht aus 14 Fragen und dauert ungefähr 5 Minuten. In dem Fall, dass Sie weitere Fragen haben, zögern Sie bitte nicht diese an mich zu richten. Außerdem können Sie mich im Nachhinein über diese E-Mail erreichen: i.y.van.der.til@student.rug.nl. Vielen Dank, dass Sie sich die Zeit nehmen, an meiner Umfrage teilzunehmen!

1. Wie lange dauert Ihr Aufenthalt auf Ameland?

   [   ]   Tage

2. Welches Geschlecht haben Sie?
   - ○ Männlich
   - ○ Weiblich
   - ○ Anders

3. Wie alt sind Sie?

   [   ]   Jahre alt

4. Wie lautet Ihre Postleitzahl?

   [   ]

5. Welchen Bildungsabschluss haben Sie?
   - ○ Grundschule
   - ○ Hauptschule
   - ○ Realschule
   - ○ Gymnasium
   - ○ Gesamtschule
   - ○ Fachhochschule/Universität
   - ○ Ausbildung/Berufsschule

Bitte bewerten Sie die folgenden Aussagen auf einer Skala von 1 bis 10, wobei 1 für „Stimme überhaupt nicht zu" und 10 für „Stimme voll und ganz zu" steht.

6. Ich besuche Ameland hauptsächlich wegen dem Meer und dem Strand.

   1   2   3   4   5   6   7   8   9   10

7. Ich besuche Ameland hautpsächlich wegen der Natur.

   1   2   3   4   5   6   7   8   9   10

8. Ich besuche Ameland hauptsächlich für Wanderungen und/oder Fahrradtouren.

    1   2   3   4   5   6   7   8   9   10

9. Ich besuche Ameland weil ich der Meinung bin, dass die Dörfer Nes, Ballum und Hollum eine angenehme Atmosphäre haben.

    1   2   3   4   5   6   7   8   9   10

10. Ich besuche die Dörfer Nes, Ballum und Hollum ausschließlich für Geschäfte und andere Anlagen (Einkaufsläden, Restaurants, usw.).

    1   2   3   4   5   6   7   8   9   10

11. Es ist mir bewusst, dass das Wattenmeer Teil des UNESCO-Weltkulturerbe ist.

    1   2   3   4   5   6   7   8   9   10

12. Die Dörfer Nes, Ballum und Hollum sind visuell attraktiv.

    1   2   3   4   5   6   7   8   9   10

13. Die Atmosphäre in den Dörfern Nes, Ballum und Hollum ensteht durch die historische Bauweise.

    1   2   3   4   5   6   7   8   9   10

14. Ich denke, es ist wichtig, die historisch bebaute Umgebung in Nes, Ballum und Hollum zu schützen, um den historischen Charakter zu erhalten.

    1   2   3   4   5   6   7   8   9   10

Dies ist das Ende der Umfrage. Vielen Dank, dass Sie die Umfrage ausgefüllt haben!