

## **Sense of Svalbard**

*A study of place attachment through winter recreation on Svalbard*

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## **Abstract**

Even though Svalbard has been pronounced as “no place for humans”, primarily because of its location, climate and remote appearance, it has been recognized several times in books and articles. As a consequence, tourism in the archipelago started about 100 years ago. The biggest increase in tourism occurred during the last 25 years, due to technological advances and to symbiotic co-operation between the tourism industry, researchers and governing bodies. Today, during both summer and winter, it attracts visitors from all continents.

From the moment we are born, we seek safety, comfort and satisfaction. Then during the first months of our life, the longing and need for attachment begins and continues throughout our lifetimes. This emotional bond connects us with others through time and space. It can be directed not only towards humans but towards animals, objects and places as well. A physical place can appear as a special place – a place to practice and concentrate on hobbies; a place to be together with others; and a place, which reflects who we really are – a place for personal growth. The term “sense of place” describes the characteristics which make a place unique and special, and evoke belonging and attachment needs.

This Master’s research was conducted in Longyearbyen using a quantitative survey to reveal and understand the interaction between place attachment and tourist experience during winter recreation in Svalbard. The research aim was to provide a holistic representation of the relationships between human and environment, and uncover factors, which can make the winter tourism of Svalbard meaningful enough to arouse positive attachment. The thesis also describes how personal experiences and physical, emotional and social aspects can affect a person’s relation to places.

**Keywords:** place attachment, Svalbard, arctic, winter tourism, quantitative research

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## Chapter 1. Introduction

This thesis focuses on the archipelago of Svalbard, which is situated half way between the Norwegian mainland and the North Pole. The land area is 61,229 km<sup>2</sup> with a coastline over 3,500 km long. It is the northernmost permanently inhabited area on Earth, stretching from 74° to 81°N. In 1596, Willem Barents discovered Svalbard and it remained a “no-man’s” land until the beginning of the 1900s. Since 1925, it has been under Norwegian jurisdiction. By the 1<sup>st</sup> of July 2016, Svalbard had a population of 2667 inhabitants, from which 2152 lived in the capital, Longyearbyen ([sb.no](http://sb.no)). The biggest and most important island is Spitsbergen, where the capital is located as well. Approximately 65% of the islands are protected areas; some require special permission to access. Svalbard hosts six nature reserves, seven national parks, fifteen bird reserves and one geotropic area.

The climate, thanks to the Gulf Stream, is not as cold as other places this far north. The average summer temperature is +6°C, during the winter it is -14°C. Due to Svalbard’s geographical position, the light conditions are extreme; in Longyearbyen from the 20<sup>th</sup> of April until the 23<sup>rd</sup> of August the sun never sets – midnight sun – and from the 11<sup>th</sup> November until the 30<sup>th</sup> of January the sun never rises – polar night ([Syssemmannen.no](http://Syssemmannen.no)).

I have personally had the opportunity to experience how important the role of place can play in someone’s life. Since my early teens, I have shown special interest in astronomy, especially the northern lights. Partly because of this and because of my admiration of arctic nature and climate, I have always wanted to visit Norway. Therefore, as a result of an international scholarship in 2007, I had no hesitation when I was offered the opportunity of spending five months as an intern in Northern Norway to visit. Experiencing Northern Norway for the first time helped me realize that this was the place where I wanted to live. Subsequently, a year later I moved from Hungary to Norway. Moving to Northern Norway made me understand how a place can become part of you – or you become part of it, which is right I am not entirely sure.

I started my first trip to Svalbard with a strong feeling of excitement. I had an image in my head from all the books and articles I had read about the place, as well as from the narratives of people who had been there. Still, I was positively surprised! All the nature, beauty, silence and at the same time excitement, which I admire about the northern part of the mainland is



exponentially in place in Svalbard. Learning how visitors perceive this area was an interesting and meaningful job for me to accomplish.

### **1.1 The research question**

This Master's thesis aims to reveal elements and characteristics which have significant influence on tourists' attachment to Svalbard as a destination. The research investigates how the two main pillars of place attachment, the physical place and the experience (Altman & Low, 1992) affect individuals. I was looking for the existence of any kind of physical, emotional or social dependence associated with visiting and revisiting this place. Through the study, I tried to find reasons why tourists visit Svalbard and Longyearbyen, the northernmost settlement on Earth. My aim was to discover the components, which are connected and can strengthen place attachment and find correlations between winter recreational experiences and the degree of attachment. The research sought to explore if different winter activities affected visitor satisfaction and therefore, the strength of attachment as well. I wanted to better understand how visitors see, experience, and value Svalbard during the winter season. The gathered information essayed to capture the connection between people and geographic areas and thereby would be able to assist tourism management to facilitate winter recreation for visitors in the most beneficial way.

To this end, I used the following research question:

- *Which winter recreational components are essential in contributing to a unique attachment to Svalbard?*

With this question, I was able to find out *which* were the most important elements of winter tourism in Svalbard and *how* these influence the strength of place attachment. My main reflections were based on place attachment theory, primarily the works of Altman and Low (1992), Williams (2003) and Kyle's three dimensional model (2005). Place as such was introduced through the five-dimension aspect of Bærenholdt (2004). The tourist experience also received close attention where the connecting theory was based on the multi-relational approach of Lindberg (2014). Research within the social sciences has been attempting to describe and understand the feelings of humans related to places and environments, and so does this Master's thesis. I have mainly focused on the possible connection between tourist

activities and attachment to places, and how the presence and strength of this attachment depends on personal experiences through different winter activities undertaken in Svalbard. Therefore, the purpose of this thesis is to identify and understand the main features and elements of place attachment and how it is affected by the place itself and the tourist experience. Hypotheses used in data analysis are presented in the following chapters.

The empirical material is primarily based on quantitative methods, through researcher-distributed surveys which were conducted in Svalbard at the end of February, 2016. Due to the inclusion of some open-ended questions, through observation of participants and their storytelling during the administration of the surveys, I was able to collect some potential qualitative data as well. The study participants were between the ages of 18 and 82 though most were in their 30's. The majority of participants were Norwegians, but I received information from visitors from all continents.

## **1.2 Tourism on Svalbard**

Tourism in the archipelago started over 100 years ago; albeit the first recorded organized trip was on a steam vessel from Hammerfest, in 1871 (Viken & Jørgensen, 1998). Svalbard has progressively become a desirable destination; however it still remains a fragile and vulnerable place on Earth. The biggest increase in tourism occurred during the last 25 years, as a result of technological advances and symbiotic co-operation between tourism industry, researchers and governing bodies (Viken, 2011).

The tourism of Svalbard generally relies on its natural and cultural values. The different types of activities provide a connection with Arctic nature to varying degrees; from gazing and admiring from cruise ships to becoming one with it through expeditions. Most tourists arrive at Svalbard as cruise ship passengers. Except for some disembarkation, they essentially live on board. Other tourists take coastal cruise trips offered by local tour operators, most of these tourists stay on board and have one or two overnight stays in Longyearbyen. A significant share of tourists participate in organized activities, mostly by local tour operators, such as hiking, skiing, ATV-safaris, snowmobile trips, dog sledding, horseback riding, kayaking, sightseeing, mine visits, fossil hunting, snow cat driving, ice caving, northern lights safaris and fat biking. A smaller share of tourists arrives as individual tourists, who plan and organize their trips without using local tour operators. Since 2002, individual tourists can drive

snowmobiles within the Longyearbyen area without being part of an organized group. However, they have to report these trips to the governor of Svalbard in advance. Tourists also visit this archipelago because of their special interest in some subjects and hobbies, for instance, geology, glacier walking or bird-watching (Viken & Jørgensen, 1998). Winter recreation in the Svalbard area is a worldwide attraction, which offers a unique experience of the wild arctic nature. Since modern technology and knowledge has made the wilderness accessible for wider user groups, there is also a growing interest in adventure tourism. Tourists are now partaking in longer expeditions while pushing their own boundaries and facing their fears (Beedie & Hudson, 2003). Some travelers prefer to stay in and around Longyearbyen and use the facilities offered in the nearby area. This is advantageous for town-based businesses, such as restaurants, hotels and shops but obviously differs from the previously mentioned nature-based profile (Viken & Jørgensen, 1998).

According to *'Reiselivsstatistikk for Svalbard 2014'* there were 50,017 tourists traveling to Longyearbyen, and 118,614 guest nights were registered. This is a significant increase compared to previous years. In 2003, the registered guest nights were 71,049, which corroborate an increase of 60% over the past ten years. A considerable share of this increase occurred during the first and the fourth quartile of the year; during the dark period which had previously been a low season in tourism. These figures serve to highlight the growing interest towards winter tourism and emphasize the importance of research within this area of study. In 2014, 68% of arriving tourists visited Svalbard for leisure and recreational intentions, 27% were participating in courses and conferences, while 5% of the visits were work-related. The number of international cruise ships is between 21 and 34 each year, which generated approximately 35,000 passengers to the area in 2014. Coastal cruises and daytrips by boats through local tour operators also had over 12,000 registered passengers each in 2014. Due to the seasonal nature of cruise ship tourism, this study will not focus on this sector since it investigates only winter tourism. In 2009, the number of day's tourists spent in the field in connection with hiking, skiing, ice caving, kayaking and horseback riding had a significant fall when one of the biggest tour operators ceased offering the longest skiing trips. However, the number started increasing again in 2012, and reached 3,500 in 2014. The same phenomenon can be observed in regard to number of days tourists spent in the field with dog sledges (over 2,400) in 2014. In addition to the previously mentioned activities, snowmobile trips are the most popular activities during the winter season. The number of days spent in the field by snowmobiles is strongly connected to weather conditions. In 2007 and 2008, it was

possible to organize snowmobile trips until the beginning of June, which represented a significant increase in the number of days spent in field. In 2012, this number decreased due to mild temperatures and the subsequent shortening of the season. In 2014, 4,000 days were associated with organized snowmobile trips while individual snowmobile tourists spent 7,000 days in the field. Both of these numbers show significant growth compared to previous years, which beside weather conditions, can also be explained by the return of the Norwegian low cost airline to Svalbard.

*Table 1: Number of guest nights on Svalbard between January and April, 2014/2015/2016 ([ssb.no](http://ssb.no))*

		All	Foreigner	Norwegian
		Svalbard	Svalbard	Svalbard
Guest nights	2014M01	3,297	938	2,359
	2014M02	7,174	1,421	5,753
	2014M03	14,149	2,147	12,002
	2014M04	13,744	1,553	12,191
	2015M01	4,913	1,523	3,390
	2015M02	10,124	2,787	7,337
	2015M03	14,808	3,764	11,044
	2015M04	16,665	3,761	12,904
	2016M01	6,664	2,028	4,636
	2016M02	11,803	2,946	8,857
	2016M03	14,664	4,801	9,863
	2016M04	17,248	4,057	13,191

The number of guest nights during the first four months of 2015 was 46,510, and 75% of those were spent by Norwegians. The remaining 25% was primarily spent by British, German, Swedish, Danish, French, Dutch and American tourists ([ssb.no](http://ssb.no)). The most popular months were March and April. The winter months of 2016 generated even higher numbers. From January to April, 50,379 guest nights were registered, which is a growth of 8.3%. The most popular months were March and April again, but this year there was a high increase in February and April. Norwegians spent 36,547 guest nights in Svalbard during the first four months of 2016, this represents 73% of all registered guest nights. Comparing the first four months of the last three years indicates 31% growth of guest nights and a growing number of foreign visitors. The year of 2015 beat all previous tourism records in Svalbard and statistics show higher numbers for 2016 as well. Already from January to May, 62,349 guest nights have been spent. In general, the increasing number of guest nights is primarily due to visitors

from Belgium, France, Great Britain and USA, and a significant growth can be observed among Chinese and Australian tourists as well ([ssb.no](http://ssb.no)). The results of this research indicate that among visitors there were no negative effects of the avalanche, which hit Longyearbyen in December, 2015. Even though the present study did not concentrate on the outcome of this natural disaster, the number of guest nights did not drop afterwards. During the research that informs this thesis, no tourists mentioned that they would feel insecure or threatened by the previous avalanche.

Chapter two provides the background information about theoretical perspectives and the choice of research methods. It introduces the study settings and the sampling process, highlighting the analytical framework and the measurements, which were applied in the research that informs this thesis. Ethical considerations and challenges I had to face during the writing process are also described in this chapter.

Chapter three introduces the theoretical framework through three separate but connecting themes; place attachment, place and landscape and tourist experience. This chapter includes all the hypotheses, which were used during the process of analysis.

Chapter four presents the analysis of the empirical data, based on the theoretical framework presented in chapter three.

Chapter five summarizes the findings of the study and highlights conclusions and practical implications.

Throughout this thesis both the expression of *'tourist'* and the expression of *'visitor'* are interchangeably used and the choice of word does not indicate any semantic differences.

## **Chapter 2. Methodology**

### **2.1 Introduction**

This chapter presents the methods and methodological considerations involved in the process of this research project. I focus on tourists' attachment to Svalbard and the meaning they give to this place based on their winter activities and experiences. The annual statistical reports of the governor of Svalbard and Statistics Norway have provided general touristic information about nationalities, accommodation and activities.

Through the leading theoretical perspectives of Altman and Low (Altman & Low, 1992) and Kyle's (Kyle, Graefe, & Manning, 2005) three-dimensional place attachment theory in recreational settings, I investigated place identity, place dependence and the social aspects of winter recreation in Svalbard. I use Lindberg's (Lindberg, Hansen, & Eide, 2014) multi-relational approach as a fund to better understand tourist experiences through the aspects of time, context, body and interaction. My aim was to find conjunction between place attachment and tourist experiences.

Primarily I use quantitative research methods through researcher-distributed paper questionnaires. This was accomplished during ten days of stay in Longyearbyen in February, 2016. Secondly, qualitative research methods were also applied. Besides the organized empirical data collection, the observation of participants is a natural and unavoidable part of most studies. Observing and talking to my participants during the administration of the survey gave me extra information and served as potential qualitative data (e.g. storytelling) to complement the quantitative findings. I could also observe my own actions and embodied experiences as well. I treat this self-reflection as autoethnographic data (Chang, 2008) but I do not establish any conclusion based on that.

### **2.2 Background of the study**

The idea for this Master's thesis originates from a research started by the University of Utah in 2014. The research aims to understand and compare winter recreational experiences and sense of place between various user groups of the Yellowstone National Park. This study is a result of co-operation between Norway, Iceland, Alaska and Finland in the project: '*Winter: New turns in arctic winter tourism*', and it is financed by The Research Council of Norway. The American study proposes to compare results with similar Norwegian research conducted

on place attachment as well. Therefore, due to the suggestion of my supervisor, Svalbard was chosen as the target of this study. Within Norway, Svalbard seemed to show the most similarities with the Yellowstone area – in point of climate, nature and structure. This Master's thesis aims to be useful and comparable for future studies within this research area.

### **2.3 Theoretical perspective and research methods**

Social science works with 'reality' and 'knowledge' by being committed to empirical data (Weber, 1949). Empiricism identifies the source of knowledge in human experiences, which relies on the connection between experiences and the empirical world (Guba & Lincoln, 1994). The way empirical data is collected defines the methodological position of research. Methodology is a systematic and theoretical analysis of methods. The ontological and epistemological arguments of social scientists reflect their theoretical assumption, which finally defines their choice of method. The way scientists define ontology (the study of reality) affects how they relate to epistemology (the way of knowing), and these two together affect how they relate to objectivity (Guba & Lincoln, 1994). Paradigms derive from Kuhn (Kuhn, 1970), paradigms include all the beliefs, values and techniques that members of a scientific community share. Guba and Lincoln (1994) identified four different paradigms, which serve as frames for scientific work and as a worldview that guides a researcher.

Positivism was developed by August Comte during the 1800s emphasizing the measurability of reality through empirical data in order to explain a social phenomenon (Comte, 1880). This paradigm is a brand of empiricism, which fully believes in objectivity; one can and shall be objective (Guba & Lincoln, 1994). This declaration derives from its ontological and epistemological position. Positivist thinking claims that reality exists and researchers can converge in direct contact with it. Researchers should relate to reality as through a one-way window, where the investigator and the investigated are independent from each other (Guba & Lincoln, 1994). The way of ensuring this objectivity is through scientific procedures and studies. Including own beliefs and subjectivity can negatively affect validity and the results of research. Quantitative methods exclude the researchers own values during the empirical study, and thereby achieve more accurate results. Quantitative research is a systematic empirical observation of a phenomenon (Given, 2008), and it is a way of "explaining phenomena by collecting numerical data that is analyzed using mathematically based methods" (Aliaga & Gunderson, 2000). Quantitative data is represented through tables and

figures to explain or falsify a certain phenomenon. This Master’s thesis is an example of this positivistic thinking ensuring objectivity through the use of quantitative methods.

Working with hypothesis is strongly related to positivist thinking. A hypothesis is a formulation of a logical, meaningful sentence (Kuhn, 1970; Popper, Popper, & Popper, 1972). It is a suggestive and general statement about reality, and it is also an assumption, which explains the relationship between variables. Hypotheses should be testable and possible to falsify (Popper et al., 1972). The null hypothesis predicts the absence of relationships between variables, while in contrast to this the alternative hypothesis declares the existence of connection between variables. The dominant hypothetico-deductive model of scientific theorizing is a way of developing a theory and explaining the world in a positivistic way. The method tests and falsifies hypotheses in order to capture the reality of the human population (Potter, 2014).

The used methodology in this Master’s thesis is hypothesis driven. The hypotheses I use to produce valid, reliable knowledge (O’Leary, 2013) are theory-based (*Figure 1*). They are derived from Kyle ‘s (Kyle et al., 2005) three dimensional place attachment theory and Lindberg’s (Lindberg et al., 2014) multi-relational approach for understanding tourist experience. Based on the work with the hypotheses, I have received insight into the field of my research problem.

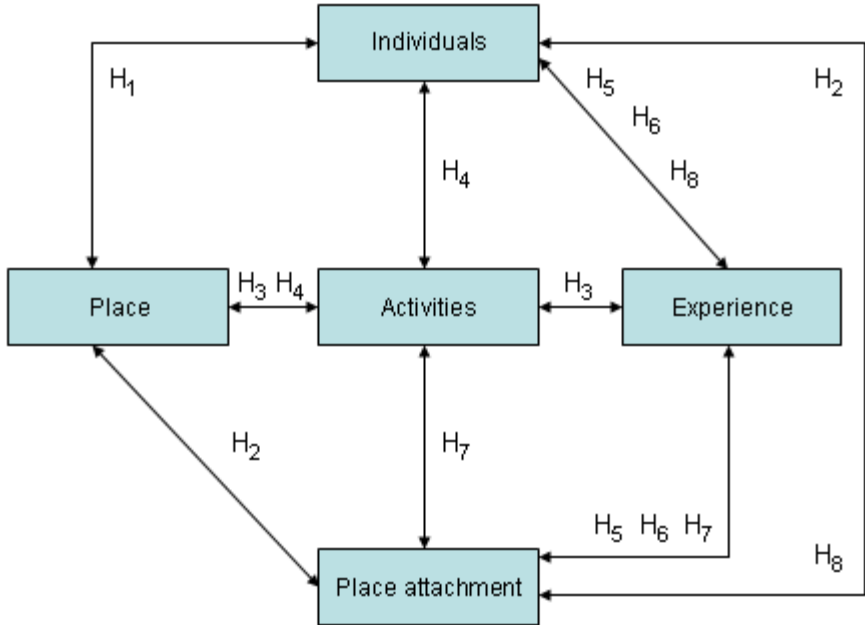


Figure 1: Model of hypotheses



The method used in this research project is a quantitative survey, where the collected data is primarily quantitative. The data was coded; the information from the surveys was transformed into numerical data and analyzed by statistics, the numerical summary of the gathered sample data represents the findings. The advantage of this research method is that the data is derived from a relatively big number of respondents, which enables me to generate standardized and quantifiable data to show statistical significance.

Even though the use of quantitative and qualitative methods within one study reflects paradigmatic differences in the way of worldviews (Ryan & Bernard, 2000), this mixed method appears advantageous for present study. In this Master's thesis, I have chosen quantitative analysis and hypothesis testing to be able to stay objective and perceive reliable results. The main focus relies on quantitative methods, however qualitative research methods such as observation, content analysis and autoethnographic data were also employed in the study. Autoethnography investigates the researcher's own experiences in a form of self-observation (Chang, 2008; Ellis, 2004). It is therefore the opposite of hypothesis-driven, positivistic thinking. Autoethnography observes the feelings, thoughts and impressions of the researcher (*Appendix IV*) therefore it can never be fully objective (Ellingson & Ellis, 2008). The same premises apply to observation and content analysis as well. Through the in-depth nature of storytelling and some long and detailed answers to the open-ended question, the weaknesses of the quantitative survey are compensated (Johnson & Onwuegbuzie, 2004). I do not make any conclusion based on the qualitative findings; they only appear as supporting examples.

Errors and bias through quantitative data collection and analysis can lead to misunderstanding and incorrect results. Quantitative research methods are also inflexible, because the survey can not be modified after the study begins. Converting data into numbers may result in lost information or may ignore underlying causes. By conducting qualitative data, the aforementioned weaknesses can be neutralized. On the other hand, qualitative methods have vulnerabilities as well. The qualitative researcher has to be aware of reflexivity (Foley, 2002) and has to be critical of his or her role within the research. The usually small sample size and subjective analysis are harmonized by the big sample size of questionnaire participants and objective results. Using mixed methods in the research that informs this thesis results in methodological flexibility and rich, comprehensive data. The binary nature of the collected data gives me the possibility to provide extensive results.

## **2.4 Study settings and sampling**

The study took place in Longyearbyen, on the arctic archipelago of Svalbard. Data was collected primarily at the airport of Longyearbyen, before the departure of tourists. Other tourists were asked to participate at the tourist information office, Visit Svalbard.

The research was conducted between the 22<sup>th</sup> of February and the 3<sup>rd</sup> of March, 2016. The gross sample of my study was national and international winter recreational tourists, both men and women above the age of 18, who were present in the Longyearbyen area during the abovementioned period of time. The sampling method was non-probability, availability sampling, which means that I chose my participants from among those who were available at a specific place at a specific time. I collected data through a cross-sectional survey, where the respondents self-completed the handed-out paper questionnaire. The five-page questionnaire took approximately 5-10 minutes to administer.

A total of 248 winter recreational tourists in Longyearbyen agreed to participate in the study, which resulted in approximately a 95% response rate.

The applied quantitative questionnaire is similar to the one used for data collection in the Yellowstone National Park. However, it was adjusted to the Svalbard context and at the same time changes attempted to be minimal in order to support future comparison. Thus, this survey was originally written in English and translated into Norwegian and German afterwards. These surveys were pilot-tested with 20 students of the UiT, who identified no major problems.

The structure of the survey is built upon three main sections. Section one concentrates on trip characteristics, such as length, accommodation, modes of travel, recreation group, regularity and reason to travel. Section two focuses on the winter recreation experience, the importance and satisfaction level of different activities. It also provides an insight about the participant's attachment to Svalbard through evaluating statements. This evaluation, however, is in addition to the original American survey, but I felt that this was important to include as well. Section three collects information about the study participant. Beside the socio-demographic data, the last section collects information about the total cost of the trip as well as how participants learnt about winter visitation to this area. The survey closed with an open-ended

question, giving the possibility to fill in additional comments or to provide longer, more detailed information.

## **2.5 Measurements and analytical framework**

The questionnaire sought information about socio-demographic and trip characteristics, as well as motivations and aims of the trip. Visitor experience and satisfaction is often used as a dependent variable to measure and describe place attachment. Therefore, the importance of diverse factors and satisfaction levels were also investigated. The importance and satisfaction level of activities were measured on a 5-point Likert-scale (1 = not important, 5 = very important), and afterwards examined through an importance-performance analysis (Martilla & James, 1977). I used Kyle's first order, three factor correlated model (Kyle et al., 2005) to measure place attachment (place identity, place dependence, social aspect). Rating of statements was required to reveal the aspects of tourists' meaning-making and attachment or lack of attachment to Svalbard. The same approach was used to evaluate the 14 statements (Williams & Roggenbuck, 1989) describing different levels of the phenomenon (1 = strongly disagree, 5 = strongly agree). Cronbach's alpha was applied to examine the inter-item reliability of the place attachment measures.

The collected data was analyzed by using IBM SPSS Statistics 22 Software, through testing of hypotheses, which aimed to underline the preferences and relationships with nature. To be able to evaluate hypotheses and the research question first I presented the socio-demographic and vacation characteristics using descriptive statistics. Through this analysis, I received a qualitative description of the main features of the collected information. Contingency tables illustrated the number and percentage of the categories, while the Chi-square test and Pearson's correlation coefficient revealed the association between characteristics. Declaring the statistical significance of findings is based on probability. The probability was set for .05, which means that the probability of obtaining statistical significance by chance alone is five percent. This indicates that if the probability is lower than the  $\alpha$  significance level ( $p < .05$ ), we have statistically significant results. A significant t-test indicates the rejection of the null hypothesis and the approval of the alternative hypothesis. Through the analysis of variance (ANOVA) I tested for overall differences between group means and the overall fit of the regression model. The regression model demonstrates the influence of different characteristics such as visiting history, socio-demographic and trip characteristics, etc. on the degree of place

attachment. This analysis helped me determine which groups of activities and trip components led to satisfying experiences and to a higher degree of place attachment. By the help of two-way ANOVA, I was able to discover if there was interaction between the two independent variables on the dependent variable. For example, it helps to understand if there is an interaction between length of stay and visiting intensity on the strength of place attachment. I also used confirmatory factor analysis to identify and understand the structure of clusters within the variables (characteristics) as different aspects of tourist satisfaction and place attachment.

## **2.6 Challenges**

During my research process I have faced and successfully overcome some challenges. The chosen time period for data collection was beneficial but not exquisite, since the high season for winter tourism on Svalbard is March and April. The choice of conducting the research in the end of February had practical reasons, to finish and submit the Master's thesis in time. Fortunately, the size of the sampled data was sufficient to obtain valid results.

The study from the University of Utah served as the foundation of this research project. The final version of the survey was adapted to Svalbard as a destination. At the same time it was customized in a way that facilitated future comparisons with the American results as well. Taking the fact that most tourists, who arrive at this destination, are Norwegians (and other Scandinavian nations), British and Germans, translation of the data sampling materials was necessary. Due to different languages used in the questionnaire the equivalence of semantic and conceptual meaning had to be certain. Concepts, which were seemingly universal, might have had slightly different meanings in other languages and cultures, and these could lead to biases in the results. This problem was resolved by using the method of translation/back-translation to ensure compatibility (Budruk, 2010). The English version of the survey was used as the starting point. I translated this survey to Norwegian and an associate researcher translated it to German, based on previous. Native speakers of these two languages who were at the same time experts in English accomplished the back-translation. Minor changes were made in the original surveys due to the aforementioned process. An advantage for me as a researcher was that I speak both English and Norwegian; this made it easier to approach tourists and gain their trust.

A final question is about how to deal with the additional data I collected. During the data collection at the airport of Longyearbyen, I had some interesting and useful conversations with some of the tourists. They talked about the activities they had participated in, their positive and negative experiences and plans about (not) coming back. I have to mention the information collected from the open-ended question as well. First, I had to make sure that I used the quantitative survey data and the qualitative data as separate collections of information. After accepting the results of the survey, I used the qualitative information to support and exemplify the findings. To avoid any misconception, I clearly identified the source of the data throughout my analysis, specifically if it did not originate from the survey.

## **2.7 My role as a researcher and ethical considerations**

All social research involves ethical issues since such studies collect data from and about people. However researchers do not always agree on what is considered ethical behavior and what is not. Through my power and choices made as a researcher, the study could touch on several ethical dilemmas during the research process. The way questions are asked and the language used might mislead respondents or influence the given answers. Choosing participants who I knew for certain have a passionate relationship to Svalbard could have skewed the statistical results. I ensured respondents regarding confidentiality and anonymity before their participation in the survey. I felt that through the brief introduction, which was given to participants about the thesis and myself, I was able to establish a comfortable atmosphere and a solid and professional basis for the research.

I presented my idea and research plan to my supervisor first, and later discussed it with the general manager of Visit Svalbard. I received positive responses and useful advice for completing this study. Due to the nature of the survey, I registered the research project at NSD, the Norwegian Social Science Data Services. I also wrote an information letter<sup>1</sup> which was given to the respondents together with the survey. The short letter described the aim and characteristics of present research study and at the same time emphasized the voluntary nature of the participation. Respondents were informed that they might skip any question or stop any time without providing a reason. Confidentiality and anonymity were also assured; informants would not be recognized through their participation. The survey did not demand any names and due to the large number of respondents they could not be recognized by their responses.

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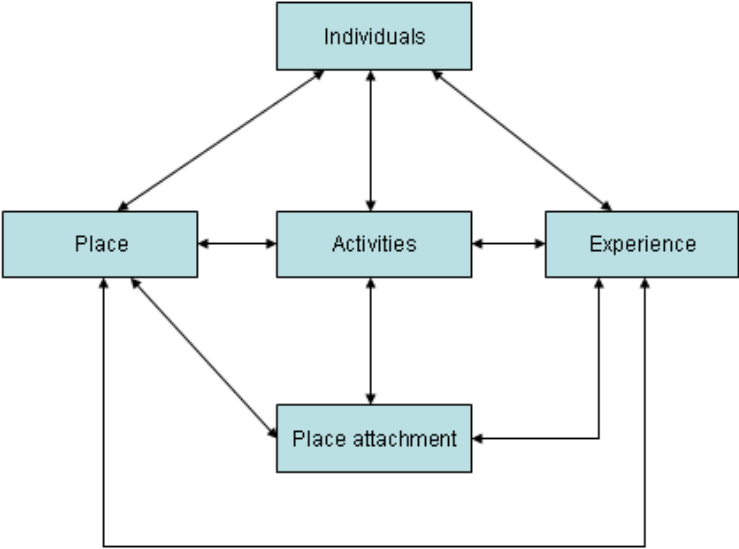
<sup>1</sup> The information letter is found in the appendix (Appendix I.).

The survey was tested in advance to make sure that the used language and the way questions were asked would not lead to misunderstandings, and that the answers would ultimately help to address my research problem. Most tourists were asked to participate at the airport of Longyearbyen before their departure. This way their participation did not steal precious vacation time, which may have contributed to an increased willingness to participate.

### Chapter 3. Literature review

#### 3.1 Introduction

This chapter presents the background and theoretical discussions connected to place attachment theory. Due to the complex nature of this phenomenon different viewpoints are introduced instead of giving a general definition. The connection between the individual, tourist place and tourist experience, and their influence on place attachment are presented in this chapter. The theoretical and working model is demonstrated in *Figure 2*, which also displays the complex nature of this phenomenon. The model illustrates the interdependence of all the elements of the context in focus and their impact on each other. On one hand, individuals visit a specific geographical location. The type of winter activity, chosen by the individual, results in an experience which has an effect on the degree of place attachment. At the same time, this chapter also demonstrates how we can examine this process on the other hand. Specifically, the degree of place attachment has an effect on the perceived experience, as well as on the chosen winter activity. Most importantly, it also affects the choice of destination. This chapter investigates how place attachment evolves through experiences derived from winter recreation and different winter activities. This theoretical background provides a foundation for the empirical study and a framework for analysis and findings.



*Figure 2: Working model*

Studies about the bond between humans and environment date back to the 1960s (Hammitt, Kyle, & Oh, 2009) and were discussed in one particular article (Fried, 1963). It has been identified that place attachment is a significant factor within the choice of tourist destination process, and therefore of increasing attention in natural resource management. Thus, it has become an important issue for social scientists to discover. Research on place attachment developed dynamically in the 2000s (Lewicka, 2011). Between 2000 and 2010, approximately 112 articles were published on the aforementioned issue, which focused primarily on attachment at the individual level (Lewicka, 2011).

Tourists attach meanings and importance to specific geographical places in numerous ways and scope, based on their positive and negative feelings, emotions and affects (Hidalgo & Hernandez, 2001). For some, a specific location can emerge with extraordinary physical conditions to perform a particular activity. For others, the exact same place may help them to identify themselves. Among other facts, the specific environment can be symbolic as well, because it recalls memories or it appears as a symbol for a nation or a culture (Williams & Roggenbuck, 1989). This complex phenomenon is presented and explained in the following sub-sections of the chapter.

### **3.2 Place attachment**

In tourism studies, the phrase ‘place attachment’ means the relationship between a physical location and a tourist experience (Altman & Low, 1992). It is also referred to as ‘sense of place’ which involves the mixture of intrinsic characters and the meaning people give to a place (Mayhew, 2015). Why do tourists choose a specific place instead of another? Does this place have any special meaning for tourists? Are tourists attached to this place or dependent on this place? If the answer is yes, the second question will be to what degree? Which features and settings make this location unique and not replaceable with any other alternative locations? Place attachment theory has several components to describe the multidimensional relationship of human-place bonding. Altman and Low (1992) highlighted the importance of human’s affection, emotions and feelings. These emotions vary among individuals in its nature and size or scope when they are directed to a specific place. Beside the emotional qualities, cognition, such as knowledge and belief, and practice, for example, behavior and action are also involved in place attachment (Altman & Low, 1992).



The human-environment relationship of place attachment has a two-dimensional approach (Williams & Roggenbuck, 1989). The first one is place identity – an emotional and symbolic dimension – which describes the cognitive connection between the physical place and the individual's identity (Proshansky, 1978).

*“place identity represents a ... sub-structure of the self-identity of the person”*  
(Proshansky, 1978, p. 60)

Place offers the opportunity for individuals to express personal meaning and affirm their identity through a pattern of feelings, values, preferences or conscious and unconscious ideals, which are relevant to this specific environment (Proshansky, 1978). For instance, a specific hiking area could be better than others for some because of nostalgic memories from early childhood, or scenery where a tourist can recognize his own personality. Place identity is the result of a process. Through experiences and involvement a place can become an essential part of a tourist's life, either self-consciously or subconsciously (Manzo & Devine-Wright, 2013).

The second dimension is place dependence – a functional dimension – which occurs when tourists have a functional need for a place which can not be transferred to any other location.

*“place dependence reflects the importance of a place in providing features and conditions that support service specific goals and desired activities.”* (Williams and Vaske, 2003, p. 831)

The functional value of a place demonstrates how well the environmental settings facilitate and satisfy the desired activities and experiences of tourists (Stokols & Shumaker, 1981). This is more related to the nature-made, physical characteristics of a place and the built infrastructure. People choose a place specifically because of its typical features, which are not possible to find anywhere else. For instance, one mountain hill is better for hiking than others because of the quality and marking of the trails. These attributes are easier ones for tourism management to work with and shape, therefore it is essential to investigate their roles and importance.

In addition to place identity and place dependence, a third factor is included in place attachment dimensionality (Altman & Low, 1992; Hidalgo & Hernandez, 2001; Kyle et al., 2005) . Social bonding and meaningful social relationships can also be developed and

maintained in special environmental settings. A study by Hidalgo and Hernández (2001) demonstrated that social attachments can be as strong or even stronger as setting attachments. However, another study by Williams and Roggenbuck (1989) argues that functional dependence, the unwillingness to use another location to perform a specific activity is the strongest dimension of all.

While environmental psychology primarily focuses on the attachment of places from an individual's perspective, sociologists take the effects of social relationships into consideration. They have noted that families, community members and even cultures can collectively share attachments to places. Primarily, this refers to dependence on an emotional dimension, such as symbolic meaning or memories attached to a specific environment. It can also increase the feeling of being part of a community (Williams & Vaske, 2003).

Based on a variety of concepts describing the feelings of people about places, Shamai (Shamai, 1991) referred to sense of place as an umbrella concept. This indicates an involvement of several different notions – such as place attachment, regional awareness and national identity – instead of taking one single interpretation as a starting point for further research. Sense of place can differ from person to person depending on how they experience a specific geographical location. To be able to measure the range and intensity of a previous notion, Shamai (1991) developed and tested a sense of place scale. The resulting seven-level scale demonstrates different phases based on feelings and intensity by which people associate with places. At one end of the scale, there are individuals who do not have any sense of place. They travel to Svalbard, for instance, but they could be at any other arctic destination doing the same activities. They feel no physical, emotional or social dependence or attachment to this place. At the other end, Shamai (1991) positions people who are deeply committed to a place and are ready to sacrifice their personal values for the sake of the place. Even though this is an extraordinary feeling connected to a physical location, some very enthusiast people are willing to give up their previous traditions, community or lifestyle for a place, which is so special for them. Time spent with family and friends or on previous hobbies will not be highly prioritized anymore. Between these two extreme points, there are people who are only aware of a place, who belong to a place, the ones who are attached to a place, and people who identify themselves with a place's goals or even play active roles to achieve those goals. Shamai (1991) describes place attachment as an emotional attachment that is unique and not exchangeable with other places. The individual endows a place with a meaning, which is

connected to the person's personal identity. The scale well represents how many different ways of varying intensity individuals can feel about the same place.

Researchers have developed psychometric scaling to be able to measure and analyze the degree of place attachment (Kyle et al., 2005; Williams & Roggenbuck, 1989; Williams & Vaske, 2003), even though a standardized measurement scale does not exist. The measurements are accomplished by the evaluation of statements, which describe different levels of attachment. The statements are constructed to capture the respondents' physically, emotionally and socially derived attachment to places. These items are usually evaluated on a five-point Likert scale (from "strongly disagree" to "strongly agree") and statistically analyzed afterwards. In the empirical data collection of this Master's thesis, ten statement items were adopted from Williams and Roggenbuck (1989). Those statements measured place identity (e.g. Svalbard means a lot to me) and place dependence (e.g. Svalbard is the best place for what I like to do). The original scale of Williams and Roggenbuck (1989) did not include elements of social dimensions, however I felt this might be an important component of the human-place relationship. Therefore, in addition to previous items, I included four statements from Kyle et al. (2005) for measuring the third dimension, social bonding (e.g. I have a special connection to Svalbard and to the people visiting this place). The original survey from the Yellowstone National Park did not use any statements to evaluate place attachment. However, I choose to use them because I felt that operating with the aforementioned measurement statements gives me the possibility to observe different degrees of place attachment and expectedly the reasons behind.

The concept of sense of place is another way of referring to place attachment. It illustrates how people feel about places. There have been several ways to explain and define the aforementioned notion; some in a more philosophical way while others are rather descriptive. According to Relph (Relph, 1976) it is easier to focus on its effects made on human behavior and examine the links between people and the actual geographical place. The essence of 'place' also needs clarification in this sense, due to its dimensionless scale. A place can appear as a location, a landscape, a community or an entire country. Relph (1976) highlighted that a place alone – whether it takes a small or a larger dimension – is not adequate to create a sense of place. Establishing attachment and sense of place requires a longer and deeper experience and preferably involvement with the place. Thus, it is necessary to investigate the

characteristics of the aforementioned notions and their effect on place attachment. Therefore, in the following, tourist place and tourist experience will be further considered.

### **3.3 Place and landscape**

Place, as a geographic location is one of the main cornerstones of place attachment (Altman & Low, 1992; Relph, 1976), and a vital element of tourism as well. Tourism is fundamentally about consuming places (Urry, 1995), which indicates that places are significant parts of any kind of tourism. Places are not produced by tourism industry or by tourists alone. Physical spaces can become places through embodied and social practices of tourists, their images and anticipated memories (Bærenholdt, Haldrup, Larsen, & Urry, 2004). In other words, a tourist place is created through the interaction between humans and the environment (Edensor, 2001). To better understand place attachment we can not avoid investigating different aspects and dimensions of place.

Tourist places are described through five diverse but overlapping principal dimensions (Bærenholdt et al., 2004). Place as a material or physical environment is seen as a geographical place, as a spatial position of a destination, for example, Longyearbyen in Svalbard. It is never fixed but constantly under construction, due to human interaction (Bærenholdt et al., 2004). This interaction forms the second dimension, the embodied place. This is produced not only in space but also in time. It stresses the importance of humans' bodily engagement with places through which the material place will be produced and performed. For instance, in this thesis, this material and embodied place is the Longyearbyen-area in the Svalbard archipelago, visited by tourists in the end of February, 2016. The movement of tourist bodies in diverse time and space can create memorable moments in people's lives, thus associating it with positive feelings and meanings (Bærenholdt et al., 2004). This embodied place can be understood as a place of sociality. The co-presence of bodies serves as the foundation of social interaction, for example, spending winter vacation on Svalbard with family. Humans are engaged not only with a place but with each other as well. It is materially organized; people are at the same place at the same time who can interact in a wide range of social practices (Bærenholdt et al., 2004). Due to social interaction and the engagement with a tourist place, a geographical location can also be conceptualized as a place of a memory. Remembering experiences is an essential part of the meaning-making process of tourists and at the same time has a significant effect on revisitation intentions, for instance,

tourists telling narratives about their visit to Svalbard. Place as a memory appears in double temporality; the memorized time and the time of the memory (Bærenholdt et al., 2004). Tourists usually consider and compare several qualities of places. They contemplate where they have come from, where they are right now and where they desire to go. Besides this categorization, tourists focus on experiences and attach meaning to different activities rather than places (Altman & Low, 1992; Bærenholdt et al., 2004). Places are often remembered based on a meeting with someone, a good meal, a special purchase, and an extraordinary activity. The final dimension is place image. This aspect involves all the meanings of tourists associated with the place regardless of its real characteristics (Bærenholdt et al., 2004), for instance, thinking about Svalbard as the land of polar bears. All four aforementioned dimensions are reflected in the fifth dimension, place image. Everything that tourists see, read and hear about a place in advance and everything they sense, experience and remember during their visit takes part in the creation of place image. Images are therefore temporally and culturally specific and subjective (Morgan & Pritchard, 1998), thus, due to each individual, place image can vary and hold different characteristics.

Taking a step backwards allows us to look at place from a wider perspective. Tourism takes place in the “tourism landscape” (Ingold, 2000). The notion of landscape can be explained from several perspectives. It is a geographical world meaning the material reality of a physical area or the ideal representation of a particular viewpoint. This is not only a place; it is not static, but active and ever changing. It is the collection of all the things in the geographical area; physical and social constructions. Landscape is the way of seeing and perceiving place (Ingold, 2000).

*“Our experience of any landscape through the senses is inseparable from the social and psychological context of the experience” (Sopher, 1979, 138).*

The quotation highlights the complexity of the notion of landscape. At the same time, it involves physiological senses and personal experiences through which an individual perspective and interpretation of landscape is created. Experiences differ from person to person, creating a unique view of the world, of the landscape. Therefore, tourists’ perceptions of the surrounding physiological and social context are various. It is based, for instance, on their culture and personal values. However, materials and actors in the tourism industry, such as guides, narratives, websites, and social media also have an influencing effect. Landscape represents the cultural values and the collective identity of a group of people. This identity

does not have to be associated with a nation or with a state; it can be associated with a territory as well (Bærenholdt et al., 2004). In regard to territory-identity, tourists can also share and connect their identity to a geographical area or a landscape.

Landscape is the representation of collective values, imaginations and performances of different groups. Tourists apprehend these symbolic features in different ways, thus receiving diverse meanings (Knudsen, 2008). People try to make sense of places they visit or are related to in some way by understanding and attributing meaning. Even though people may experience the same landscape at the same time, they may associate it with different meanings (Bærenholdt et al., 2004). Summarizing the essentials of the diverse perspectives above, we can describe landscape as the existence of a human-nature dichotomy. It is not merely the tourist practices, which influence places and landscapes, but these two also have an effect on behavior and values, and on the experience and satisfaction of tourists (Desforges, 2000).

### **3.4 Tourist experience**

After revealing the meaning and importance of tourist places, I now explore the nature of tourist experiences and how these can contribute to place attachment. Unquestionably, tourists desire experiences when they make a travel decision. A tourist experience is simply when people are being affected by situations and conditions during travel. At the same time, it is a complex notion with multiple levels, which are filled with memories and emotions, in a different way than everyday experiences (Cutler & Carmichael, 2010). We immediately have to distinguish two kinds of experience. The first one is the different services tourists consume during their holiday, such as a meal in a restaurant or accommodation. These are commoditized experiences, which satisfy an urgent, present need. However, food and foreign cuisine can be much more than a tool which soothes hunger. When travelling, unknown, local cuisines can be the easiest and fastest way to get to know and truly experience another culture (Cohen & Avieli, 2004). Due to different attitudes, tastes and cultural backgrounds of people, we experience food in diverse ways. Hesitation and suspicion towards foreign cuisines originates first of all from the unfamiliarity of the destination and its hygiene standards, and relatedly the fear of illnesses.

The second type is a broader experience which is generated by the contribution of tourists. This is the experience of actually being a tourist. It arises not only from the consumed and

provided experiences but also from the meaning and images tourists create based on their socio-cultural existence (Sharpley & Stone, 2010). Experiences are intrinsically personal, since they exist in the mind of individuals who may have been challenged on an emotional, physical or spiritual level. Therefore, experiences are always individual; people participating in the same activity perceive different experiences (B Joseph Pine & Gilmore, 1998). A tourist experience is related to places (Cutler & Carmichael, 2010) since it is generated during and after the interactions between tourists and destinations. Experiencing a destination involves not only all the events and activities tourists participate in but all the images they receive by seeing, visiting, learning and living in a place. All these actions have an impact on how individuals perceive and value the destination (Oh, Fiore, & Jeoung, 2007). A tourist experience is a continuous phenomenon, it does not end with the end of travel (Haldrup & Larsen, 2003). Tourists have their memories, photos taken during the holiday, souvenirs they purchased and the narratives about their trip. All these tangible and intangible items have a significant role in the prolonging of an experience. It is important to note that negative experiences can last just as long (or even longer) than positive experiences (B Joseph Pine & Gilmore, 1998). Therefore it is essential to focus on and understand the needs and values of tourists to be able to ensure the experience they desire.

Due to its complex nature and multiple levels it is hard to generally define what in fact a tourist experience is. Therefore I am introducing this phenomenon through the dimensions of context, time, body and interaction (Lindberg et al., 2014). At the same time, I am investigating how these influence individuals and their perceived experiences.

We can immediately recognize that the dimensions of context, time, body and interaction already emerge through the decision-making process. Tourists hold personal values, which affect their choice of travel destination and the desire for specific tourist experiences (Madrigal & Kahle, 1994). When an internal travel motivation arises and it is not directed to a specific target, it functions as a push factor. The factor encourages one to leave the current home behind. This motivational factor or need originates from Maslow's hierarchy of needs (Maslow, 1943). Existing studies suggest escape, novelty, social interaction and prestige as common push factors (Prayag & Ryan, 2011). Many people travel, for instance, to depart from their everyday routines. In these cases, the chosen destination is not significant. Individuals focus on getting away and fulfilling the needs they can not satisfy during their everyday life, such as feeling free, taking a break or avoiding routines.

On the other hand, pull factors are destination driven and have an important influence on where, when and how people travel (Prayag & Ryan, 2011). Tourists expecting values from an experience at a specific destination can also explain it. The expected values can be directed towards the physical surroundings of the place and activities connected to a specific location. Individuals also expect values from the social milieu and the roles and characters in which they can partake during activities. Additionally, memories which have been made during previous visits have an essential role in travel decisions (Prayag & Ryan, 2011). These values are consistent with the image of the destination, which is created by the tourism industry, marketing, social media, friends or the individual her- or himself during previous trips to the area.

As described earlier, images are individual and they can take on different characteristics from person to person independently of the real features of the location. The decision-making process about a travel destination is a mixture of these two, push and pull, factors. Enhancing the understanding on push and pull factors can help to reveal motives and images behind repeated visits to the same destination, thereby identifying the compelling factors, which generate place attachment.

The tourist context can be understood from three different perspectives (Lindberg et al., 2014). The physical context is the physical place where tourists and tourist activities are situated. This includes both the natural environment, such as landscape, and the built surroundings. While well-known tourist settings usually do not require more than every day actions and the use of tacit knowledge, experiencing a new and unknown nature might be challenging. For many tourists, taking the background of this study, Arctic nature, as our example, is a place where not only the activities but also the actual context of Svalbard may be unknown. Placing the tourist activities and experiences on an island, in the fragile surroundings of the Arctic nature might be challenging. The specific components of Svalbard's tourism will definitely have an effect on tourist experiences. The extreme settings will challenge the knowledge of tourists through both body and mind (Lindberg & Eide, 2015). Through a lack of knowledge about the context and the activities of the Arctic, such as handling dogs or skiing, tourists may mainly focus on their bodily actions, not leaving any space for involvement and admiration of nature and surroundings (Lindberg et al., 2014). Another characteristic of the Arctic context is the winter darkness and special light conditions. Due to the geographical location of Svalbard, a significant period of the winter season can be



characterized by a lack of light. During the dark period, the main light sources both day and night are the moon and the stars reflecting on the snow, occasionally complemented by the northern lights. By the return of the sun in February, the hours of daylight quickly increases. There is a general negative association connected to experiencing darkness, especially for urban people (Edensor, 2013). They are encompassed with brightness and artificial lights in their everyday. However, the lack of light can lead to activate the other senses, leading to a stronger and finally positive multisensory experience (Edensor, 2013; Jensen, Scarles, & Cohen, 2015).

Tourists endure the shift of context from urban to Arctic wilderness in distinct ways, depending on their background. Culture as a context (Lindberg et al., 2014) always influences tourist experiences since tourists are always embedded in culture. Their attraction, focus and sensing will be influenced by their cultural background. It is important to emphasize that expectations towards Arctic nature in the present study can strongly differ based on the cultural background, thereby previous experiences and knowledge of tourists as well. For instance, most Scandinavians (particularly Norwegians) are familiar with the weather conditions, context and activities through their connection to Arctic nature. Their expectations are more realistic than non-Scandinavians, due to the Norwegian cultural heritage of “friluftsliv” (Faarlund, Dahle, & Jensen, 2007). Due to this unique heritage of being outdoor (Faarlund et al., 2007), Norwegians are more willing to participate in nature based activities as well. They also prefer activities with the possibility of immersion in nature; simply being instead of doing. Their motivation to visit Svalbard is more likely to experience the possibilities of the Arctic nature and follow the footsteps of their national explorer heroes, Nansen or Amundsen. In contrast to Norwegian tourists, others might have less realistic, even romantic images of Svalbard, expecting a mystic wilderness with ‘cute’ polar bears and other polar animals (Lindberg et al., 2014). False expectations might lead to a non-satisfying experience after being surrounded by the actual context. Meeting local people carrying guns in town, who simply follow the safety routines, might scare or even cause anxiety for those who are not prepared to see this. The desire of these tourists sometimes is merely to reach the northernmost part of the world, instead of being involved in it (Lindberg et al., 2014). Even though the expectations are not fulfilled, it does not necessarily mean something negative. A different, not expected experience can also be positive and result in a pleasant adventure (Arnould & Price, 1993).

Social context (Lindberg et al., 2014) is usually created by tourist settings and an important part of the tourist experience. Most tourist activities involve the co-presence of and communication with others. Observing other tourists' actions and reactions might affect someone's own experiences (Von Lehm, 2006). The need of belonging and social or group pressure can force tourists into a different behavior. Thus, we can say that interacting directly or indirectly with others can affect the tourist experience both in positive and negative ways. Participating in unfamiliar settings can cause tension for tourists. The way they cope with these tensions will define the outcome of their experience (Lindberg & Eide, 2015; Rokenes, Schumann, & Rose, 2015). This indicates the importance of having social interaction with a competent guide and with other tourists with whom to share the experience (Lindberg et al., 2014). Therefore, it is also essential during dividing participants into groups based on skills and fitness level to try to keep companionship of friends and family together. They might wish to experience and do activities together; otherwise it can affect the experience in a negative way (Rokenes et al., 2015).

Time, as a dynamic phenomenon influences tourists' experiences and meaning continuously: before, during and after the holiday (Lindberg et al., 2014). Tourists often compare present experiences with other similar experiences from the past, for instance, weather conditions or quality of activities and services. Memories can also affect the experiences in the future. While memories about a satisfying experience will increase a revisitation intention, a negative memory about a poor experience will incite for seeking a new destination or another activity. Alexandris (Alexandris, Kouthouris, & Meligdis, 2006) confirms the contribution of satisfying tourist experiences and the development of place attachment. Their findings also affirm the positive influence of the latter on revisitation intentions and customers' loyalty to continue their activity at the same place in the future. Positive experiences and tourist satisfaction strengthens the emotional feelings towards natural settings, and this predicts future visits (Lee, Kyle, & Scott, 2012). A satisfying experience can encourage tourists to return; the greater the satisfaction, the stronger place identity is (Lalli, 1992).

George (B. P. George, 2004) supports the aforementioned findings in his study about past visits affecting the prospect of future visits. According to the study results place attachment develops through satisfactory experiences of tourists. Every visit resulting in positive experiences will reinforce tourists' feelings connected to the place, which will finally evolve

into loyalty. At the same time, a strong attachment to a geographical location is more likely to result in a satisfying experience (Ramkissoon & Mavondo, 2015).

During the past 25 years, the importance of memories and memorable experiences has received increasing attention (B. Joseph Pine & Gilmore, 1999) while tourist consumption of experiences has been rapidly growing and changing. The high quality of products and services are no longer enough to differentiate and influence the choice of tourists (B Joseph Pine & Gilmore, 1998). The production-consumption context of Fordist mass production does not satisfy emerging desires anymore. Customers desire activities, which have highly skilled staff with specialized knowledge, who allow them to be part of the value-creation process and become co-producers of that activity. This way they can perceive a better experience and at the same time a higher value as well (Vargo & Lusch, 2004). The demands are now concentrated around unique, memorable and authentic experiences, which can not be found in everyday life. A tourist experience creates memories but those must be unique and last long to be able to differentiate them from competitors.

However, the thought of a future activity can also have an effect on the present experience (Lindberg et al., 2014). Being excited about an upcoming activity in the following days will influence the focus and the performance of the present time activity. Time has another conceptualization in the tourism context, which affects the tourist experience. Tourism represents multiple temporalities (Bærenholdt et al., 2004). Tourists from hectic city life and urban temporality have to step outside the 'clock time' and leave everyday routines behind. They have to follow a wilderness temporality and change to the slower 'time of nature' (Elsrud, 1998).

The movement, attention and senses of tourists' bodies are involved in the experience, thus we can talk about embodied experiences (Vom Lehn, 2006). The tourist body as a context (Lindberg et al., 2014) also has an influence on how tourists value their experiences. Our body has tacit movements and often knows how to act without us thinking about it. Tourists usually do not pay attention to these bodily movements, however, an unfamiliar activity or a negative experience can quickly bring awareness to these. An unskilled tourist will not be able to enjoy the nature and scenery while paddling for the first time; more likely he or she may struggle and focus on each of the body's movements. However, the body does not always have to be involved in a physical challenge to be an active part of an experience.

Whale watching during day cruising or sightseeing from a bus involves physically less active bodily relationships, such as smells and sounds, feeling the wind and waves or taking photos. Tourists choose activities, which match their resources, skills and fitness levels and are close to their personality. At the same time, some choose activities to challenge their comfort zones and try another way of being.

The degree of bodily involvement has a significant effect on an experience (Lindberg et al., 2014). Tourists with previous knowledge can be more involved in the activities, thus reducing the distance between themselves and the environment, creating an embodied experience. They wish for activities and services, which creates values. Tourists do not simply buy these services, they appear as co-producers. Through this process, they are part of the value creation, which results in determinant experiences and long lasting memories (Vargo & Lusch, 2004). Evolving the activities into bodily actions makes it possible to immerse in the surrounding nature. Reiterating previous theory, Hwang (Hwang, Lee, & Chen, 2005) highlights the intense correlation between the involvement of tourists, place attachment and tourist satisfaction. His study result shows that emotional or functional attachment to a place has positive impacts on tourists' involvement. At the same time, involvement has a significant and strengthening effect on the satisfaction level of tourists. Therefore, previous knowledge and previous visits can play an important role in creating positive experiences, thus emphasizing the interaction between the dimension of time and body.

Another important feature of the tourist experience is interaction (Lindberg et al., 2014). Interaction during an experience is dynamic, changing rapidly when tourists engage in different activities. Interaction is also co-existing – it can occur with the self, with others, with animals and with objects simultaneously (Lindberg et al., 2014). Interaction with the self appears in relationship with the world and it can be recognized as a part of self-discovery. It includes the awareness of needs, ambitions, feelings and thoughts. This aspect of the tourist experience is strongly connected to the emergence of place identity. It describes how a place can be synchronized with someone's self-identity (Proshansky, 1978). During an experience, self-reflection can intertwine the present activity with former experiences through selective memories and with future experiences, through desires and expectations. Taking Svalbard as an example, dog sledding in the Arctic wilderness may evoke reflections about the hectic and urban lifestyle of tourists. Experiencing new activities and new places, and later the memories of these experiences can incite people to make changes in their life after returning home.

Social interactions are one of the most important elements of the tourist experience and sense making (Vom Lehn, 2006). People often travel to strengthen their social bonds and the feeling of belonging (Lindberg et al., 2014; Oh et al., 2007). Experiences, of course, differ based on with whom people share the vacation; friends, family, small children or a romantic partner. Traveling with a group, being tied together with other tourists or a guide, their cooperation and coexistence can affect the experience both in a positive and a negative way.

The interaction with animals has different levels of intensity (Lindberg et al., 2014). Studies show that this mainly embodied and less verbal interaction encourages people to communicate and take part in social interactions (Hunt, Hart, & Gomulkiewicz, 1992). The interaction can appear from simply observing animals, such as whale watching, or it might involve close, physical interplay, such as dog sledding. The level and intensity of tourists' interaction with animals depends on interest, previous experiences, cultural background, skills and provided information and instruction. A study about arctic experiences (Lindberg & Eide, 2015) shows that those tourists who have helped in handling huskies before their trip emphasized a closer connection to these dogs during dog sledding. Deeper involvement helps them to have a satisfactory experience, which ultimately leads to stronger place attachment (Hwang et al., 2005).

Interaction with objects can also influence the experience and the meaning-making of tourists (Lindberg et al., 2014). It is embodied and the relationship to and awareness of the object is primarily dependent on the skills of the tourist. Here there are similarities and overlapping attributes between bodily involvement and interaction. When the bodily movements do not require the attention and focus of individuals, they are able to become more involved and interact on a higher level. For instance, an experienced skier does not have to focus on skiing; he is one with his skis and poles. On the other hand, an inexperienced skier has to concentrate on every movement and instruction, which will take his attention away from the actual experience of skiing, and admiring nature. Physically and mentally struggling through an activity will certainly affect the meaning and the value of a tourist experience (Lindberg et al., 2014).

The importance of individuals being involved not only in the actual activity but in the creation of that activity has received increasing attention (Prebensen, Chen, & Uysal, 2014; Vargo & Lusch, 2008). Building further on consumer participation (B. Joseph Pine & Gilmore, 1999),

the co-creation between tourists, and between tourists and service providers is essential. Taking a ten days long excursion skiing across Spitsbergen as an example, it is easy to understand the importance of co-production. In advance, participants need a good co-operation with the organizer to be suitably prepared. During the trip, tourists will need help and support from each other and from their guide as well. They are all co-creators of the excursion through their active participation. Tourists taking an active role will generate a unique, personal and memorable experience. Their active participation and involvement during the consumption process is necessary (Prebensen et al., 2014). It will result in unforgettable experiences and ultimately in satisfaction.

### 3.5 Human – place relationship

Several studies have been undertaken to investigate the emotional and symbolic bond between humans and nature. Generally, they focus on revealing the factors and characteristics, which have a major role to play in developing place attachment. *Table 2* demonstrates some results from four previous place attachment studies. It highlights the significance of several characteristics, which have – or do not have – an effect on the human-place relationship.

*Table 2: Summary of characteristics, which affect place attachment based on previous research*

Characteristics		Research	Place identity	Place dependence	Place attachment in general
Age	Under 40 / 40 or more	Williams et al. (1992)			No significance
		Rollero&DePicolli (2010)	2.54 / 2.83		No significance
Gender	Male / Female	Williams et al. (1992)			No significance
		Rollero&DePicolli (2010)			4.65 / 4.97
Income	Low / High	Williams et al. (1992)			3.42 / 3.18
Focus on	Place / Activity	Williams et al. (1992)			3.67 / 3.18
Previous visits	Less than 3 / 3 or more	Williams et al. (1992)			3.00 / 3.53
		Williams&Vaske (2003)	3.02 / 4.01	2.52 / 2.99	
Length of stay (nights)	Less than 2 / 2 or more	Hartig et al. (1991)			- / greater happiness
		Williams et al. (1992)			3.23 / 3.40
Travel with	Alone / Group	Williams et al. (1992)			3.45 / 2.96
Years since first visit	Less than 3 / 3 or more	Williams et al. (1992)			3.21 / 3.50

Researchers investigated the emotional and symbolic ties attached to four wilderness areas in the United States (Williams, Patterson, Roggenbuck, & Watson, 1992). Results show significantly stronger place attachment among those tourists who had had more previous

visits to the location. Place attachment is also stronger in those occasions where a longer time has passed since the previous visit. Sociodemographic characteristics show that lower income results in stronger place attachment while gender and age have no significant effect on it. Through the view of trip characteristics, Williams et al. (1992) found that people traveling alone show stronger place attachment, as well as those who typically stay more than 2 nights. Place focused tourists also show significantly higher place attachment than activity focused or group focused tourists.

Other research, conducted by Williams and Vaske (2003), examined place identity and place attachment to some Colorado locations. Similarly to previous research, their results demonstrate strongest place identity and place dependence among those, who have been visiting the location seven or more times during the past twelve months. Both place attachment dimensions were stronger among the respondents who perceived familiarity with the place. Those who expressed that they were “extremely familiar” with the areas announced significantly higher place identity and dependence than others. The attachment is also stronger among tourists, who think of the location as a “special place”, than those who do not have similar feelings.

Another study involving residents of an Italian town (Rollero & De Piccoli, 2010) shows interesting results connected to sociodemographic characteristics. Contrary to the findings of Williams (Williams et al., 1992), respondents’ age had an important influence on their place identity. The higher the respondents’ age, the stronger place identity appeared. Surprisingly, age had no effect on place attachment in general. Similar results were found in connection with gender. While Williams (Williams et al., 1992) did not observe that gender had an effect on place attachment, Rollero and De Piccoli (Rollero & De Piccoli, 2010) found that women had significantly stronger place attachment than men. This difference might be simply explained by the fact that the latter study was conducted among local residents of the examined town, while the former research was performed among tourists who temporarily stayed at a location.

The degree of attachment may also be influenced by the nature and attractiveness of a destination. A study by Hartig (Hartig, Mang, & Evans, 1991) investigated the benefits of experiences in natural environments. The results indicate that activities done in wilderness and other natural settings contribute to the creation of restorative experiences. Further, the

research points out that the longer the experience in the natural environment, the stronger the emerging positive emotional effect is. A prolonged wilderness experiences had the strongest restorative effect in the discussed article. It also noted that people with such experiences might evolve negative feelings after returning home. The large contrast between the normal settings of the everyday, filled with people and pollution, and the calmness and pureness of the natural environment may arouse an intention to return.

These studies mainly investigated the effects and importance of socio-demographic characteristics and the number and length of visits. There is too little or no focus on the attributes and characteristics of the place of study. They also lack information about the effects of different activities and tourist experience on the emergence of place attachment. Therefore, the present Master's thesis aims to fill in these research gaps. Besides the socio-demographic and trip characteristics, the survey used in this study concentrated on the nature and effects of diverse winter activities in order to understand the correlation between tourists' experiences and their attachment to place.

In addition to the type of winter activity, nationality – precisely being Norwegian or not – might result in a differentiation in the strength of place attachment. Norway and Norwegian people have historical connections to Svalbard. Since 1925, it has been under Norwegian jurisdiction and several Norwegian mining companies were established there in the 1900s. Some Norwegian tourists primarily visit Svalbard because one of their ancestors used to work there (Hisdal, 1998). Most inhabitants of this Arctic archipelago are still Norwegians. In addition to historical connections, culture could also play an important role for Norwegians to visit. Norwegian polar explorers, such as Amundsen or Nansen achieved national hero status there. Today, they stand as icons and arctic role models for adventure seeker tourists whose dream is to follow in the footsteps of their heroes (Gyimóthy & Mykletun, 2004; Jølle, 2014).

### **3.6 Hypotheses**

Previous sub-sections of this chapter provide theoretical background that introduces the main features of place attachment and tourist experience theory. The pillars of place attachment, building on the work of Altman and Low (Altman & Low, 1992) and Williams (Williams & Vaske, 2003) using a three-dimensional model (Kyle et al., 2005) provided a solid base for this thesis. Lindberg's (Lindberg et al., 2014) multi-relational approach helped to better



understand the complex nature of tourist experiences. Using hypotheses, I would like to highlight the themes upon which I concentrated the most. Based on the previously discussed theories, this Master's thesis essays to identify how winter activities and tourist experiences can influence the outcome and development of place attachment. To this end, I tested the following hypotheses:

- H<sub>1</sub>** Tourists who demonstrate a positive attitude towards polar nights/polar lights are more attached to Svalbard.
- H<sub>2</sub>** Tourists who have visited Svalbard more than once have a stronger place attachment.
- H<sub>3</sub>** Satisfied tourists are more likely to have revisitation intentions.
- H<sub>4</sub>** There is a relationship between revisitation intentions and type of winter recreational activity.
- H<sub>5</sub>** More satisfied tourists have higher levels of place attachment.
- H<sub>6</sub>** Tourists with stronger place attachment are more satisfied with their visit to Svalbard than the ones with weaker or no attachment.
- H<sub>7</sub>** There is a relationship between the dimension of sense of place and type of winter recreational activities.
- H<sub>8</sub>** Norwegian tourists have a higher level of attachment towards Svalbard than non-Norwegians.

## **Chapter 4. Findings**

This chapter concentrates on understanding and analyzing the place attachment of study participants. Two hundred and forty-eight (248) respondents self-completed the handed-out paper questionnaire in order to investigate the existence of the connection between place attachment and tourist experience. First, the chapter describes the main socio-demographic and trip characteristics of tourists' stays in and around Longyearbyen. Second, it suggests evidence for the existence or absence of physical, emotional and social dependence and connection towards Svalbard as a destination. Third, the chapter examines the relationship and correlation between tourist experiences and revisitation intentions as well as looks into the importance and effects of interaction. Fourth, through the importance-performance analysis, elements and characteristics are introduced, which have either low or high importance or satisfaction levels among visitors. At the same time, the chapter highlights the significance of satisfying experiences. Finally, the chapter also investigates the impact of diverse winter activities on people's attachment and eventual dissimilarities based on cultural differences. Through hypotheses, I underline the main research points of this Master's thesis and highlight factors, which can affect tourists' place attachment. Results presented in this chapter indicate significant correlations at the 0.05 level, otherwise I signify the opposite. Quotations are a selection from answers given to the open-ended question in the survey. Findings in this study are supported or contradicted by previous research undertaken within the field.

### **4.1 Socio-demographic and trip characteristics**

Genders were nearly represented by the same amount, 54.4% men and 45.2% women tourists participated in this study. Most participants were between 26 and 35 years old, while the average age was 42, with a standard deviation of 14 years, implying a big variation among the tourists' ages. Over 40% were older than 45 years (*Figure 3*).

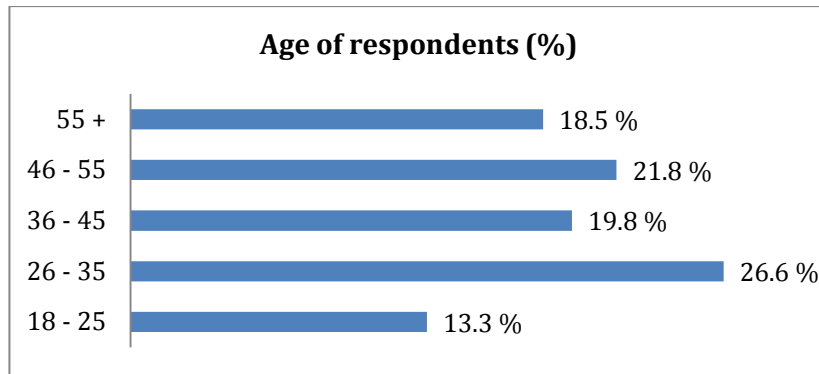


Figure 3: Age of respondents (N=248)

Participants represented six continents including 23 countries. 62.9 % of all participants were Norwegian (see Table 3). The large number of Norwegian participants were expected due to their cultural history (Gyimóthy & Mykletun, 2004; Hisdal, 1998; Jølle, 2014), their outdoor lifestyle (Faarlund et al., 2007), and of course based on statistics from previous years ([ssb.no](http://ssb.no)).

Table 3: Frequency of respondents' nationality (N=248)

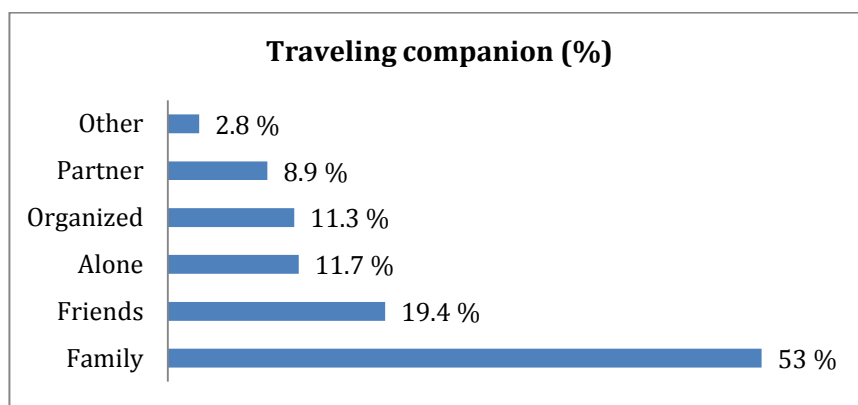
	Frequency	Percent	Cumulative Percent
Valid			
Australia	2	.8	.8
Austria	1	.4	1.2
Belgium	3	1.2	2.4
Brazil	3	1.2	3.6
Denmark	5	2.0	5.6
Finland	5	2.0	7.7
France	10	4.0	11.7
Germany	10	4.0	15.7
Greece	2	.8	16.5
Japan	3	1.2	17.7
Malaysia	1	.4	18.1
Norway	156	62.9	81.0
Russia	5	2.0	83.1
Singapore	3	1.2	84.3
Slovakia	1	.4	84.7
South Africa	2	.8	85.5
Spain	1	.4	85.9
Sweden	7	2.8	88.7
Switzerland	2	.8	89.5
The Netherlands	7	2.8	92.3
Turkey	1	.4	92.7
United Kingdom	14	5.6	98.4
USA	4	1.6	100.0
Total	248	100.0	

Norwegian participants were followed by visitors from the United Kingdom with 5.6%. France and Germany were represented by 4% each, followed by Sweden and The Netherlands with 2.8%. The remaining 18% was divided among 17 other countries.

I also found diversity with regard to traveling companions (see *Figure 4*). More than half of the participants travelled with family (52.8%), while others were accompanied by friends (19.4%) or partner and spouse (8.9%), and some people travelled alone (11.7%). Some of the participants travelled with an organized group (11.3%) or “Other” travel companion (2.8%), such as, colleagues or classmates. Families’ primary reasons for visiting were to have an Arctic experience, have a vacation here, spend time with family, and enjoy nature and the wildlife. In this study, several family members declared that they travelled to Svalbard because they wanted their children to experience this Arctic island. A British (42) and a Norwegian man (46) expressed the same reason:

*“It was a great experience to show this place to my children and do the activities together. I want them to learn about nature and respect it. I couldn’t find a better place for this.”*

*“I enjoy being here very much. I would like if my children could experience as much of this amazing place as possible!”*



*Figure 4: Respondents’ traveling companion (% , N=248)*

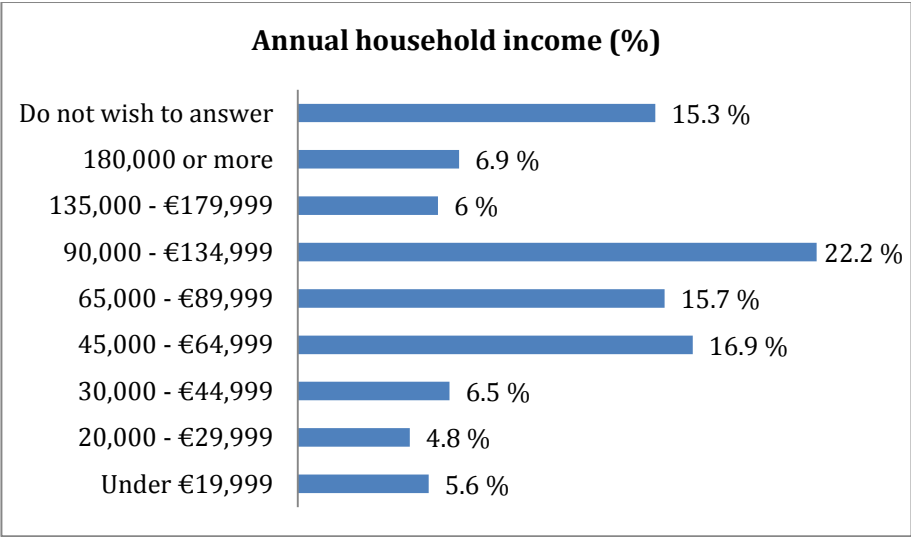
People who were accompanied by friends noted having an Arctic experience and experiencing the northern lights as their primary reason. Those who travelled alone came to Svalbard mostly because of work or study (45%). However, some of them visited Svalbard to get away

from the rush of everyday life. A previous study also suggests that people seek the closeness of nature to “slow down” (Elsrud, 1998). A man (25) from Turkey supported those thoughts.

*“I would love to spend a whole winter on Svalbard. I think, people like me, who seek to escape from urban chaos, ought to work/live here for a temporary period of time.”*

Nearly all who travelled alone were men, and primarily between the age of 26 and 35 or between 46 and 55. Most participants (71.8%) were first time visitors, and their primary reason to visit was to have an Arctic experience (24.7%), see nature and wildlife (15.2%) and the Northern Lights (11.8%). 14.5% of participants are infrequent visitors, which means less than 1 visit per year and 8.5% are occasional visitors who visit 1-2 times per year. Five point two percent are regular visitors who visit Svalbard three or more times a year. Their primary reason was to visit family and friends (38.5%), and work or study (38.5%).

Most of the participants (22%) have an annual household income between €90,000 and €134,999, however, the average income is between €65,000 and €89,999. We can also see in *Figure 5* that 55% of the households earn between €45,000 and €134,999, while 17% earns less than 45,000. 13% of participants’ households earn more than €135,000.



*Figure 5: Respondents’ annual household income (N=248)*

The total cost of the trips to Svalbard varied widely between €160 and €15,000. Most people (41.3%) spent between €1,000 and €2,999 during their visit. The average length of stay was five days (4.71) with a standard deviation of nearly five days. Standard deviation is simply

showing how tightly the examples are clustered around the mean (average) in the set of data, or with other words, the dispersion of days spent. We can see that they are not clustered very tightly. This is explained by the extreme cases of some tourists who stayed much longer on Svalbard than most people.

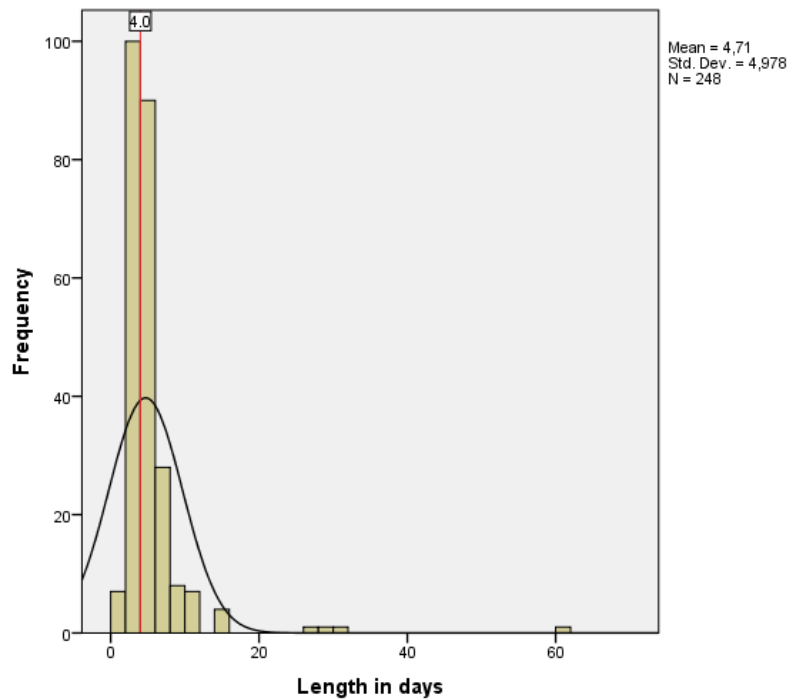


Figure 6: Participants' length of stay on Svalbard (N=248)

The largest share, 29.8% of the participants spent four days (marked red line in Figure 6), 22.2% three days, and 18.1% two days. Less than 10% stayed for eight or more days. Therefore, data indicates that more than half of the participants in this study spent three to four days on Svalbard.

The most common accommodation was staying in a hotel or in a lodge in Longyearbyen (58.1%). Popular units were the Radisson Blu Polar Hotel (47.2%), Mary Ann's Polarrigg (13.9%) and the Scandic Spitsbergen Hotel (13.2%). These were followed by hotels and lodges outside Longyearbyen (19.4%). Respondents' accommodation, which was further from the center, was first of all the Coal Miner's Cabin, Gjestehuset 102 and the Isfjord Radio Hotel. The first two mentioned are in Nybyen, at the upper part of the Longyear Valley, approximately 2.5 kilometers to the south from Longyearbyen's center, while the latter is situated 90 kilometers from the capital. Thirteen point three percent (13.3%) chose other

accommodation possibilities, such as private apartments and cabins (Airbnb) or staying with friends and relatives. Some tourists (10%) combined hotels in or near Longyearbyen with hotels and other accommodation facilities outside Longyearbyen, such as winter camping or Isfjord Radio Hotel.

The research was conducted towards the end of February, therefore, the modes of travel were concentrated around two modes; snowmobile (69.4%) and dog sledding (49.2%). February and March is the high season for these activities. These were followed by 'Other' transport (18.1%) – mainly walking – and automobiles (17.3%). Participants also used snowcoach, snowcat, snowshoes, skis and day cruise or rib boat during their stay. The travel mode depended on the season. If the research had been done in April-May, I would have received for instance, a higher number for skiing tourists and a lower participation in snowmobiling. We also have to take into consideration that most tourists used several modes of travel, for instance, dog sledding and snowmobiling is a common combination (18%). Data show that most people who traveled with an organized group or with 'Other' travel companion used snowmobiles as their means of transport. As described above the recreational group of 'Other' means first of all work related visits and participants who traveled with organized groups were and mostly taking part in a team-building trip organized for their workplace. Therefore, based on previous information data suggests that people visiting Svalbard through work mainly use snowmobiles (10.5%) and they are usually regular visitors (15.4%).

Most visitors learnt about the winter visits to Svalbard by the word of mouth (43.1%) and from the internet (39.5%). Almost 36% received information about visiting Svalbard during the winter season from other sources as well. These other sources were primarily television – both documentary programs and commercials; or the participant had been visiting or living in Svalbard. Other sources were specific forms of word of mouth, such as narratives of friends and family and information through work.

#### **4.2 Svalbard – an arctic destination**

The extreme settings and the Arctic context can affect visitors and their attachment to a place in different ways (Edensor, 2013; Lindberg & Eide, 2015). We can find numerous examples for that on Svalbard during winter, such as cold weather, snow, ice, wind, or the polar nights and the unique light conditions. The Arctic winter landscape gives the impression of

uniqueness from the first moments of arriving and this picture develops into an image of Svalbard (Bærenholdt et al., 2004; Ingold, 2000; Oh et al., 2007). A British woman (36) gave a statement that illustrates this point:

*“Already arriving to the airport I knew I would fall in love with this place. The nature and the landscape were simply overwhelming.”*

Landscape is the way how individuals see and perceive a place (Ingold, 2000). However, people might experience the same landscape at the same time in different ways, and attach different meanings to it (Bærenholdt et al., 2004; Desforges, 2000; Knudsen, 2008). These experiences and expressions are based on, among other factors, tourists’ socio-cultural background (Lindberg et al., 2014; Sharpley & Stone, 2010). This was easy to recognize during my fieldwork. While snow and cold weather were ordinary phenomena for Norwegian tourists, four young women from the Philippines spent a long time taking pictures of the snow and snowflakes. Surroundings, which appear as natural or extraordinary for some might be unattractive for others. A good example comes from a woman (47) from Greece.

*“After spending five days here I still can not get use to this place. The nature, the view is so cold and empty. Wonder if people living here get depressed or not.”*

When it comes to the light conditions, only 8% of participants wished it was not dark during their visit and 56% meant that it had no effect on the choice of travel destination. 30% of respondents think that winter lights are very unique, 4% choose to travel to destinations where this phenomenon occurs and only 1% prefers it during their activity. The special light conditions might awake other senses and this can lead to a stronger and positive multisensory experience (Jensen et al., 2015).

*Table 4: Participants’ attachment to Svalbard based on attitude towards polar light conditions (N=214)*

	N	Mean	Std. Deviation
Wish it was not dark.	17	3.0006	.77927
No effect on choice.	120	3.3283	.76214
Very unique.	65	3.7290	.72478
Prefer it.	3	4.1429	.94491
Travel when it occurs.	9	3.9683	.90641
Valid N (listwise)	214		



Data presented in *Table 4* show that visitors who felt positive about the winter light conditions had a mean attachment of 3.8 (on a 5-point Likert-scale) to Svalbard. They think it is very unique, some prefer it during their activities and some specifically choose to travel here when these light conditions occur. Others, who did not have positive attitude towards winter lights perceived a lower average score on place attachment (3.3). Even though people with a positive attitude are “Attached” to Svalbard (based on the Likert-scale) and people with no positive feelings about the light conditions are “Neutral”, the measures of ANOVA showed no significant correlation between the attitude towards polar light and visitors’ attachment level. Therefore data reject:

**H<sub>1</sub>**: “Tourists who demonstrate a positive attitude towards polar nights/polar lights are more attached to Svalbard”

and confirm

**H<sub>10</sub>**: “Tourists who demonstrate a positive attitude towards polar nights/polar lights are not more attached to Svalbard”.

This result was surprising. I expected people with positive attitude to have significantly stronger attachment to Svalbard. Edensor (2013) discusses the negative association with darkness, and *Table 4* also shows that people with a negative attitude have the lowest attachment. The lack of significance can probably be explained by the high number of respondents who were not affected by the light conditions in either a positive or a negative way and by the low number of respondents who were affected in a very positive way.

### **4.3 Place attachment and affecting characteristics**

To be able to present appropriate results, first I had to check the reliability of the multiple Likert scales I used during the analysis. The Cronbach’s alpha is 0.905 for the ‘Importance’-scale with an error variance of 0.18. It is 0.926 for the ‘Satisfaction’-scale and 0.859 for ‘Attachment’, with an error variance of 0.14 and 0.26. These numbers indicate a high level of internal consistency (reliability), for all three of the Likert scales used in this study. The acceptable values of alpha range from 0.70 to 0.95 (Bland & Altman, 1997; DeVellis, 2012; D. George & Mallery, 2003; Nunnally, 1994), where measuring  $0.7 \leq \alpha < 0.9$  gives good,  $0.9 \leq \alpha$  gives excellent reliability results. Cronbach’s alpha is also affected by the length of the

test. If a scale is too short, it usually has lower reliability estimates. The shortness of present Likert-scales is not an issue here since I use 14 and 32 statements to evaluate.

Measured by the Kaiser-Meyer-Olkin statistics, the sampling adequacy (0.915) predicted that the data would factor well. This index of sampling adequacy shows if the variance of the variables supports factor analysis or not. All results above 0.6 are useful for factor analysis and results above 0.9 are excellent (Kaiser, 1974). With the help of factor analysis, I can reduce the dimensions of attachment and divide them into three groups: place identity, place dependence and social aspect. Checking the reliability of these factors through Cronbach's alpha demonstrates obviously reliable results for place identity (0.73) and place dependence (0.89). The Cronbach's alpha of the social aspects were slightly lower than expected (0.64) but it is acceptable with which to work (Kaiser, 1974).

The average score on individuals' attachment is 3.5 on a 5-point Likert scale, meaning that instead of having neutral feelings towards Svalbard, an average participant had a stronger and positive attachment. Agreeing with Kyle's three-dimensional place attachment theory (Kyle et al., 2005) – discussed already by Altman and Low (Altman & Low, 1992) – the results of this Master's research represent the strongest attachment connected to the social aspect dimension (shown in *Table 5*). This dimension was also found to be the strongest in other studies (Hidalgo & Hernandez, 2001).

*Table 5: Strength of place attachment dimensions among respondents (N=248)*

		Place Identity	Place Dependence	Social Aspect
N	Valid	247	246	248
	Missing	1	2	0
Mean		3.2643	3.2624	4.3777
Median		3.2500	3.2000	4.6667
Std. Deviation		.98189	.95542	.69608
Minimum		1.00	1.00	1.67
Maximum		5.00	5.00	5.00

In contrast to the research of Williams et al. (1992) and Rollero and DePiccolli (2010), my results indicate a significant correlation between age and strength of place attachment in general (see *Table 11*). While participants under the age of 40 reached average 3.7 (significant) on the attachment scale, visitors over 40 only evaluated their attachment lower, to 3.4 (sig). This contrast might be explained by the high prices of Svalbard. Svalbard is an expensive destination; therefore, if elder visitors have a better financial background than the

younger ones, they might travel on impulse to take an item off their bucket list. At the same time, younger people with less money perhaps have a more conscious choice.

Looking at the three dimensions of place attachment, we find significant correlation between age and place dependence (under 40: 3.5, 40 and over: 3.1 in average) and social aspects (under 40: 4.5, 40 and over: 4.3 in average) as well. The study of Rollero and DePiccolli (Rollero & De Piccoli, 2010) referred to significant interaction with place identity, where the strength of attachment is getting stronger by age. This Master's study also suggests significant correlation between these two variables. Surprisingly and contrary to expectations, the numbers presenting this research imply that visitors under the age of 40 have stronger place identity (3.4) to Svalbard than the ones over 40 (3.1). The regression coefficient indicates that by getting one year older decreases the strength of place attachment in general by 0.01, place dependence by 0.02, and the social aspect by 0.01. Norwegians, on the other hand, show nearly the same attachment level for tourists both under and over 40 years (3.5 sig).

Regarding the correlation between gender and attachment, I found no correlation, this is similar to the results of Williams (Williams et al., 1992), and unlike those of Rollero and DePiccolli (Rollero & De Piccoli, 2010). Both genders showed similar results, attachment of the strength of 3.5, equivalent with the average mean of all participants. In regard to the income of participant, results did not show correlation with place attachment in general (see *Table 11*). At the same time place, dependence and income under €65000 have significant correlation with each other, implying that the lower the income, the stronger the place dependence.

According to previous studies and the results presented above, place attachment develops through the positive experiences and satisfaction of tourists (B. P. George, 2004; Lalli, 1992). Every visit filled with positive experiences will increase tourists' connection to Svalbard, which will lead to and strengthen place attachment. Therefore the number of previous visits also has a significant correlation with the strength of attachment to Svalbard. Even though only 14% of the participants of this study were occasional or regular visitors, the results suggest a stronger attachment to Svalbard among these two groups (4.1) than first time or infrequent visitors (3.5), similarly to the results of Williams et al. (1992). *Table 6* also shows that the smallest variance occurred between regular visitors who visit Svalbard three or more times a year. The linear regression analysis shows that the strength of place attachment increases with 0.3 with each visit per year (regarding all visitor groups).

Table 6: Average place attachment among respondents based on visiting frequency (N=248)

	N	Minimum	Maximum	Mean	Std. Deviation
First time visitor	178	1.36	5.00	3.3817	.79175
Infrequent visitor	36	2.00	5.00	3.6420	.67198
Occasional visitor	21	2.64	5.00	4.0612	.72008
Regular visitor	13	3.07	5.00	4.0110	.64934
Valid N (listwise)	248				

Therefore I am accepting:

**H<sub>2</sub>** which states that “Tourists who have visited Svalbard more than once have a stronger place attachment”. Two Norwegian men (52 and 59) added a reason why:

*“I visited Svalbard the first time in 1982 as part of a scout group on an environmental project in Svea. I went on a week hiking from Cam Morton via Barentsburg to Longyearbyen as the last part of the stay. I have been connected and strongly attached to Svalbard and polar nature ever since. I am visiting as often as possible, usually once a year.”*

*“I was here the first time in 1981. Ever since, I am coming back as often as possible. Magical land, I love it.”*

Building on the findings of Williams and Vaske (2003), this Master’s research also suggests that occasional and regular visitors’ (visiting 1-2 times or more per year) place identity and place dependence are much higher than of those who visit less often (see *Table 11*). The same results can be described about social dependence as well. Of importance to note, is that social dependence showed the strongest attachment among the three dimensions of place attachment. While place identity and place dependence score 4.1 and 3.6 on average (on a five-point Likert scale) for occasional and regular visitors, people who visit less than one time per year score only 3.3 and 3.2. This indicates a neutral rather than positive attachment. The social aspect demonstrates a mean of 4.6 for the first group and 4.4 for the second group. The standard deviation (variance) is 0.5 here, the smallest of all, meaning that respondents’ social aspect is closely distributed around this number. This is shown in *Table 7*.

*Table 7: Dimensions of place attachment – place identity, place dependence, social aspect – among respondents with different visiting frequency (N=248)*

	N	Minimum	Maximum	Mean	Std. Deviation
Identity-Firsttimevisitor	177	1.00	5.00	3.0642	.95831
Identity-Infrequent	36	1.67	5.00	3.4838	.87465
Identity-Occasional	21	2.67	5.00	4.0079	.78080
Identity-Regular	13	3.33	5.00	4.1795	.66130
Dependence-First	177	1.00	5.00	3.1907	.97400
Dependence-Infrequent	36	1.60	5.00	3.2611	.82055
Dependence-Occasional	21	2.00	5.00	3.8190	.92066
Dependence-Regular	12	2.00	4.80	3.3500	.88677
Social-Firsttimevisitor	178	1.67	5.00	4.2996	.74690
Social-Infrequent	36	3.00	5.00	4.5833	.51254
Social-Occasional	21	3.67	5.00	4.5714	.49602
Social-Regular	13	3.67	5.00	4.5641	.49786
Valid N (listwise)	248				

The table illustrates that for the tourists of Svalbard, who participated in this study, the most important attachment dimension is the social aspect, followed by place identity. The primary reason for regular visitors was to visit family and friends during their stay, which explains the high number of the social aspect dimension.

Length of stay also has an effect on visitors place attachment to Svalbard. Similar to the results of Hartig et al (1991) and Williams et al (1992), visitors who stay for a longer period of time show stronger attachment than those who stay shorter (see *Table 8* and *Table 11*). Results of this research suggest that those who stayed for less than five days have weaker attachment (3.3) than those who stayed five days or more (4.0).

*Table 8: Place attachment based on length of stay (N=248)*

	N	Minimum	Maximum	Mean	Std. Deviation
2 days or less	52	1.43	4.50	3.0479	.71716
More than 2 days	196	1.36	5.00	3.6326	.76832
4 days or less	181	1.36	5.00	3.3363	.75501
5 days or more	67	2.36	5.00	3.9792	.70256

The same findings apply for all three dimensions (presented in *Table 9*). The length of stay indicates the strongest correlation with place identity, according to the Pearson correlation coefficient (0.4). Social aspects reflect the strongest attachment and the smallest variance considering the length of stay among participants. Therefore, there is no significant change in the strength of the social aspect dimension and the length of stay.

*Table 9: Significance and strength of correlation between place attachment and length of stay (N=248)*

		MeanAttachment	Place Identity	Place Dependence	Social Aspect
Less Than 5 Days	Pearson Correlation	-.361**	-.429**	-.260**	-.125
	Sig. (2-tailed)	.000	.000	.000	.050
	N	248	247	246	248
5 or More Days	Pearson Correlation	.361**	.429**	.260**	.125
	Sig. (2-tailed)	.000	.000	.000	.050
	N	248	247	246	248

In general, the mean of place attachment grows with 0.04 by each day of stay. The same tendency can be found for place identity (0.06), place dependence (0.03) and for the social aspect as well (0.02). We can see that the biggest increase appears for place identity, while the smallest is for the social aspect, as mentioned earlier.

However, results suggest that tourists who stay longer have stronger place attachment than those who stay for a shorter period of time, we do not know if these people booked a longer stay because they were already attached or this attachment evolved during their longer visit. I wanted to find out if first time visitors also have this frequency or not. If this only applies for tourists who have been visiting before, then we can say that they have a longer stay because they are attached already. Therefore, I applied a two-way analysis of variance (ANOVA) to discover if there was an interaction between the length of stay and visiting intensity (first time visitors or have been here before) on the strength of place attachment. Results indicate the increasing strength of place attachment by longer stay both for first time visitors and for those who have been in Svalbard earlier. The two-way ANOVA showed no significant interaction between the two variables. Thus, to be able to find out more about this, further research is needed.

Not only the length of stay but the travel companion also had a significant effect on the attachment to Svalbard. Results show in *Table 10* that the strongest place attachment occurs among tourists who traveled together with their partner or spouse (3.94 sig) without children and the ones who traveled alone (3.9 sig). This is an interesting finding since previous studies, e.g., Williams et al (1992), suggest that people travelling alone show the strongest attachment to places. However, agreeing with this study, people who travelled alone show significantly higher attachment than those who travelled through an organized group (3.1 sig). An explanation of this difference could be that in an organized group, participants can not choose

the travel destination independently, for example, during an incentive or team-building trip for co-workers. It is possible that some of them do not wish to visit Svalbard at all but they do not have a choice when it comes to destination.

This Master’s thesis also highlights that not only place attachment in general is the strongest for visitors travelling together with their partner but place dependence as well (3.8 sig). These two visitor-groups show similar attachment level regarding place identity. In this case, visitors travelling alone show the strongest place identity (3.9 sig) and also the highest correlation (Pearson: 0.22) indicating the strongest relationship between travel companion and the first dimension of place attachment. This visitor group was followed closely by visitors travelling with a partner (3.8 sig). The social aspect of place attachment seems to be the highest for those who described their recreational group as travelling with friends (4.493 no significance), which reflects the importance of being together, doing activities together with friends (Rokenes et al., 2015). Nearly the same results apply for visitors travelling alone (4.488 no sig), but none of these two relations show significant correlation.

Table 10: Strength of place attachment based on recreational group (N=248)

		Attachment Alone	Attachment Family	Attachment Friends	Attachment Organized	Attachment Other	Attachment Partner
N	Valid	29	131	48	28	7	22
	Missing	219	117	200	220	241	226
Mean		3.8977	3.3880	3.7068	3.0179	3.4184	3.9376

Accommodation of tourists showed no significant correlation with place attachment in general, which might be explained by the fact that tourists often use several different accommodation options during their visit. Another possible explanation is that the choice of lodging is considerably influenced by income as well. However, accommodation did show significant correlation with place identity (Pearson: 0.02). Data suggested stronger place identity among tourists whose accommodation was only winter camping or when this was combined with other options and among those who chose ‘Other’ accommodation possibilities (3.6 sig for both). Staying in a hotel or a lodge inside or outside Longyearbyen resulted in lower place identity (3.3 sig). The different intensity of place identity could be explained by an important feature of the tourist experience – interaction. Based on the accommodation and its physical context, tourists had different interactions with the self, with others, with animals or objects (Lindberg et al., 2014). Winter camping or a private home

allowed tourists to easily express personal meanings and affirm their identity relevant to a specific environment (Proshansky, 1978). Tourists who used one of these accommodation types showed higher place identity because through their experiences they can easily immerse in the surrounding place and nature, which therefore can become a part of their life to some extent (Manzo & Devine-Wright, 2013). Winter camping provides a prolonged wilderness experience, which has a strong restorative effect (Hartig et al., 1991). Probably, they were the ones who can get closest to the Arctic nature and leave the everyday routines behind and change to the slower temporality of nature (Elsrud, 1998; Faarlund et al., 2007), in contrast with others who stay in a hotel.

The strength of place attachment also changes based on the participants' primary reason for visiting Svalbard. However, the only significant correlation was found between the strength of place attachment and visiting family and friends (3.9 sig). In contrast with the study of Williams et al (1992), this Master's study did not measure stronger attachment for visitors focusing on nature and natural settings compared to the activity oriented ones. On the contrary, results suggest that visitors whose main focus was on winter activities (3.9 no sig) showed higher place attachment than nature focused visitors (3.7 no sig). This could be explained by the theory of co-creation (B. Joseph Pine & Gilmore, 1999; Vargo & Lusch, 2004). Those tourists who were more involved and participated more actively (Lindberg et al., 2014) during the activities co-created better experiences, showed higher levels of satisfaction and were co-creators of a higher value. Corroborating this explanation, the mean satisfaction of participants with winter activities as their primary reason to travel was slightly higher (3.8 no sig) than of the ones who aimed for nature and wildlife (3.7 no sig). Similar magnitude of differences can be found for place identity, place dependence and for the social aspects as well. Place identity is the only dimension showing significant correlation with a focus on nature (3.4 sig) and a focus on winter activities (3.9 sig). *Table 11* summarizes the characteristics and factors investigated in this chapter, which can have an effect on place attachment.



*Table 11: Summary of characteristics, which can affect place attachment, place identity or place dependence based on previous research (Hartig et al., 1991; Rollero & De Piccoli, 2010; Williams et al., 1992; Williams & Vaske, 2003), supplemented with own findings*

Characteristics		Research	Place identity	Place dependence	Place attachment in general
Age	Under 40 / 40 or more	Williams et al. (1992)			No significance
		Rollero&DePiccoli (2010)	2.54 / 2.83		No significance
		Aamot (2016)	3.4 / 3.1	3.5 / 3.1	3.7 / 3.4
Gender	Man / Woman	Williams et al. (1992)			No significance
		Rollero&DePiccoli (2010)			4.65 / 4.97
		Aamot (2016)	No significance	No significance	No significance
Income	Low / High	Williams et al. (1992)			3.42 / 3.18
		Aamot (2016)	No significance	3.4 / 3.2	No significance
Focus on	Place / Activity	Williams et al. (1992)			3.67 / 3.18
		Aamot (2016)	3.4 / 3.9	3.4 / 3.6	3.7 / 3.9
Previous visits	Less than 3 / 3 or more	Williams et al. (1992)			3.00 / 3.53
		Williams&Vaske (2003)	3.02 / 4.01	2.52 / 2.99	
		Aamot (2016)	3.5 / 4.2	3.2 / 3.4	3.7 / 4.0
Length of stay (nights)	Less than 2 / 2 or more	Hartig et al. (1991)			- / greater happiness
		Williams et al. (1992)			3.23 / 3.40
		Aamot (2016)	2.7 / 3.4	2.8 / 3.4	3.0 / 3.6
Travel with	Alone / Organized group	Williams et al. (1992)			3.45 / 2.96
		Aamot (2016)	3.9 / 2.7	3.6 / 2.8	3.9 / 3.0

#### **4.4 Tourist experience and revisitation intentions**

A good experience has a long time cycle; it does not only appear in the present, but in the past and the future as well (Haldrup & Larsen, 2003). Due to the activities and interactions in Svalbard, tourists create memories of experiences from the past. Through these experiences and memories, a place image is formed in a visitors' mind (Bærenholdt et al., 2004), depending on their values, culture and identity (Morgan & Pritchard, 1998). All those memories, which were made during previous visits to Svalbard play an essential role in travel decisions in the future (B. P. George, 2004; Prayag & Ryan, 2011), thus, memories affect the experiences of the future as well (Hartig et al., 1991). It is important to note that negative experiences last as long, or sometimes even longer than positive memories (B Joseph Pine & Gilmore, 1998). Therefore, it is crucial for positive experiences. Most activities in Svalbard allow tourists to become co-creators of the activity and perceived value, which leads to positive experiences, and these memories last longest (Vargo & Lusch, 2004). A neutral or negative experience and memory will incite people to visit another places in the future.

Positive memories from Svalbard, on the other hand, appear as pull factors (Prayag & Ryan, 2011) and make tourists want to return. Satisfied tourists are more likely to want to return to Svalbard.

A significant factor for revisitation and choice of destination is place attachment (Fried, 1963). Bivariate correlation showed significant interaction between the revisitation intentions and place attachment. The mean place attachment of tourists, who had revisitation intentions was much higher (3.6) than those, who were not sure about their return (2.0). A 34 year old Norwegian woman gave a good example to the coherence between positive experiences, attachment and revisitation intentions.

*“This has been the most impressive trip I have ever been on. The nature here is so unique and I feel very lucky to be able to experience this beautiful landscape and enjoy its silence. I will remember this forever. I will come back for sure!”*

Ninety-five percent (95.6%) of participants in this study declared that they wish to revisit Svalbard in the future while only 4.4% were not sure about their return. No participants answered that they did not wish to visit Svalbard again. The mean attachment of visitors with revisitation intentions was 3.6 and only 2.5 for those who were not sure about their return. Bivariate correlation showed significant correlation between these two variables and linear regression demonstrated significantly stronger revisitation intentions for participants with higher satisfaction. Therefore I can say that:

**H<sub>3</sub>:** ‘Satisfied tourists are more likely to have revisitation intentions’ was accepted.

According to the previous hypothesis, satisfying activities will increase tourists’ intentions to return. We have also stated that satisfying experiences strengthen place attachment, and stronger place attachment also increases revisitation intentions. Based on this information, I want to find out if there are any winter activities, which raise the intention to return more than other activities.

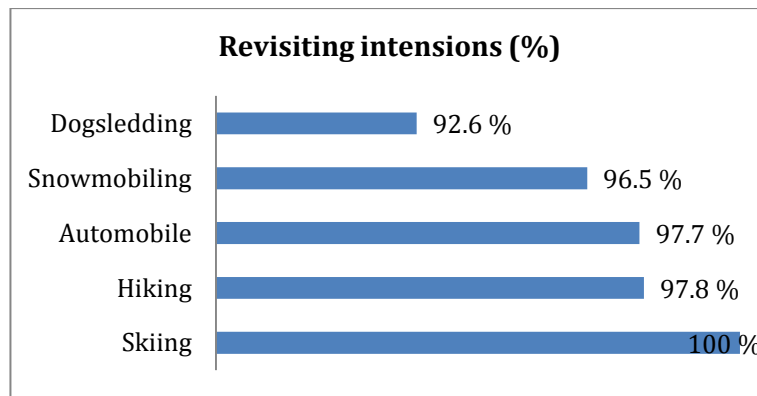


Figure 7: Respondents' revisitation intentions based on winter activity

Even though 95.6% of study participants had revisitation intentions, we can see minor differences in *Figure 7*, based on their activity. Every tourist, who went skiing during their stay in Svalbard, wished to return. They were followed by hiking and driving tourists. The last mentioned activity contained sightseeing with a cab/bus or driving around the Longyearbyen area by car. Behind them snowmobiling tourists stand with 96.5% revisitation intentions. Among the winter activities dog sledding people showed the lowest motive to return – but 92.6% of them also wished to revisit. Comparing the results with the satisfaction of these activities, findings are surprising. Dog sledding showed the highest satisfaction (4.6 – very satisfied) while the satisfaction level of skiing tourists with the highest revisitation intentions were much lower (2.3 – dissatisfied). This is unexpected since hypothesis number 3 ( $H_3$ ) is accepted, saying that satisfied tourists were more likely to wish to return.

However, the results do not show significant correlation between these winter activities and revisitation intentions. The differences between activities are minor. This might be explained by the fact that most tourists participate in several winter activities instead of choosing only one. Thus notable differences did not occur within revisitation intentions and different winter activities. Evidence rejected:

**H<sub>4</sub>**: “There is a relationship between the revisitation intentions and type of winter recreational activity”

and therefore accepted the alternative hypothesis

**H<sub>0</sub>**: “There is no relationship between the revisitation intentions and type of winter activity”.

#### 4.5 Tourist experience and interactions

Tourists can not always be prepared for extreme situations (Arnould & Price, 1993). During an unexpected and new experience the interaction with each other is indispensable. To be able to receive a positive and satisfying experience, co-operation is necessary in an unknown or difficult situation. The interaction with each other, tourists with tourists and tourists with guides (Bærenholdt et al., 2004; Lindberg et al., 2014; Prebensen et al., 2014), therefore, is essential. A good example by a Russian woman (28) illustrates the importance of interaction:

*“We were on the most extreme tour to the east coast. Usually in that bad weather condition groups stop the trip and turn back. But we joined another group on the way – so there were three tour guides. We were stuck in the deep snow with the snowmobiles so many times. It was dangerous especially in the polar bear area with no visibility because of snowstorm. Finally, we came to the east coast and saw a polar bear with a cub. The trip usually takes eight hours, our trip took twelve hours. Best extreme experience ever!!!”*

The wished value was perceived by co-creation with the participants (Lindberg & Eide, 2015; Prebensen et al., 2014). This interaction can not occur only with other humans but with animals as well (Lindberg et al., 2014). A South-African man (33) gave a statement, which illustrates this point:

*“I will never forget the dog sledding. It was great and unexpected to help harness the dogs.”*

Tourists book their trips and organize their activities based on their personal values (Madrigal & Kahle, 1994) and according to their skills and fitness level. Their body interferes with the kind of activity they participate in. However, they may feel the urge to push their boundaries (Lindberg et al., 2014). Examples illustrate these thoughts:

Norwegian man (36):

*“I would like to experience and explore areas longer away from Longyearbyen, therefore, I will definitely book multiday excursions during my next visit. I will choose physically more demanding trips than this time and sleep in a tent.”*

French man (32):

*“I wish now that I would have booked a snowmobile trip and maybe even an overnight expedition.”*

Interaction and co-creation of value can not only occur with other tourists or with service providers but in some unexpected situations with the local population. This Master's study did not focus on this kind of interaction but a woman (27) gave a great example of the connection between interaction and place attachment.

*“My husband and I were in Svalbard during the avalanche, we helped with the rescue and being a doctor I helped at the hospital. The pure show of people who wanted to help made us fall in love with the people of Svalbard. It is a town of incredible people and I would love to come back.”*

This quotation represents an experience, which differs greatly from the usual values tourists expect to have and perceive during their vacation. Through an event, which was not possible to influence by any tourism related unit, this woman developed as a person and changed her human values. Instead of having fun, having an adventure or pleasure seeking (etc.) in this case a tragedy created a value and made people better people – something that is difficult to influence and develop.

#### **4.6 Importance and satisfaction of winter recreational factors**

All tourist actions, such as seeing, visiting and learning affect how people perceive and value a place (Oh et al., 2007). In the survey, 32 statements were evaluated by respondents to receive a better view of which were the most important winter recreation factors of tourists, and if they were satisfied with those. The statements included motivational factors, factors related to physical, social and personal importance, interest and desires<sup>2</sup>. All statements were applied in an importance-performance analysis. This analysis showed which characteristics and elements of the winter visit to Svalbard were the most important for visitors. It also presents how satisfied tourists were with the perceived experience of these characteristics and elements.

In *Figure 8* the black reference lines mark the median, the middle value of the dataset both for importance and satisfaction. This divides the figure into four quadrants.

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<sup>2</sup> Full list of statements is found in Appendix III.

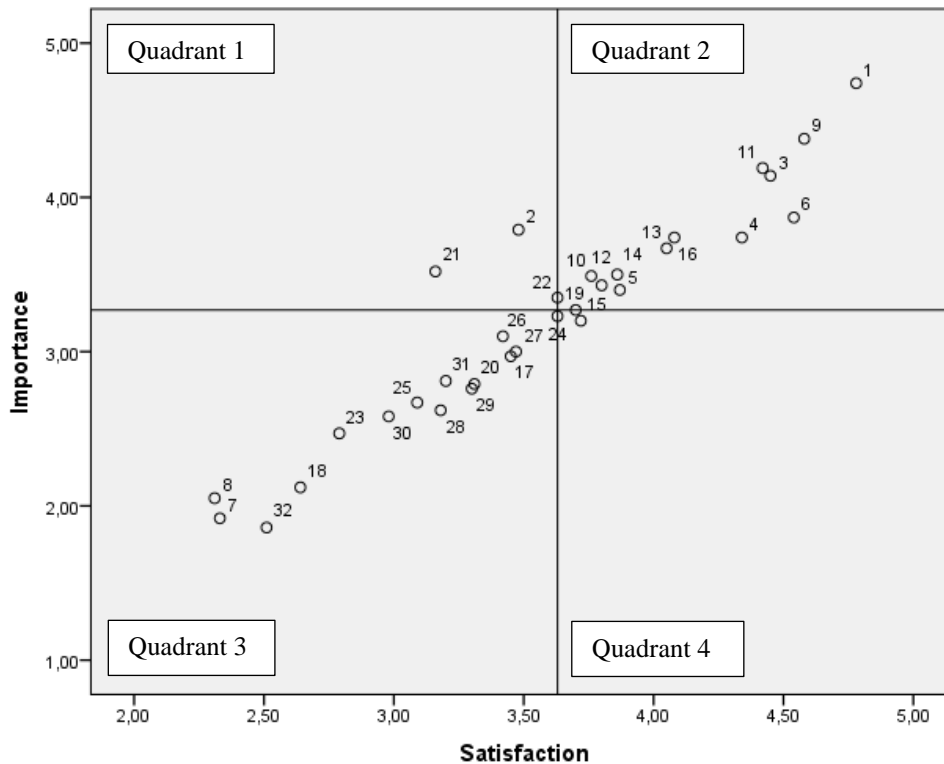


Figure 8: Importance and satisfaction level of different factors connected to winter visits in Svalbard, according to respondents. List of factors by numbers is found in Appendix III.

The first quadrant is the most important detail of the diagram. It presents the factors, which need to be focused on more because they have a high importance among respondents and at the same time received relatively low satisfaction. These elements were viewing wildlife (nr.2) and being in an area where polar bears exist (nr.21). This indicated that tourists found it important to see more of the wilds of nature but had relatively low satisfaction on the same variable. Several respondents exemplified this finding; a woman (65) from the USA and a man (24) from Russia:

*“I plan on returning again as I truly want to see polar bears.”*

*“What else do I wish for? More polar bears, more snow foxes and more northern lights. But people are no master of nature here either.”*

Allowing the mind to move at a slower pace (nr.22) also received relatively low satisfaction. Some participants mentioned that the high number of other visitors disturbed them, and some of them pointed out the lack of activities and experiences, which focused more on the “being” instead of the “doing”. This viewpoint is very similar to the values of the Norwegian outdoor

lifestyle, “friluftsliv” (Faarlund et al., 2007). Maybe it is not only a Norwegian phenomenon after all? A British woman (51) and man (60) also highlighted these thoughts:

*“Want more quiet experience of the nature, slower activities. Time to BE rather than DO in nature.”*

*“There should be more trips for stillness in nature.”*

Other characteristics, which have high importance and could possibly receive higher satisfaction are doing something with the family (nr.10) and being with people who enjoy the same things (nr.12). This indicated the need for activities, which focus more on being social, being together, including all members of the group during an excursion.

Learning more about nature (nr.14) and cultural history (nr.19) also showed a requirement for higher quality performances. A number of participants were not fully satisfied with the snowmobile experience in wild, natural settings (nr.5). Visitors complained about the high usage of snowmobiles. Some of them were worried about the sustainability of the Arctic nature while others felt that the high number of other snowmobile tourists disturbed their Arctic experience. Respondents expressed their dissatisfaction, displeasure and concerns:

Norwegian woman (72):

*“I miss snowmobiling with a driver in cases when you can not drive yourself and do not know the area.”*

Norwegian woman (49):

*“I wish tourism was limited up here! There is way too much snowmobile-tourism. It makes too much noise and nature should be spared. Ecotourism should be promoted more than it is done today.”*

Norwegian man (56):

*“I was surprised and a little disappointed about the snowmobile traffic. I think it disturbs nature.”*

Finnish woman (32):

*“They should set quotas of tourist per year and set deeper discussions about how to avoid extra pollution and climate impact.”*

Elements, which respondents named as most important and contributed to the highest satisfaction level can be found in the second quadrant. These were the following: enjoy natural scenery (nr.1), experience something new (nr.9), dog sled in wild, natural settings (nr.6), have fun (nr.3), have an adventure (nr.11), get away from everyday life (nr.4), experience excitement (nr.16) and experience peace and quiet (nr.13). These factors did not require further increased attention; these are the strength of Svalbard's tourism in general.

The third quadrant presents factors with low priority, since both the importance and satisfaction level of these was relatively low. These factors were, for instance, skiing (nr.8) and snowshoeing (nr.7) in wild, natural settings – but this might be explained by the fact that the time of data collection was not high season for those mentioned activities. Other low priority factors were experiencing solitude (nr.18) and temporarily escaping family (nr.32).

Quadrant number four contains factors, which might be exaggerated by tourism companies and at the same time have low importance from a tourists' perspective. This Master's research did not reveal any of these characteristics.

*Figure 9* summarizes the discussed characteristics and elements of winter recreation in Svalbard representing their importance and satisfaction levels.



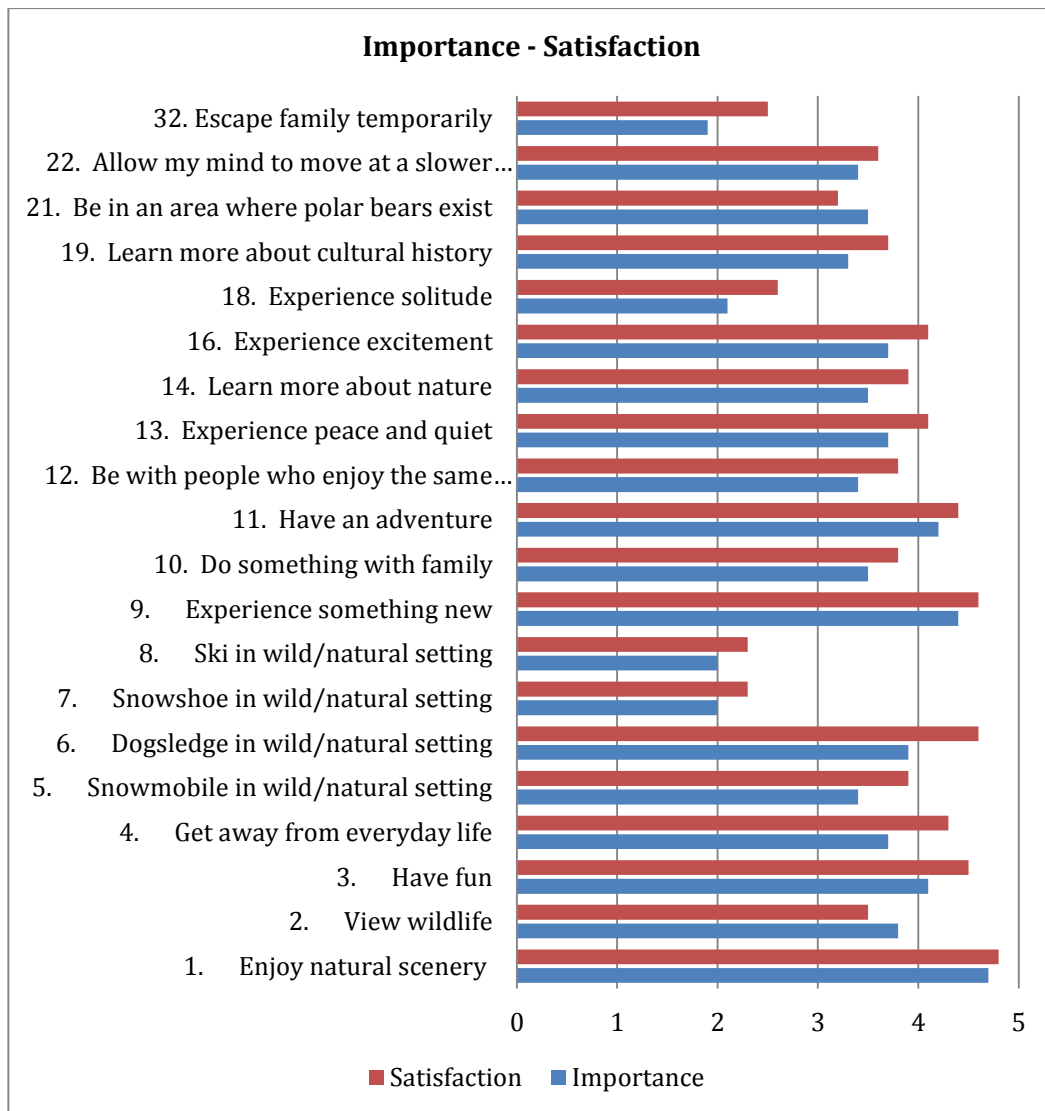


Figure 9: Importance and satisfaction level of factors connected to winter visit in Svalbard, evaluated on a 5-point Likert-scale

#### 4.7 The importance of satisfying experiences

The mean satisfaction of participants was 3.6 on a 5-point Likert scale, meaning that on average visitors were close to being satisfied. Fifty-five point seven percent (55.7%) of visitors who participated in this study were satisfied (4) or very satisfied (5) with their stay in Svalbard (Figure 10). A woman from Slovakia (30) and a woman from the USA (65) briefly described their experiences:

*“It was a GREAT winter adventure. The Arctic view was so huge and strong. It was very interesting to me, nature in Svalbard is dangerous sometimes, it is so beautiful,*

*quiet and even not friendly for people. I think this place I would see in my dreams a lot of nights in the future. I would like to take my friends to this place. Thanks!”*

*“I never drove a dog team, never drove or rode on a snow scooter, only went in one ice cave before and never experienced coal mining industry. The guides on the trips were wonderful, kind, helpful and patient – very knowledgeable. It has been a wonderful experience. The landscape is truly beautiful and beyond words to describe how incredible it is. Thank you!”*

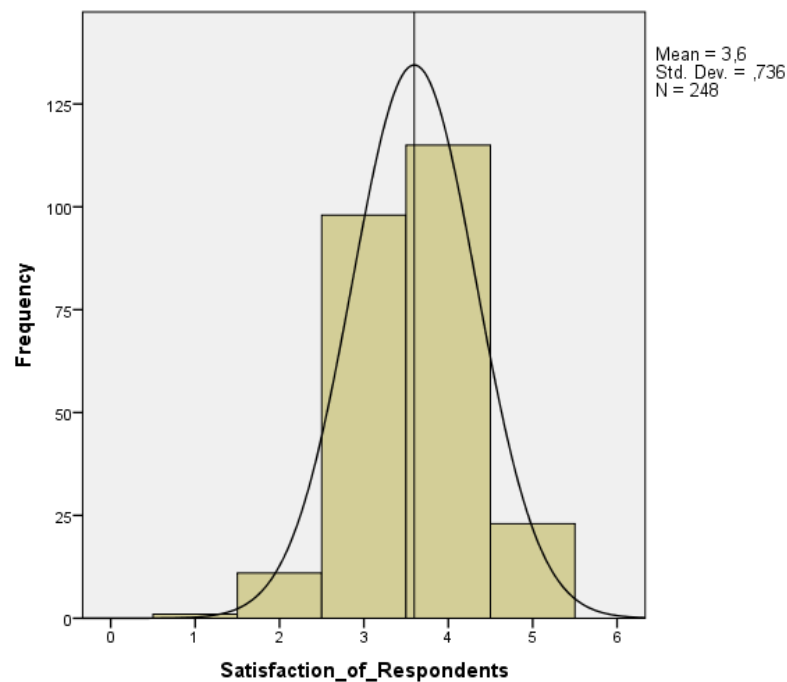


Figure 10: Satisfaction level of respondents

Thirty-nine point five percent (39.5%) of respondents were neither satisfied nor dissatisfied (3), 4.4% were dissatisfied (2), and only one person (0.4%) was very dissatisfied (1). Three participants described the different nature of their dissatisfaction according to the following:

Norwegian man (43):

*“Because of injunctions about carrying a gun I felt locked up during my stay, since it was not allowed to go out in nature alone. The guided trips were alright but it was not worth the money. My thoughts about Svalbard now that this is mostly a destination for rich people who like organised and guided activities and do not care about high pricing. Therefore, I will not recommend Svalbard to my friends. But I might return once again, being more prepared to explore and experience the nature on my own, independently.”*

Woman from Norway (59):

*“I think many of the activities in Svalbard are too expensive. What kind of tourists are wanted here? Only rich ones? ”*

Japanese man (59):

*“I broke my leg.”*

Usually, in the focus of the negative feedback was the high level of prices. My point of view is that to be able to provide good quality services and at the same time to be considerate about nature, tour operators must operate with small groups. Of course, this is an indicator of high prices but at the same time definitely something to consider. The enactment of carrying a weapon is necessary for the safety of tourists and most of them accept that. The poor Chinese man who broke his leg had no chance to experience much of Svalbard; he slipped and broke his foot arriving at the airport.

Previous studies (Alexandris et al., 2006; Hwang et al., 2005; Lalli, 1992; Lee et al., 2012; Ramkissoon & Mavondo, 2015) showed that satisfying experiences strengthen the attachment to places. This Master’s research found similar results, reflecting a strong and significant correlation (Pearson: 0.57) between the satisfaction level and attachment of visitors. Similar results can be observed not only about place attachment in general, but about all three dimensions as well. The correlation is equally strong for place identity and place dependence at the same time slightly weaker, but still significant, for the social aspects. Looking at the mean attachment of respondents, we find stronger attachment by increased satisfaction. The one respondent who was “Very dissatisfied” with his stay on Svalbard evaluated his satisfaction as 1.5 on a 5-point Likert scale while the “Dissatisfied” 4% scored 2.6 on average, which is actually closer to being neutral than dissatisfied. Forty percent (40%) of participants were either “Satisfied” or “Dissatisfied”, their mean attachment toward the place was 3.1, while the biggest share of participants (46%) were “Satisfied” and their attachment was noted as 3.8. However, the highest place attachment was connected to the highest satisfaction level; 9% of the respondents were “Very satisfied” and had 4.1 as their average attachment towards Svalbard. The linear regression applied to these two variables showed that scoring one item higher on satisfaction on the Likert scale will increase the strength of place attachment in general by 0.67. For instance, being “Very satisfied” instead of being “Satisfied” increased visitors’ attachment to Svalbard with 0.67 (on a five-point Likert-scale). It also increased place identity and place dependence even more, by 0.75 and 0.74, while the increase of social

aspects was only 0.34. This means that respondents who evaluated their satisfaction with a higher number showed stronger place attachment as well. This connection can also be found between satisfaction and the three dimensions of place attachment. Data showed that higher satisfaction increased first of all with regard to place identity and place dependence and in a smaller proportion to social aspects. Therefore I am accepting:

**H<sub>5</sub>:** “More satisfied tourists have higher levels of place attachment”.

It is interesting to note that similar to the study of Ramkissoon and Mavondo (2015), this effect can be observed the other way around; higher attachment results in higher satisfaction. Increasing the mean attachment by one item on the Likert scale will allow people to have 0.48 times higher satisfaction. The strength of the three dimensions also had an increasing effect on satisfaction, weaker, however, where the social aspects, which showed the weakest correlation. Based on the aforementioned results, I am also accepting:

**H<sub>6</sub>:** “Tourists with stronger place attachment are more satisfied with their visit to Svalbard than the ones with weaker or no attachment”.

#### 4.8 Winter activities and place attachment

Results show significant correlation between the level of place attachment and different winter activities. I looked into the most common activities among study participants, such as snowmobiling, dog sledding, walking/hiking, skiing, snowcoaching and snowshoeing. Driving a snowmobile or a dog sled, or travelling by a snowcoach showed no significant effect on attachment; all of these activities resulted in an average attachment of 3.5 (Figure 11).

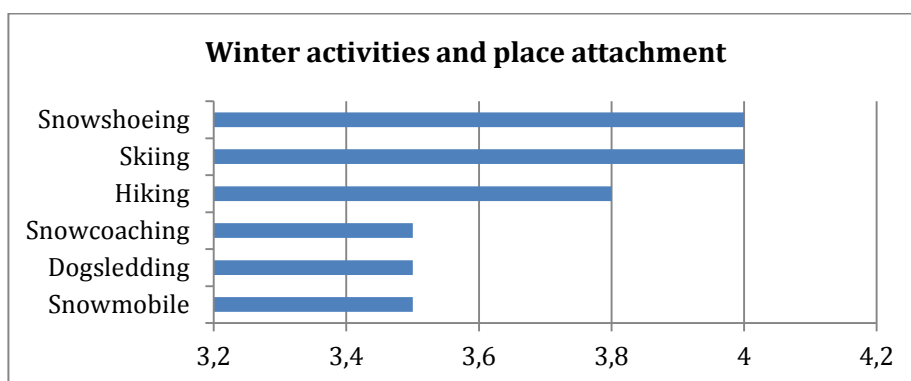


Figure 11: Strength of place attachment based on winter activities

Based on the research of Lindberg (Lindberg et al., 2014), we would expect higher attachment for instance, for dog sledding tourists than those who drive a snowmobile . It is described how being together with animals increases social interaction (Hunt et al., 1992), the level of satisfaction and thereby the attachment level of tourists (B. P. George, 2004). However, it is possible that tourists had more experience driving a snowmobile than a dog sled, or snowmobile driving did not need as much focus on the bodily movements than the other activity. The interaction with the sled (as an object) depends on the skills of the tourist (Lindberg et al., 2014). Respondents' statements illustrate this well.

A thirty-two (32) year old man from Normandy:

*“I noticed that the tour guides take very well into account that most people are unfamiliar with dog sledding. I was a little bit afraid of that first.”*

Dutch man (62):

*“Dog sledding was more difficult than I thought; I was not very good at it. I fell off several times and was pulled after the sled. I felt embarrassed because all the other teams had to wait for me to get back on my feet.”*

French woman (30):

*“Dog sledding was a wonderful experience! Although it was sometimes physically exhausting but I feel I was born to do it. It was so natural for me to handle the dogs.”*

Even though it was the same activity, tourists experienced it in different ways (B Joseph Pine & Gilmore, 1998). Being part of a group can be a negative effect on the experience if tourists can not cope with the emerging tension (Lindberg et al., 2014; Rokenes et al., 2015; Von Lehm, 2006). This might also be an explanation for why dog sledding tourists did not show stronger attachment.

Another possible explanation is, as was mentioned earlier, that tourists prefer participating in several different activities during their stay. Therefore, if a person participates in both dog sledding and snowmobiling he or she will feel a certain attachment towards Svalbard, independently of the activity.

Walking/hiking, snowshoeing and skiing on the other hand show significantly positive correlation with attachment in general. Respondents participating in the last two activities had

the highest place attachment, 4.0 in average, while walking/hiking tourists' attachment was slightly lower, 3.8. Snowshoeing, skiing and walking/hiking showed positive significant correlation with all three dimensions of place attachment. Snowshoeing and skiing were positively correlated with place dependence, meaning that visitors travel to Svalbard to exercise these activities rather than travel to other substitute areas (Stokols & Shumaker, 1981; Williams & Vaske, 2003). Only snowshoeing had a positive and significant correlation with the social aspects of place attachment. This indicated that visitors who snowshoe on Svalbard are more focused on being together with others. It is interesting to note that respondents who did not participate in other winter activities other than driving an automobile during their stay showed negative correlation with place attachment.

I also examined eventual differences between motorized and non-motorized winter activities. Data showed significant correlation between place attachment and the actual winter activity being motorized or not. Even though the differences were very small, non-motorized winter activities resulted in marginally stronger (3.6) place attachment than motorized activities (3.5).

Based on the results above I accepted:

**H<sub>7</sub>:** "There is a relationship between the dimension of sense of place and type of winter recreational activities".

#### **4.9 Cultural (dis)similarities**

According to a Norwegian saying, Norwegians are "born with skis on their feet". Due to this and the nation's outdoor lifestyle (Faarlund et al., 2007), the attachment-level of Norwegians and foreigners towards Svalbard was unexpected. Results suggested that the place attachment of both Norwegians and foreigners were nearly the same. 3.5 for Norwegians on a five-point Likert scale, while for foreigners it was slightly higher, 3.53, but none of these results were significant. Looking into the three dimensions also gave surprising results (see *Table 12*).

*Table 12: Strength of place attachment and dimensions among Norwegians and foreigners (N=248)*

	N	Minimum	Maximum	Mean	Std. Deviation
Attachment – Norwegians	156	1.50	5.00	3.4964	.79257
Attachment – Foreigners	92	1.36	5.00	3.5330	.79800
Identity – Norwegians	155	1.00	5.00	3.1698	.99978
Identity – Foreigners	92	1.17	5.00	3.4236	.93479
Dependence - Norwegians	154	1.00	5.00	3.2669	.94917
Dependence - Foreigners	92	1.00	5.00	3.2549	.97098
Social Aspect - Norwegians	156	2.33	5.00	4.4712	.64568
Social Aspect - Foreigners	92	1.67	5.00	4.2192	.75145
Valid N (listwise)	248				

While the mean of Norwegians’ place identity is 3.2 (sig), foreigners showed higher place identity (3.4 sig) as well. Both of the aforementioned results were unforeseen. I predicted much stronger attachment for Norwegian participants than for other nations due to their cultural heritage and history (Gyimóthy & Mykletun, 2004; Hisdal, 1998; Williams & Roggenbuck, 1989). A Norwegian woman (38) and a man (43) gave good examples:

*“My grandfather used to work on Svalbard from the ‘50s as a miner. In 1962, two of his close friends died in a mining accident in Ny-Ålesund. I was young when he passed away, but my father has told us many stories about his life up here. Somehow it feels good to come back here and visit the places where he used to live. It makes me feel closer to my roots.”*

*“My father-in-law was here in the 1960s building the cableways.”*

The strength of place dependence was nearly the same for both foreigners (3.25) and Norwegians (3.27) and showed no significant correlation. This proposes that the quality and characteristics of the physical surroundings were perceived as nearly the same way by both types of participants. On the other hand, the social aspect of place attachment was stronger for Norwegians (4.5 sig) with the lowest variance of all, compared to foreigners (4.2 sig). Place attachment in general and the place dependence dimension did not show significant correlation with nationality (more accurately being Norwegian or not), but place identity and the social aspect did (shown in *Table 13*).

Table 13: Significance and strength of correlation between place attachment and being Norwegian or a foreigner (N=248)

		Mean Attachment	Place Identity	Place Dependence	Social Aspect
Norwegian or Foreigner	Pearson Correlation	-.022	-.125	.006	.175**
	Sig. (2-tailed)	.726	.049	.924	.006
	N	248	247	246	248

Based on the data I rejected:

**H<sub>8</sub>** stating that “Norwegian tourists have a higher level of attachment towards Svalbard than non-Norwegians”

and therefore I accepted the alternative hypothesis

**H<sub>80</sub>**: “Norwegian tourists do not have a higher level of attachment towards Svalbard than non-Norwegians”.

#### 4.10 Evaluation of hypotheses

In this chapter eight hypotheses were tested and evaluated to provide an insight to tourists’ place attachment to Svalbard. Five of these hypotheses were accepted while three were rejected based on the data collected in Svalbard (shown in *Table 14*). A comprehensive summary of findings from this study with conclusions and suggestions for tourism concerned entities will be presented in the next, final chapter.

Table 14: Evaluation of hypotheses used in present master thesis

Hypothesis	Accepted or Rejected
<b>H<sub>1</sub></b> Tourists who demonstrate positive attitude towards polar nights/polar lights are more attached to Svalbard.	Rejected
<b>H<sub>2</sub></b> Tourists who have visited Svalbard more than once have a stronger place attachment.	Accepted
<b>H<sub>3</sub></b> Satisfied tourists are more likely to have revisitation intentions.	Accepted
<b>H<sub>4</sub></b> There is a relationship between revisitation intentions and type of winter recreational activity.	Rejected
<b>H<sub>5</sub></b> More satisfied tourists have a higher level of place attachment.	Accepted
<b>H<sub>6</sub></b> Tourists with stronger place attachment are more satisfied with their visit to Svalbard than the ones with weaker or no attachment.	Accepted
<b>H<sub>7</sub></b> There is a relationship between the dimension of sense of place and type of winter recreational activities.	Accepted
<b>H<sub>8</sub></b> Norwegian tourists have a higher level of attachment towards Svalbard than non-Norwegians	Rejected



## **Chapter 5. Summary and conclusions**

Place attachment is a complex phenomenon presenting a multidimensional relationship of human-place bonding. The aim of this Master's thesis was to provide insight into that complexity by revealing elements and characteristics, which are the most important and can influence tourists' attachment to places. While previous studies have mainly focused on socio-demographic characteristics and number of visits, this research concentrated on the attributes and possibilities of place as well. The research aim was to interpret the correlation between activities, tourist experience and place attachment as a result of winter recreation in Svalbard. The data collection was undertaken in Longyearbyen at the end of February, 2016 using cross-sectional surveys translated into three languages, which were self-completed by respondents. Data was coded and analyzed primarily by quantitative methods and interpreted with the help of hypotheses. Analysis principally relied on the three dimensional place attachment theory of Altman and Low (1992) and the multi-relational approach for consumer experience by Lindberg et al. (2014).

### **5.1 Highlights of findings**

Results of the research that informed this thesis conducted in Svalbard among 248 respondents suggest that most visitors come to the northernmost settlement in the world to have a unique, Arctic experience and enjoy Arctic nature and scenery. Since the research was conducted at the end of February, the potential impact of polar lights was an issue. Respondents did not show significant difference in attachment to Svalbard based on their perspectives towards polar nights and polar lights. Those tourists who had visited this place more than once showed stronger place attachment. Therefore, it was important to examine the revisitation intentions as well. Even though winter activities had no determining influence on tourists' plans to visit this place again, satisfied tourists are more likely to return. Data also confirmed that the more satisfied tourists felt a stronger attachment to Svalbard. Alternately, this effect can be observed the other way around; respondents with stronger place attachment were more satisfied with their stay than their associates with weaker place attachment. Results also suggest a significant relationship between the level of place attachment and winter activities. Snowshoeing and skiing tourists showed the highest level of attachment. Since 63% of participants represented Norway, I found it important to investigate possible differences within Norwegians' attachment compared to other nations. Contrary to expectations, there

was no significant difference between Norwegian and foreigner respondents' attachment to Svalbard.

Tourists under the age of 40 showed stronger attachment, as well as occasional and regular visitors, who visited at least once a year. The same correlation can also be found between visitation frequency and the three dimensions of place attachment; with the strongest relationship with social dependence, followed by place identity, and then place dependence. Data suggest higher levels of place attachment for those who stayed more than five days and among those who were accompanied by partner and no children, and the ones who traveled alone. Respondents with winter camping as their accommodation show the strongest place identity.

## **5.2 Conclusions and practical implications**

I would like to emphasize some findings which can serve as useful information for tourism related units. Three-quarters of respondents participating in this study were first time visitors, this fact is an indication of the existence of a new and growing market for the winter tourism in Svalbard. This highlights the importance of a strong and highly skilled tourism industry high up in the North as well. As I mentioned within the socio-demographic characteristics, most people who travelled alone to Svalbard were between the age of 26 and 35 or between 46 and 55. This might imply that tourists between the age of 36 and 45 perhaps have younger children and therefore they can not or choose not to travel alone. Visitors who travel with family also show lower attachment towards Svalbard. This could perhaps be explained by the fact that the purpose of their visit was focused more on spending time with family and experiencing the Arctic together. Tourism businesses should keep this in mind and design their products for the aforementioned age group accordingly, in the hope of stronger attachment through such exchanges. Tourism businesses should also provide and advertise family friendly and softer adventures to this segment of people instead of only focusing on the Arctic explorer profile.

The importance-performance analysis also appeared useful to evaluate tourists' satisfaction and dissatisfaction. Tourists do not find it important to experience solitude or escape family during their visit. On the contrary, they wish to focus more on being social and being together during their activities. In this context, tour guides should concentrate more on groups of

family and friends when they divide people based on their skills. Tourists arriving here with friends and family wish to experience activities together and share these great moments. Thus, it can be disappointing if they are separated from their original group of people. This indicates that people visiting Svalbard do not come here to escape other people; they want to escape the noise and rush of the everyday. Therefore, it is also important that within the offers of tourism companies some slower activities with a focus on immersion in nature and experiencing and enjoying tranquility should also be included. An example of the significance and value of the “Arctic silence” is found in *Appendix IV* due to my own experience and self-reflection. It is interesting to note that these are some of the main features of the Norwegian outdoor lifestyle; the “friluftsliv” theory. Results of this study indicate that this phenomenon is more prevalent than and nearly not as concentrated in the Norwegian population as assumed.

Based on the same phenomenon, it was expected to find stronger connection towards Svalbard from Norwegian tourists than from foreigners, due to the Norwegian Arctic lifestyle and the influence of Arctic heroes from cultural history. Surprisingly, the strength of place attachment was nearly the same for Norwegians and other nations while place identity was even higher for foreigners. This would be interesting to investigate further. My personal experience is that Norwegians often take the treasures of the Norwegian nature granted, part of the everyday life, whereas foreigners can find and appreciate the beauty of a winter landscape, for instance.

Results also drive attention to the importance of interaction between tourists and guides or other stakeholders. Respondents emphasized the great experience of helping to harness the dogs before dogsledding. This doing this, they became co-creators of the activity and perceived value. Others found it very satisfying to continue on a trip despite the bad weather and would rather join another group and carry on together. A good guide should facilitate for tourists to be active participants of an activity. They should also be flexible and interact with other guides if it is necessary in extreme situations, for instance, simultaneously keeping the safety of tourists as a first priority. This, however, depends on the profile of the tourism company, which trains and provides the guides. This should receive more attention in human resource management and training in the future.

Data also indicate that tourists find it important to be more in the wilds of nature, especially to see more polar bears. Tourism entrepreneurs might have to focus more on this, by keeping

nature's best outcomes in mind. The question is, how much more can humans interact in Arctic nature without interfering with its sustainability? It might be challenging to satisfy the needs of tourists and keep the sustainability of the fragile Arctic nature at the same time. Due to the marketing and advertising of Svalbard, tourists associate this place with the home of polar bears and thus expect to see them during their stay. This image might have to be changed through information and marketing channels and create new expectations. Svalbard has much more than polar bears, therefore, other kinds of wildlife could be presented as well, thereby potentially increasing the level of satisfaction.

Building further on sustainability, several respondents identified a lack of focus on ecotourism. This was connected in many occasions to the increased level of snowmobile traffic. Interestingly, tourists only found this lack of focus on sustainability on the suppliers' side; they went on the snowmobile trip anyhow. They also wished for smaller groups within organized tours, because the high number of tourists and snowmobiles disturbed their desired Arctic experience. On the other hand, tourists also complained about the high prices of activities. We can see that this puts tourism businesses in a difficult position, since smaller groups most likely mean higher prices. However, this is a tourism provider's choice and challenge – to find the balance between tourists' pleasure, a profitable business and nature's best interests.

These findings give insight into tourists' satisfaction and dissatisfaction in general. Thus, this does not mean that all tourism companies in Svalbard should take these results for granted; neither the positive nor the negative feedback. Every company should know and be able to evaluate and analyze their products and services, and accordingly make any necessary improvements. A possible method to increase satisfaction and minimize the negative experiences could be the segmentation of the tourist market ([Vintertroms.no](http://Vintertroms.no)). Based on tourists' motivation, interests and characteristics they can be divided into separate groups. Due to segmentation, the most fitting activities can be offered to visitors according to how physically active they want to be during their stay and in which kind of activities they prefer to participate. By gaining a better insight to the construction of the tourist market, stakeholders can develop and customize their products, use their resources in a more effective way in order to provide higher customer satisfaction and at the same time increase their sales. This research also confirmed that more satisfied tourists have higher levels of place attachment and are more likely to have revisitation intentions. Therefore, it is essential to

concentrate on tourist satisfaction. Returning tourists do not require extended marketing communication, and in today's world of social media they are the best marketing tools to have.

It would be interesting to see if the results of this study changed if the data had been collected later during the winter season. Since the high season of skiing in Svalbard is April and May, respondents would have represented another segment of tourists. This offers direction for future research. Another suggestion for further studies is to compare these results to other Arctic places with similar image and winter activities with the possibility of finding patterns within Arctic place attachment. I am also interested to find out if and how place attachment of tourists changes by time. Will it get stronger with the passing of time after a visit or will memories fade away? In fact, which experiences and memories get stronger and more powerful over time? Nonetheless, such future research may require the use of in-depth interviews besides quantitative surveys. Another important finding of the research that needs a deeper analysis as well.

One of the most interesting findings of this study pointed out that a natural disaster; a tragedy is also able to create values, besides the most common tourist experiences<sup>3</sup>. There was no talk about dark tourism or disaster tourism here, the aforementioned vacation started as any other winter visit to Svalbard. A tourist who was not initially involved in the strike of the avalanche decided to take part in the rescue anyhow. Even though this woman experienced something unexpected, something physically and mentally very negative, she was still able to perceive the other side of this incident; the unconditional help and solidarity of local people. How can the experience of a catastrophe transform into positive feelings and lead to place attachment? I feel that this unforeseen finding is entitled to further investigation to provide a better understanding of emerging emotions and actions and its possible effect on attachment to a place.

Consequently, what is the "Sense of Svalbard"? It is unquestionably something extreme, something out of the ordinary. The northernmost inhabited place on Earth with the northernmost restaurant, café, post office, convenience store and the northernmost tourist

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<sup>3</sup> "My husband and I were in Svalbard during the avalanche, we helped with the rescue and being a doctor, I helped at the hospital. The pure show of people who wanted to help made us fall in love with the people of Svalbard. It is a town of incredible people and I would love to come back." (woman, 27)

activities as well. Whether we talk about extreme skiing, glacier hiking, ice-caving, dogsledding or snowmobiling, we can find everything from the most extreme expeditions to the silent tranquility of nature. All of this is embedded in the Arctic surroundings of snow and ice where the number of polar bears exceeds the number of inhabitants. A place where no trees grow. A place where the dichotomy of safe and dangerous is a natural component of every day<sup>4</sup>. There is something extraordinary about Svalbard, which is impossible to explain. The climate, the nature, the distance, the atmosphere of the small local community all together provides a unique setting. Even though the tourism market constantly offers new activities and attractions, tourists are not interested in paying for a serial reproduction. This is the advantage and singularity of Svalbard; it creates authentic experiences, which are not possible to find in everyday life.

I hope this thesis serves to provide useful material for future comparison to the place attachment project undertaken in the Yellowstone National Park. I also wish that this thesis can help other students, researchers and tourism related units to receive a better insight to the system of place attachment and the Arctic tourism of Svalbard. Hopefully, it will make people realize the importance of place attachment since it is a valuable element of rational and economic marketing as well as sustainable tourism.

Finally, I would like to close this Master's thesis with a quote from a Norwegian woman (52). I think her words well-illustrate how people are touched by visiting Svalbard and return home with unforgettable memories. These positive memories and experiences make people wish to return and not replace this destination with any other.

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<sup>4</sup> "Longyearbyen is one of the safest cities in the world and has all modern comforts. Outside the city is potentially the most dangerous place you can be (weather, polar bears etc.). This makes a fascinating contrast." (Norwegian man, 49)

*“Beautiful. I feel a tiny bit of longing for Svalbard already. Longing for the light. Longing for the darkness. Longing for the people who were once around me. Longing for the blue hours. Longing for the mountains standing there as the most beautiful cathedrals. The squeaking of cow-skin-shoes when they hit the snow. The day and nights without lights. The days and nights full of lights. The sound of Tromsø-people in the mountains. The Saxifraga which colors the ground purple. All the different shapes and formations of the Hjorthamn-mountain I could rest my eyes on. To simply experience. Now I am remembering all the days which I once had.”<sup>5</sup>*



Photo: Dóra B. Aamot

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<sup>5</sup> “Vakkert. Kjenne en smule Svalbardlengsel allerede. Lengsel tel lyset. Lengsel ætte mørket. Tel folkan eg engang hadde rundt meg. Tel de blåe timan. Tel fjellan som stod der som de vakraste katedrala. Tel knirkinga i snøen når kuskinnskoen traff overflata. Tel dagan og nettern uten lys. Tel dagan og nettern full av lys. Tel lyden av Tromsøværingan i fjellan. Tel synet av Saxifragaen som farga jorda lilla. Tel alle de forskjellige formasjonan i Hjorthamnfjellan som øyet kunne kvile i. Tel å bære oppleve. No minnes eg alle de dagan som engang va.”

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## APPENDIX: I. The information letter

### Introduction to the “Sense of Svalbard” project

*“A place without meaning is no place to be.”  
Wayne Gerard Trotman*

Dear Study Participant,

This research project is a part of a master thesis about sense of place due to winter recreation on Svalbard. The term ‘sense of place’ describes the characteristics which make a place special or unique. This study is aimed to reveal the link between tourist experiences and attachment to the place. To that end I would like to learn more about how you see, experience, and value this area during the winter season. Your answers will help capture the connection between people and geographic areas and assist tourism management to facilitate winter recreation for visitors in the most beneficial way. The background of the study originates from a co-operation between UiT – The Arctic University of Norway and the University of Utah, USA.

I am Dora B. Aamot, 30 years old, originally from Hungary but I have been living and working in Norway since 2007. My interest in, and admiration of the Arctic nature and Arctic tourism incited me to continue my previous study (BA in tourism and economy) and start a master course in tourism at UiT.

Participation in this study is voluntary and confidential; there is no need to include your name or address. You may skip any question or stop any time without providing a reason. The following survey is an essential part of my research; therefore I would highly appreciate if you helped me by answering it. Completing the questions takes 5-10 minutes.

Thank you for your kind help in advance!

*Best regards,*

*Masterstudent Dora B. Aamot, UiT – The Arctic University of Norway, Campus Alta*

Keep this information sheet and if you have any further question about the research, do not hesitate to contact Dora B. Aamot ([daa002@uit.no](mailto:daa002@uit.no), +47 45 79 21 39) or ass. prof. Arild Røkenes ([arild.rokenes@uit.no](mailto:arild.rokenes@uit.no), +47 97 00 17 68).

## APPENDIX: II. Winter Recreation on Svalbard – the survey

### Winter Recreation on Svalbard

Please choose only one alternative for each question, unless other instructions are given.

#### Section 1 – Trip Characteristics

##### 1. What kind of accommodation do you have during your stay on Svalbard?

- Winter camping  
 Hotel/lodge inside Longyearbyen. If so, name the hotel you are staying at.

\_\_\_\_\_

- Winter camping combined with hotel/lodge. Please, name the hotel/lodge.

\_\_\_\_\_

- Hotel/lodge outside Longyearbyen. If so, where are you staying?

\_\_\_\_\_

- Other (please specify): \_\_\_\_\_

##### 2. When did you arrive and when do you plan to depart Svalbard?

	Arrival	Departure
Date		

##### 3. What are your primary modes of travel on your tours in the wilderness of Svalbard?

(You can choose several alternatives)

- Snowcoach/Snowcat       Snowmobile       Automobile       Rib boat  
 Dog sledding       Snowshoes       Skis       Day cruise  
 Fatbike       Other: \_\_\_\_\_

##### 4. Regarding Svalbard during winter, do you consider yourself:

- Regular visitor (3 or more times per year)  
 Occasional visitor (1-2 times per year)  
 Infrequent visitor (Less than 1 time per year)  
 This is my first visit

##### 5. Which of the following best describes your recreation group? Are you traveling...

(You can choose several alternatives)

- Alone       Family       Friends       Partner / Spouse  
 Organized group / If so, total number in your personal group? \_\_\_\_\_  
 Other (please specify): \_\_\_\_\_

##### 6. Do you have a primary reason for visiting Svalbard this winter?

If so, what is your primary reason? \_\_\_\_\_

If you do not have a primary reason, what would you say is the purpose of your visit to Svalbard in winter? \_\_\_\_\_

## Section 2 – Your Winter Recreation Experience

**7. Below is a list of factors that may contribute to your winter recreational experience on Svalbard. First rate how IMPORTANT each of the following factors are to you personally, then rate how SATISFIED you are with each during your winter recreational experience on Svalbard.**

Please circle one importance rating and one satisfaction rating for each factor.

Level of importance (5=highest,1=lowest)	<b>Winter Recreation Factors</b>	Level of satisfaction (5=highest,1=lowest)
5 4 3 2 1	Enjoy natural scenery	5 4 3 2 1
5 4 3 2 1	View wildlife	5 4 3 2 1
5 4 3 2 1	Have fun	5 4 3 2 1
5 4 3 2 1	Get away from everyday life	5 4 3 2 1
5 4 3 2 1	Snowmobile in wild/natural setting	5 4 3 2 1
5 4 3 2 1	Dog sledge in wild/natural setting	5 4 3 2 1
5 4 3 2 1	Snowshoe in wild/natural setting	5 4 3 2 1
5 4 3 2 1	Ski in a wild/natural setting	5 4 3 2 1
5 4 3 2 1	Experience something new	5 4 3 2 1
5 4 3 2 1	Do something with family	5 4 3 2 1
5 4 3 2 1	Have an adventure	5 4 3 2 1
5 4 3 2 1	Be with people who enjoy the same things	5 4 3 2 1
5 4 3 2 1	Experience peace and quiet	5 4 3 2 1
5 4 3 2 1	Learn more about nature	5 4 3 2 1
5 4 3 2 1	Get away from crowds	5 4 3 2 1
5 4 3 2 1	Experience excitement	5 4 3 2 1
5 4 3 2 1	Bring family/group closer together	5 4 3 2 1
5 4 3 2 1	Experience solitude	5 4 3 2 1
5 4 3 2 1	Learn more about cultural history	5 4 3 2 1
5 4 3 2 1	Feel healthier	5 4 3 2 1
5 4 3 2 1	Be in an area where polar bears exist	5 4 3 2 1
5 4 3 2 1	Allow my mind to move at a slower pace	5 4 3 2 1
5 4 3 2 1	Promote greater environmental awareness in my own group	5 4 3 2 1
5 4 3 2 1	Be challenged	5 4 3 2 1
5 4 3 2 1	Reflect on and clarify personal values	5 4 3 2 1
5 4 3 2 1	Keep physically fit	5 4 3 2 1
5 4 3 2 1	Talk to new and varied people	5 4 3 2 1
5 4 3 2 1	Rest physically	5 4 3 2 1
5 4 3 2 1	Feel more self-confident	5 4 3 2 1
5 4 3 2 1	Be at a place where I can make my own decisions	5 4 3 2 1
5 4 3 2 1	Develop my skills	5 4 3 2 1
5 4 3 2 1	Escape family temporarily	5 4 3 2 1

**8. Please evaluate the following statements according to the following:**

5-Strongly agree, 4-Agree, 3-Neither agree or disagree, 2-Disagree, 1-Strongly disagree

Svalbard means a lot to me.	5	4	3	2	1
I feel Svalbard is a part of me.	5	4	3	2	1
I am very attached to Svalbard.	5	4	3	2	1
I identify strongly with Svalbard.	5	4	3	2	1
I feel no commitment to Svalbard.	5	4	3	2	1
Svalbard is the best place for what I like to do.	5	4	3	2	1
I enjoy winter activities on Svalbard more than any other places.	5	4	3	2	1
I get more satisfaction out of visiting Svalbard than visiting another place.	5	4	3	2	1
Participating in winter activity on Svalbard is more important than at another place.	5	4	3	2	1
I would not substitute any other place for the type of recreation I do here.	5	4	3	2	1
I have a lot of fond memories about Svalbard.	5	4	3	2	1
I have a special connection to Svalbard and to the people visiting this place.	5	4	3	2	1
I will (do) bring my children to Svalbard.	5	4	3	2	1
I do not tell many people about Svalbard.	5	4	3	2	1

**9. Do polar nights / polar lights have any effect on your choice of travel destination?**

(You can choose several alternatives)

- No, but I wish it was not dark.       No, it does not affect it.  
 Yes, I think it is very unique.       Yes, I prefer it during my activity.  
 Yes, I choose to travel where/when winter darkness occurs.  
 Other (Please specify): \_\_\_\_\_

**10. Do you wish to return?**

- Yes       No       Maybe

**Section 3 – About You**

**11. How did you learn about a winter visit to Svalbard?**

- Word of mouth       Internet       Travel agency       Guidebook  
 Other (please specify): \_\_\_\_\_

**12. Gender**

- Male       Female

**13. Age** \_\_\_\_\_

**14. What is your primary place of residence?**

\_\_\_\_\_

**15. What is your primary spoken language?**

\_\_\_\_\_

**16. Which category best represents your annual household income?**

- |  |  |  |
|--|--|--|
| <input type="checkbox"/> Under €19,999       | <input type="checkbox"/> €20,000 – €29,999 | <input type="checkbox"/> €30,000 – €44,999     |
| <input type="checkbox"/> €45,000 – €64,999   | <input type="checkbox"/> €65,000 – €89,999 | <input type="checkbox"/> €90,000 – €134,999    |
| <input type="checkbox"/> €135,000 – €179,999 | <input type="checkbox"/> €180,000 or more  | <input type="checkbox"/> Do not wish to answer |

**17. What was the total cost of your/your personal group's trip to Svalbard?**

\_\_\_\_\_ Euro

**18. Please let me know if you have any additional comments regarding your recreation experience during your visit on Svalbard, in the space below.**



### **APPENDIX: III. Figure 9 – List of factors**

1. Enjoy natural scenery
2. View wildlife
3. Have fun
4. Get away from everyday life
5. Snowmobile in wild/natural setting
6. Dogsledge in wild/natural setting
7. Snowshoe in wild/natural setting
8. Ski in wild/natural setting
9. Experience something new
10. Do something with family
11. Have an adventure
12. Be with people who enjoy the same things
13. Experience peace and quiet
14. Learn more about nature
15. Get away from crowds
16. Experience excitement
17. Bring family/group closer together
18. Experience solitude
19. Learn more about cultural history
20. Feel healthier
21. Be in an area where polar bears exist
22. Allow my mind to move at a slower pace
23. Promote greater environmental awareness in my own group
24. Be challenged
25. Reflect on and clarify personal values
26. Keep physically fit
27. Talk to new and varied people
28. Rest physically
29. Feel more self-confident
30. Be at a place where I can make my own decisions
31. Develop m skills
32. Escape family temporarily

## **APPENDIX: IV. Experiencing the “arctic silence”**

Even though some tourists were complaining about the lack of quiet experiences, I had a great opportunity to experience and feel the “arctic silence”. My own experience also gave me the possibility to observe the feelings and reactions of other tourists as well.

I was ice-caving in the Longyearbyen glacier with ten other tourists. When we reached the deepest point possible to walk down to, our guide told us to turn off all the headlights and listen to the silence. It was dark, cold and the air was very fresh. The only thing we heard was each other’s’ breath. After a couple of minutes our guide started singing a beautiful Norwegian song<sup>6</sup> metaphorically about living our life in darkness and finding the light which will lead us further on. It was a wonderful experience. I am certain, I was not the only one who got goosebumps, and not because of the low temperature. Getting closer to the end of the song, singing about finally finding the light and being visible<sup>7</sup>, she turned on her headlight. For a couple of minutes everyone was moved and did not really know what to say. During the 30 minutes ride back to Longyearbyen all of us were talking about this song. This was, without a doubt, an extraordinary and unexpected experience. Something which gave us great satisfaction. A moment to remember.

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<sup>6</sup> Ola Bremnes: Har du fyr?

<sup>7</sup> “æ vil bli sett”