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iconic hiking destination, the Pulpit Rock in Norway."

Satisfaction Is Not Enough:

Crowding, Displacement and Loyalty at a Frontcountry Iconic Hiking Destination

- the Pulpit Rock in Norway.

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Abstract

The iconic Pulpit Rock in Norway is receiving more and more visitors every year and crowding has become an issue. Crowding and displacement belong to the most frequently studied concepts in outdoor recreation research while destination loyalty is a rather new area of research. Both concepts investigate the quality of experiences beyond overall satisfaction. This study investigates the links between the two. Quantitative data from 258 respondents was collected on-site at the Pulpit Rock and in form of an online questionnaire. Novel elements in this study included the investigation of crowding as an antecedent to behavioural destination loyalty, the operationalization of the displacement concept as behavioural intentions, and the search for overlaps between behavioural intentions related to loyalty and behavioural intentions in connection with displacement. In addition, the role of place attachment within these frameworks was studied. Findings suggested that crowding directly influences loyalty to a small extent, and that place attachment seemed to be irrelevant for perceptions of crowding and displacement. Moreover, small indications for overlaps between the concepts of behavioural loyalty and displacement intentions were found.

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Foreword

When I began to study for my Master's my mind was already set on nature-based tourism and sustainability as a direction for my Master's Thesis. My interest was confirmed studying for the elective course in nature based tourism with James Higham during the last semester.

In the first year of the programme, I was lucky to participate in the “mentor programme” and my mentor was the “manager” of the Pulpit Rock. He encouraged me to think about the Pulpit Rock as a potential research topic. Quite soon I realized that, for myself and others including the media, the most common topic people talk about with regard to the Pulpit Rock, except the large crack in the plateau, the steep cliff and the incredible beauty of the Lysefjord, was the increasing visitor numbers and how crowded it is depending on the weather, the season, and the time of day. It seems natural, to consider how many others will be there with you when you intend to hike up – with friends, or as a guide. Since last year I have been a guide and have guided a couple of times at the Pulpit Rock during the summer months. These times, I was walking in big groups (100+) and I was wondering how enjoyable the experience was for the tourists that went with me. I was wondering how seriously crowding can affect the quality of the experience.

Taking a closer look at nature based tourism research and following the media on topics related to the Pulpit Rock, I realized that it could also be interesting to find out more about visitor preferences with regard to crowding, but also in terms of facility development. For some time I studied relevant research contributions, mainly from Scandinavia, the USA, and New Zealand, and I got interested in choice experiments, tradeoffs between solitude and access and the like, the “Wilderness Purism Scale” (work done by Odd Inge Vistad and Marit Vorkinn) and rather new psychographic scales like “Nature Orientation” and “Quest for Facilities” (work by Jan Vidar Haukeland, Berit Grue and Knut Veisten) that were developed

in Norway. However, to work on validating scales would have required a far larger sample than I could have provided. Another focus in my search for thesis topic was to investigate crowding norms, in terms of preferences, acceptability and displacement and visual measurement approaches (a lot of work done by Robert E. Manning and others). I was keen on employing a visual approach at the Pulpit Rock, however, I was not able to find a new angle that would have justified research from a theoretical point of view. Nevertheless, I finally found a topic related to crowding and I think it is very interesting for me as a student – as it involves outdoor recreation, psychological constructs and marketing elements – but also from a managerial and theoretical perspective.

I would like to thank Audun Rake for his support during the mentor programme and beyond and Tide Reiser to help out with the transport to and from the Pulpit Rock. Thank you, for taking time to talk about potential topics, Johannes Apon. Furthermore, I would like to thank Truls Engstrøm as my supervisor and as the person who made me believe that studying the Pulpit Rock is practically possible and interesting. I would also like to thank you, Truls, for facilitating the search for potential respondents for me. Another who became a mentor to me, is Torvald Øgaard, thank you so much for your open door. Second to last, I would like to thank you, James Higham, for being an inspiring and motivating teacher, and a supervisor that goes above and beyond if he is asked for help.

Last but not least, I thank my parents, who are always supportive and who challenge and motivate me, my brother and my friends who believe in me.

Introduction

The World Tourism Organization (UNWTO, 2014) reports continued, virtually uninterrupted growth and diversification in tourism over the past decades with tourism being one of the fastest-growing sectors in the global economy, and forecasts a worldwide increase of international arrivals by 3.3% annually to reach 1.8 billion by 2030. In 2013, Europe, as the most visited region, attracted 52% of all international arrivals and despite the maturity of the market showed an increase of international arrivals by 5%, while numbers increased by 6% in Northern Europe and by 8% in Norway (UNWTO, 2014). According to Buckley (2009) the nature, eco- and adventure tourism (NEAT) sector makes up up to 25% of the tourism industry and Newsome, Moore, and Dowling (2012) and Balmford et al. (2009) point out that natural area tourism is undergoing explosive growth. It is argued given that it is planned, developed and managed in a responsible way; it can benefit individuals, regions and countries (Ardoin, Wheaton, Bowers, Hunt, & Durham, 2015; Newsome et al., 2012).

Prebensen, Vittersø, and Dahl (2013) found “nature” to be the most important experience element for tourists in Norway, which is also reflected in a 2013 report by Innovation Norway (the Norwegian Tourist Board), showing that experiencing nature is the most common planned activity for both, international and domestic tourists (Innovation Norway, 2013). In the vision for Norway’s destination brand “Powered by Nature” it is stated: “By 2018, Norway will have a sustainable travel and tourism industry that succeeds in attracting nature-loving explorers who seek accessible and strong experiences in spectacular nature” (Brand Norway, n.d.). However, Innovation Norway (2013) is also calling for offering tourists complete packages to encourage increased spending in the nature segment and points out that the high price level in Norway poses a challenge for the industry. One could argue that Norway is dependent on tourists that are willing to pay more, a feature that often comes with being loyal to a product or a destination (Moore, Rodger, & Taplin, 2013).

Norwegian iconic nature sites such as Preikestolen (the Pulpit Rock), Kjeragbolten and Trolltunga attract more and more visitors at an accelerated tempo with 250,000 visitors to the Pulpit Rock and 40,000 visitors each to Kjerag and Trolltunga in 2014 (Jøssang, 2014, October 18). The six kilometer hike to the Pulpit Rock, a rock formation towering above the Lysefjord in Fjord Norway, is one of Norway's top tourist attractions and in comparison to other iconic sites with a four hour return hike (Visit Norway, 2013) relatively easily accessible for even inexperienced visitors which might partly explain its popularity. For the summer season 2014 the site attracted approximately 23% more visitors than in 2013 (Jøssang, 2014, October 6).

The Pulpit Rock is not a part of a protected area and even if it was it would still underlie the principle of common access rights to all uncultivated land (Allemannsretten) which can be a challenge for resource and visitor management (Vistad & Vorkinn, 2012). Therefore, direct management approaches like regulations are often not available and indirect approaches such as using physical facilitation in a strategic manner are being employed (Vistad & Vorkinn, 2012). Organisations and stakeholders involved in the management of the Pulpit Rock and the local communities have recognized the need for visitor management and planning for the site and the entire Lysefjord area including Kjerag, another site attracting growing numbers of tourists (Jøssang, 2014, May 23; October 6; October 18; November 11; Larsen & Ellingsen, 2014, July 29; Terjesen, 2014, November 15).

Recently and as a response to the fast growing visitor numbers several topics of public discussion concerning visitor management, the visitor experience and the development of infrastructure and facilities have come up in the media. Crowding and queuing has been reported as an issue on some days which is partly due to the facts that there is only one, in some parts narrow, path that both visitors on the way up to the plateau and visitors that are returning share (Larsen & Ellingsen, 2014, July 29). In order to improve the quality of the

trail and to increase safety, Sherpa from Nepal have been hired to work on it over the past years (Larsen & Ellingsen, 2014, July 29; Jøssang, 2014, May 23). Management also considers installing toilets on the mountain (Larsen & Ellingsen, 2014, July 29); 40 signposts each have been installed on Preikestolen and Kjerag to guide confused tourists through darkness and bad weather conditions (Jøssang, 2014; November 11) and parking areas are considered to be expanded (Jøssang, 2014, October 18). Bigger topics that are being discussed include the establishment of a new experience and information center at the Pulpit Rock (Jøssang, 2014, September 16), a national park status (Haukeland & Fossgard, 2015, January 26; Jøssang, 2015, March 25; Terjesen, 2014, November 15), and a cable car installation that goes up to the plateau (Jøssang, 2014a, November 11).

Most of these considerations are connected to the wish of attracting and keeping more tourists in the area around Preikestolen (Jøssang, 2014, September 16). The management has asked for scientific contributions in order to help decision making as knowing more about the visitors to Preikestolen. Insights into their experiences and behaviours as a stakeholder group are of vital importance in order to protect the experience and for visitor planning, management and development of the area. What is more, findings from the Pulpit Rock may throw a light on similar destinations in Norway. Another interesting question is also, whether there are significant differences between visitor types.

From a theoretical point of view, crowding has been said to be a very important indicator for the quality of outdoor recreation experiences and yet overall is usually high despite perceptions of crowding (Manning, 1999). According to Gramann (1983; as cited in Higham, 1997) increasing participation in outdoor recreation logically results in perceptions of crowding. Coping mechanisms like rationalization, product shift and displacement explain high satisfaction ratings in this context and research has suggested that satisfaction is still an important indicator for quality experiences but that it might not be sensitive enough to detect

changes in site conditions (Manning, 1999). More recently the concept of destination loyalty has gained attention in outdoor recreation research (Moore et al., 2013). The concepts of loyalty and displacement seem to be very closely related in this context. Destination loyalty most commonly is measured with the conative dimension of loyalty in terms of behavioural intentions – precisely intentions to revisit and intentions to recommend (Moore et al., 2013). Displacement research has started to ask recreationists under what kind of circumstances they would use certain behavioural strategies (displacement intentions) to avoid unacceptable site conditions such as crowding (Arnberger & Haider, 2007; Arnberger, Haider, Eder, & Muhar, 2010).

Displacement has the potential to decrease the quality of the visitor experience and site conditions as visitors that are more tolerant towards social and other impacts displace less tolerant visitors (Kearsley & Coughlan, 1999). While attracting more visitors to Norway has potential benefits, it is important to monitor and consider the implications for on-site management (Kearsley & Coughlan, 1999). For effective resource management an understanding of visitor perceptions and behaviours is vital (Budruk, Stanis, Schneider, & Heisey, 2008).

Three conditions are being considered when potential visitors decide whether they would like to repeat a visit: people, place and activity (Lee, Graefe, & Burns, 2007). Crowding perceptions belong to the social conditions that are being considered in this context. It seems natural that visitors whose enjoyment has been affected negatively by crowding, but who were still satisfied overall with their experience would want to return or recommend the site, but would also employ or recommend behavioural coping strategies, such as to visit at a less popular time or to use a more remote trail, to avoid crowding. If they intend to choose a different site altogether they obviously would not behave like a loyal visitor, at least not in terms of revisiting. There seems to be some overlap in the concepts of displacement and

loyalty. Finally, place attachment is an important concept in destination loyalty and crowding research (Budruk et al., 2008; Kyle, Graefe, Manning, & Bacon, 2004b). Linking it to displacement seems promising.

To my knowledge, this study could be the first to explore the crowding-destination loyalty relationship in an outdoor recreation setting and the first to explore the potential overlap in behavioural intentions related to loyalty and displacement in the context of outdoor recreation. Up until 12 June 2015 I did not find articles making these issues their focus of attention within the first three pages of the outcome in Google Scholar, entering the terms, “crowding + loyalty + tourism”, “crowding + loyalty + nature”, “crowding + loyalty + outdoor”, “crowding + intentions + tourism”, “crowding + behavioural intentions + outdoor”, “displacement + loyalty + tourism”, “crowding + displacement + loyalty”, “coping behaviour + crowding + loyalty”, “behavioural intentions + displacement + tourism”, “behavioural intentions + coping + recreation”.

Research Questions

Based on the above outlined problem, I intend to conduct research in the interdisciplinary field of study of outdoor recreation by approaching the problem from a psychological perspective and involving marketing research elements in the pursuit of answering the following questions: (1) Does crowding have an influence on loyalty behavioural intentions? (2) What is the role of place attachment in determining the crowding-loyalty relationship? As an exploratory feature, I operationalize displacement as behavioural shift intentions and I want to make contributions to answering those questions: (3) what is the role of place attachment in determining the crowding-displacement relationship? (4) Are there measurable overlaps between loyalty behavioural intentions and behavioural displacement shift intentions?

This study takes the most recent experience of visitors to the Pulpit Rock as the unit of analysis in estimating the relationships between crowding, satisfaction, place attachment, loyalty and displacement. For this purpose data has been collected from 258 visitors in form of self-administered questionnaires distributed online and on-site at the Pulpit Rock. In the following parts of this thesis, a literature review will outline the theoretical framework for the hypothesis and proposed models, followed by a detailed method section, a presentation and discussion of the results, conclusions and implications.

Literature Review

The presented theoretical framework for this study is divided into eight subsections: empirical research from Norway, an introduction to natural area tourism and visitor planning, the conceptualization of the relevant concepts including crowding, experience in recreation, satisfaction, place attachment, loyalty, coping behaviour including displacement, and an outline of relevant empirical findings informing the research conducted for this study.

Empirical Research Based in Norway

According to Aasetre and Gundersen (2012) about 90 % of the Norwegian population participates in outdoor recreation at least once a year, and each recreationist makes an average of 96 day trips a year making outdoor recreation a very important activity for the well-being of the population and more common than visiting cinemas.

Vistad and Vorkinn (2012) validated a simplified standardized version of the Wilderness Purism Scale with eight different studies out of which seven were conducted in or around national parks in Norway. They point out the similarity between the concept of purism and traditional Scandinavian outdoor recreation (*friluftsliv*) and that the stereotypical Norwegian outdoor recreationist – described as “the skilled and lonesome hiker, fisherman or hunter, staying in a pristine environment for several days, without the need for service facilities” (Vistad & Vorkinn, 2012, p. 40) shares many characteristics with the strong purist.

In the main sample from Rondane National Park (N=5574) the mean tourism score was 3.1, below the average of 4 on the scale which indicated the presence of predominantly “low purists”. Furthermore, they found low and medium purists to be less experienced than high purists. Vistad and Vorkinn (2012) did not find correlations between level of purism and the number of previous visits, or level of purism and the strength of attachment to the area. Strong purists showed the least tolerance towards other types of activities, the number of users during peak season, the behaviours of others in general, and toward recreational impacts on trails; while low purists were more likely to be in favour for parking fees if it was used for facilitation purposes (Vistad & Vorkinn, 2012). Finally, and surprisingly, they found Norwegians (78% low purists) to be the least purist among other nationalities (Vistad & Vorkinn, 2012).

Natural Area Tourism and Visitor Planning

According to Newsome et al. (2012) there is a growing trend to seek authentic, inspiring and transformational experiences in natural areas which are associated with unspoilt and wild landscapes where original vegetation and biodiversity and naturally securing processes are in place. Identifying different forms of natural area tourism and different types of natural area tourists requires values, attitudes and behaviours of the latter to be considered (Newsome et al., 2012). The term natural area tourism is congruent with the definitions of ecotourism, wildlife tourism, geotourism and adventure tourism and needs to be distinguished from the term nature based tourism which focuses on the understanding and conserving natural environments (biotic and abiotic components) reflecting an ecocentric philosophy towards sustainability and responsible tourism (Newsome et al., 2012; Weaver, 2008). Even though not all natural area tourists hold ecocentric values, there is an increasing demand for more sustainable tourism (Newsome et al., 2012) which can be seen from several different perspectives: ecological, social, cultural and economic (Mowforth & Munt, 2003). Along

these lines, Garrett Hardin stated as early as in 1968 in his classic paper “The Tragedy of the Commons”:

The National Parks present another instance of the working out of the tragedy of the commons. At present, they are open to all, without limit. The parks themselves are limited in extent--there is only one Yosemite Valley--whereas population seems to grow without limit. The values that visitors seek in the parks are steadily eroded.

Plainly, we must soon cease to treat the parks as commons or they will be of no value to anyone. (Hardin, 1968, p. 1245)

As pointed out in the introduction of this thesis, tourism can have benefits for natural areas given that they are managed in a responsible way (Newsome et al., 2012). Extensive scientific contributions on the issues that the tragedy of the commons describes have been made with the application of the concept of carrying capacity over the past decades (Manning, 2007). The term carrying capacity has been defined as the maximum level of use that an area can sustain (e.g. by natural factors such as food, shelter or water) beyond which irreversible damage and problems will occur, and has been applied to determine ecological (environmental resources), social visitor carrying capacity limits (with regard to the impact on visitor experiences), and management action limits (Manning, 2007; Newsome et al., 2012).

According to Wagar (1964, p. 3) “Recreational carrying capacity is the level of recreational use an area can withstand while providing a sustained quality of recreation”. Shelby and Herberlein (1981; as cited in Graefe, Vaske, & Kuss, 1984, p. 396) as agents of a more contemporary definition define it as the “level of use beyond which experience parameters exceed acceptable levels specified by evaluative standards”. In fact, in contemporary literature the term has morphed into sustainability (Manning, 2007). The concept of carrying capacity has also evolved to be less deterministic and more normative than suggested in its origin (Manning, 2007) as the concept of limits of acceptable change

(LAC) has become more fashionable (Mowforth & Munt, 2003) and practical (Newsome et al., 2012) than numerical carrying capacity. As the term suggests, it is grounded in the realization that changes are inevitable with visitor use and concentrates more on the question how much change is acceptable instead of trying to determine how much use is too much (Newsome et al., 2012). The Recreation opportunities spectrum (ROS) is another important concept for visitor management which evolved around the idea that not everyone prefers the same activities and experiences and that not all activities can happen at the same site at the same time without resulting in conflict - ideally resulting in natural areas that provide some diversity of opportunities (Clark & Stankey, 1979; Newsome et al., 2012).

The focus of this paper falls upon social sustainability. However, in Europe there is often a lower interest in the social aspect compared to ecological aspects of recreational activities (Arnberger & Brandenburg, 2007). With respect to social sustainability and visitor management the concepts of carrying capacity, limits of acceptable change and the spectrum of recreation opportunities are commonly applied in natural area visitor planning and management frameworks (Manning, 2007; Newsome et al., 2012). Common elements of these kind of frameworks include the development of management objectives and indicators and standards for the desired conditions, the monitoring of the latter, and actions by the management addressing the maintenance of these conditions (Manning, 2007). According to Newsome et al. (2012) visitor planning for natural areas means that the management of such an area needs to define what desirable visitor experiences are, what type of visitor is desirable and what acceptable limits to environmental change are. The iterative process of visitor planning that takes place over time is adaptive and involves different value judgments of philosophical, emotional, spiritual, experienced-based or economic nature of visitors, managers and other stakeholders that need to be overcome. Different techniques employed to

manage visitors include, for example, zoning, channeled visitor flows, restricted entry and differential pricing structures (Mowforth & Munt, 2003).

Crowding

Social carrying capacity has been studied with the attempt to have an influence on the quality of visitor experiences and the concept is closely associated with the concept of crowding (Lee & Graefe, 2003). Crowding is one of the most frequently investigated concepts in outdoor recreation (Arnberger & Brandenburg, 2007; Budruk et al., 2008; Kearsley & Coughlan, 1999; Sayan, Krymkowski, Manning, Valliere, & Rovelstad, 2013; Shelby, Vaske, & Heberlein, 1989; Vaske & Shelby, 2008) and will most likely continue to be important as the population grows (Vaske & Shelby, 2008). On the words of Kearsley and Coughlan (1999) crowding is a serious impact affecting the very nature of the outdoor experience. Perceived crowding is a psychological concept defined as a combination of a negative evaluation of density, hence a value judgment (evaluative information) and the density level experienced by the individual (descriptive information) (Desor, 1972; Stokols, 1972; Vaske & Shelby, 2008). In other words, crowding is a negative assessment of a density level in a certain area (Lee & Graefe, 2003). Hence a clear distinction is made between the number of individuals in a particular setting (density) and the negative evaluation of it (crowding) (Graefe et al., 1984; Higham, 1997; Stokols, 1972). As the concept is so closely linked to numbers of encounters and because of its specificity, it can be a more useful indicator for management than satisfaction (Shelby & Heberlein, 1986; as cited in Lee & Graefe, 2003).

Bell, Green, Fisher, and Baum (2001) take crowding as a psychological state characterized by stress and with behavioural properties as people may attempt to reduce discomfort. There are theories that people feel crowded when they feel compromised by the presence of others, or when physical conditions increase the sense of social density (stimulus overload theory), or when they feel a loss or lack of control (Schmidt & Keating, 1979).

According to Steg, van den Berg, and De Groot (2012) crowding hinders social interaction regulation, results in invasions of personal space, limits behavioural options and elevates physiological stress which becomes noticeable in form of elevation of skin conductance, blood pressure and stress hormones, symptoms which in general are stronger for men than for women. Crowding also makes itself felt in terms of psychological stress as people who feel crowded show negative affect, tension, anxiety and nonverbal signs of nervousness (Steg et al., 2012). It is also associated with social withdrawal, a coping mechanism which is characterized by reduced eye contact, greater interpersonal distancing and more pronounced inhibition in starting a conversation (Bell et al., 2001; Steg et al., 2012).

Vaske and Shelby (2008) explain that when people perceive an area to be crowded they implicitly compared the experienced condition or the impacts with what would be acceptable, so if the conditions experienced exceed their standards, they evaluate an area to be crowded. In this case the area is over capacity in terms of visitor standards being exceeded (Vaske & Shelby, 2008). Thus crowding is a normative concept (Manning, 2007) and the term “perceived crowding” refers to its social psychological, subjective or evaluative nature (Lee & Graefe, 2003). The origins of crowding have been summarized as deriving from an experiential state of perceived lack of space, the results of excessive stimulation, an experience of unwanted behavioral interference, a need for more privacy, an attribution of arousal to the invasion of personal space or loss of control (Kruse, 1985; as cited in Lee & Graefe, 2003). As Lee and Graefe (2003) point out crowding is a very complex psychological construct more influenced by social psychological factors than use levels (Shelby & Heberlein, 1986; as cited in Lee & Graefe, 2003). A range of variables mediate the relationship between use-levels and crowding perceptions (Higham, 1997) and an updated review will be presented in the following paragraphs.

Shelby et al. (1989) conducted a comprehensive comparative study of 15 years of research in the United States investigating factors that could not have been studied with a single setting. The aggregated data from 59 different settings or activities, 35 studies and 17.000 respondents with the same single-item perception of crowding scale found that crowding perceptions vary by time, resource availability, accessibility and convenience, and management strategy (Shelby et al., 1989). The researchers found that the type of activity (consumptive vs. nonconsumptive), the region of the United States, and methodology related to data collection (on site vs. mailed questionnaire) did not affect crowding perceptions (Shelby et al., 1989). Vaske and Shelby (2008) followed up by comparing 181 studies using the same 9-point scale and found that methods for summarizing the crowding scale were very highly correlated, that the year the study was conducted, the region of the United States, the country, and the specific activity affected perceived crowding while the specific location of the encounter only affected the percentages and not the mean of the scale.

Normative theory. Crowding is a normative concept and people perceive crowding when use levels interfere with objectives, activities, or values of visitors (Manning, 1999, 2007). This is also called social interference (Lee & Graefe, 2003). It is differentiated between the social norm, which describes common standards for desired experiences or conditions, and personal norms which refers to the standards of an individual (Manning, 1999, 2007). Manning (1999, 2007) suggests that factors contributing to crowding norms include characteristics of visitors, characteristics of those encountered and situational variables.

Characteristics of visitors are for example, motivations, expectations, preferences, and experience ore more specifically experience use history (EUH) (Arnberger & Brandenburg, 2007; Budruk et al., 2008; Eder & Arnberger, 2012). More recently the concepts of place attachment (Arnberger & Brandenburg, 2007; Budruk et al., 2008; Eder & Arnberger, 2012), and displacement (Arnberger & Brandenburg, 2007; Arnberger & Haider, 2007; Kearsley &

Coughlan, 1999) have been investigated with respect to crowding perceptions. These concepts will be reviewed later on. Among characteristics of those encountered are the type and size of the group encountered, their behaviours, and the degree to which others are perceived to be alike (Budruk et al., 2008) for example in terms of the activities they pursue on-site (Higham, 1997). Finally, situational variables investigated involve the type of area, the location within an area and environmental factors (Budruk et al., 2008), for example secondary impacts of recreation, such as litter or damage (Higham, 1997).

Lee and Graefe (2003) summarized that most studies of perceptions of crowding had been conducted in backcountry settings. Vaske and Donnelly (2002) studied the normative theory that when reported encounters exceed an individual's norm for use density, crowding perception will increase. Reported encounters are a descriptive indicator for what has been experienced by individuals, crowding is an indirect method for establishing evaluative standards, and norms measure directly what will be tolerated (Vaske & Donnelly, 2002). Vaske and Donnelly (2002) used data from 13 different studies and 72 evaluation contexts and concluded that while crowding and norms vary across different settings and activities, the predicted relationship among encounters, norms and crowding is consistent for different resources (backcountry vs. frontcountry), activities (e.g. canoers, hikers, hunters), type of encounter (conflict vs. no conflict) and evaluation contexts and statistically significant for 67 of the studied relationships. The previously mentioned 9-point Likert scale was used to measure perceptions of crowding, respondents were asked to indicate the number of people they remembered seeing for the encounter measure and the number of encounters they would tolerate for the tolerance norm (Vaske & Donnelly, 2002). Higher encounters than the norm resulted in a higher perceptions of crowding (slightly to moderately crowded with an average score of 4.01) and lower encounters than the norm resulted in lower perceptions of crowding (i.e. not at all crowded with an average score of 2.02) (Vaske & Donnelly, 2002). The

strength of the relationship assessed with the effect size was considered medium to large (Vaske & Donnelly, 2002).

In an earlier comparative study of 56 evaluation contexts from 30 studies Donnelly, Vaske, Whittaker, and Shelby (2000) investigated encounter norm prevalence, the proportion of people who can articulate encounter norms across different types of resources (backcountry vs. frontcountry), activities (consumptive vs. nonconsumptive), encounters (no conflict vs. conflict) and question response formats, using a single-item question asking people to indicate their highest tolerance level for encounters. As predicted, norm prevalence varied by all variables except for type of activity and the three variables explained 64 % of the variance in norm prevalence. Relevant for this study is that visitors to frontcountry settings compared to backcountry settings are less willing or able to provide a numerical tolerance limit and that this finding can probably be explained by the fact that people expect and tolerate a higher user density in frontcountry settings (Donnelly et al., 2000). The previously outlined follow up study by Vaske and Donnelly (2002) however showed that if visitors give a numerical estimation, the relationship pattern for the encounter-norm-crowding relationship is the same as for backcountry settings. A common technique to facilitate the specification of what is acceptable for frontcountry visitors are visual methods which also allow people to consider additional information affecting crowding, like the characteristics of those encountered including the activity, mode of travel and group size, or physical impacts such as litter (Manning, 2007; Manning & Freimund, 2004). Manning (2007) suggests to consider a range of evaluative dimensions besides the acceptability dimension: preference (the preferred condition), displacement (the point at which people would not choose to visit the site again because of the negative evaluation of the impacts), and management action (the point at which visitors would support restrictions on visitor use). Visual methods, however, seem more

useful in settings where use levels are precisely monitored and visitor use simulation systems can be employed (Manning, 2007).

Expectancy theory. According to Graefe et al. (1984) an understanding of recreation motivations, defined as the reasons why we behave in a certain way, is essential to understand experience perceptions and two related concepts: expectancy and norms are particularly vital when it comes to social carrying capacity. Expectancy theory is concerned with the relationship of expected outcomes and actual outcomes and the convergence of the two experienced at a certain recreational site (Graefe et al., 1984; Higham, 1997). People usually have multiple expectations ranging from intrinsic to extrinsic motivations to a long list of outcomes or rewards such as status, solitude, and excitement (Lee & Graefe, 2003) which depend on the individual's previous experience, culture, situational variables, communication with others, and personal characteristics (Graefe et al., 1984; Higham, 1997; Lee & Graefe, 2003).

Stewart and Carpenter (1989; as cited in Higham, 1997) highlight that previous experience with the motive structure and recreational setting strengthens the approximation of expectations and outcomes. Furthermore some expectations are linked to certain activities but can vary significantly among individuals engaged in the same activity, in the same environment and even with the same individual at different times (Graefe et al., 1984). Lee and Graefe (2003) summarize relevant literature by stating that expectations and preferences can help explain crowding and better than use levels. Higham (1997) refers to Shelby, Heberlein, Vaske, and Alfano (1983; as cited in Higham, 1997) concluding that visitors are more likely to evaluate crowding on the basis of their expectations than based on their idealistic preferences, making it more likely for more experienced visitors to have more accurate expectations with regard to crowding and perceive less crowding than visitors with false expectations. Lee and Graefe (2003) also refer to Shelby et al. (1983; as cited in Lee &

Graefe, 2003) who found expectancy theory supported by studying six different areas and by finding that seeing more other visitors that expected made people feel more crowded. Vaske et al. (1994; as cited in Lee & Graefe, 2003) therefore proposed to build realistic expectations among visitors.

Experience in Recreation

On the words of Manning (1999) recreation research has been driven by the notion that experience in recreation, also termed experience use history (EUH) may be important to differentiate between types of recreationists as differences in knowledge are likely to result in difference in attitude, preference and behaviour. According to Hammitt, Backlund, and Bixler (2004) they might have a greater cognitive and affective basis for evaluating if they are more familiar with the setting. It is usually measured in terms of frequency of participation, years of participation, total visits or a variety of other ways and the measures vary from single-item variables to composite indexes of multiple dimensions that measure amount and type of experience (Arnberger & Brandenburg, 2007; Budruk et al., 2008; Hammitt et al., 2004; Manning, 1999).

As stated by Hammitt et al. (2004) EUH has many dimensions including past experience with a specific cite and past experience with similar sites. Experience has been related to variables such as perceived crowding and other impacts, conflict, willingness to pay, motivations, attitudes towards management, preferences for facilities and services (Manning, 1999), place attachment and behavioural intentions (Budruk et al., 2008; Hammitt et al., 2004; Kim & Brown, 2012; Pearce & Kang, 2009).

Closely related to experience is the concept of specialization which is conceptualized as “a continuum of behavior from the general to the more particular, reflected by equipment and skills used in the sport and activity setting preferences” and encompasses behavioural, cognitive and psychological components (Manning, 1999, pp. 235-236). Often composite

indexes are used including dimensions such as experience, activity involvement, commitment to an activity, skill or expertise, and the centrality of the activity to one's life (Manning, 1999). For this study experience is included as an important control variable with respect to crowding, place attachment, satisfaction, displacement and behavioural loyalty, conceptualized as single-item measures in terms of total visits, frequency of visits, and frequency of activity exercise.

Satisfaction

As Manning (1999) demonstrates, quality is implicitly or explicitly incorporated in the goals and policies of most outdoor recreation areas and is an underlying objective of most research in these kind of studies as managers want to provide high quality opportunities, visitors want to have high quality experiences and researchers want to understand factors influencing high quality experiences. Manning (1999) goes on to explain that the main measure of quality in outdoor recreation has been satisfaction and that this focus originates in the potential usefulness of visitor opinions and assessments recognized by most managers with respect to the lack the of feedback from price signals available for the private sector as outdoor recreation is usually free of charge or low-charged.

A definition borrowed from consumer marketing defines satisfaction as pleasurable fulfillment of a need, desire, or goal, or "the consumer's sense that consumption provides outcomes against a standard of pleasure versus displeasure" (Oliver, 1997; as cited in Oliver, 1999, p. 34). Satisfaction research in outdoor recreation is based in expectancy theory which defines the concept as the congruence between expectations and outcomes, however the measurement of satisfaction is rather complex and involves a range of conceptual and methodological issues which will be summarized in the following (Manning, 1999).

First of all, overall measures of satisfaction may be too broad to be useful and may also not be sensitive enough to detect changes in the variables that interest managers and

researchers as satisfaction is affected by a number of variables of which some are controllable and some are not (Manning, 1999; Moore et al., 2013). It is a multidimensional concept influenced by biophysical, social and managerial environments which has led to alternative multi-item measures of different dimensions which have been found more useful than global single-item measures (Manning, 1999).

Moreover, while situational variables (e.g. resource, social, management settings) are important influences on satisfaction they are mediated by subjective evaluations dependent on socioeconomic characteristics, cultural characteristics, experience, attitudes and norms of individuals (Manning, 1999). Manning (1999) therefore points out that satisfaction is a function of both settings and visitors and that the perceptions of visitors are equally important in determining it.

Resulting from the lack of sensitivity of overall visitor satisfaction might be a diminished quality of the visitor experience as visitors who are less sensitive to impacts influenced by increased use levels might replace the ones that are more sensitive and displace to other settings (Manning, 1999).

In addition, very high levels of satisfaction for visitor to recreation areas are common and not surprising as visitor usually choose recreation opportunities in line with their tastes and preferences (Manning, 1999). Hence Manning (1999) concludes that quality in outdoor recreation can be defined as the extent to which opportunities satisfy the experiences that they are managed for and that this is a way to optimize overall satisfaction.

Moore et al. (2013) and Kim and Brown (2012) portray on the basis of relevant research that satisfaction and service quality as intertwined concepts are often used interchangeably although it is generally agreed that satisfaction is distinct from service quality and refers to the emotional state of a visitor after experiencing a destination, while service quality is a measure of perceived quality of performance based on evaluating services and

facilities. Perceived attribute performances lead to overall satisfaction (Alegre & Garau, 2010; Kim & Brown, 2012). Hence, in line with Manning (1999) above, managers are more likely to have control over service quality than over satisfaction which can be influenced by uncontrollable factors like mood, emotions or weather (Moore et al., 2013).

Serving the purpose of investigating the relationships between crowding, satisfaction, loyalty and displacement, for this study the overall conceptualization of satisfaction was considered most efficient and suitable.

Place Attachment

Giuliani (2003) outlines the general frame of reference for the psychological concept of place attachment to be in the sector of affect in human experience (feelings, moods, emotions) towards places where they live and act and also to other persons living and operating in them. She cites Marris (1982, p. 185; as cited in Giuliani, 2003, p. 159) to explain the useful comparison with interpersonal relationships but points out that it is not an exact analogy: “the relationships that matter most to us are characteristically to particular people whom we love ... and sometimes to particular places that we invest with the same loving qualities”. Giuliani (2003) provides a simple explanation for place attachment in stating that people desire to maintain closeness to places in order to experience the positive emotions they may evoke.

Scannell and Gifford (2010) recognize that place attachment can be used to plan and encourage the use of public spaces such as national parks, and hence also other natural areas and that it is important to studies of environmental perception. However, Scannell and Gifford (2010) also point out that the variations in this above given broad definition are great: while humanistic geographers see a sense of place to fulfill a fundamental human need, others argue that it includes sub-concepts of place identity, place attachment and place dependence, some suggest that place attachment encompasses ancestral ties and a desire to stay in a place, and

some define it by the intensity of longing for places that are lost and urban sociologists locate place attachment at the city/home/neighbourhood levels. There is also a diversion of definitions within disciplines when it comes to relying place attachment on social or physical features or both (Scannell & Gifford, 2010). So Scannell and Gifford (2010) make an effort in structuring and shaping a more coherent understanding of the concept and propose a three-dimensional framework defining place attachment as a multidimensional construct with person (who is attached and to what extent is the attachment based on individually and collectively held meanings?), psychological process (how are affect, cognition, and behaviour featured in the attachment?) and place dimensions (the object of the attachment, what is the attachment to and what is the nature of this place?) to guide future research.

Budruk et al. (2008, p. 530) cite Relph (1976, p.29) to define “place” as a multi-faceted concept encompassing “setting, landscape, ritual, other people, personal experiences, care and concern for home, and in the context of other places” and explain that in the recreational context the concept is often measured by place identity and place dependence, two primary dimensions of the construct.

Kyle et al. (2004b) outline how recreation researchers have built on the work of human geographers and environmental psychologists who believe that through place attachment within the geographic landscape people attach meaning to places, and applied the concept to an outdoor recreation context. Moore et al. (2013) highlight how place attachment research contributes to area research and management by explaining visitors’ responses to sites and proposed changes to them.

In the following paragraphs the two concepts of place attachment used in this study will be outlined.

Place identity. According to Proshansky, Fabian, and Kaminoff (1983, p. 59) place identity can be defined as a sub-structure of the self-identity of the person consisting of,

broadly conceived, cognitions about the physical world in which the individual lives. These cognitions represent memories, ideas, feelings, attitudes, values, preferences, meanings, and conceptions of behavior and experience which relate to the variety and complexity of physical settings that define the day-to-day existence of every human being. At the core of such physical environment-related cognitions is the 'environmental past' of the person; a past consisting of places, spaces and their properties which have served instrumentally in the satisfaction of the person's biological, psychological, social, and cultural needs. Kyle, Graefe, Manning, and Bacon (2004a) explain that settings or places allow individuals to express both their identity as well as to affirm it. Along these lines, Prebensen, Larsen, and Abelsen (2003) point out that identity fulfillment may be realized through a tourist experience and found that nature based tourists in the North of Norway consider themselves different from others and kind of unique.

Place dependence. Place dependence determines how well a setting serves goal achievement in relation to other alternatives; it can be negative in terms of a place limiting the achievement of valued goals, and the strength of the connection is rather based on specific goals than general affect (Jorgensen & Stedman, 2001). Places can be important to people because of their functional value and visitors to specific resources may depend on them due to their unique ability to facilitate desired experiences (Stokols & Shumaker, 1981; as cited in Kyle et al., 2004a).

Conceptualizing place attachment as place identity and place attachment. Based on the work of Williams and Roggenbuck (1989), Williams and Vaske (2003) examined the validity and generalizability of a two-dimensional place attachment construct consistent of place identity and place dependence across different settings and found confirmation in the two-dimensionality of the construct and reliable measures with only four items for each of the dimensions. A three-dimensional alternative concept reflecting different attitudinal

components was suggested by Jorgensen and Stedman (2001) who conceptualized place attachment (affective) as a first-order construct together with place identity (cognitive) and place dependence (conative) with an overarching “sense of place” concept. However, as Kyle et al. (2004a) argue, the conceptualization by Jorgensen and Stedman (2001) is more suitable for the strength of attachment to residential settings and communities while the former outlined conceptualization seems to fit and has been frequently applied in recreational contexts where the interaction with the place is more sporadic. Furthermore it is argued that the use of a second-order factor (sense of place) might be misleading because studies testing the effect of place identity and place dependents on different dependent variables have shown that the two dimensions do not always act uniformly (Kyle et al., 2004a; Williams & Vaske, 2003).

In line with Kyle et al. (2004b), Lee et al. (2007) and Weaver and Lawton (2011) and building on the work of Pritchard, Havitz, and Howard (1999), for this study, the two primary dimensions of place attachment are conceptualized as attitudinal loyalty and an antecedent of behavioural loyalty as position involvement and place identity seem to measure the same construct and resistance to change can be conceptualized as place dependence.

Furthermore, in the context of natural area recreation the object of the attitude should be the place itself and not as common in examinations of loyalty, the service provider as people are more likely to differentiate between sites than between service providers (Kyle et al., 2004b).

Loyalty

Citing work by Zeithaml, Berry, and Parasuraman (1996), Oliver, Rust, and Varki (1997) argue in the context of relationship marketing that from a management perspective satisfaction only matters because of its affect on behavioural outcomes. A popular definition of loyalty in the marketing literature is “a deeply held commitment to rebuy or repatronize a

preferred product or service consistently in the future, despite situational influences and marketing efforts having the potential to cause switching behaviour” (Oliver 1997, p.392 ; as cited in Oliver, 1999, p. 34). Oliver (1999) argues that it is commonly understood that satisfaction and loyalty are linked and calls attention to the fact that satisfied customers are not necessarily loyal. He concludes his analysis by stating that satisfaction becomes less significant as loyalty begins to set through other mechanisms like personal determinism, or social bonding at the institutional or personal level (Oliver, 1999).

According to Oliver (1997; as cited in Oliver, 1999) consumers can become loyal going through several phases: first in a cognitive sense, followed by affective loyalty before they develop loyal behavioural intentions (conative loyalty) and finally act loyal in terms of their behaviours.

Moore et al. (2013) argue that the future of natural areas cannot be secured without societal support by loyal visitors as a valuable source of operational revenue in terms of paying entrance fees as well as with regard to volunteering to help management in times of increasing accountability of public funds (Lee, Graefe, & Burns, 2004). Moreover, intentions to revisit and recommend are of importance to managers in terms of increasing revenue and support for natural areas (Chi, 2012; Kyle et al., 2004b; Moore et al., 2013; Weaver & Lawton, 2011). Moore et al. (2013) outline how loyal visitors have the potential to be advocates for natural areas under threat and that it is important for managers to understand what influences visitor loyalty in order to be able to better protect natural places.

In the context of natural area tourism, satisfaction has been a long-recognized way of reporting on visitor experience and contributes to loyalty, making it vital to any consideration of destination loyalty research (Moore et al., 2013). Loyalty in this context, is defined as commitment to a destination (Moore et al., 2013; Rivera & Croes, 2010).

Besides overall visitor satisfaction, quality of service influences loyalty directly and indirectly through the mediating influence of satisfaction (Chi, 2012; Lee et al., 2004; Moore et al., 2013; Tian-Cole, Crompton, & Willson, 2002). Other variables that have been studied in relation to loyalty include destination image, value for money, involvement in activities and quality of experience (Moore et al., 2013). Place attachment has been studied frequently in relation to destination loyalty (Kyle et al., 2004b; Moore et al., 2013; Weaver & Lawton, 2011) and as mentioned above has been used to operationalize attitudinal loyalty (Kyle et al., 2004b; Lee et al., 2007; Weaver & Lawton, 2011). Chi (2012) reports that repeat visitors had stronger intentions to revisit and recommend a major tourist destination, that previous experience moderated the satisfaction-loyalty relationship and that satisfaction played a more important role in determining loyalty for first timers. This is actually not surprising, as visitors that are already loyal in behavioural terms visit a place more repeatedly. In other words, repeat visitation is actual behaviour and a dimension of behavioural loyalty.

Pearce and Kang (2009) allude to three kinds of difficulties in the application of the loyalty concept to tourism studies. First of all, repeat visitation to any single destination is likely to decrease with an increasing range of tourism destinations and opportunities, and is rather opposed to the notion that tourists seek novelty in their experiences and preferring the excitement and adventures of new settings instead of already familiar destinations. A second issue of concern is that behavioural intentions of loyalty may be infrequently or even never realized due to the nature of pleasure travel as infrequently purchased products and due to critical intervening variables like finances, health, and destination capacity issues. As a third issue Pearce and Kang (2009) explain that a holiday experience is multi-faceted, complicated and interrelates purchases and experiences which may put the locus of loyalty at any one of a number of scales, such as a particular type of accommodation, an activity or an environmental setting. In this sense it may be related to a particular business or place or it may be manifested

by choosing the same type of accommodation, environmental setting or activity again in the future (Pearce & Kang, 2009). Pearce and Kang (2009) refer to this kind of loyalty as transferred loyalty.

Moore et al. (2013) in their review of ten years of loyalty studies in nature based tourism, provide some interesting direction of research which to some extent are considered in this study. First of all it is argued that elaboration of the loyalty model beyond service quality and satisfaction is important, just as the validation in different settings such as the frontcountry (Moore et al., 2013). As a second suggestion place attachment is put forward as a interesting and promising area for future research. Third, progressing analysis of loyalty as a complex construct is suggested. With this respect it is also argued that intention to revisit as a measure of loyalty is not suitable for once-in-a-lifetime experiences (Moore et al., 2013). Moore et al. (2013) also point out that there are potentially other items to be identified and tested in further research. Finally, transferred loyalty to multiple destination at different scales, for instance to a certain site, an protected area, a system of protected areas or protected areas in general, should be explored according to (Moore et al., 2013).

Conative Loyalty. On the words of Moore et al. (2013) behavioural intentions are statements of intention to perform a certain behaviour and behavioural intentions are direct determinants of actual behaviour (Ajzen & Fishbein, 1980; as cited in Moore et al., 2013). Within the context of outdoor recreation research, very little is known about the intentions of visitors after they have visited a natural area and according to Moore et al. (2013) it is a neglected area of research which is of vital importance. As they explain, the term behavioural intentions has morphed into the term loyalty while behavioural intentions are a common means of measuring visitor loyalty (Lee et al., 2007; Moore et al., 2013).

Coping Behaviour

Bonnes, Lee, and Bonaiuto (2003) explain related to the study of environmental perception that in the relationship between an individual and the environment “there is a continuous processing of solutions to the problems created by the coexistence of demands, inner dispositions, incentives, invitations, proposals, warnings and threats coming from the outside” (p.110). In keeping with this notion, three primary forms of coping behaviour exist among outdoor recreationists: rationalization, product shift and displacement (Manning, 1999) which might explain high overall satisfaction ratings despite reports of crowding and unacceptable conditions (Johnson & Dawson, 2004).

Rationalization. The process of rationalization is a cognitive coping mechanism rooted in the theory of cognitive dissonance theory which proposes that people order their thoughts to reduce inconsistencies and associated stress (Manning, 1999). Manning (1999) reasons since recreation activities are voluntarily chosen and involve investment in form of money, time and effort, people may rationalize their experience to reduce internal conflict and rate their experience highly regardless of conditions. This would explain why satisfaction is often not related to use levels.

However, as Manning (1999) points out, this reasoning proved to be of value in the case of a study by Heberlein and Shelby with rafters on the Colorado River in Grand Canyon National Park (1977; as cited in Manning, 1999) where the experience represented a substantial undertaking for most involving rather high investments, but less appealing in less extraordinary settings like in the study of river use in Vermont by Manning and Ciali (1980; as cited in Manning, 1999) where people had small investments and did not hesitate when it came to expressing their dissatisfaction. Nevertheless, few studies have addressed rationalization (Manning, 1999).

Product shift. Another cognitive coping mechanism is termed product shift and suggests that people may adapt or change their definition of the recreation opportunity in accordance to what they have experienced if they experienced higher use levels than preferred or expected (Manning, 1999). A small number of studies have generally confirmed the theory of product shift (Manning, 1999).

Displacement. When increased use levels result in dissatisfaction for some recreationists who then alter their patterns of activity to avoid crowding and maybe even move to less crowded areas, they will be displaced by users who are more tolerant of high use levels (Manning, 1999; Manning & Valliere, 2001). According to Kearsley and Coughlan (1999) the assumption of recreational choice and substitutability is reflected in the notion of displacement. Displacement requires an unacceptable change in the recreation setting and substitutable settings – in this sense, unique settings (like iconic sites) might not experience the process of displacement (Kearsley & Coughlan, 1999).

Basing their statement on previous research Johnson and Dawson (2004) highlight the fact that visitors also use displacement for other reasons, for instance to avoid management actions, like use limits designed to increase opportunities for solitude.

Displacement may explain a lack of relationship between use levels and perceived crowding as people sensitive to existing use levels at each recreation setting have been displaced from these settings (Manning, 1999; Manning & Valliere, 2001). As an example, a site that originally attracted wilderness and solitude seekers may lose those characteristics in the process of displacement but the experience may still be satisfactory to its visitors (Kearsley & Coughlan, 1999).

Along these lines, it is important to outline the process concept of recreational succession which describes cyclical patterns in which natural areas are discovered by exploratory visitors (Stankey, 1985; as cited in Higham & Lück, 2007) who are low in

numbers and characterized by a high genuine interest in and knowledge about the natural area (Brian, 1977, 1979; as cited in Higham & Lück, 2007) and by having minimal impacts on the site (Higham & Lück, 2007). As interest in the area grows, more inexperienced subsequent visitors arrive (Brian, 1977, 1979; as cited in Higham & Lück, 2007) and a gradual deterioration of the natural qualities takes place (Orams, 1999; as cited in Higham & Lück, 2007) earlier visitors start to consider the place as too developed and popular and continue their search for unspoilt places somewhere else (Brian, 1977, 1979; as cited in Higham & Lück, 2007).

Kearsley and Coughlan (1999) warn that displacement mechanisms might result into “pushing” less tolerant users into more dangerous seasons, more remote environments and conditions beyond their skills, experience and capacities and highlight the danger for those displaced and the ones involved in rescue operations.

Moyle and Croy (2007) made a valuable point by stating that managers need to recognize that crowding is not limited to peak visitation periods as visitors sensitive to crowding and displaced from the peak season are more likely to be at the location during the off season.

Hall and Shelby (2000) present a typology of displacement adopted from researchers studying substitution behaviours according to which there are different forms of displacement for recreationists: temporal, spatial (intra- and inter-site), and activity displacement.

Temporal displacement involves altering the timing of a visit in order to avoid certain site conditions such as increased crowding during peak times (Hall & Shelby, 2000; Manning, 1999). In other words, if the experience goals can be achieved at another time and the visitor is willing and able to alter the timing of the visit, then one might continue to visit the site regardless of changes in conditions (Hall & Shelby, 2000). Chambers and Price (1986; as

cited in Hall & Shelby, 2000) found that hikers described as “quiet seekers” perceived the site as more crowded than others and were more likely to hike at off-peak times.

With regard to spatial displacement, which occurs when visitor react to changing site conditions by changing the location of the activity, it needs to be distinguished between intra-site displacement – shifts within a recreation area – and inter-site displacement – shifts from one recreation area to another (Hall & Shelby, 2000; Manning, 1999).

Activity displacement is a fourth manner of displacement suggested by researchers (Arnberger & Haider, 2007; Arnberger et al., 2010; Hall & Shelby, 2000; Kearsley & Coughlan, 1999; Schneider, 2007) where recreationists may adopt another activity but continue to use a site and it is suggested that this might occur with strong attachment to a site or if the new activity is equally fulfilling for the individual (Hall & Shelby, 2000).

Nevertheless it is argued that this mechanism does not appear common and is rather rare as, for example, a spatial shift seemed more likely to anglers in New Zealand (Shelby & Vaske, 1991; as cited in Hall & Shelby, 2000).

According to Manning (1999) and his synthesis there has been considerable evidence for intra-site and temporal displacement in the literature (some findings will be presented in the following paragraphs) whereas inter-site displacement seems to be less common and less supported.

Kearsley and Coughlan (1999) found evidence of all forms of cognitive and behavioural coping mechanisms (except for activity displacement), especially intra- and inter-site, in their study of 22 site in the backcountry of New Zealand.

In a study by Manning and Valliere (2001) in Acadia National Park, Maine, investigating in coping mechanisms of residents of local communities relatively high levels of coping as 94 % reported to adopt one or more mechanisms (cognitive or behavioural) and 7.4 % reported to have been displaced from the site completely. The study also supported the

assumption that perceived changes in amount and type of recreation influence coping strategies. Manning and Valliere (2001) conclude that even though it is hard to determine how much coping is too much, that the consequences of high coping levels may include stress at the individual level, and diminished diversity of recreation opportunities. Moreover it is concluded that satisfaction may be a misleading measure for the quality of outdoor recreation experiences (Manning & Valliere, 2001).

1,069 users (mainly involved in boating) of a popular reservoir, Lake Billy Chinook in Oregon were questioned about displacement behaviours in a mail survey by Hall and Shelby (2000) demonstrated that about half changed their behaviours due to crowding. In addition 168 interviews were conducted with users of three other close alternative sites indicated that half of those who had been to Lake Billy Chinook go there less than before, 20-30% due to adverse conditions, mainly crowding (Hall & Shelby, 2000). The researchers also reported temporal displacement (42% of users) to be the most common strategy, followed by spatial displacement (26%) and stated that users who are displaced are also more sensitive to conflict, facility issues and environmental impacts (Hall & Shelby, 2000). Hall and Shelby (2000) found evidence that was not decisive with respect to the displacement – past experience relationship: they found a higher proportion of displacers to be experienced and a higher proportion of non-displacers to be inexperienced or newcomers. The authors suggest that this is in line with an explanation common in the literature: experienced users are more sensitive to adverse changes and therefore more likely to alter their behaviour; or experienced users are more knowledgeable and aware of a greater range of alternative sites or locations within the destination and able to mitigate with temporal or spatial strategies (Hall & Shelby, 2000).

Johnson and Dawson (2004) identified complex and variable strategies of coping behaviour (cognitive and behavioural in terms of spatial and temporal displacement) to

maintain satisfaction with hikers at in the wilderness of New York's Adirondack Park using both field-based interviews and surveys. They found that 53% of the respondents (N=54) used one or more coping behaviours (28 spatial displacement, 35 temporal displacement, 33 product shift, 8 rationalization). In their study of 383 visitors to the peri-urban Danube Floodplains National Park in Austria, Arnberger and Brandenburg (2007) found that for 27% of locals, 15 % of regionals use levels were so unacceptable that they displaced spatially or temporally, while use displacement was irrelevant for tourists. Furthermore, the strategies differed among the three user groups (Arnberger & Brandenburg, 2007). Arnberger and Haider (2007) used a visual approach to explore conditions such as different use levels with mixes of user types, group sizes, compliance behaviour, direction of movement and placement within the image in relation to "intended displacement" in a dichotomous choice survey with 237 visitors to the main trail of a recreation area in Vienna, and found that all tested social factors and a combination of them affected intended displacement. A similar study using an image-based stated preference model for 425 visitors to an urban forest trail in Vienna was conducted by Arnberger et al. (2010) to investigate differences in use displacement intentions. This study found differences in gender and activity (walkers and dog walkers) and reduced potential times to use the area for female walkers due to safety concerns. So in addition to crowding, safety concerns may detract from site use (Arnberger et al., 2010). Another study in an urban context by Arnberger and Eder (2012) found differences in coping behaviours with regard to workday and Sunday visitors (N=330): 44% of all respondents employed coping behaviours, but coping was more common among workday visitors (55%) than among Sunday visitors (35%). Differences in the types of behaviour employed were not found (Arnberger & Eder, 2012).

This study looks at "displacement intentions" due to perceived crowding from a different angle: based on one experience (the most recent for re-visitors) – in the style of

relationship marketing and measures of conative loyalty – respondents are asked to indicate their level of agreement for certain behavioural “shift intentions” (displacement intentions) asking them if they would revisit but employ behavioural coping strategies and whether they would recommend behavioural coping strategies to others.

As Schneider (2007) argues, displacement research can contribute to inform management about the status of the relationship between visitor and the natural resource site in addition to providing information on evaluations of on-site experience. According to Schneider (2007) displacement deserves special attention given that it can impact substantially on resource benefits sought by visitors (Hall & Shelby, 2000) and as an indicator for a change in the public’s relationship with an area or an agency in the long-term. Managers can influence visitor expectation for numbers and encounters and provide opportunities for experiences that match expectations by understanding changing visitation patterns and anticipating increases in visitors (Schneider, 2007). This may also be helpful in order to provide appropriate information and management responses (Schneider, 2007).

In her paper, Schneider (2007) refers to Hall and Shelby (2000) who called for research linking displacement to other frameworks involved with individual decision-making. Hall and Shelby (2000) point out that the recreation field could benefit from a more thorough model incorporating other factors known to be of relevance in decision-making processes. In line with this Schneider (2007) proposes relational marketing as a suitable framework to progress an understanding of the role of displacement and argues that elements such as trust, commitment and perceptions of social responsibility related to an area can be indicated by displacement. Schneider (2007) states: “Visitor displacement appears to be a prime candidate to serve as a relationship indicator for wilderness management agencies” (p.26). In keeping with this notion, a key challenge in relationship marketing is to identify and understand how

antecedent variables influence customer loyalty and word-of-mouth as relationship marketing outcomes (Hennig-Thurau, Gwinner, & Gremler, 2002).

The concept of loyalty as outlined above seems to be closely related to the concept of displacement in outdoor recreation. In this study a model with destination loyalty and displacement as outcome variables is tested with regard to crowding perceptions and satisfaction. Furthermore attitudinal loyalty is conceptualized as place attachment in terms of place identity and place dependence and it should be interesting to see how these relationship concepts relate to displacement.

Models and Hypotheses

Based on the conceptual framework and the research questions above I propose two models. One for the potential crowding – loyalty relationship (see figure 1 Model 1) and one for the crowding displacement relationship (see figure 2 Model 2). The following hypotheses will be tested with regard to Model 1 and Model 2:

Model 1

H1: As perceptions of crowding increase conative loyalty will decrease.

H2: As perceptions of crowding increase overall satisfaction will decrease.

H3: As overall satisfaction increases, so too will conative loyalty.

H4: The relationship between crowding and loyalty is mediated by overall satisfaction.

H5: The relationship between crowding and conative loyalty is mediated by place identity.

H6: The relationship between crowding and loyalty is mediated by place dependence.

H7: The relationship between overall satisfaction and loyalty is mediated by place identity.

H8: The relationship between overall satisfaction and loyalty is mediated by place dependence.

H9: The relationship between crowding and overall satisfaction is mediated by place identity.

H10: The relationship between crowding and overall satisfaction is mediated by place dependence.

Model 2

H1: As perceptions of crowding increase so too will shift intentions.

H2: As overall satisfaction increases, shift intentions will decrease

H3: The relationship between crowding and shift intentions is mediated by overall satisfaction.

H4: The relationship between crowding and shift intentions is mediated by place identity.

H5: The relationship between crowding and shift intentions is mediated by place dependence.

H6: The relationship between overall satisfaction and shift intentions is mediated by place identity.

H7: The relationship between overall satisfaction and shift intentions is mediated by place dependence.

Figure 1. Model 1 Crowding, Satisfaction, Place Attachment and Loyalty

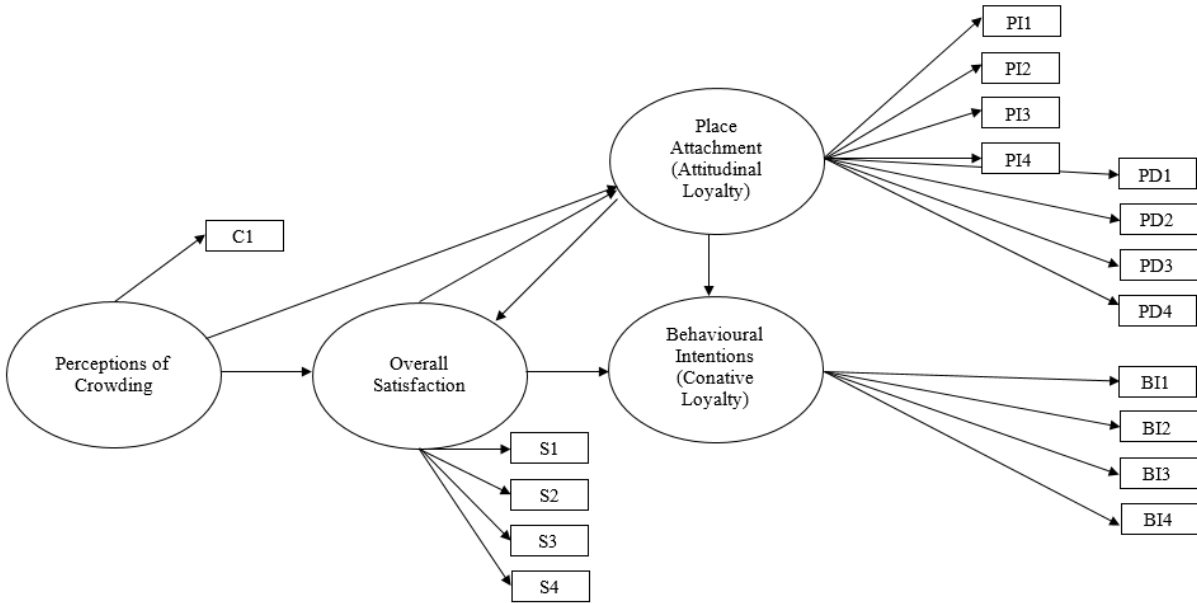
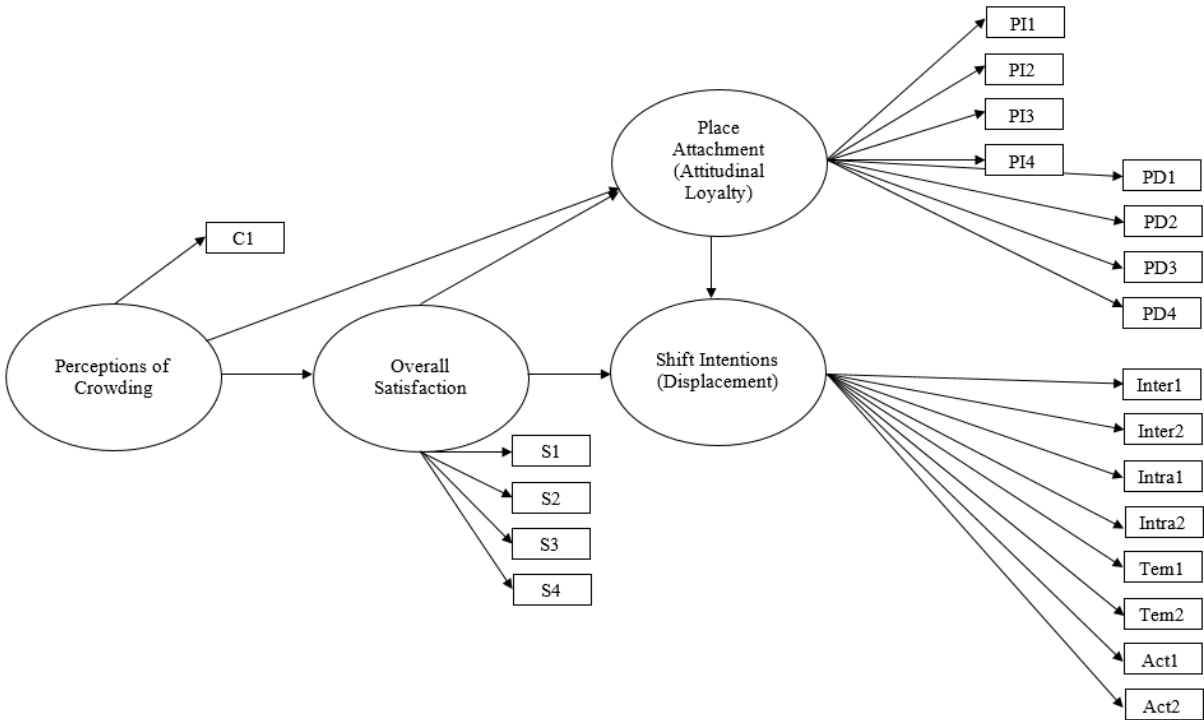


Figure 2. Model 2 Crowding, Satisfaction, Place Attachment and Displacement



Method

This section will describe the methodology involved in the design of the present study.

Design

For the purpose of answering the research questions outlined above a quantitative descriptive survey design was chosen with the unit of analysis being the most recent experience of the visitor. As area of study a frontcountry iconic site with increasing visitor use, the Pulpit Rock in Norway was chosen. Even though tolerance for other users at frontcountry sites is usually higher (e.g. Manning, 2007), crowding, as outlined in the introduction, seems to be an important issue. Furthermore, use levels depend on the season, weather, and time of the day which allowed me to achieve a great variance in crowding perceptions. The site has a certain uniqueness to it, which might be reflected in place dependence and place identity (Prebensen et al., 2003). Furthermore, it is interesting with regard to the importance and relevance of displacement at unique iconic sites.

Sample and Data Collection

Data collection took place in form of self-administered online and on-site questionnaires in English from a convenience sample of visitors to the Pulpit Rock (n=258). First of all, 270 email addresses collected at the parking lot of the Pulpit Rock in the summer months of 2013 and in August/September 2014 for the purpose of another study could be used for this study. The respondents of 2013 and mainly 2014 agreed to participate in follow up studies. They were contacted by email in English, Norwegian and German (see appendix B for correspondence) and after 5 days a reminder email was sent. Some email addresses were not valid (about 30) and 131 respondents (55%) participated in the survey over the given time period. The online survey was available from 17th May until 7th of June 2015. Another 90 useable email addresses were collected on the 21st and 23rd of May 2015 (Thursday, Friday, Saturday including days during the week and the weekend) at the start/end of the trail to the Pulpit Rock out of which 60 responded (67%). The online survey was available from 24th

May until 7th of June 2015, and a reminder email was sent on 4 days after the initial contact in English (see appendix B).

Furthermore, 67 questionnaires were filled out on-site at the start/end of the trail, the parking lot and on the ferry from Tau to Stavanger. No training for the distribution of the questionnaires was required as I collected the data myself with a response rate close to 100% for either email registration and questionnaire completion on-site.

Measurements

The following paragraphs describe how the concepts for this study have been operationalized, and validated where applicable. All items are listed in table 1 in the next chapter and were measure on a 5-point scale asked to indicate their level of agreement to certain statements, except for the crowding and the satisfaction scales.

Place identity and place dependence. The place identity and place dependence items were adapted from Kyle et al. (2004b) and Kyle et al. (2004a) and based on the work of Williams and Roggenbuck (1989) and Williams and Vaske (2003) as outlined in the literature review. Initially 5-items have been used for place dependence and 4 for place identity in the questionnaire, however as it is common to only use 8 items and as the reliability of the scale could be slightly improved by removing the fifth item, eventually only 8 items were used for the analyses. It was considered to be important to state clearly that the object of the attitude is supposed to be the Pulpit Rock as a recreational site, and one item of place identity was double-barreled involving other people in a special connection: "I have a special connection to the ... and the people who hike along it". Therefore, the item was shortened for this study. Kyle et al. (2004a) ran reliability tests and found the internal consistency for place identity ($\alpha = .87$) and place dependence ($\alpha = .86$) to be sufficient and conceptually consistent.

Perceptions of crowding. The simple single-item 9-point scale suggested by Vaske and Shelby (2008) and developed by Heberlein and Vaske (1977; as cited in Vaske & Shelby,

2008) was adopted to make the measurement comparable to other studies and as it is easy to fill out (Vaske & Shelby, 2008). It is explained that a response of 1 or 2 indicates not at all crowded, 3-4 indicates that the site is perceived as slightly crowded, 5-7 is moderately crowded and 8-9 indicates extremely crowded. For frontcountry sites where visitors are more tolerant Vaske and Shelby (2008) recommend to either use the mean for analyses or to divide the scale into two categories, not at all to slightly crowded, and moderately to extremely crowded. In an attempt to provide useful information for management 3 more items were formulated to identify more or less crowded places within the site. Even though a four-item scale would have been valid in terms of reliability, and factor analyses determining convergent and discriminant validity, only the overall scale was used for analyses.

Satisfaction. Moore et al. (2013) summarize different measures for overall satisfaction that have been used in the context of destination loyalty research and determine that the most common measurement is a simple single-item scale, asking, for instance, how satisfied visitors were with their visit. They also recognize that a more valid measure would be a multi-item scale and outline previous overlaps between satisfaction and behavioural intention scales on the item level which would not be recommendable for any kind of loyalty research (Moore et al., 2013). As an alternative, Tian-Cole et al. (2002) and Baker and Crompton (2000) used a 4-item semantic differential scale which was originally adapted from Crosby and Stephens (1987). Tian-Cole et al. (2002) conducted a factor analysis on the 4 items of the scale and found it to be unifactorial with Cronbach's α at .97. This α can be considered very high, one could argue that maybe not all the items are necessary to measure overall satisfaction. Nevertheless, the scale was adopted for this study. A small adjustment was made though. As satisfaction ratings are often highly skewed an 11-point scale was used to capture all the variance in the responses as suggested by Fornell, Johnson, Anderson, Cha, and Bryant (1996) and Chan et al. (2003) for these kinds of evaluative constructs.

Conative Loyalty. Although there are more advanced scales of behavioural loyalty including willingness to pay more or intentions to volunteer (Moore et al., 2013) the two most common behavioural intentions, intentions to recommend and to revisit (Moore et al., 2013; Tian-Cole et al., 2002) were employed in this study adopted from Lee et al. (2007). The 4-item scale (5-point) consisting of three items measuring intention to recommend and one item measuring intention to revisit was tested to be valid in terms of convergent validity with factor loadings ranging from .71 for intention to revisit to .94 and a Cronbach's α of .91 and discriminant validity. In order to facilitate respondent understanding, the items were formulated as starting with "I will" instead of "I would". As an exploratory addition three possible dimensions of transferred loyalty were added formulated as intentions to recommend and revisit the Lysefjord area, Fjord Norway and Norway in general.

Shift intentions (displacement). The formulation of the shift intentions items took behavioural intention items as example items (see table 1 and appendix A for the questionnaire). It was a bit problematic not to use too many words and making sure that displacement was understood as a consequence of crowding. Surely, some sought the excitement of a new place or activity and therefore intended to shift. Initially, 6 dimensions were formulated for this construct, spatial, temporal and activity shift for inter-site displacement, and spatial, temporal and activity shift for intra-site displacement. However, when coding the paper questionnaires I realized that especially, activity and temporal shift for inter-site displacement was irrelevant for respondents and for theory development. Therefore, 4 dimensions remained: spatial shift in terms of intra-site displacement, temporal, activity and inter-site shift intentions. Each dimension was measured with intention to recommend and intention to revisit. Operationalization seem most conceptually consistent this way.

Questionnaire

A four-page questionnaire (see appendix A) was designed with feedback from two professors, one experienced in nature based tourism and the other with experience from psychology and tourism. It was considered to translate the questionnaire into German and Norwegian, but to avoid translation bias the questionnaire was distributed in English only. It was pre-tested online (n=5) and with a paper version (n=5) with students at the University of Stavanger that had been to the Pulpit Rock within the last year. The questionnaire was adapted between subjects in the pre-test process, and feedback from respondents was taken into account. Among smaller changes, the questionnaire was reduced in length by deleting questions that were not essential, a map of Fjord Norway was added to ensure respondents knew what areas questions were referring to, a definition of crowding was added, and the question whether crowding affected the respondent's enjoyment was reformulated as whether the enjoyment was negatively affected to avoid misunderstandings. Finally a lot of attention was dedicated to the formulation of the displacement items. They were mainly reduced in text to make them easier to read and comprehend. The survey consisted of three sections, general questions about the most recent visit to the Pulpit Rock, including area of residence, size of travel group, hiking experience, and Experience Use History. In the main section, questions concerning place attachment, perceptions of crowding, satisfaction, conative loyalty and displacement were asked, followed by demographic variables. In the sequence crowding perceptions were intentionally asked before displacement questions, in order to avoid that displacement questions were not answered in relation to crowding.

Data Analysis

The data was analyzed using IBM SPSS Statistics 21. Reliability tests were conducted to assess the internal consistency of the constructs. Factor Analysis was used to determine whether the constructs were valid in terms of convergent and discriminant validity.

Regression analysis and multiple step guidelines by Baron and Kenny (1986) were followed to test the hypothesis and the proposed mediation models (see figures 1 & 2 above). As a valuable alternative in analyzing multiple paths and dependent variables structural equation modeling was considered (Kyle et al., 2004a) but discarded as the development of the model and the handling of new software would have been out of the scope and range of what was possible considering limited resources and time for this project. Instead the models were tested with 4 steps (Baron & Kenny, 1986): (1) Relate the independent variable with the dependent variable to show that there is a correlation that can be mediated, (2) Relate the independent variable with the potential mediator variable, (3) and (4) Enter both independent variable and mediator variable in a regression analysis with the dependent variable and assess whether the independent variable still has a significant unique effect on the dependent variable.

Results

This section describes the sample, the validation of measures, descriptive statistics and the analysis of the two models to find out whether the hypotheses are supported.

Sample

The achieved sample was divided into four groups in terms of data collection: 2013/2014 online (51%), 2015 online (23%), 2015 paper (17%) and the responses from 2015 paper version collected on the ferry (9%).

Some of the questionnaires had some missing values, nevertheless they were considered useful for the analysis. 226 questionnaires were completed.

Respondents represented 38 nationalities (24% German, 8% American, 7% Dutch, 4% Australian, 4% British, 3% Canadian, 3% Swedish, 3% French, 3% Chinese and 2% Danish). The relative high percentage of Germans is most likely due to the fact that in 2014, German tour buses from cruise ships were included in the sample. In fact, the majority of visitors was

international (82%), followed by local visitors (9%), domestic visitors (6%) and regional visitors (3%).

53% were female and 47% male with an average age of 36 years, ranging from 17 to 70. An independent-sample t-test showed no significant difference for gender and shift intentions, behavioural loyalty, satisfaction, place attachment and crowding. Regression analyses showed no correlation between age and crowding, satisfaction and loyalty.

The sample was rather well-educated with 36% completed Bachelor's degrees and 31% Master's degrees and 7% on the PhD level.

The majority of respondents travelled in small groups with 2 to 3 people (68%), followed by groups of 4 to 15 people (20%), 7% made the trip with more than 25 people, 3% hiked on their own and 2% in a group of 16 to 25 people. Most visitors were regular hikers (40%) while the groups were relatively even in this respect as 31% hiked occasionally and 29% were categorized as hiking beginners. The vast majority of respondents visited the Pulpit Rock for the first time (80%), 11% came for the 2nd time, 8% hiked up multiple times but irregularly and only 1% came to the Pulpit Rock on a regular basis. Of those that did not live in Norway, 58% were first time visitors to Norway, of those that did not live in Fjord Norway 59% visited Fjord Norway for the first time and 71% of those who did not live around the Lysefjord were first-time visitors.

Validation of Measures

Reliability analyses demonstrated that all of the scales had acceptable internal consistency and high Cronbach's alpha values above $\alpha > .7$ (Pallant, 2007) except for activity shift intentions (.69) and loyalty towards Fjord Norway (.68) (see table 1). Cronbach's alpha for conative loyalty could have been higher if intentions to revisit would have been removed but the consistency was regarded as sufficient. Like Moore et al. (2013) pointed out, it has been argued that it is not a good measure of loyalty for once-in-a-lifetime destinations.

In order to assess convergent validity factor analysis was conducted for the multi-item constructs with each of the constructs at a time. All assumptions were met and only one factor with an Eigenvalue >1 was found for each construct (see table 1 for the percentage of variance that was explained by the first factor and the range of factor loadings in the component matrix). The shift intentions and transferred loyalty dimension were later on treated as separate constructs though as it makes more sense from a conceptual perspective and in terms of face validity.

Convergent and discriminant validity were confirmed by factor Varimax rotation on the construct level (see table C2 in appendix C). Cross loading between Lysefjord, Fjord Norway, and Norway loyalty intentions were found but were not surprising as well as between place dependence and place identity. Nevertheless, based on previous research and face validity they were kept as separate constructs.

Finally, the correlations between conative loyalty intentions and displacement shift intentions are negative and weak (see appendix C, table C3), which might be a measurement issue in shift intentions. A separate factor analysis on the item-level was conducted for loyalty and shift intentions. Table C4 in appendix C shows the component matrix and there are cross loadings especially evident between loyalty behavioural intentions and temporary and intra-site shift intentions.

For some constructs it is easy to detect nomological validity from the correlation matrix (appendix C, table C3), for instance for loyalty and satisfaction, and place identity and place dependence, which are expected to be correlated.

Descriptive Statistics

Responding to the question whether crowding affected their enjoyment negatively, 53% responded with “no” and 41% responded with “yes”. The follow up question asking about how strongly crowding affected their enjoyment resulted in under scale average means

(M= 2.62) After the crowding scale was computed into two categories, 60% felt moderately and extremely crowded and 40% felt not at all to slightly crowded. On average visitors felt most crowded and moderately crowded on the plateau, followed by the trail and the parking lot (see table 1).

Place attachment and place identity had rather low means ranging from 2.41 to 2.99 (see table 1 and appendix C, table C1) and loyalty and satisfaction means were rather high. People were most likely to displace temporally, and least likely to change the leisure activity.

Screening and Distribution

Before the analysis was conducted, the data was screened for outliers and cleaned. As Pallant (2007) suggested the missing values were dealt with by means of pairwise exclusion of cases. Furthermore, attention was paid to the distribution of the data as normal distribution is required for regression analysis. Satisfaction, crowding, loyalty and temporal shift intentions were negatively skewed and point towards clustering of scores toward the right side of a graph, while place identity and place dependence were positively skewed towards the left hand side (see table 1) (Pallant, 2007). Especially conative, transferred loyalty and satisfaction were rather peaked looking at the kurtosis values. Nevertheless, the sample seems to be large enough, and the numbers quite small, so that skewness and kurtosis probably do not influence the analyses substantially (Pallant, 2007). Furthermore, the violation of the assumption of normality is quite normal in big samples (Pallant, 2007)

Table 1 Constructs, Descriptive Statistics, Reliability and Validity

Constructs	Items	Mean	SD	Skewness	Kurtosis	Cronbach's α	1 st Factor	Highest-lowest factor loadings
<i>Crowding</i>								
						.92		
C1	Indicate how crowded the facilities at the parking lot were at the time of your visit	4.41	2.00	-0.16 (SE = 0.16)	-0.55 (SE = 0.31)			
C2	Indicate how crowded the trail was at the time of your visit	5.17	2.10	-0.09 (SE = 0.16)	-0.73 (SE = 0.31)			
C3	Indicate how crowded the Pulpit Rock plateau was at the time of your visit	5.23	2.09	-0.14 (SE = 0.16)	-0.81 (SE = 0.31)			
C4	Indicate how crowded the site was at the time of your visit (overall)	5.12	1.98	-0.18 (SE = 0.16)	-0.60 (SE = 0.31)			
						.89	76%	.84-.91
<i>Place Dependence</i>								
PD1	I enjoy hiking along the Pulpit Rock more than any other trail	2.68	1.19	0.09 (SE = 0.16)	-1.05 (SE = 0.31)			
PD2	I get more satisfaction out of visiting the Pulpit Rock than from visiting any other trail	2.61	1.16	0.24 (SE = 0.16)	-0.84 (SE = 0.31)			
PD3	Hiking the Pulpit Rock is more important than hiking any other place	2.39	1.10	0.41 (SE = 0.16)	-0.63 (SE = 0.31)			
PD4	I would 'nt substitute any other trail for the type of recreation I do here at the Pulpit Rock	2.34	1.05	0.19 (SE = 0.16)	-0.99 (SE = 0.31)			
						.86	71%	.78-.89
<i>Place Identity</i>								
PI1	The Pulpit Rock means a lot to me	3.32	1.10	-0.16 (SE = 0.16)	-0.53 (SE = 0.31)			
PI2	I am very attached to the Pulpit Rock	2.99	1.23	0.11 (SE = 0.16)	-0.94 (SE = 0.31)			
PI3	I identify strongly with the Pulpit Rock	2.63	1.11	0.26 (SE = 0.16)	0.54 (SE = 0.31)			
PI4	I have a special connection to the Pulpit Rock	2.41	1.03	0.31 (SE = 0.16)	0.33 (SE = 0.31)			

<i>Affected Employment</i> A1	If yes, how seriously did it affect your enjoyment	2.62	1.04	0.22 (SE = 0.20)	-0.29 (SE = 0.40)	.96	90%	.90-.97
<i>Satisfaction</i>								
S1	Unfavourable - Favourable	8.90	2.11	-1.45 (SE = 0.16)	2.68 (SE = 0.31)			
S2	Dissatisfied - Satisfied	8.80	2.40	-1.60 (SE = 0.16)	2.49 (SE = 0.32)			
S3	Displeased - Pleased	8.85	2.46	-1.66 (SE = 0.16)	2.53 (SE = 0.32)			
S4	Negative - Positive	9.09	2.27	-1.81 (SE = 0.16)	3.39 (SE = 0.31)	.78	70%	.55-.94
<i>Behavioural Intentions (Conative Loyalty)</i>								
BI1	I will recommend the Pulpit Rock to people who seek my advice	4.53	0.73	-1.56 (SE = 0.16)	2.94 (SE = 0.31)			
BI2	I will tell other people positive things about the Pulpit Rock	4.50	0.70	-1.28 (SE = 0.16)	1.05 (SE = 0.31)			
BI3	I will recommend the Pulpit Rock to my friends	4.55	0.71	-1.81 (SE = 0.16)	3.95 (SE = 0.31)			
BI4	I will visit the Pulpit Rock again	3.50	1.24	-0.32 (SE = 0.16)	-0.95 (SE = 0.31)	.86	59%	.68-.84
<i>"Transferred Loyalty" Lysefjord</i>								
TLLF1	I will visit places at the Lysefjord again	3.84	0.99	-0.45 (SE = 0.16)	0.49 (SE = 0.31)	.70		
TLLF2	I will recommend the Lysefjord to other people	4.31	0.75	-0.76 (SE = 0.16)	0.24 (SE = 0.31)			
<i>Fjord Norway</i>								
TLFN1	I will visit places in Western/Fjord Norway again	4.12	0.96	-0.92 (SE = 0.16)	0.26 (SE = 0.31)	.68		
TLFN2	I will recommend Western/Fjord Norway to other people	4.51	0.69	-1.37 (SE = 0.16)	1.65 (SE = 0.31)			

Analysis

In the following the hypotheses will be tested one by one, to answer the research questions of this study. First model one will be estimated, followed by the more explorative model 2. Assumptions of multicollinearity, outliers, normality, linearity, homoscedasticity and independence of residuals were checked for each analysis (Pallant, 2007).

Model 1

H1: As perceptions of crowding increase conative loyalty will decrease.

Based on the literature and common sense it was expected that if crowding is perceived, people are less likely to have loyalty intentions. This hypothesis is somewhat supported as crowding explains 5% of the variance in conative loyalty ($R^2=.05, p<.0005$; $\beta=-.22, p<.0005$).

H2: As perceptions of crowding increase overall satisfaction will decrease.

Not surprisingly no significant relationship was found between crowding and satisfaction

H3: As overall satisfaction increases, so too will conative loyalty.

As expected, overall satisfaction explains 10% of the variance in loyalty ($R^2=.10, p<0.0005$; $\beta=.32; p<0.0005$).

H4: The relationship between crowding and loyalty is mediated by overall satisfaction.

Due to the above outlined findings this hypothesis is rejected.

H5: The relationship between crowding and conative loyalty is mediated by place identity.

This hypothesis is rejected as crowding does not influence place identity. However, place identity explains 7% of the variations on conative loyalty ($R^2=.07$, $p<0.0005$; $\beta=.27$; $p<0.0005$).

H6: The relationship between crowding and conative loyalty is mediated by place dependence.

No relationship was found between crowding and place dependence. There for the hypothesis is not supported. Nevertheless, place dependence as expected is related to conative loyalty ($R^2=.05$, $p<.0005$; $\beta= .23$, $p<.0005$).

H7: The relationship between overall satisfaction and loyalty is mediated by place identity.

Place identity explains 3% of the variance in satisfaction. Place identity ($\beta=.20$, $p<.0005$) and overall satisfaction ($\beta=.28$, $p<.0005$) both contribute uniquely and significantly to conative loyalty but the effect of satisfaction is stronger. This means that the hypothesis is rejected.

H8: The relationship between overall satisfaction and loyalty is mediated by place dependence.

Place dependence explains 3% of the variance in satisfaction. Place dependence ($\beta=.18$, $p<.005$) and overall satisfaction ($\beta=.29$, $p<.0005$) both contribute uniquely and significantly to conative loyalty but the effect of satisfaction is stronger. This means that the hypothesis is rejected.

H9: The relationship between crowding and overall satisfaction is mediated by place identity.

Based on previously stated results, this hypothesis is not supported.

H10: The relationship between crowding and overall satisfaction is mediated by place dependence.

Due to the fact that crowding is not correlated with overall satisfaction this hypothesis needs to be rejected.

Model 2

H1: As perceptions of crowding increase so too will shift intentions.

This hypothesis is mostly supported. Crowding explained 6% in inter-site shift intentions ($R^2=.06$, $p<.0005$, $\beta=.25$, $p<.0005$), 4% in intra-site shift intentions ($R^2=.04$, $p<.005$, $\beta=.20$, $p<.005$) and 12% in temporal shift intentions ($R^2=.12$, $p<.0005$, $\beta=.35$, $p<.0005$), but no correlation was found between crowding and activity shift intentions.

H2: As overall satisfaction increases, shift intentions will decrease.

No significant relationships were found between satisfaction and intra-site shift intentions, temporal shift intention and activity shift intentions. However, satisfaction explained 6% of the variance in inter-site shift intentions ($R^2=.06$, $p<.0005$; $\beta=-.246$, $p<.0005$). When people are not satisfied, they are more likely to shift to another area.

H3: The relationship between crowding and shift intentions is mediated by overall satisfaction.

This hypothesis is not supported as there is no significant relationship between crowding and satisfaction.

H4: The relationship between crowding and shift intentions is mediated by place identity.

This statement does not hold true as crowding and place identity have not been linked.

H5: The relationship between crowding and shift intentions is mediated by place dependence.

This notion is rejected in this study as crowding could not be related to place dependence.

H6: The relationship between overall satisfaction and shift intentions is mediated by place identity.

No significant relationships were found between place attachment and shift intentions.

H7: The relationship between overall satisfaction and shift intentions is mediated by place dependence.

No significant relationships were found between place attachment and shift intentions.

Discussion and Conclusion

The study used a reasonably large sample, and relatively robust measure with an exception for the new developed items and therefore it seems to be reasonable to be able to generalize to other populations. However, the measurements seem to be dependent on particular types of settings. The chosen setting here with an iconic frontcountry site is rather special and the sample was not randomly chosen. The high numbers of internationals and first-time users surely influence the way models similar to the ones employed in this study behave. The unique setting can however also be regarded as a strength. With the inclusion of new operationalizations of loyalty as transferred loyalty and displacement as shift intentions the study is tapping into a new area of research which might inspire the outdoor recreation community. The formulation of shift intentions for the purpose of this study was rather ad hoc - more time and effort should be invested in exploring the concept in relation to loyalty and antecedents of satisfaction, loyalty and displacement. A weakness of the study are also the simple analyses used.

A purpose of this study was to find out more about a potential crowding-loyalty relationship and research question one, “does crowding have an influence on conative loyalty?” can clearly be answered with “yes”, even though it is a relatively weak relationship. Crowding has been linked to the concept of displacement for a long time and the study indicated a small evidence that there might be an overlap between the conative loyalty and displacement concept. Therefore it is not surprising that the correlation exists, even though the so far greatest antecedent to behavioural loyalty, satisfaction, (Moore et al., 2013) has not been correlated with crowding. This finding supports other studies involving coping

mechanisms (Kearsley & Coughlan, 1999) and trying to explain the lacking connection between crowding and satisfaction (Manning, 1999). Surprisingly, place attachment did only play a role as an antecedent to conative loyalty but not with regard to crowding or displacement shift intentions. One could speculate that place attachment might not be relevant in a once-in-a-lifetime setting like the iconic Pulpit Rock, just as it has been speculated that intentions to revisit in a setting like this are irrelevant (Moore et al., 2013). Maybe other measure for the uniqueness of a destination need to be developed. The influence of Experience Use History could not be investigated as planned due to the high numbers of first-time visitors. As there have been some small overlaps between conative loyalty and especially intra-site and temporal displacement, the fourth research question has been answered to some extent. The prevalence of temporal and spatial displacement has also been noted in previous studies (Hall & Shelby, 2000; Manning, 1999). The relationship in model two between crowding and the displacement intentions also supports the reliability of an approach that operationalizes displacement as shift intentions. The exploratory part of this study, the newly developed shift intentions, in a way behaved as expected which somewhat indicates nomological validity, even though more attention needs to be paid to methodological issues. From a methodological perspective this could be an interesting area of future research. Furthermore, methodological implications include to investigate in the role of place attachment at iconic sites. The low means in place attachment could also be explained by the fact that most of the studied population were first time visitors and internationals. For 60% of the visitors crowding was an issue on-site, which is why displacement is probably also an issue. Management needs to monitor both to avoid decreases in experience and site quality and pushing less tolerant visitors to hike the site at rather dangerous seasons which could result in an increased number of accidents (Kearsley & Coughlan, 1999).

A potential interesting course of future research is to use psychographic scales to explain variations in attitudes and tolerances of potential negative ecological impacts from tourism activities and facilities in a Norwegian national park setting (Haukeland, Veisten, Grue, & Vistad, 2013). It was discovered that psychographic scales reflecting visitor's nature orientations, facility desires, preferences and concerns about human interaction with the natural areas, explained more variation in attitudes than most social background and trip characteristics (Haukeland et al., 2013).

Moreover, one of the pre-test respondents made me aware of the fact that the question "did crowding affect your enjoyment?" might also be biased and that crowding or more accurately termed crowds might affect enjoyment in a positive way. Hikers at the plateau might also enjoy the company of similar oriented others.

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Appendix A

Questionnaire

Your experience at the Pulpit Rock

Page 1

15-30 May 2015 Contact: k.jathe@stud.uis.no

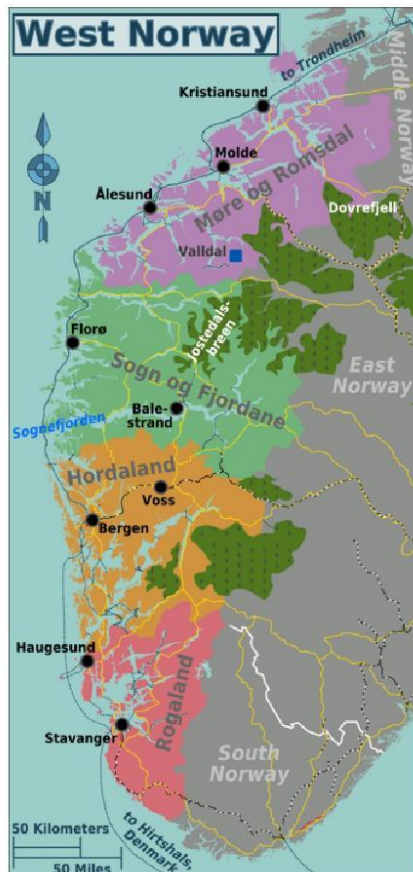


Dear participant,

Thank you for taking the time to participate in this study about nature based experiences in Norway conducted by a student of the International Hotel and Tourism Leadership Master's programme at the University of Stavanger, Norway. Completing this questionnaire will take 5-10 minutes (5 pages) and will be very much appreciated.

The survey is for research purposes and the results can help to improve amenities and services provided to visitors. Your responses will be treated strictly confidential, anonymously, and the information you provide will not be utilized for commercial purposes nor solicitations in any manner.

For your orientation: this is Western/Fjord Norway and the Pulpit Rock is located in Rogaland along the Lysefjord in Western/Fjord Norway.



SOME QUESTIONS ABOUT YOUR (MOST RECENT) VISIT TO THE PULPIT ROCK

1. Please indicate what kind of visitor group you belong to. *

- local visitor (I live in Rogaland County) regional visitor (I live in Western/Fjord Norway) domestic visitor (I live in Norway) international visitor (I live abroad/ in another country)

2. How many individuals are (were) visiting the Pulpit Rock with you including yourself? *

- I am/was alone 2-3 4-15 16-25 more than 25

3. Would you describe yourself as a: *

- Hiking beginner Occasional hiker (at least three times a year) Regular hiker (more than three times a year)

4. How often do you hike to the Pulpit Rock? *

- First-time Second-time Multiple times (irregularly) Multiple times (regularly)

5. If it is (was) not your first hike, how many times have you been to the Pulpit Rock?

Please guess if you do not know the exact number of times.

times.

6. If you are an international tourist, how often do you travel to Norway?

You do not need to answer this question if you are a domestic visitor.

- First-time visitor Second-time visitor Multiple times (irregularly) Multiple times (regularly)

7. If you do not live in the southwest of Norway, how often do you travel to Western/Fjord Norway?

You do not need to answer this question if you live in the southwest of Norway.

- First-time visitor Second-time visitor Multiple times (irregularly) Multiple times (regularly)

8. If you do not live around the Lysefjord, how often do you travel to the Lysefjord area?

You do not need to answer this question if you live in the Lysefjord area (Ryfylke).

- First-time visitor Second-time visitor Multiple times (irregularly) Multiple times (regularly)

Page 2

9. Please indicate how much you agree with the following statements. *

	Strongly disagree 1	2	3	4	Strongly agree 5
The Pulpit Rock means a lot to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am very attached to the Pulpit Rock	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I identify strongly with the Pulpit Rock	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have a special connection to the Pulpit Rock	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The Pulpit Rock means more to me than any other trail I can think of	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy hiking along the Pulpit Rock more than any other trail	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get more satisfaction out of visiting the Pulpit Rock than from visiting any other trail	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Hiking the Pulpit Rock is more important than hiking any other place	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I wouldn't substitute any other trail for the type of recreation I do here at the Pulpit Rock	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

10. Please indicate how crowded the Pulpit Rock area was at the time of your visit. *

"Crowding is defined as a negative evaluation of density and involves a value judgment that the density or number of encounters with other visitors is too many" (Vaske & Shelby).

	Not at all crowded 1	2	3	Slightly crowded 4	5	Moderately Crowded 6	7	8	Extremely crowded 9
Indicate how crowded the facilities at the parking lot were at the time of your visit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Indicate how crowded the trail was at the time of your visit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Indicate how crowded the Pulpit Rock plateau was at the time of your visit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Indicate how crowded the site was at the time of your visit (overall)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

11. Did crowding affect your enjoyment in a negative way? *

yes

no

12. If yes,...

	Not at all 1	2	3	4	Extremely 5
...how seriously did it affect your enjoyment?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page 3

13. Please indicate how you would rate your (most recent) experience at the Pulpit Rock. *

	1	2	3	4	5	6	7	8	9	10	11	
Unfavourable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Favourable
Dissatisfied	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Satisfied
Displeased	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Pleased
Negative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Positive

14. Please indicate how much you agree with the following statements. *

	Strongly disagree 1	2	3	4	Strongly agree 5
I will recommend the Pulpit Rock to people who seek my advice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will tell other people positive things about the Pulpit Rock	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will recommend the Pulpit Rock to my friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will visit the Pulpit Rock again	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

15. Please indicate how much you agree with the following statements. *

	Strongly disagree 1	2	3	4	Strongly agree 5
I will recommend the Lysefjord to other people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will visit places at the Lysefjord again	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will recommend Western/Fjord Norway to other people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will visit places in Western/Fjord Norway again	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will recommend Norway to other people	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will visit places in Norway again	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page 4**16. Please indicate how much you agree with the following statements****I will visit the Pulpit Rock again, but next time, to avoid crowding, I will... ***

	Strongly disagree 1	2	3	4	Strongly agree 5
take a different, less crowded/more remote trail	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
hike at a less crowded time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
choose a different activity (e.g. running, snowshoe hike, mountain biking)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17. Please indicate how much you agree with the following statements**I will NOT visit Pulpit Rock again, to avoid crowding, next time I will... ***

	Strongly disagree 1	2	3	4	Strongly agree 5
go to another site where it is less crowded to go hiking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
go to another site at a less crowded time to go hiking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
choose another activity at another site	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

18. Please indicate how much you agree with the following statements.**I will recommend the Pulpit Rock to others but, to avoid crowding, I will recommend... ***

	Strongly disagree 1	2	3	4	Strongly agree 5
to take a different, less crowded/more remote trail	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
to hike at a less crowded time	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
to choose a different activity (e.g. running, snowshoe hike, mountain biking)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

19. Please indicate how much you agree with the following statements.**I will NOT recommend the Pulpit Rock to others but, to avoid crowding, I will recommend... ****

	Strongly disagree 1	2	3	4	Strongly agree 5
to go to another site where it is less crowded to go hiking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
to go to another site at a less crowded time to go hiking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
to choose a different activity at another site	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Page 5

SOME BASIC QUESTIONS ABOUT YOURSELF

What is your gender? *

<input type="radio"/> Female	<input type="radio"/> Male
------------------------------	----------------------------

20. What is your nationality? *

21. What is your year of birth? *

I was born in

22. What is the highest level of education you have completed? *

- Less than secondary school Secondary School High School Bachelor's degree Master's degree PhD

Do you remember on which date you visited the Pulpit Rock?

This is not a mandatory question.

Thank you very much for your participation!

15-30 May 2015 Contact: k.jathe@stud.uis.no

» [Redirection to final page of eSurvey Creator](#) (change)

Appendix B

1. Email English Sample 2013/2014

Dear Sir or Madam,

Thank you for participating in the questionnaire survey at the Pulpit Rock during the last summer.

My name is Kathrin Jathe and I am a student at the University of Stavanger and I am conducting a small follow-up study to complete my Master's degree. I would appreciate it very much if you could take part in this new anonymous study about your experience at the Pulpit Rock.

It will take about 5 minutes and you can access it through this link: [SURVEYLINK]

Thank you very much in advance and feel free to contact me should you have any questions.

Best regards

Kathrin Jathe
Student of International Hotel and Tourism Leadership (Master of Science)

Norwegian School of Hotel Management
University of Stavanger (Norway)

If you do not want to receive such emails in the future, please click on following link to unsubscribe: <https://www.esurveycreator.com/unsubscribe/68348-9b36c6f-3>

2. Email Reminder Sample 2013/2014

Dear Sir or Madam,

thank you very much and "tusen takk" to all of you who have already invested the time to participate in my survey! To all others, this (last) email serves as a reminder, in case you considered to participate and to share your experiences at the Pulpit Rock with me. You belong to a small number of respondents that have been chosen to participate and your participation would add immensely to the quality of my work.

---the original email---

Thank you for participating in the questionnaire survey at the Pulpit Rock during the last summer.

My name is Kathrin Jathe and I am a student at the University of Stavanger and I am conducting a small follow-up study to complete my Master's degree. I would appreciate it very much if you could take part in this new anonymous study about your experience at the Pulpit Rock.

It will take about 5 minutes and you can access it through this link: [SURVEYLINK]

Thank you very much in advance and feel free to contact me should you have any questions.

Best regards

Kathrin Jathe

Student of International Hotel and Tourism Leadership (Master of Science)

Norwegian School of Hotel Management

University of Stavanger (Norway)

3. Email German Sample 2013/2014

Sehr geehrte Damen und Herren,

vielen Dank für die Teilnahme an der Umfrage am Preikestolen im letzten Sommer.

Mein Name ist Kathrin Jathe. Ich bin Studentin an der Universität Stavanger und führe zur Zeit eine kleine Folgestudie durch, um meinen Master abzuschließen. Ich wäre Ihnen sehr dankbar, wenn Sie sich noch einmal ca. 5 Minuten Zeit nehmen würden, um in dieser neuen, anonymen Studie über Ihre Erfahrungen am Preikestolen teilzunehmen.

Die Umfrage ist nur auf Englisch zugänglich.

Mit diesem Link gelangen Sie zur Umfrage: [SURVEYLINK]

Ich danke Ihnen vielmals im Voraus! Sollten Sie Fragen haben, zögern Sie nicht und kontaktieren Sie mich gerne.

Mit freundlichen Grüßen

Kathrin Jathe

Studentin "International Hotel and Tourism Leadership" (Master of Science)

Norwegian School of Hotel Management

University of Stavanger (Norwegen)

Wenn Sie keine weiteren Nachrichten dieser Art wünschen, dann klicken Sie bitte auf folgenden Link: <https://www.esurveycreator.com/unsubscribe/68349-aac768b-1>

4. Email Reminder German Sample 2013/2014

Sehr geehrte Damen und Herren,

vielen vielen Dank und "tusen takk" an alle, die schon mitgemacht haben! Für alle anderen soll diese (letzte) Email als Erinnerung dienen, falls Sie es noch in Erwägung ziehen teilzunehmen und von Ihren Erfahrungen am Preikestolen zu "berichten". Sie

gehören zu einer kleinen Anzahl von angeschriebenen Besuchern und Ihre Teilnahme würde wirklich sehr zur Qualität meiner Arbeit beitragen.

---das originale Anschreiben---

vielen Dank für die Teilnahme an der Umfrage am Preikestolen im letzten Sommer.

Mein Name ist Kathrin Jathe. Ich bin Studentin an der Universität Stavanger und führe zur Zeit eine kleine Folgestudie durch, um meinen Master abzuschließen. Ich wäre Ihnen sehr dankbar, wenn Sie sich noch einmal ca. 5 Minuten Zeit nehmen würden, um in dieser neuen, anonymen Studie über Ihre Erfahrungen am Preikestolen teilzunehmen.

Die Umfrage ist nur auf Englisch zugänglich. Ich würde mich freuen, wenn Sie es trotzdem versuchen würden.

Mit diesem Link gelangen Sie zur Umfrage: [SURVEYLINK]

Ich danke Ihnen vielmals im Voraus! Sollten Sie Fragen haben, zögern Sie nicht und kontaktieren Sie mich gerne.

Mit freundlichen Grüßen

Kathrin Jathe

Studentin "International Hotel and Tourism Leadership" (Master of Science)

Norwegian School of Hotel Management

University of Stavanger (Norwegen)

5. Email Norwegian Sample 2013/2014

Kjære herr/fru,

Takk for at du deltok i undersøkelsen på Preikestolen i fjor sommer.

Mitt navn er Kathrin Jathe. Jeg er en student ved Universitetet i Stavanger, og for tiden leder jeg en liten oppfølgingsstudie for å fullføre min Master. Jeg vil være takknemlig om du igjen vil ta ca 5 minutter for å ta del i denne nye, anonyme studien for å dele dine erfaringer fra Preikestolen.

(Undersøkelsen er desverre kun tilgjengelig på engelsk, men håper på ditt bidrag)

Denne koblingen tar deg til undersøkelsen: [SURVEYLINK]

På forhånd, mange takk for ditt bidrag! Hvis du har spørsmål, ikke nøl med å kontakte meg.

Med vennlig hilsen

Kathrin Jathe
Student "International Hotel and Tourism Leadership" (Master of Science)

Norsk hotellhøgskole
Universitetet i Stavanger

Hvis du ikke ønsker å motta slike e-poster i fremtiden, kan du klikke på denne linken for å avslutte sendingen: <https://www.esurveycreator.com/unsubscribe/68479-62cd7a9-10>

6. Email Reminder Norwegian Sample 2013/2014

Kjære herr/fru,

Tusen takk til dere som har bidratt til undersøkelsen min! Dersom du fortsatt vurderer å dele dine erfaringer av Prekestolen, er denne (siste) eposten en påminnelse til dere. Invitasjonen til undersøkelsen er kun sendt ut til en liten gruppe av respondenter, og derfor vil ditt bidrag bety mye for kvaliteten av undersøkelsen min.

Takk for at du deltok i undersøkelsen på Preikestolen i fjor sommer.

Mitt navn er Kathrin Jathe. Jeg er en student ved Universitetet i Stavanger, og for tiden leder jeg en liten oppfølgingsstudie for å fullføre min Master. Jeg vil være takknemlig om du igjen vil ta ca 5 minutter for å ta del i denne nye, anonyme studien for å dele dine erfaringer fra Preikestolen.

(Undersøkelsen er desverre kun tilgjengelig på engelsk, men håper på ditt bidrag)

Denne koblingen tar deg til undersøkelsen: [SURVEYLINK]

På forhånd, mange takk for ditt bidrag! Hvis du har spørsmål, ikke nøl med å kontakte meg.

Med vennlig hilsen

Kathrin Jathe

Student "International Hotel and Tourism Leadership" (Master of Science)

Norsk hotellhøgskole
Universitetet i Stavanger

7. Email Sample 2015

Dear Sir or Madam,

Thank you very much for signing up for my online survey.

My name is Kathrin Jathe and I am a student at the University of Stavanger and I am conducting a study about your experiences at the Pulpit Rock to complete my Master's degree. I would appreciate it very much if you could take part in this anonymous study.

It will take about 5 minutes and you can access it through this link: [SURVEYLINK]

Thank you very much in advance and feel free to contact me should you have any questions.

Best regards

Kathrin Jathe
Student of International Hotel and Tourism Leadership (Master of Science)

Norwegian School of Hotel Management
University of Stavanger (Norway)

If you do not want to receive such emails in the future, please click on following link to unsubscribe: <https://www.esurveycreator.com/unsubscribe/69401-7fa97ba-3>

8. Email Reminder Sample 2015

Dear Sir or Madam,

Thank you very much for signing up for my online survey.

My name is Kathrin Jathe and I am a student at the University of Stavanger and I am conducting a study about your experiences at the Pulpit Rock to complete my Master's degree. I would appreciate it very much if you could take part in this anonymous study.

If you have not completed it, here is the link again: [SURVEYLINK]

In case you have already completed my questionnaire, please ignore this "last reminder" email. In that case, THANKS A LOT :))!!

As the survey is anonymous, I cannot see who has responded already. Sorry for the inconvenience.

Again, thank you and best regards

Kathrin Jathe
Student of International Hotel and Tourism Leadership (Master of Science)

Norwegian School of Hotel Management
University of Stavanger (Norway)

Appendix C

SPSS Output

Table C1 Composite means

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
TLOY4	240	1,75	5,00	4,2688	,67623
TPI4	242	1,00	5,00	2,8430	,94514
TPD4	244	1,00	5,00	2,5020	,97631
TSAT4	237	1,00	11,00	8,9114	2,19858
TInter2	232	1,00	5,00	2,3405	1,12450
TIntra2	236	1,00	5,00	2,6695	,99834
TTemp2	236	1,00	5,00	3,3877	1,17378
TAct2	236	1,00	5,00	2,0678	,91190
Valid N (listwise)	226				

Table C2 Rotated component matrix

	Rotated Component Matrix ^a												
	Component												
	1	2	3	4	5	6	7	8	9	10	11	12	13
TLoyN2	,943												
TLoyLF2		,911											
TAct2			,949										
TSAT4				,979									
CROW4					,960								
TTemp2						,934							
TPD4							,938						
AffectENJ2								,927					
TPI4									,301	,933			
TInter2											,896		
TLOY4												,878	
TIntra2													,885
TLoyFN2	,514	,452											,697

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 9 iterations.

Table C3 Correlation matrix

Correlation Matrix

	CROW4	AffectENJ2	TLoyN2	TLoyFN2	TLoyLF2	TAct2	TTemp2	TIntra2	TInter2	TLOY4	TPI4	TSAT4	TPD4
CROW4	1,000	,414	-,113	-,045	-,047	,001	,346	,204	,248	-,224	,020	-,036	,050
AffectENJ2	,414	1,000	-,036	-,009	-,056	,207	,351	,385	,451	-,300	,131	-,123	-,017
TLoyN2	-,113	-,036	1,000	,715	,514	-,101	,133	,089	-,034	,404	,113	,098	-,086
TLoyFN2	-,045	-,009	,715	1,000	,701	-,033	,101	,066	-,038	,469	,095	,171	-,012
TLoyLF2	-,047	-,056	,514	,701	1,000	,047	,088	,048	-,118	,550	,240	,158	,160
TAct2	,001	,207	-,101	-,033	,047	1,000	,221	,486	,404	-,127	,136	-,112	,164
TTemp2	,346	,351	,133	,101	,088	,221	1,000	,517	,392	-,092	,047	-,066	,018
TIntra2	,204	,385	,089	,066	,048	,486	,517	1,000	,516	-,131	,128	-,004	,069
TInter2	,248	,451	-,034	-,038	-,118	,404	,392	,516	1,000	-,315	-,064	-,246	-,114
TLOY4	-,224	-,300	,404	,469	,550	-,127	-,092	-,131	-,315	1,000	,267	,318	,232
TPI4	,020	,131	,113	,095	,240	,136	,047	,128	-,064	,267	1,000	,167	,579
TSAT4	-,036	-,123	,098	,171	,158	-,112	-,066	-,004	-,246	,318	,167	1,000	,170
TPD4	,050	-,017	-,086	-,012	,160	,164	,018	,069	-,114	,232	,579	,170	1,000

Table C4 Loyalty and displacement component matrix

Component Matrix^a

	Component		
	1	2	3
Inter1	,772		
Intra2	,764	,319	
Inter2	,632		
Act2	,615		,459
Intra1	,608	,392	
Temp2	,594	,395	-,559
Temp1	,532	,408	-,507
LOY3	-,574	,738	
LOY1	-,528	,727	
LOY2	-,539	,681	
LOY4	-,325	,453	
Act1	,449		,628

Extraction Method: Principal Component Analysis.

a. 3 components extracted.