#### STOCKHOLM SCHOOL OF ECONOMICS

#### **DEPARTMENT OF MARKETING AND STRATEGY**

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# Communicating Sustainability – is it worth it?

A closer look at three different message contents and their impact on the brand

#### **Abstract**

Many companies are working to become more sustainable. The reason can be altruism, cost savings or building a more attractive brand. There is however limited research into how these efforts should be communicated and what type of impact they have on the customer. By conducting field experiments at two hotels, this thesis tries to identify which message content types can strengthen the perceptions of brand sustainability, as well as have an effect on brand attitude and brand loyalty. The used message contents are third-party labels, coupling sustainability to other benefits, and highlighting company's sustainability goals. We found that sustainability perceptions are indeed linked to higher brand loyalty and brand attitude. However, none of the tested messages raised the perceived sustainability of the hotel nor had a positive impact on the brand attitude and loyalty. This might have been due to, for example, specific industry characteristics or customer expectations affecting the impact of sustainability communication. Companies should keep in mind that building sustainable brands takes time, and the communication has to be credible, trustworthy and relevant to the consumer.

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#### 1. Introduction

#### Green is the new black

Buzz words like sustainability and eco-friendliness are frequently thrown around by marketers. Despite this, surprisingly little research has been conducted on what *type* of sustainability message content to use, as well as what kind of an *impact* particular message contents have on the consumer.

Our interest in sustainability communications lead us to Sustainable Brand Insight, a consultancy that performs a yearly research project into Nordic consumers' perceptions regarding the sustainability of major brands. Sustainable Brand Insight in turn got us in touch with one of their customers: a hotel chain called Nordic Choice Hotels.

Nordic Choice Hotels has put a lot of effort in making their breakfast service more sustainable and now needed a helping hand in how to communicate their sustainability efforts in the most effective way.

We have chosen to test three different message contents to find out which, if any, have the most positive effect on Nordic Choice Hotel's customers. The impact is tested in relation to the customers' sustainability perception on the hotel, their attitude towards the hotel, and their loyalty/willingness to promote the company.

#### Our partners

#### Sustainable Brand Insight

Sustainable Brand Insight is a Swedish firm, which each year conducts a study on consumer perceptions on the sustainability of major Nordic brands. The results are published in a report called Sustainable Brand Index™. In 2013, 23 000 respondents took part in the survey, which included 600 Nordic brands. In addition to the information on consumer perceptions of the brand, companies can get tailored reports with insights on what underlying drivers lie behind the results, as well as advice on how best to address any issues regarding the sustainability of the brand.

We have worked with Sustainable Brand Insight to gain information on the hotel industry, sustainability perceptions, and specific consumer perceptions on the brand that we have had the privilege to work with.

#### **Nordic Choice Hotels**

Nordic Choice Hotels is the largest hotel chain in the Nordics (Nordic Choice Hotels Annual Report, 2012). They have in the last few years put in a lot of work into sustainability measures. In particular, they have strived to improve the sustainability of the food served at the hotels. The measures include increasing the

amount of organic options available at the breakfast buffets, serving Fairtrade-certified coffee, and refraining from serving products that are harmful for the environment or ethically questionable.

Nordic Choice Hotels measures sustainability from many points-of-view. Concrete sustainability targets, such as cutting CO2emissions, are of course in place. From the customer perspective, the chain also has an ambition to reach at least 71% of guests answering positively on the question "I perceive that this hotel takes responsibility for the environment" (Nordic Choice Hotels Annual Report, 2012).

Quality Hotels is one of the brands within the Nordic Choice Hotels group. In the Sustainable Brand Index survey of 2013, the brand was perceived as being less sustainable than many other hotel brands on the Swedish market. According to the study, a weak perceived sustainability could also be reflected in weaker perceived brand quality and brand equity.

Nordic Choice Hotels have done a lot of work to improve their sustainability, and also have ambitious and quantified goals in place for the future. There thus seems to have been true and concrete sustainability advances made within the chain – something that several scholars point to as necessary before starting to consider using sustainability messages in one's marketing. What the hotel chain would now need is to get something in return from this work – not only through fulfilling altruistic goals or cost savings, but also through increased brand equity and more loyal customers. They are thus keen on developing ways of efficiently communicating their sustainability efforts. As food is one area where they have done a lot of work in particular, we were asked to focus on the food offer at Quality Hotels, in particular the breakfast buffet.

#### **Purpose**

The purpose of this Master's thesis is to gain a better understanding of *how companies should* communicate their sustainability efforts.

We first need to explore whether, and in which way, consumers react to communication on sustainability. Are any effects to be seen directly in satisfaction or recommendation ratings? Also, we will investigate whether there are any tones-of-voice or message contents that are particularly useful when trying to influence a consumer's satisfaction, perception of sustainability and attitude towards a brand with sustainability communication.

#### **Expected contributions**

We believe that our research will contribute to the understanding of how sustainability perceptions, sustainability marketing communication and customer behavior are linked. Little research has been done

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on sustainability communication content – particularly in relation to what kind of an impact the messages have on the consumer.

This thesis will only be the beginning of understanding what type of sustainability content is most effective. However, we believe we will be able to contribute with specific practical implications on what kind of content to use, or not to use.

Also, since we have chosen to work with two real companies, we will hope to be able to come up with specific recommendations to these companies, particularly to Quality Hotels.

Current research has relied on convenience samples and fictitious brands.. We will be conducting a field experiment, and believe that we will therefore be able to provide more credible real world implications into the field of sustainability communications.

#### **Delimitations**

We will measure existing customers' reaction to specific sustainability messages. Therefore, our experiment will focus on the customer-company relationship, leaving out considerations of other stakeholders, such as investors, employees, and NGOs.

We are not looking into how to attract new customers. Rather, we research how to improve the brand perception and loyalty of current customers.

We will not look into implementation of sustainability measures – we will only look at how the communication of sustainability influences customer behavior and perceptions.

There will be no divisions of the customers into different segments, such as "green customer", "selectively sustainable", and so on.

We were given a task by our partner to communicate the sustainability efforts related to their hotels' breakfast serving and will therefore not be communicating about other non-breakfast related sustainability efforts.

All the results will be derived based on one brand operating on the Swedish market. Sweden has a neutral trust in companies (Edelman's Trust Index for 2013), and Swedes are more critical towards companies sustainability efforts compared to other Nordic Countries (Sustainable Brand Index report, 2013). Therefore, we can assume that Swedes are not very gullible when it comes to marketing communications, making our results more applicable also in other countries. However, Swedish culture is fairly unique,

which might have an impact on the way the messages will be interpreted, possibly not making our results applicable in countries with a very different culture.

#### **Outline**

The thesis will start with a background, explaining the concepts of sustainability and CSR, as well as why this is an important area to research. The particular industry and market that have been researched will also be presented.

The second part is dedicated to the theoretical framework. This chapter first looks at what constitutes brand equity, brand attitude, and brand loyalty. The theory part will discuss why these concepts are important in determining the effectiveness of sustainability communication, as well as how these concepts are related to sustainability perception. After this, challenges related to sustainability communications, as well as recommendations on how to overcome these challenges, will be discussed. Finally, the theory part will discuss current research on the impact of sustainability communications on brand attitude and brand loyalty, as well as the literature related to specific message contents and introduce our chosen three message contents to test. Based on the theory, hypotheses are derived.

The methodology part will explain in detail how the research was conducted. The advantages and limitations of tackling the research question in the chosen way will be identified and discussed

The fourth part of our thesis is dedicated to presenting and analyzing the results. It contains a final conceptual model, based on whether or not evidence was found to support our hypotheses.

In the last part there will be a discussion of the results, managerial implications, limitations and suggestions for further research, as well as our conclusion.

## 2. Background

#### Defining sustainability and CSR

According to the European Commission (2011), corporate social responsibility (CSR) refers to "companies taking responsibility for their impact on society." Schwartz & Carroll (2003) divided CSR into financial, environmental and social aspects. When firms focus on sustainability with regards to these three aspects it can be considered CSR (Öberg, 2012). According to Freeman & Hasnaoui (2011), CSR includes green practices, business ethics, employee development and firms' focus on the long-term societal effects.

Sustainable Brand Insight (2013) defines sustainability as taking responsibility of both environmental and social environment. According to Wilson (2003), corporate sustainability recognizes both the company's responsibility for profitability and growth, as well as its societal goals and responsibilities in relation to sustainable development. These responsibilities include responsibility of environmental protection, social justice and equity, as well as economic development.

As can be seen, CSR and corporate sustainability have been defined as a company taking responsibility of the environmental and social surroundings, while at the same time remaining economically profitable. We feel that the terms can therefore be used, and have been used, somewhat interchangeably. There are some small differences to note: cause related marketing (CRM), for example, is considered to be part of CSR but does not automatically fit with being a part of corporate sustainability. This is because corporate sustainability has more of an internal focus; i.e. how can the company conduct its everyday business in the most environmentally, socially and economically sustainable way? This type of thinking does not go hand in hand with philanthropic, especially one-off, donations to outside causes. Having said that, as both CSR and sustainability communications are trying to convince the consumer that the company is "doing good", we feel that we can benefit also from looking into CRM-related communication theory. Due to the closeness of these two terms, we will be using the terms CSR and sustainability interchangeably throughout our thesis.

#### Why is sustainability important?

There are several benefits into being sustainable. The European Commission (2014) sees that companies investing in CSR efforts can benefit from risk management, cost savings, access to capital, customer relationships, human resource management, and innovation capacity. Porter and Kramer (2006) also agree that companies can use sustainability to further innovation, and as a way to develop a long-term competitive advantage. Also, it is not just the large firms that can benefit from sustainability. According to research by Orlitzky (2001), both small and large firms can financially benefit from CSR efforts. CSR might open up new business opportunities by having an ethical focus on the brand's marketing communications

(Grove et al., 1996). Sustainability can also be a hygiene factor required by the customers (Lewin & Winiarski 2010), as consumers might not take a brand into their consideration set if sustainability is lacking (Erik Hedén, Sustainable Brand Insight, 2014).

Society also puts pressure on companies to report on their actions and impacts on environmental and social environments (Borkowski et al., 2012). Freeman's (1984) stakeholder theory is a theory of organizational management and business ethics, and often comes up when discussing a company's responsibility towards the society. Freeman defines a stakeholder as 'any group or individual who can affect or is affected by the achievement of the firm's objectives' and suggests a need for 'integrated approaches for dealing with multiple stakeholders on multiple issues' (1984: 26). According to Stubblefield (2010), a stakeholder theory approach can also be used in describing a business case for sustainability: sustainability attracts consumer attention, and leads to more motivated employees, favourable governmental and media treatment, meeting investor demands etc.

Company managers interviewed by Lewin & Winiarski (2010) point towards several roles of sustainability in a company. Responsibility for the environment and society can be an altruistic goal – an important reason for why the company exists in the first place (ibid). Cost savings were also mentioned as an important reason, as sustainable practices often go hand in hand with reduced waste and a more efficient use of available resources (Lewin & Winiarski, 2010). Several companies also engage in CSR initiatives because their managers believe that it is morally 'the right thing to do' (Paine 2001).

#### Sustainability perception in the Swedish market

Swedish consumers deem sustainability to be important when judging the overall attractiveness of a brand (Sustainable Brand Index, 2013). On the Swedish market, on average 45 % of consumers judge their attitude towards a brand ("brand quality") as either "positive" or "very positive", but when it comes to the attitude towards the sustainability of a brand, only 29 % of consumers on average answer "positive" or "very positive" (ibid). According to Sustainable Brand Insight's research, there is a significant correlation between overall brand quality and how sustainable the brand is perceived as being. It is however important to remember that correlation does not imply causality. The causality might just as well go in the other direction: an otherwise positive image of a company might lead people to think more positively about the sustainability of the brand.

Naturally, there are differences across industries. Some industries are more strongly associated with sustainability issues. Cars, energy and food are examples of industries in which people weigh in sustainability into their purchasing decisions (Sustainable Brand Index, 2013).

Table 1. Perceptions of sustainability on the Swedish market - 242 brands

	Perceived quality of brand sustainability (positive or very positive)	Perceived quality of brand (positive or very positive)
Average	29,05%	45,40%
Standard deviation	11,83%	14,54%

#### Sustainability in the hotel and restaurant industries

In our thesis, we will have a closer look at the breakfast serving in a hotel chain. This is a particularly interesting area, as the chosen service touches upon both tourism and restaurant industries. Peattie et al. (2009) point to food and drink industry as one of the industries that has the biggest negative impact on the environment. According to the authors, tourism also has one of the greatest carbon footprints. Tourism is often identified as a particularly important industry for sustainability measures, as it almost by definition puts a strain on natural resources of a certain location (Budeanu, 2013, Jayawardena et al 2013).

McKercher and Prideaux (2011) also observed that people were less inclined to care for the environment when travelling and on vacation. The chosen industry therefore has a great impact on the environment.

In the hotel industry, the importance of sustainability in relation to other attributes is relatively low in comparison to other industries. In a 2013 survey by SB Insights, respondents were asked to rank the most important criteria when choosing a hotel. Location, clean room, low prices and service were all ahead of environmental and social sustainability, which were found to be important by every fourth respondent. Having said that, sustainability ranked higher than, for example, food and drink, hotel facilities and the reward program. Therefore, sustainability can be a great, and possibly more affordable, differentiator for a hotel. (SB Insight, 2013)

The hotel industry has struggled with negative image when it comes to sustainability communications. According to the Peattie et al. (2009), the term "greenwashing" actually originated from hotels' efforts to get their guests to re-use their towels. An environmentalist Jay Westerveld perceived this merely as a way for the hotels to reduce washing expenses rather than save the environment (ibid). Hotels might thus struggle with communicating their sustainability efforts, as well as finding a good balance between sustainability and cost savings on one hand, and customer demand and expectations regarding service levels on the other.

There are several large hotel chains operating on the Swedish market, such as Scandic, Nordic Choice, RadissonBlu, Elite and Rica. For years, Scandic has been perceived as being the most sustainable, but it seems that this year (2014) the other hotels have started to catch up on Scandic (SBI report, 2014), and all these hotel chains are now engaged in some sort of CSR work. One example of a sustainability initiative is

Scandic's efforts to meet the Nordic "Svanen" environmental certification standards at its hotels (Scandic hotels, 2014) another example is Nordic Choice's efforts to remove certain environmentally harmful products from their food selection (Nordic Choice, 2014)

When it comes to communicating sustainability, there are a few different strategies in place among the hotel chains in Sweden. Scandic Hotels has an ambitious website dedicated to its sustainability efforts (Scandic hotels, 2014) whereas RadissonBlu has chosen to communicate its sustainability efforts on their corporate website (Rezidor hotel group, 2014), implying a different target audience of investors and employees.

### 3. Theoretical framework

In the following chapter, we will present the theoretical framework for our thesis. First, theory around brand equity, brand attitude and brand loyalty will be presented. After this, we will explain how CSR, sustainability and sustainability communication can increase brand equity. Then, we will discuss the challenges that are related to communicating sustainability. And finally, different approaches to communicating sustainability will be laid-out.

A lot of the theoretical material we will be leaning on contains references to CSR and green marketing. As we discussed earlier, CSR communication and sustainability communication will be treated interchangeably.

#### **Brand Equity**

Companies spend resources on developing brands and building brand equity in hope that it will pay off in the future. Keller (1993) defined (customer-based) brand equity as "when customers react more favourably to an element of the marketing mix for the brand version of the product than they do to the same marketing mix element when it is attributed to a factiously named or unnamed version of the product or service."

According to Wood (2000) brands can create value for a company. There is a positive relationship between favourable brand associations and brand value/brand equity, and therefore a strong brand is a competitive advantage (ibid).

#### **Brand Attitude**

Berry (2000) described brand equity as dependent of both brand awareness and brand meaning. Brand awareness is a measure of how "top-of-the-mind" a brand is in its category. Brand meaning (Berry, 2000), brand quality (Sustainable Brand Insight, 2012), brand image (Woods, 2000), brand strength (Lassar et al, 2000), and brand attitude (Ishida & Taylor, 2012) are all similar constructs describing the positive or negative associations that a customer has towards a brand. According to Lassar et al (2001), brand equity is first and foremost based on customer perceptions, not objective measures.

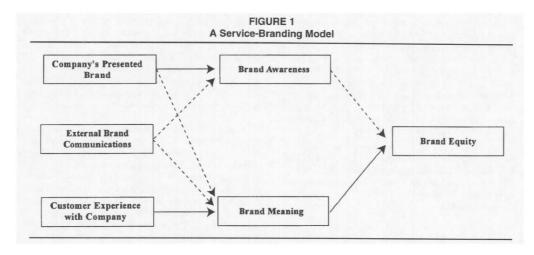
According to Berry (2000), brand meaning (or quality, image, strength, attitude, etc., depending on which word one prefers) is influenced by three basic factors.

- 1. Company's presented brand (marketing communication, bought and owned media)
- 2. External brand communications (word of mouth, earned media)

3. Customer experience with company (service quality and customer satisfaction)

Brand equity is thus also influenced by these three variables, with brand meaning acting as a mediator.





In our article, we have chosen to use the term (*perceived*) brand attitude, instead of brand meaning, or any of the other terms. Brand attitude directly affects Brand equity (Berry, 2000; Woods, 2000; Lassar et al 1995).

#### **Brand loyalty**

Loyalty can be defined in a number of ways – it can be viewed as emotional attachment to a brand, or simply as the frequency of repeated purchases (Day, 1969; Söderlund, 2010).

One way to measure loyalty, the Net Promoter Score, was introduced by Reicheld (2003). He surveyed 4000 customers from 14 different industries and found that the strongest correlation between repeat purchases in most industries was with the answer to the question: "How likely is it that you would recommend [company X] to a friend or colleague?". The question is answered on a scale of one to ten, where ten stands for "extremely likely", five means neutral, and zero stands for "not at all likely". Based on his analysis, Reichheld identified three clusters with different referral and repurchase behaviour. He named the customers that gave ratings of nine to ten as "Promoters", customers with ratings of seven or eight were "Passives", and customers that gave ratings of zero to six were named as "Passives". The NPS is then calculated as the percentage of detractors subtracted from the percentage of promoters.

Blasberg et al. (2008) also found a strong correlation between NPS and consumer loyalty, referrals and repurchases. They found that nearly 70% of promoters recommended a brand to their friends or colleagues, and that promoters also spent two thirds of their spending for a category for a specific favoured

brand. A high and positive word-of-mouth score will lead to a higher probability of re-purchase (Berry, 2000) and, according to Söderlund (2010), repatronage intentions and word-of-mouth intentions are the two most widely used measures of loyalty.

Despite NPS being widely accepted, there has also been some critique on the NPS in relation to some academics saying that it leads to loss of information and that ratings above midpoint should not be considered negative (Grisaffe, 2007). Therefore, in this thesis, we will use the NPS question of "How likely would you recommend…", but, due to a smaller sample, we will calculate an average rather than exclude the outliers. We will refer to this type of measurement as the *Promoter Score*, and will go through it more thoroughly in the methodology section.

#### Improving brand equity

Chaudhuri and Holbrook (2001) talk about how the concepts of brand trust and brand affect determine behavioural loyalty and attitude loyalty (*brand attitude*). Behavioural loyalty leads to higher market share, and attitude loyalty leads to higher price premium. According to Dick and Basu (1994), as well as Day (1969), a positive attitude is a requirement for true loyalty. Behavioural loyalty and brand attitude are thus interrelated. Together these two concepts are strong determinants of brand equity.

On a general level, there are many ways to improve brand equity and consumer perception of a brand. Lassar et al (1995) mentioned five components that influence overall brand equity: product or service performance, social image (the brand matches the customer's self-perception), value for money, trustworthiness, and attachment. For this thesis, the most relevant ones are trustworthiness – a factor that is also strongly related to sustainability communications – and attachment, which has the same meaning as likeability and positive attitude towards a brand. Building trust and positive associations would thus appear to be key targets for any company wanting to build its brand equity. Berry (2000) lists four very basic points for how to increase brand equity: differentiation, creating an emotional connection between the customer and the brand, internal marketing and, of course, providing a good service for the customer. In a consumer marketing communication context, differentiation and emotional connection are the two factors that are most relevant.

In a widely cited article from 1996, Parasuraman et al. discuss which factors influence consumers' perception of service quality – an antecedent of brand equity. They identified several gaps that could lead to lower perceived quality of a service. One of these gaps was the "service delivery – external communications-gap". The authors argued that external communication would affect customer expectations, which in turn affected their perceptions. Promising too much, or coming across as not credible, would therefore have a negative effect on customer perceptions. The article also highlighted the

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need to inform customers about all the "behind the scenes"-work that is going on to provide the positive service experience.

#### Brands and sustainability

#### Sustainability perceptions

Singh et al (2008) claim that addressing CSR issues is essential for successful brand management. Their study analysed consumer's degree of interest in CSR, as well as the effect of CSR on consumers' perception of a company, and found that CSR is one of many dimensions that influence brand image. The authors also found that there is only a weak link between companies' CSR *measures* and consumer's brand perceptions. CSR measures thus need to be *communicated* in new ways, which reach consumers directly. Worth noticing is also that negative publicity has a stronger effect than positive publicity (ibid). This leads us to our first hypothesis:

# H1: In a given setting, communicating sustainability will lead to higher Sustainability Perceptions than not communicating sustainability.

In contrast to Singh et al (2008), Wang (2010) argued that previous "corporate social performance" indeed is related to brand equity. If a company has been performing well on CSR and sustainability matters, it will also be reflected in the value of the brand. According to Woods (2000), long-term commitment to CSR and CRM initiatives is a good way to increase brand equity.

Benoit-Moreau and Parguel (2011) looked at how environmental communication affect brand equity and brand image (attitude) through strengthened positive sustainability associations. Communicating one's sustainability efforts appeared to be a good way to increase positive associations with a brand. Congruence and credibility of the message were found to be particularly important. Their research also showed that (self-reported) societal consciences have no moderating effect on the relationship between sustainability communication and brand equity.

Today, consumers put more and more value in companies' sustainability efforts. Therefore, by coming across as more sustainable, the company should be able to improve the consumers' attitudes toward the company. Francisco et al. (2006) tested the relationship between sustainability perception and brand attitude, and found environmental associations to have a positive effect on brand attitude. This leads us to our second two hypotheses:

H2: Customer perception of brand sustainability is positively correlated with a positive Brand Attitude.

H3: In a given setting, communicating sustainability will lead to higher Brand Attitude than not communicating sustainability.

In the end, what is positive brand attitude and positive sustainability perception if this does not also transfer to actual sales? Positive brand attitude and positive sustainability perception should further lead to purchase intentions. Tian et al (2011) studied consumers' responses to CSR efforts and found that a higher level of trust in sustainability efforts was correlated with a positive corporate evaluation, product associations and purchase intentions. This leads us to our second hypothesis:

H4: Customer perception of brand sustainability is positively correlated with Promoter Score

H5: In a given setting, communicating sustainability will lead to a higher Promoter Score than not

communicating sustainability.

#### Sustainability communications

We will first go through some challenges that companies face in communicating sustainability and then some recommendations from the academics on how to overcome some of these challenges. After this we will briefly go through the existing literature on CSR communication content in relation to the variables we want to test (sustainability perception, brand attitude, and brand loyalty), as well as other recommended message contents in relation to sustainability communications.

Some CSR communications research focuses specifically on, for example, cause-related marketing (CRM), whereas our research is concentrated on communicating sustainability efforts. However, as we previously concluded, we believe that we can still learn from the literature on CRM as both CRM and our topic are about communicating the company's responsibility towards the society and the environment.

#### Challenges with communicating sustainability

#### Green segmenting

Shrum et al (1995) describe a "green consumer" as someone who takes sustainability into account when making purchasing decisions. According to Luzio & Lemke (2013), it is not a viable targeting strategy to just target the environmentally conscious, as "green consumers represent an artificial segment".

As can be seen from AccountAbility's (2007) study on green consumer segments, a vast majority (91 %) of consumers are already environmentally conscious and according to SBI's survey from 2014, 88% of consumers want to take responsibility of sustainability. Therefore, the construction of sustainable marketing communication should be made with all of the businesses' customers in mind.

Do Paco And Reis (2012) also point to a major, and rather paradoxical, challenge in sustainability marketing. Their research shows that the more a consumer takes sustainability into consideration, the more he/she is sceptical towards green advertising.

#### Consumer perceptions and preferences

Many things influence the way consumers perceive brand and company sustainability communications. These include the characteristics of the industry (McDonald and Oates, 2006), the prior reputation of the brand (Yoon et al 2006), as well as the consumer's own mindset (Paco and Reis 2012).

90% of the respondents in Morsing and Schultz' (2006) large survey on sustainability perceptions in Sweden, Denmark and Norway, preferred that companies communicate their CSR activities in some way. But, Morsing and Schultz (2006) also found that "too much" sustainability communication could lead to consumers becoming suspicious of the message delivered. Other authors also agree that consumers are becoming more and more suspicious about sustainability claims, and therefore credibility, trustworthiness and verifiability are very important when making these claims (Lewis, 2003; Fassin and Buelens, 2011).

The company's pre-existing reputation is also a moderating factor for sustainability perceptions and the way customers react to CSR communication, as the information received from the company will be interpreted in the light of already existing perceptions (Fombrun and Shanley, 1990). Having said that, the academics have been of different opinions in relation to what type of impact different reputations might have. Yoon et al (2006) argued that companies with a good reputation on CSR issues will see increased effect from their CSR communication, whereas companies suffering from a bad reputation will have trouble making their voice heard. Strahilevitz (2003) in the other hand found the interesting phenomenon that companies perceived as *neither* very bad nor very good on sustainability issues actually reap the highest benefits from this kind of communication. This phenomenon can be explained by the idea that consumers do not trust companies with bad reputation, but also do not particularly need additional convincing when it comes to companies with good reputations. A third view comes from the previously mentioned study by Fischer and Fredholm (2013), who found companies with bad reputation to benefit most from strategic CSR.

#### Awareness-behaviour gap

Sustainability communication has also struggled with turning customers' awareness into action. A majority of consumers claim to care about sustainability to some degree, but this concern cannot be observed in the consumers' actual behavior (Do Paco and Reis, 2012). Consumers might give more weight to factors such as price, quality and convenience, and products that are communicated as sustainable can actually be perceived as being more expensive or lacking in desired features (Pedersen and Neergaard, 2006).

Also, even behaviour that would appear to be sustainable, such as reducing electricity consumption, is often driven by a desire to save money, not a desire to save the planet (De Paco and Raposo, 2009). Peattie

et al (2009) argued that further raising awareness is therefore not enough to change people's behaviour – other incentives need to be in place.

Tourism is an industry that suffers particularly from the awareness-behavior gap (McKerher & Prideuax, 2011). Antimova et al (2012) claim that this might be due to customers not wanting to compromise on their comfort when on vacation, and also because of free rider effects – people do not perceive that anyone else is contributing, so why should they?

#### Overcoming challenges with communicating sustainability

Several academics have researched into how to overcome the major problem of consumer scepticism and distrust towards CSR communications. Du et al. (2010) have listed several recommendations on how to increase credibility in CSR communications. The authors suggest, for example, signalling the previously discussed commitment, impact, motives, and fit, as well as going "all in" in the form of a CSR positioning in the marketplace.

When it comes to the motives behind the cause ventures, some academics suggest that a company should be open about their company serving motives. According to Forehand and Grier (2003), acknowledgement of extrinsic, firm-serving motives in its CSR message will actually enhance the credibility of a company's CSR communication and inhibit stakeholder scepticism. Therefore, a company should emphasize the convergence of social and business interests, and frankly acknowledge that its CSR endeavours are beneficial to both society and itself.

When it comes to CRM, several authors have agreed that the actual fit between the cause and the company itself is also very important. According to Du et al. (2010), low CSR fit between the social issue and the company itself is likely to "increase cognitive elaboration and make extrinsic motives more salient, thereby reducing stakeholders' positive reactions to a company's CSR activities" (pg. 5). The company should therefore highlight the fit, or when a natural obvious fit is missing, the company should elaborate on the rational for supporting the cause in order to increase perceived fit.

There should also be a fit between the values of the company and their stakeholders. Waddock and Googins (2011) emphasized the aspect that CSR communications should be based on authentic values, beliefs and practices, in order for the communications to truly have an impact and be accepted by the stakeholders. The values should also be aligned with the values of the stakeholders, as people are attracted to companies that display similar values to those that they themselves consider to be important (Siltaoja, 2006). The values should also be ingrained in the company as a whole, as a strong senior-management commitment to CSR has been discussed as being crucial in improving a company's CSR image (Jahdi and

Florén & Poutanen (2014), Communicating Sustainability – is it worth it?, Stockholm School of Economics

Acikdilli, 2009).

According to Du et al. (2007), a company's CSR positioning is also likely to have a positive impact on the acceptability of CSR communication. This is because the company has taken the relatively unusual and even risky chance of positioning themselves on CSR, rather than just superficially engaging in CSR activities. The authors believe that consumers are likely to both pay more attention to these companies' CSR communications as well as believe in their authenticity and therefore be more favourable towards the communications.

Another interesting discovery on the topic of increasing credibility is the effect of corporate heritage. According to a study by Blombäck (2013), consumers perceived brands that communicated corporate heritage in combination with CSR as more responsible than brands that did not. Communication of corporate heritage identity did not have an effect on the perceived social and environmental responsibility but when coupled with CSR communications these perceptions were increased.

#### Sustainability communications and Brand attitude

Schmeltz (2014) pointed out the lack of research in the field of CSR communications, and therefore tested different message contents in relation to how they are framed and their impact on young consumers. She tested similar variables as what we are looking at, i.e. company credibility, sustainability perception and brand attitude. What she found was, that young consumers preferred the message content where the company was communicating their corporate competence in being a responsible and sustainable company combined with a non-personal orientation. The latter means that the company just discussed their competences rather than involving the consumer, i.e. the message asking for the consumers' cooperation was found to be less successful. (ibid)

Specific claims have also found to have a positive impact on the consumers perception of a brand. According to research by Davis (1994), specific claims about environmental product attributes, as well as providing specific data (100% recycled cardboard, etc.), lead to more favourable perceptions of the company's commitment than general claims. In his studies, Davis found that nearly nine in ten consumers agreed with the statement: "A product's environmental claim should always be specific. For example, in discussing reductions in emissions from gasoline the advertiser should always say "reduces emissions by 21 percent" instead of "reduces emissions" (ibid). Davis also found that a company should provide a context for the environmental claims by, for example comparing their product to the competitors'. The attitude toward the advertiser of a fictitious product was measured by asking the consumer to evaluate the advertiser in relation to the following values: trustworthy, believable, honest, and sincere. In their research into green marketing, Maronick & Andrews (1999) found that the consumers found the environmental

claims to be most convincing when the specific claim and general claim were grouped together to support each other.

The message content in terms of emotion and vividness has also been researched. Baghi et al. (2009) found that consumers prefer vivid (meaning emotional, attractive, exciting to the imagination) CSR messages because they increase positive emotions and trust in the company's cause related marketing messages. In their test of around 600 undergraduate students, the authors found that the respondents preferred and were willing to pay more for the product with the vivid, rather than the pallid, message. They also rated the companies using vivid messages as more likely to use the money in an effective way. Baghi et al. (2009) used fictitious scenarios and brands, which they listed as one of their limitations.

Hartmann et al. (2005) also tested the effect of emotional and functional environmental message content on brand attitude and purchase intention. The authors found that a functional positioning lead to a heightened cognitive perception of the brand as being environmentally friendly, whereas the emotional positioning had a positive effect on the emotional dimension of green brand associations. Both types of green positioning were found to have a significant positive influence on the brand attitude, but between the two, emotional messages were found to have a stronger effect. Having said that, the combined functional and emotional strategy led to the strongest results. The two should thus be considered complementary rather than alternative.

#### Sustainability communications and Brand loyalty

Companies' commitment has been found to have an effect on consumers' perception on the company and their motives for the CSR project (Webb&Mohr, 1998; Van den Brink, 2006). Commitment to CSR can be expressed by communicating, for example, the amount of input, the length of the project, and the consistency of the support. In their research into cause related marketing, Webb and Mohr (1998) found that consumers saw the length of the support as a signal for underlying company motives. Short-term projects were more likely seen as an attempt to profit with the cause, whereas a long-term commitment signalled more genuine interest and concern.

Van den Brink et al. (2006) confirmed Webb and Mohr's findings, and also found a connection between enhanced level of brand loyalty and strategic cause-related marketing, given that the firm had a long-term commitment to the campaign and that the campaign was related to a low involvement product. Fischer and Fredholm (2013) on the other hand tested philanthropic CSR and strategic CSR against each other and found that strategic CSR was more effective in terms of raising brand loyalty and brand attitude for companies with bad reputation (no effect for companies with good reputation).

If a consumer thinks that the sustainability causes promoted by the company are relevant to them, there will be a stronger positive effect (Russel & Russel, 2010; Choi & Ng, 2011). Russel & Russel (2010) looked into whether having a local CSR focus versus a global focus would have an effect on the consumers purchase intent and attitude toward the company. What they found was that a local CSR focus increased consumer's actual behaviour toward the company, compared to a CSR activity focused in a distant state. However, this was reduced when consumers had a strong sense of environmental consciousness. Also when consumers do not identify strongly with the local group, they might have stronger feelings for a distant cause as that is considered part of their 'in-group' (ibid).

#### Sustainability communication content

A limited amount of research has been conducted in relation to CSR communications, and even less has been devoted to testing actual effectiveness of different message contents. This has also been noted by, for example, Du et al. (2010), who have asked for future research "to explore the mediating mechanisms that account for the effectiveness (or ineffectiveness) of CSR communication" (pg. 12). According to Schmeltz (2014), due to this field of being relatively new, the academics have concentrated on establishing and understanding the big picture and overall concepts rather than practical implications, and the research into CSR communications has had more of an internal company focus.

We will look further into three particular content types, which we have found being mentioned in the CSR and sustainability communication research. These are 1) the practice of using labels or certifications, 2) coupling the sustainable attributes of the product or service to other benefits and 3) using specific and factual claims in one's sustainability communication. We have chosen to look closer into these three message contents as these are messages types that have been either or both recommended by academics as well as used widely by companies. Despite them being widely used and discussed, the contents have not received attention from academic research in relation to the variables that we will be looking at (sustainability perception, brand attitude, brand loyalty) or our chosen research method (field experiment).

#### Labels and third-party verification

The use of labels has been both recommended as well as questioned by academics. The idea behind labels is that they reduce uncertainty and add credibility to a brand's sustainability claims.

Pedersen & Neergaard (2006) do not believe that environmental labelling automatically transfers into higher profits, but the authors do see it as a way for a company to differentiate their products from competitor's products. Johansen and Nielsen (2012) do recommend the use of third party certification, but have also recognised a challenge between conformity and differentiation. With more and more companies using these certifications, this has created conformity rather than differentiation. Having said that, the

authors believe that differentiation may be established in the way the company describes its belonging to these organisations. By presenting themselves as initiating or key members, they can position themselves as leaders within or endorsers of CSR.

Some research has also gone into testing the actual effect of using environmental labelling. Bickart&Ruth (2012) tested the impact of labels on university students by using both a known (actual) brand and a non-fictional brand, as well as a fictional eco-seal (label). The authors found that using eco-seals generated more favourable purchase intentions and brand attitude among respondents with high environmental concern, especially for familiar brands. However, consumers with low environmental concern were not affected by the presence or absence of an eco-seal.

According to research by D'Souza et al. (2006) on consumers' attitudes towards labels, the authors found that almost 68% of respondents always read the labels. The authors also found that over half of the respondents were willing to purchase an environmentally friendly product even if it was of inferior quality, and close to 70% were willing to purchase the product even if it was more expensive.

These articles and theories lead us to the following hypotheses:

H6a: In a given setting, communicating sustainability using third party certification in the communication will lead to higher Perceived Sustainability than not communicating sustainability.

H6b: In a given setting, communicating sustainability using third party certification in the communication will lead to higher Brand Attitude than not communicating sustainability.

H6c: In a given setting, communicating sustainability using third party certification in the communication will lead to higher Promoter Score than not communicating sustainability.

#### Coupling sustainability to other benefits – Quality, health, safety

Coupling sustainability with other benefits has also been recommended by academics. Rose et al. (2007) conducted a study on how to influence people's behaviour to get them to act in a more climate friendly way. The author recommended focusing on other positive benefits, like convenience or saving money, to change people's behaviour.

In the previously discussed study by D'Souza et al. (2006), 26% of the respondents also believed that green products were lower in quality. This suggests that putting the emphasis on more traditional consumer benefits, like quality and the value of the product, could be more successful than just focusing on the sustainability as it would help consumers overcome their worries about having to trade off sustainability against other benefits.

Florén & Poutanen (2014), Communicating Sustainability – is it worth it?, Stockholm School of Economics

This leads us to the following hypotheses:

H7a: In a given setting, communicating sustainability by coupling it to other benefits in the communication will lead to higher Perceived Sustainability than not communicating sustainability.

H7b: In a given setting, communicating sustainability by coupling it to other benefits will lead to higher

Brand Attitude than not communicating sustainability.

H7c: In a given setting, communicating sustainability by coupling it to other benefits will lead to higher

Promoter Score than not communicating sustainability.

#### Specific and factual claims - goals and results

As discussed previously, Davis' research (1994) into green marketing found that consumers preferred companies making specific environmental statements on their products, giving the example of "reduces emissions by 21%".

Berens and van Rekom (2008) also recommended using a factual tone of voice to overcome scepticism. Together with Du et al. (2010), several other academics have also argued for emphasizing the impact of the CSR activities. According to Tian et al. (2011), CSR communications that emphasize the results, rather than only introducing the form and input of their CSR activities, can increase the consumers' trust in their CSR communications. Pomering and Johnson (2009) along with Davis (1993) also argue that communicating about the actual impact of the company's CSR actions on society would be much more credible than communicating about programs or policies.

Communicating CSR goals is a very interesting area to test, as several companies do communicate their environmental and social goals. However, we found little to no research into the impact this type of communication content has on the consumers' brand attitude and brand loyalty, let alone their sustainability perception on the brand. Therefore, we have decided to test the following hypotheses:

H8a: In a given setting, communicating sustainability by making specific and factual claims in the communication will lead higher Perceived Sustainability than not communicating sustainability.

H8b: In a given setting, communicating sustainability by making specific and factual claims in the communication will lead to higher Brand Attitude than not communicating sustainability.

H8c: In a given setting, communicating sustainability by making specific and factual claims in the communication will lead to a higher Promoter Score than not communicating sustainability.

#### Summary of theory

In this part, we give an overview of the hypotheses we have tested and present a preliminary conceptual

model. In our research, we will measure the consumer's *Sustainability Perceptions*. Our primary dependent variables will be *Brand Attitude* and *Brand loyalty* (Brand loyalty measured through the Promoter Score). The presence or absence of *Sustainability communications* will be used as an independent variable.

#### Summary of hypotheses

#### Hypotheses that look at correlation, not causality:

- H2: Customer perception of sustainability is positively correlated with Brand Attitude
- H4: Customer perceptions sustainability is positively correlated with Promoter Score.

#### Hypotheses that look at correlation and causality:

H1: In a given setting, communicating sustainability will lead to higher Sustainability Perceptions than not communicating sustainability.

H3: In a given setting, communicating sustainability will lead to higher Brand Attitude than not communicating sustainability.

H5: In a given setting, communicating sustainability will lead to a higher Promoter Score than not communicating sustainability.

#### H6: Effect of communicating sustainability efforts using third party certification

H6a: In a given setting, communicating sustainability using third party certification in the communication will lead to higher Perceived Sustainability than not communicating sustainability.

H6b: In a given setting, communicating sustainability using third party certification in the communication will lead to higher Brand Attitude than not communicating sustainability.

H6c: In a given setting, communicating sustainability using third party certification in the communication will lead to higher Promoter Score than not communicating sustainability.

#### H7: Effect of communicating sustainability by coupling it to other benefits

H7a: In a given setting, communicating sustainability by coupling it to other benefits in the communication will lead to higher Perceived Sustainability than not communicating sustainability.

H7b: In a given setting, communicating sustainability by coupling it to other benefits will lead to higher Brand Attitude than not communicating sustainability.

H7c: In a given setting, communicating sustainability by coupling it to other benefits will lead to higher Promoter Score than not communicating sustainability.

#### H8: Effect of communicating sustainability efforts by making specific and factual claims

H8a: In a given setting, communicating sustainability by making specific and factual claims in the communication will lead higher Perceived Sustainability than not communicating sustainability.

H8b: In a given setting, communicating sustainability by making specific and factual claims in the communication will lead to higher Brand Attitude than not communicating sustainability.

H8c: In a given setting, communicating sustainability by making specific and factual claims in the communication will lead to a higher Promoter Score than not communicating sustainability.

#### Conceptual model

In our conceptual model, we have chosen to include the key variables that our theoretical review has found to influence brand equity. As will be explained in the methods section, we will only be manipulating the communication variables, thus making the relationships between communication and the other variables the only relationship that we will test for causality.

What can be seen in the model is that both Brand Loyalty and Brand Attitude have an impact on Brand Equity. If Brand Equity is the additional revenue a Brand can bring to a company, the Brand Loyalty will be reflected in the frequency of purchase, and Brand Attitude will be reflected in the willingness to pay. Both concepts thus add to Brand Equity.

Brand equity has not been measured in our research, but is included in the model to provide a full image of the theoretical framework.

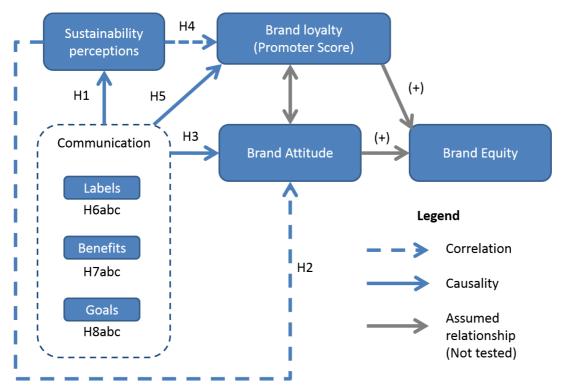


Figure 2 - Preliminary conceptual model

# 4. Methodology

#### Data source

Our primary data source will be the results that we derive from an experiment conducted in collaboration with Nordic Choice hotels. Secondary data from the Sustainable Brand Index survey will also be used to clarify and strengthen arguments in the discussion part.

#### Research Design

#### Selection of research method

Research can be either inductive or deductive. An inductive study takes an explorative approach, trying to create new theory and frameworks. For this kind of research, qualitative methods are the best suited (Bryman and Bell, 2011). However, in this particular thesis, new knowledge will be generated primarily by testing already existing theory and validating existing recommendations. Therefore, we will be using a deductive approach. Thus a quantitative approach was judged to be the most suitable one (ibid).

According to Andersson (2014), experimental quantitative methods include laboratory experiments and field experiments. Laboratory experiments give the researcher more control over the experiment, which allows for a more precise measurement and therefore adds confidence in the research results. Having said that, the results might face difficulties with generalization due to the experiment being conducted in a staged environment. Field experiments in the other hand take place in actual real life situations, which will help with the generalization of the results but at the same time exposes the test to externalities. (Andersson, 2014)

As shown in the theory part of this thesis, many earlier studies on the sustainability communication topic seem to have relied on a convenience sample and using a scenario experiment methodology. According to Andersson (2014) and Söderlund (2010) this approach has some major drawbacks. The results can lack in strength and be difficult to generalize. Also, the realism and reliability of these sorts of experiments can sometimes be questionable. For example, Van den Brink (2006) have admitted to a shortcoming in using fictitious situations, as this type of experiment made it impossible to measure respondents' actual behaviour. Several academics also used convenience samples of university students (Van den Brink, 2006; Hartman et al., 2005; Russell & Russell, 2010), but we believe that our sample is more true to the population due to using a field experiment design.

Therefore, it is our belief that experiments and studies with real customers, in a real-life business setting, being subject to the communication efforts of a real brand, will not only result in a more realistic depiction of consumer reactions, but also poses a stronger business case. This is why we have chosen to work with a field experiment.

#### Field experiment

To test our hypotheses, we conducted an on-site field experiment at two Nordic Choice Hotels in the Stockholm area. Both hotels are part of the sub-brand Quality Hotels, and both hotels are outside of the Stockholm CBD. Hotel A has more tourists as guests and tends to attract the more price sensitive business travelers, whereas Hotel B hosts a lot of conferences and serves many business travelers. On average, Hotel A has 150 breakfast guests every morning, and Hotel B has on average 200 breakfast guests every morning.

The setting of the experiment was the breakfast buffet area. We placed signs on each of the small tables, and one sign for every four people if it was a long table, in the dining area. We felt that we were able to attract customers' attention by having signs on the tables, rather than having, for example, posters on the walls. This is because the customer will sit down to eat in front of the sign, and is therefore almost forced to read through it as they eat. We kept the message content intentionally short in order to quickly convey our message and we also used bold letters to bring out the most important words.

The signs contained primarily written (but also to some extent pictured) communication content that informed the hotel guests about the sustainability of the breakfast and of Nordic Choice Hotels. There were three kinds of signs, with three different message contents. To be able to test differences in customer reactions to different contents, only one kind of sign was allowed to be on display at any given time. Each of the signs got a week of exposure each.

Figure 3. Sign on breakfast buffet table in Hotel A.



#### **Stimuli** – The chosen three message contents

Having gone through the theory related to sustainability, CSR communication, and green marketing, we decided to test the following three message contents:

- 1) Third party verification.
- 2) Coupling the sustainability message with other benefits (in our case health, safety and quality).
- 3) Specific claims in the form of goals.

We chose these three message types, first of all, because they were specific and concrete. Therefore, our results would contribute to actual managerial implications, rather than creating more frameworks when it came to CSR and sustainability communications specifically. We also chose these three because we were able to match the message choices with Nordic Choice's sustainability efforts and their preferences when it came to the communication content. We also considered the importance of fit between Quality Hotels and the message contents and found there to be a good fit with the brand.

The design and copy of the signs was done in collaboration with Nordic Choice Hotel's marketing department and Sustainable Brand Insight. Several remakes were needed before the signs had the desired characteristics – they needed to be able to convey the different message contents that we wanted to test, while at the same time fit within the current communication profile of Nordic Choice and Quality Hotels.

The same basic grey, green and white design was used for all signs, as this was the layout that Quality Hotels had previously used in their communications. The same headline was used for all signs: "Sustainable breakfast" (Swedish: En Hållbar Frukost) and what differed was the sub-heading, the main content, and the use and placement of labels in one of the experiments. All signs had the message written in English on one side and in Swedish on the other (see the Appendix 1 for the Swedish versions). The Quality Hotel logo was displayed in all the signs, in order to increase the positive associations with the brand. All the information on the signs was based on information in either Nordic Choice Hotels' 2012 annual report, or an internal marketing document describing the "food revolution" at Nordic Choice Hotels.

The production of the signs was paid for by Nordic Choice Hotels.

#### Labels - Third party verification

We chose to test third party verification because it has been recommended by many academics but has also faced criticism by some (Pedersen & Neergaard, 2006). Companies also commonly use third party verification, as it is believed to offer credibility to the CSR communications. All questions, except the ones about brand attitude and the promoter question, included the option to answer: "don't know/not relevant.

Nordic Choice has been active in using products that have been certified by, for example, Fair Trade and Krav and therefore we were able to test whether these verifications actually had the desired affect on the customers.

All of the verifications that we used have a very high recognition in Sweden. 98% of Swedes know the Krav-label very well, or somewhat well, and 65% of the population has positive attitude

Figure 4. "Labels" sign



towards the label (Krav's website). Fairtrade certification is also fairly well known in Sweden. According to TNS Sifo's research into consumers' knowledge on Fairtrade, they found that in 2014 approximately 80% remembered previously having seen the label, approximately 31% knew well what it stood for, and approximately 50% of the respondents had a very positive attitude towards the label. WWF is also a very well-known organisation, with close to five million supporters all around the world (WWF website). In Sweden, WWF has existed since 1971 and has approximately 195 000 supporters (ibid). Therefore, we will assume that all of the labels that are used in this experiment are well to somewhat well known in Sweden.

We recognize the issue of conformity when it comes to third party verification, as discussed by Johansen and Nielsen (2012). For this reason, we wanted to emphasize that Nordic Choice was working together with WWF as was stated in their Food Revolution at Nordic Choice Hotels report: "In collaboration with WWF in Norway and the Norwegian Animal Protection Alliance, Nordic Choice has prepared its own Red List of meat and fish products..." (pg. 15), but this type of message content was not accepted by the head of Nordic Choice due to them not making any financial contributions to WWF.

The format of this communication design was a text describing which labels and third-party verification Quality Hotels was working with. The subheading for this sign was: "Organic and Fairtrade-certified". The Swedish eco-certification label KRAV was mentioned, as was Fairtrade and WWF. To strengthen the impact of the sign, the KRAV and Fairtrade labels were used in combination with the Quality Hotels logo.

#### Coupling to other benefits

The second message content that we decided to test was coupling the sustainability message with other benefits. This type of communication has been suggested by academics but the impact of this type of content has not been tested. We also chose to include commitment in the message content in order to provide more credibility towards the communication.

The format of this communication design was a text coupling organic food to several health, quality and safety related benefits, as well as environmental friendliness. The subheading for this sign was: "Fresh, healthy, organic". The commitment was signaled by stating that the hotel chain had been serving organic food in their breakfast since 2008.

Figure 5. "Benefits" sign.

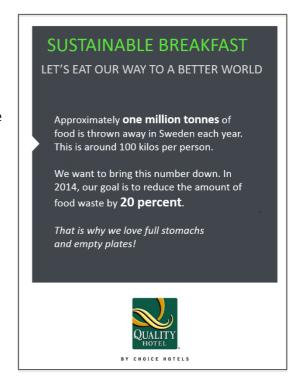


#### Specific claims (goals)

The third message content that we chose to test was the communication of sustainability goals. We initially wanted to test communicating the actual impact and results of the sustainability efforts as we felt that this would have had a great impact on the variables, but as Nordic Choice has not kept a record of their actual impact we had to abandon this option. Therefore we went with other form of factual message content with specific claims and data. This was also an interesting content to test, as we felt that several companies were using these types of claims in their CSR communications but no research into the effectiveness of this type of message content had been conducted.

The format of this communication design was a text highlighting the amount of food thrown away in Sweden each year, and what goals Quality Hotel had established for their own waste reduction. We wanted to use numbers and

Figure 6. "Goals" sign.



specified targets to convey a factual message. The sub-heading for this sign was: "Let's eat our way to a better world", a slogan that had earlier been used in Nordic Choice's marketing communication.

#### Measuring the results

To measure the effects of our experiment, we used an already existing check out-survey that has been distributed to the hotels guest through an e-mail sent to the guests two days after their check out (see Appendix 2). All questions, expect the Promoter Score and Brand Attitude questions, included the option to answer "not relevant".

Nordic Choice had already been testing some of the discussed variables in their check out-survey. We ended up using some of their current questions, as well as altering and adding some. Below we will go through the different variables that we have chosen to measure as well as how we the questions to test these variables were framed.

As we used an already existing customer survey, which is used to measure and compare hotel performance, there were some limitations to how much we could change it to fit our research purpose. As a result, we mostly had to use the hotel's standard 4-point scale, instead a more preferable 5- or 7-point scale. Promoter Score and Brand Attitude were however measured on the standard 10 (Net Promoter Score standard) and 5 (Sustainable Brand Insight standard) item scales.

#### Sustainability perception

To test the customers' sustainability perception, we used the existing question "I feel that the hotel is taking responsibility for the environment and society", which the customer could answer on a four-point scale from "I totally agree" to "I strongly disagree".

#### Brand attitude

To test the brand attitude, we added a question "What is your attitude towards Quality Hotels", with a scale of one to five, from very positive to very negative. We could justify using a one to five scale, instead of the regular one to four, as it is the same measure used by Sustainable Brand Insight.

#### Promoter score

Nordic Choice already had a Promoter Score question in their current check out-survey, which we decided to keep in our experiment to use as a measure of brand health and customer loyalty. Nordic Choice was at the time experimenting with two types of NPS questions: "How likely is it that you would recommend this hotel to your friends or colleagues?" and "How likely is it that you would recommend this hotel to a friend or colleague for the same purpose that you had with your visit?". The Promoter Score was measured on an eleven-point scale, ranging from zero to ten, where ten was the highest.

#### Additional questions

We also chose to look at some additional questions to support our analysis and to see whether our communications had some other intended or unintended effects. These measures were focused on customer satisfaction on the overall breakfast experience and the likability of the sustainability communications.

We looked at the perceived quality of the breakfast through the question: "I was satisfied with the quality of the breakfast", which followed a four-point scale from "I totally agree" to "I strongly disagree".

We also added a more specific question regarding the breakfast and the organic options available. The question "I am satisfied with the ecological options available at the breakfast" also followed the same four-

stage scale. We are aware that "ecological" is not the correct English term. The study was however mainly conducted in Swedish, and we deem that the validity of the results are not be jeopardized by this slightly incorrect translation.

We also added a question specifically on the sustainability communications. This question was phrased as follows: "I am satisfied with the way Quality Hotel Nacka communicates their sustainability efforts". The question used the same aforementioned four-point scale.

#### Experiment execution and data gathering

At each of the hotels, the experiment was carried out in the course of four weeks.

- The first week was a control week, in which the hotel guests were not subjected to any kind of treatment. They were however presented with our modified questionnaire.
- In week two, the signs using third-party verification were used.
- In week three, the signs coupling the environmentally friendly breakfast to health and other benefits were used.
- In week four, the signs laying out the goals of Quality Hotels' sustainability efforts were used.

In both hotels, the clientele varies depending on what day of the week it is. In order to get a good and representative sample of the hotel's guest, each of the experiments lasted a full week each.

Before the experiment was set up, the hotel managers of Hotel A and Hotel B had been informed of our task and purpose and accepted to provide help to us with conducting our research. Upon the start of the experiment, we went out to the hotels and instructed the staff on how the experiment was going to be carried out. At both hotels, we then had weekly contact with the breakfast manager and the breakfast staff to make sure everything went as agreed.

In Hotel A, we encountered no issues in going through with this initial plan and were thus able to use the dataset for Hotel A without risking the data validity. In Hotel B, we encountered some problems with the placing of the signs from week 3 onwards and have thus not used these results in our data analysis.

A few days after checking out, all guests of the hotel who had provided an e-mail address when booking their stay, received the survey we had designed. The survey results were forwarded to us by the company responsible for all of Nordic Choice hotels customer satisfaction surveys. We based our analysis on this dataset.

# Data analysis procedure

The data was given to us in the form of an excel sheet, which we then put into the SPSS data analysis software. If needed, results were recoded, so that the highest possible score on every scale also was the most favourable.

To conduct the data analysis, we used several statistical measures – comparing means and mean ranks, looking at correlations, etc.

The data from Hotel A was used for the primary data analysis. Data from Hotel B was used to see whether the same results could be observed in a different setting. We did not pool the data, as it would have been problematic from a reliability perspective.

As already mentioned, due to partial contamination of the data, we had to leave out some the results from Hotel B in order not to compromise the reliability of the study. From Hotel B we were thus only able to analyze the results from the control week and the first treatment week.

As some hotels guests stayed for a longer period of time and therefore might have been subject to two different kinds of communication, these respondents were ignored when we test for differences between communication contents.

#### Research quality

According to Bryman and Bell (2011), the quality of the data is determined by its reliability and its validity. The reliability refers to how internally consistent the data is – would redoing the test generate the same results, whereas validity is concerned with whether or not the data actually depicts what the research question specifies.

# Reliability

Would we get the same results if we did the same test again?

When it comes to the scientific reliability of our method, some weaknesses can be pointed out. We were handed a task by a company, and used their existing survey rather than designing a new one from scratch. This meant that we were limited in the amount of items per measured variable we could incorporate in the survey. This limited our possibilities to test for the stability of the measure construct by using statistical methods such as Cronbach's Alpha (Malhotra, 2010).

The same week-long time period for each of the treatment groups, as well as doing the experiment at two different locations, added to the reliability of the experiment. About the timing, it can be said that at a hotel a certain seasonal effect on the composition of the guests certainly exists. However, the staff at the hotels assured us that no big variations did not occur during the four-week experiment period.

The many stakeholders involved in this project make the end results less reliable, due to the fact that there are many externalities that can influence the end results (Bryman & Bell, 2007). As we outsourced the experiment execution and data gathering, we as authors were not able to be totally secure that the stimuli would turn out as we wanted, the data given to us was collected in the way intended, or that the surveys would be distributed to the right people. To minimize these risks, we had to maintain a constant dialogue with all stakeholders, especially the hotel staff and the company responsible for the surveys.

# Validity

Was the test we did suited for our purpose?

Just as with reliability, the used method and the many actors involved, all with different needs, might have had an effect on the validity of our results. However, as explained, we have deemed the results to be more valid (and prove a better base for business decision making) exactly due to the fact that we have conducted the experiment in a live setting with real customers.

As to the question whether our stimulus actually represents what we wanted to test, we deem that the expert help we received with designing the signs is sufficient. All signs were deemed fit to be used in a real marketing campaign.

# 5. Results

# Description of data

#### Total sample

In total, there were 420 respondents in the check-out survey. 172 of the respondents stayed in Hotel A and 248 of the respondents stayed in Hotel B. The data from Hotel A will be used as our primary data. The data from Hotel B will be used to check whether our findings from the first Hotel can be replicated in a slightly different context. A total of 84 responses, mostly from hotel B, will not be used to test for differences between groups, due to a contamination in the experiment, as explained previously.

Our sample size is in line with the sample sizes of several academics that we have referred to in our thesis, and therefore we see it as sufficient. For example, Hartman et al. (2005) used a sample size of 160 respondents who were further split into four experiments, making the number of respondents around 40 respondents per group. Russell & Russell (2010) in the other hand had an even lower number of respondents per experiment, ranging from 29 to 37 respondents per each of the tree conditions.

For our analyses, we set the limit for claiming evidence that supports our hypotheses at 0,05. However, we will claim partial support for our hypotheses if there are significance levels between 0,05 and 0,10.

All variables are coded so that 0 is the lowest (and most unfavourable) score. A four-point scale will thus have 0 as the lowest and 3 as the highest score. An eleven-point scale will have 0 as the lowest and 10 as the highest score.

The variables that we measured for the purpose of this thesis were the following:

Two breakfast satisfaction variables:

- The satisfaction with the breakfast (4-point scale)
- The satisfaction with the ecological options at the breakfast (4-point scale)

Two sustainability-related variables:

- The satisfaction with the way the sustainability work of the hotel is communicated (4-point scale)
- The perceived sustainability of the hotel (4-point scale)

Two more general brand attitude and loyalty variables:

- The Promoter Score (11-point scale) used to measure Brand Loyalty.
- The Attitude towards the brand Quality Hotels (5-point scale) used to measure Brand Attitude.

We have not had access to demographic data on our respondents but do not see this as a problem. Several of our discussed academics used convenience samples of university students (Van den Brink, 2006; Hartman et al., 2005; Russell & Russell, 2010), and we believe that our sample is more true to reality due to the field experiment method.

#### Treatment distribution

In Hotel A, 43 respondents were in the control group, meaning they were not exposed to any of the treatments. 19 respondents were subject to treatments with the labels message, 43 respondents were subject to the benefits treatment, and 56 respondents were subject to the goals treatment. 11 respondents were subject to two or more treatment types – this group is labelled "communication type unknown or multiple" and has not been considered when testing differences between message contents.

In Hotel B, 95 respondents were in the control group and 80 respondents were subject to the treatment with the labels message. In addition to this, there were 73 respondents that *should have* been subject to either the benefits or the goals treatment at hotel B. These respondents have likely been subject to some sort of communication, but since we cannot verify which kind (as explained in the methods part), this group has not been included in the analysis.

The complete distribution of the number of treatments at each of the two hotels can be found in table 2.

**Table 2 - Treatment distribution** 

_	Treatment	Number	Percent of total
	Control group	43	25%
	Labels	19	11%
Hotel A	Benefits	43	25%
	Goals	56	32,6%
	Others*	11	6,4%
	Total	172	100%
	Control group	95	38,3%
	Labels	80	32,3
Hotel B	Benefits	?	?
посегь	Goals	?	?
	Others*	73	29,4%
	Total	248	100%

\* subject to two or more communication types/unknown communication type

# Selection of appropriate statistical test

First, we had to determine which kinds of statistical tests would be most appropriate to test our hypotheses.

Normal distribution of observations is an assumption in parametric statistical tests, like the T-test for equality of means. If the data is not normally distributed, non-parametric tests might be more suitable (Malhotra, 2010). Two tests for normality, Kolmogorov-Smirnov and Shapiro-Wilk, on our six dependent variables show that our variables are *not* normally distributed (sig: 0.00 < 0.950), as can be seen in Appendix 3. The same pattern can be seen in both of the hotels. This would imply that non-parametric tests are the most appropriate to check for differences between groups.

Further, one has to determine whether our variables should be treated as being on an ordinal or interval scale. Four out of the six variables have been measured on a 4 point Likert scale. According to Allen & Seaman (2007), a Likert scale should have at least 5 levels to be classified as an interval scale. We will thus treat our variables as being on an ordinal scale. Their items in the variable can be ranked – for example from "very satisfied" (highest) to "very dissatisfied" (lowest). However, we cannot be certain about that the distance between "very satisfied" and "satisfied" is the same as the distance between "dissatisfied" and "very dissatisfied". For ordinal variables non-parametric tests are the most appropriate to test differences between groups (Malhotra, 2010).

To test for differences between groups using a T-test, group size should preferably be over 30 (Malhotra, 2010). As some of the groups we are looking at are smaller than this, non-parametric tests are more appropriate for us to use.

Based on the above, we have chosen to use non-parametric tests to analyze correlations and test for differences between groups.

#### Hotel A

We started the analysis by testing for correlations and running regression analyses. We did this in order to test our second and fourth hypotheses, to see how the different dependent variables are related and to see which variables are the most important determinants of a favourable Brand Attitude and Promoter Score. We test our hypotheses on the data from hotel B (N = 172).

We understand that correlation does not imply causality. However, it shows how the different variables are related in our defined setting.

#### Correlations

#### Promoter Score, Brand Attitude and Sustainability Perceptions

To check how different variables are correlated with each other, a Spearman test for correlation was conducted for all our tested variables. The detailed results can be found in table 3 at the end of the correlations chapter. It was found that Promoter Score, Brand Attitude and Sustainability Perceptions (= perceived environmental and social sustainability of the hotel) all are significantly correlated with each other (sig: 0,000 < 0,050). We thus found evidence supporting our hypotheses H2 and H4.

# H2: Customer perception of brand sustainability is positively correlated with Brand Attitude - Evidence found to support the hypothesis

# H4: Customer perceptions of brand sustainability is positively correlated with Promoter Score - Evidence found to support the hypothesis

The results also show us that there is a significant (sig: 0,000 < 0,050) correlation between the two concepts of brand attitude and promoter score, which has also been shown by previous studies (Reicheld, 2003).

#### Satisfaction with sustainability communications

We found that Satisfaction with Sustainability Communication has a higher correlation with Brand Attitude than Sustainability Perceptions does, as can be seen in table 3. The Spearman correlation coefficient between Satisfaction with Sustainability Communication and Brand Attitude was 0,505 (sig. = 0,000). The corresponding value for Sustainability Perceptions was lower: 0,459 (sig. = 0,000).

Further analysis showed that the two variables Satisfaction with Sustainability Communication and Sustainability Perceptions are closely related. Their correlation coefficient is 0,802 (sig. = 0,000). The Cronbach's alpha, which as a measure of internal consistency, is at 0,860. A value over 0,7 implies strong internal consistency (Malhotra, 2010).

# Satisfaction with breakfast

Also in the survey were two questions on the satisfaction with the breakfast: satisfaction with the organic options available, and satisfaction with the quality of breakfast. Both these variables were significantly (sig: 0,000) correlated with Promoter Score, Brand Attitude, Satisfaction with Sustainability Communication and Sustainability Perceptions, as well as with each other.

The link between the two breakfast variables and Promoter Score/Brand Attitude appears to be weaker than the link between the two sustainability variables and Promoter Score/Brand attitude. This can be seen by observing the correlation coefficients (0,274 - 0,277 - 0,323 - 0,345) for the two breakfast variables

compared to 0,441 - 0,459 - 0,464 - 0,505 for the two sustainability variables). All the correlations were significant (sig: 0,000).

#### **Summary of Correlations**

The most noteworthy correlation coefficients in the sample as a whole can be found between Sustainability Perceptions and Satisfaction with Sustainability Communication (0,802), Satisfaction with Sustainability Communication and Brand Attitude (0,505), Sustainability Perceptions and Brand Attitude (0,459) and Promoter Score and Brand Attitude (0,621). All correlations are significant (sig: 0,000). Important to bear in mind is that correlation does not imply causality – only that the variables tend to have a similar variance in this particular sample. The next step in the analysis entails running regressions on the sample.

Table 3 - Spearman correlation coefficients. Hotel A.

	Brand attitude	Promoter Score	Sustainability Perceptions	Satisfaction w. sust. com.	Satisfaction with eco. options	Satisfaction with breakfast
Brand attitude	1	0,621*	0,459*	0,505*	0,277*	0,323*
Promoter Score	0,621*	1	0,464*	0,441*	0,345*	0,274*
Sustainability Perceptions	0,459*	0,464*	1	0,802*	0,510*	0,358*
Satisfaction with Sust. Com.	0,505*	0,441*	0,444*	1	0,444*	0,277*
Satisfaction with eco. options	0,277*	0,345*	0,510*	0,444*	1	0,500*
Satisfaction with breakfast	0.323*	0.274*	0.358*	0.277*	0.500*	1

<sup>\* =</sup> significant correlation (sig. < 0,050)

#### Regressions

Running regression analyses will allow us to see how multiple independent variables interact to determine one dependent variable. Our primary dependent variable is Brand Attitude. As with the correlation analysis, these tests are not intended to show the relative strengths of different inter-variable relationship. They are primarily meant to give a better understanding of how the variables in our sample relate to each other. This is also why we have aimed to display all independent variables, not just the significant ones.

#### Brand Attitude as dependent variable

Having the two breakfast questions, the Sustainability Perception and communication questions, as well as the Promoter Score as independent variables, one ends up with the following regression, displayed in table 4: The R<sup>2</sup> value is 0,536, meaning that 53,6% of the variance in Brand Attitude can be explained by these five variables. However, only two of the variables have significant beta coefficients: Satisfaction with Sustainability Communication and Promoter Score.

Table 4 – Regression. Hotel A. Brand Attitude as dependent variable.  $R^2 = 0.536$ 

Independent variable	Standardized beta coefficient	Significance
Promoter Score	0,563*	0,000
Sustainability Perceptions	-0,054	0,357
Satisfaction with Sustainability Communications	0,299*	0,030
Quality of breakfast	0,085	0,377
Satisfaction with organic options at breakfast	-0,057	0,595

<sup>\*</sup>significant beta coefficient (sig. < 0,050)

It is surprising that Sustainability Perceptions do not seem to have a significant impact on Brand Attitude. To shed more light on the relationship between the variables, further regression analyses were conducted to check for mediation effects. The full results of the tests for mediation can be found in Appendix 4. The test for mediation shows that that the effect Sustainability Perception has on Brand Attitude and Promoter Score is *fully mediated* by the variable Satisfaction with Sustainability Communication. This can be seen by observing how the effect of Sustainability Perceptions on Brand Attitude disappears (going from sig: 0,000 to sig: 0,788) when one introduces Satisfaction with Sustainability Communication into a regression. We will however keep using the variable Sustainability Perception for our analyses and for our testing of differences between different experiment treatment groups, as it is used as an industry benchmark (Sustainable Brand Insight, 2014).

Full mediation can also be observed when checking for the two breakfast satisfaction variables. The breakfast variables' effect on Brand Attitude can be observed through either Promoter Score, Satisfaction with Sustainability Communication and/or Sustainability Perceptions.

Promoter Score *partly mediates* the effect of both Satisfaction with Sustainability Communication and Sustainability Perceptions on Brand Attitude. Partial mediation means that some, but not all, of the effect of an independent variable on a dependent one passes through a third variable (Malhotra, 2008). The effect of Sustainability Perceptions or Satisfaction with Sustainability Communication on Brand Attitude is still significant (sig: 0,000), but the beta coefficient goes down (Sustainability Perceptions: 0,413 to 0,153, Satisfaction with Sustainability Communication 0,491 to 0,203) when Promoter Score is introduced to the regression as a second independent variable.

#### Summary of regression analysis

The regression analysis shows that Promoter Score and Sustainability Perceptions are related to Brand Attitude. If Satisfaction with Sustainability Communication is introduced into the regression, it *fully moderates* the effect of Sustainability Perceptions on Brand Attitude.

Promoter Score *partly mediates* the effect that Sustainability Perceptions have on Brand Attitude. The quality of the breakfast does not appear to be directly related to Brand Attitude, at least not in the limited context of our experiment.

Now that we have clarified the relationships between our six different dependent variables, the next step in the analysis is to bring in the variables that we have manipulated – Sustainability communication – and to see how this variable can influence the variables that have been discussed in the analysis so far.

As mentioned, the complete regression analyses used to check for mediation can be found in Appendix 4.

# Differences between experiment groups

To test whether the different communication content types have any effect on the aforementioned variables, and to see whether our hypotheses H3-H6 hold true, we started by conducting Mann-Whitney Utests to compare the control week with the different treatment weeks. We are thus testing differences with non-parametric tests, treating the variables as if they were on an ordinal scale. However, we will sometimes also choose to present our results as averages (as if the variables were on an interval scale. The averages are only used to show how the experiment groups differ from each other, and are not used to support claims about statistical significance.

The mean values, standard deviations and number of observations for all the treatments and variables can be found in Appendix 5.

#### Communicating sustainability compared to not communicating sustainability

To test our hypothesis that communicating sustainability, regardless of the message content, has a significant effect on our dependent variables, we conducted Mann-Whitney U-tests. For this test, we treated all three message contents as one group.

Mann-Whitney U-tests were run comparing the control group with the group that was subject to some form of communication. The results can be seen in table 5.

When comparing the means, it is interesting to see that the variables are at a lower level when the respondents have been subject to some sort of communication, compared to no communication. For example, the Sustainability Perception has M = 2,6774 (out of 3) when there is no communication, and M = 2,4831 (out of 3) when there is communication in place.

However, there is no evidence for a statistically significant difference between the control group and the communication group when it comes to Sustainability Perceptions (sig: 0,137 > 0,050).

# H1: In a given setting, communicating sustainability will lead to higher Sustainability Perceptions than not communicating sustainability – No evidence found to support the hypothesis

There was no statistically significant difference in Promoter Score between the control group and the experiment groups with the sustainability communication (sig: 0.418 > 0.050).

# H3: In a given setting, communicating sustainability will lead to a higher Promoter Score than not communicating sustainability – No evidence found to support the hypothesis.

There was no statistically significant difference in Brand Attitude between the control group and the experiment groups with the sustainability communication (sig: 0.171 > 0.050).

H5: In a given setting, communicating sustainability will lead to higher Brand Attitude than not communicating sustainability – No evidence found to support the hypothesis.

Table 5 - Test for difference between groups. Hotel A.

Control group/Any communication type (treatment)

Variable	Mean Treatment	Mean Control Group	Median Treatment	Median Control Group	test for significant difference between groups
Promoter Score	8,127	8,333	8	9	0,418
Brand Attitude	3,262	3,419	3	3	0,171
Sustainability Perceptions	2,483	2,677	3	3	0,137
Satisfaction with Sustainability Communications	2,257	2,571	2	3	0,105
Quality of breakfast	2,688	2,738	3	3	0,865
Satisfaction with ecological options at breakfast	2,519	2,740	3	3	0,110

<sup>\*</sup>significant difference (sig < 0,050)

Mann Whitney II

#### Labels

With our first experiment of communicating the hotels sustainability efforts with the help of third party verification, no statistically significant differences between the control group and the label communications were found. This leads us to rejecting all the hypotheses related to the third party communication content. The results of the Mann-Whitney U-test can be found in table 6.

There was no statistically significant difference in the Sustainability Perception scores between the control group and the experiment group using third party verification in the sustainability communications (sig: 0.822 > 0.050).

H6a: In a given setting, communicating sustainability using third party certification in the communication will lead to higher Sustainability Perceptions than not communicating sustainability – No evidence found to support the hypothesis

There was no statistically significant difference in Promoter Score between the control group and the experiment group using third party verification in the sustainability communications (sig: 0,888 > 0,050).

H6b: In a given setting, communicating sustainability using third party certification in the communication will lead to a higher Promoter Score than not communicating sustainability. – No evidence found to support the hypothesis

There was no statistically significant difference in Brand Attitude between the control group and the experiment group using third party verification in the sustainability communications (sig: 0,202 > 0,050).

H6c: In a given setting, communicating sustainability efforts using third party certification in the communication will lead to higher Brand Attitude than not communicating sustainability. – No evidence found to support the hypothesis

As there were a small number of respondents for this experiment, we have replicated this experiment in Hotel B and will use those answers to confirm our results. The results are displayed further on in the thesis.

Table 6 - Test for difference between groups. Hotel A.

Control Group/Labels

Variable	Mean Labels	Mean Control Group	Median Labels	Median Control Group	Mann-Whitney U- test for significant difference between groups
Promoter Score	8,278	8,333	8,5	9	0,888
Brand Attitude	3,125	3,419	3	3	0,202
Sustainability Perceptions	2,642	2,677	3	3	0,822
Satisfaction with Sustainability Communications	2,385	2,571	3	3	0,616
Quality of breakfast	2,733	2,738	3	3	0,734
Satisfaction with ecological options at breakfast	2,769	2,740	3	3	1,000

<sup>\*</sup>significant difference (sig < 0,050)

#### Benefits

With our second experiment, the only statistically significant difference between the control group and our "Benefits" experiment group is the response to the question **Satisfaction with Organic Options at Breakfast** (sig: 0,029). Surprisingly, the control week customers were more satisfied with the organic options, M = 2.74 (out of 3) than the customers that were faced with signs communicating health benefits related to the organic options available Satisfaction with Organic Options only had M = 2.41 (out of 3).

All other differences were insignificant. This leads us to rejecting all the hypotheses for the use of coupling sustainability efforts with health benefits. The results of the Mann-Whitney U-test can be found in table 7.

There was no significant difference in the sustainability perception scores between the control group and the experiment group using coupling sustainability to other benefits in the sustainability communications (sig: 0.278 > 0.050)

H7a: In a given setting, communicating sustainability efforts by coupling sustainability to other benefits in the communication will lead to higher Sustainability Perceptions than not communicating sustainability – No evidence found to support the hypothesis.

There was no statistically significant difference in the Promoter Score between the control group and the experiment group using coupling sustainability to other benefits in the sustainability communications (sig: 0.309 > 0.050).

H7b: In a given setting, communicating sustainability efforts by coupling sustainability to other benefits in the communication will lead to a higher Promoter Score than not communicating sustainability. – No evidence found to support the hypothesis.

There was no statistically significant difference in Brand Attitude between the control group and the experiment group using coupling sustainability to other benefits in the sustainability communications (sig: 0.299 > 0.050).

H7c: In a given setting, communicating sustainability efforts by coupling sustainability to other benefits in the communication will lead to higher Brand Attitude than not communicating sustainability. – No evidence found to support the hypothesis.

#### Goals

For the third experiment group, an observation of the means shows that Sustainability Perception was higher when no signs were displayed, M = 2.68 (out of 3) compared to when the hotel communicated its goal to reduce food waste, M = 2.42 (out of 3). This difference is partially significant (sig: 0,076 > 0,100).

Table 7 - Test for difference between groups. Hotel A.

Control Group/Benefits

Variable	Mean Benefits	Mean Control Group	Median Benefits	Median Control Group	Mann-Whitney U-test for significant difference between
variable	Deffettis	Group	Dellellis	Group	groups
Promoter Score	7,925	8,333	8	9	0,309
Brand Attitude	3,244	3,419	3	3	0,299
Sustainability Perceptions	2,500	2,677	3	3	0,278
Satisfaction with Sustainability Communications	2,333	2,571	3	3	0,394
Quality of breakfast	2,725	2,738	3	3	0,894
Satisfaction with ecological options at breakfast	2,407	2,740	2	3	0,029*

\*significant difference (sig < 0,050)

When it comes to Satisfaction with Sustainability Communication, we found that the customers were more satisfied with the way the hotel communicates their sustainability efforts when the signs were not on the tables. The average for customer satisfaction with the sustainability communication was M = 2.57 (out of 3) when there was no visible communication on the tables, compared to M = 2.15 (out of 3) when the sustainability goals were communicated. This difference is significant (sig: 0,035 > 0,050).

All other differences between groups were insignificant. The results of the Mann-Whitney U-test can be found in table 8.

Even though we found partial support for difference between the two groups, our hypotheses were about a positive relationship and in our sample the relationship observed was negative. Using goals in the sustainability communications actually decreased the customers' perception of the hotel's sustainability. The hypothesis H8a is thus not supported.

H8a: In a given setting, communicating sustainability efforts by making specific and factual claims in the communication will lead to higher Sustainability Perceptions than not communicating sustainability. – No evidence found to support the hypothesis.

There was no statistically significant difference in the Promoter Score between the control group and the experiment group using sustainability goals in the sustainability communications (sig: 0,548 > 0,050).

H8b: In a given setting, communicating sustainability efforts by making specific and factual claims in the communication will lead to higher Promoter Score than not communicating sustainability. – No evidence found to support the hypothesis.

There was no statistically significant difference in Brand Attitude between the control group and the experiment group using sustainability goals in the sustainability communications (sig: 0,287 > 0,050).

H8c: In a given setting, communicating sustainability efforts by making specific and factual claims in the communication will lead to higher Brand Attitude than not communicating sustainability. – No evidence found to support the hypothesis.

Table 8 - Test for difference between groups. Hotel A.

Control Group/Goals

	Mean		Median	Mann-Whitney U-test for significant
Mean	Control	Median	Control	difference between
Goals	Group	Goals	Group	groups
8,231	8,333	9	9	0,548
3,32	3,419	3	3	0,287
2,419	2,677	2	3	0,076**
2,147	2,571	2	3	0,035*
2,648	2,738	3	3	0,742
2,513	2,74	3	3	0,21
	Goals 8,231 3,32 2,419 2,147 2,648	Mean         Control           Goals         Group           8,231         8,333           3,32         3,419           2,419         2,677           2,147         2,571           2,648         2,738	Mean Goals         Control Group         Median Goals           8,231         8,333         9           3,32         3,419         3           2,419         2,677         2           2,147         2,571         2           2,648         2,738         3	Mean Goals         Control Group         Median Group         Control Goals           8,231         8,333         9         9           3,32         3,419         3         3           2,419         2,677         2         3           2,147         2,571         2         3           2,648         2,738         3         3

<sup>\*</sup>significant difference (sig < 0,05)

#### Hotel B

To verify the results that we found at Hotel A, we looked at our second data set from Hotel B. 73 answers from this data set have been omitted due to contamination of results, thus N = 175.

#### Correlations

We conducted the same correlation tests for Hotel B as we did for Hotel A. There are significant (sig: 0,000 > 0,050) correlations between Sustainability Perceptions, Promoter Score and Brand Attitude, just as in the sample from Hotel A. The data from Hotel B thus also supports our Hypotheses H2 and H4. The correlation coefficients are roughly at the same level as in Hotel A, although they seem to be a bit lower in Hotel B.

<sup>\*\*</sup>partially significant difference (sig < 0,1)

There is for example a weaker correlation between brand attitude and NPS in Hotel B compared to Hotel A (0,588 compared to 0,622).

Table 9 - Spearman correlation coefficients, Hotel B

	Brand attitude	Promoter Score	Sustainability Perceptions	Satisfaction w. sust. com.	Satisfaction with eco. options	Satisfaction with breakfast
Brand attitude	1	0,588*	0,437*	0,443*	0,168	0,340*
Promoter Score	0,588*	1	0,485*	0,516*	0,252*	0,444*
Sustainability Perceptions	0,437*	0,485*	1	0,802*	0,510*	0,358*
Satisfaction w. Sust. Com.	0,443*	0,516*	0,796*	1	0,495*	0,557*
Satisfaction with eco. options	0,168	0,252*	0,495*	0,444*	1	0,507*
Satisfaction with breakfast	0,340*	0,444*	0,358*	0,557*	0,507*	1

<sup>\* =</sup> significant correlation (sig. < 0,050)

# Regressions

As with hotel A, a regression analysis was done on the data from Hotel B. The dependent variable was Brand Attitude. The results show that when controlling for the effect of Promoter Score, all variables except for Satisfaction with Sustainability Communication became insignificant (sig. > 0,1). These results are similar to the ones from Hotel A, as the effects of the other variables are fully mediated by either Promoter Score and/or Satisfaction with Sustainability Communication.

Table 10. Regression Analysis, Hotel B.

Brand Attitude as dependent variable. R<sup>2</sup>= 0,37

Independent variable	standardized beta coefficient	significance
Promoter Score	0,501*	0,000
Satisfaction with sustainability communication	0,174**	0,060
	*significant heta coe	afficient (sig < 0.050)

<sup>\*</sup>significant beta coefficient (sig. < 0,050)

<sup>\*\*</sup> partially significant beta coefficient (sig. < 0,1)

# Differences between experiment groups

As we had a limited amount of observations for the labels communication treatment from Hotel B, we deemed it necessary to redo the test with the observations from Hotel A. The results were the same. No support could be found for the hypotheses that communicating using third-party certification labels would have a positive effect on Brand Attitude, Promoter Score or Sustainability Perceptions.

Table 11 - Test for difference between groups.

Control Group/Labels. Hotel B.

Variable	Mean Labels	Mean Control Group	Median Labels	Median Control Group	Mann-Whitney U- test for significant difference between groups
Promoter Score	8,387	8,176	9	9	0,309
Brand Attitude	3,383	3,356	3	3	0,98
Sustainability Perceptions	2,597	2,716	3	3	0,204
Satisfaction with Sustainability Communications	2,491	2,563	3	3	0,504
Quality of breakfast	2,763	2,733	3	3	0,932
Satisfaction with ecological options at breakfast	2,694	2,743	3	3	0,47

<sup>\*</sup>significant difference (sig < 0,050)

# Summary of results

In the initial part of the analysis, we investigated how six of the variables in our survey were related to each other, by looking at correlations and regressions. We found that Perceptions of Sustainability was positively correlated with both Promoter Score and Brand attitude. Interestingly enough, the satisfaction with how sustainability is communicated also had a strong correlation with Promoter Score and Brand Attitude.

With the help of non-parametric tests for differences between groups, we then tested for any causal effect that communicating company sustainability might have on any of the six observed variables. We were particularly interested in the effect that different communication contents might have on Sustainability Perceptions, Promoter Score and Brand Attitude.

We could not find any significant results supporting our hypotheses that communicating company sustainability would increase the average Promoter Score or Brand Attitude. This was true for all the three communication content types that we tested: labels, benefits and goals.

What we did find was that communicating the benefits of organic food significantly decreased the satisfaction with the organic options available at the breakfast buffet. We also found that communicating the company's sustainability goals significantly decreased the satisfaction with how the sustainability is communicated, as well as the perception of the sustainability of the brand.

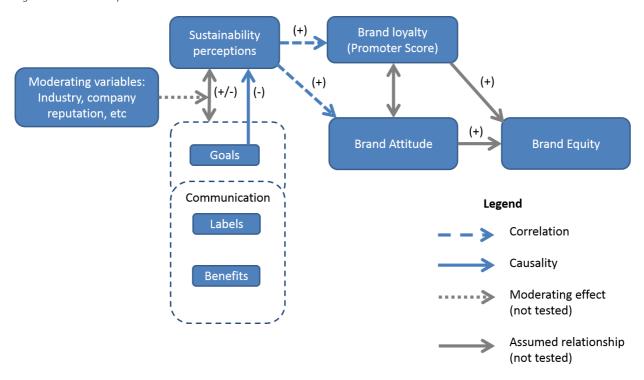
The tests were repeated at a second hotel. The results at the second hotel confirm the results found in Hotel A.

#### Final conceptual model

In our final conceptual model, we show how the different variables are related to each other, as found in our results.

We have also added another group of variables, called moderating variables, which could explain the effect of Sustainability Communication on Sustainability Perceptions (and vice versa). As our results show, Satisfaction with Sustainability Communication is strongly related to Sustainability Perceptions. It would thus seem safe to assume that one is able to influence perceptions of sustainability through communicating sustainability. The fact that we could not observe any positive impact in our experiment can be due to multiple variables that are moderating the effect. Many of these have been explained in the theory section, and will be further discussed in the discussion part of this thesis. Moderating effects can include the chosen industry, previous company reputation, fit between message content and company brand, customer characteristics, and so on.

Figure 7 - Final conceptual model



# 6. Discussion

# **Sustainability Perceptions**

Our data shows that positive perceptions of sustainability are correlated with a positive Brand Attitude, as well as a positive Promoter Score. This is in line with findings from scholars such as Fransisco et al (2006) and Benoit-Moreau and Parguel (2011), whom have claimed that companies and brands benefit from being perceived as sustainable. The fact that we see a correlation in our findings does however not imply causality. For example, a positive brand attitude to begin with could also positively influence customer beliefs about the trustworthiness and sustainability of the brand.

What we can show is that when testing for the mediating effect of Promoter Score on the relationship between Brand Attitude and Sustainability Perceptions, most of the variance can be explained with the Promoter Score. Sustainability Perceptions is however found to be an important determinant of both Brand Attitude and Promoter Score. In our experiment, Sustainability Perceptions had a stronger explanatory value for both Brand Attitude and Promoter Score than satisfaction with the breakfast.

It is also interesting to look at the strong correlation between Satisfaction with Sustainability

Communication and Sustainability Perceptions. Again, we believe there is an interaction effect: Companies that are perceived as sustainable can make credible sustainability claims, which will result in high satisfaction with sustainability communication, which then again will lead to the brand enjoying even higher sustainability perceptions. This poses a tricky challenge for brand managers and marketing scholars alike: In order to communicate sustainability credibly, one has to be perceived as sustainable, and to be perceived as sustainable, one has to be able to communicate sustainability credibly. This points to the fact that building a sustainable brand takes time. Also, it cannot be done with mere words – there has to be actions to back it up.

# Sustainability Communication

We could not find any evidence in our data to support the hypothesis that communicating sustainability will lead to higher sustainability perceptions than not communicating sustainability. On the contrary, we found partially significant evidence that communicating sustainability in the form of communicating company goals actually decreased the customers' sustainability perception on the company.

We also found no evidence to support the hypotheses that communicating sustainability will lead to higher Promoter Scores and to a more positive Brand Attitude. There could be multiple different explanations to these findings. As there was no significant change in the customers' perceptions, it might just be that our communication was not effective enough. To truly have an impact on Promoter Score and Brand Attitude, customers might have possibly needed several exposures to the sustainability communications. However, there are some differences between the four groups and, therefore, we believe that the communication was noticed and did have some type of an effect on the consumer. The effect might however not have been great enough to change their attitude, or behavioral loyalty towards the brand – this would be an example of the awareness-behavior gap (Do Paco and Reis, 2012). Just increasing the awareness around a particular problem or the sustainability work of a company will, as we can see, not have any significant effect on perceptions or behavior.

Another plausible explanation for our results is that the communication could have been interpreted as greenwashing. As mentioned earlier, the whole concept of greenwashing actually started in the hotel industry. If the customers do not trust the message or the company behind it, or believe that there are other motives at play than mere altruism, the effect of the message will be limited. On the other hand, as claimed by Fischer & Fredholm (2013), Forehand and Grier (2003) and Du et. Al (2010), sustainability measures and sustainability communications that "fit" the company and serve the company's interest (like for example waste reduction in a hotel buffet) should make the message more credible. Our results however point to the opposite – talking about the hotel chain's waste reduction goals reduced the Sustainability Perceptions. This might be due to both industry factors – the hotel industry might still wear the burden of the "greenwashing" label – and company-specific factors – Quality Hotels is not perceived as a top performer in sustainability (Sustainable Brand Insight, 2014), and people might thus not see a good fit between the image they have of the brand and the sustainability the company is trying to communicate.

Morsing and Schultz (2006) found that "too much" sustainability communication could lead to consumers becoming more suspicious. This can also be linked to Parasuraman et al. (1996) and their idea of the "service delivery-external communications gap" as a potential negative influence on satisfaction scores. If a company is communicating something that the customer cannot tangibly observe, the satisfaction with the service might in fact go down. In our particular case, it might be that a sustainability positioning was not credibly on display in other parts of the hotel (something which we in fact noticed when doing our check-up visits to the hotels).

The choice of media might have also had an impact on the results. According to Morsing and Schultz (2006) consumers might prefer searching for the information themselves, preferably from the company's website or annual reports. Annual Sustainable Brand Index Report 2013 SBI also found that hotel customers would

most rather be informed on sustainability matters via company's website, but, having said that, the second most favoured channel was "information at the hotel – e.g. brochures". According to Rademaker (2013) if the chosen media (in our case, paper signs) is not perceived as sustainable, the communication will be less effective. There is a chance that our choice of media therefore was not perceived as being sustainable enough.

According to Sustainable Brand Insight, between 2011 and 2013, there was a decrease in consumers overall sustainability perceptions across industries. This trend was particularly noticeable for the hotel industry. Having said that, 2014 saw a positive improvement as all industries experienced a positive growth in sustainability perception, and in that year the hotel industry experienced the second biggest growth of all industries.

Tourism is an industry that particularly suffers from the awareness-behavior gap (McKerher & Prideuax, 2011). Also, in comparison to other industries, the importance of sustainability in relation to other attributes is relatively low. In 2013, the respondents on the Sustainable Brand Index survey rated which attributes that were the most important when choosing a hotel. Location, clean room, low prices and service all came ahead of environmental and social sustainability, which was found to be important by every fourth respondent. Therefore, communicating sustainability might not have had enough of an impact on the Promoter Score and Brand Attitude.

As previously discussed, the company's existing reputation acts as a moderating factor for sustainability perceptions (Fombrun & Shanley, 1990). Brands can benefit from CSR positioning, and having a good existing reputation on CSR issues is supposed to make communication come across as more credible. It has also been found that a company being perceived as neither very bad nor very good benefits the most from this type of communication (Strahilevitz, 2003). At a first glance, our results do not however support these findings, as Quality Hotels is a mid-range hotel when it comes to Sustainability Perceptions (Sustainable Brand Insight, 2014) and should therefore have more to gain from communicating their sustainability efforts. However, Quality Hotels does perform particularly well with environmental sustainability (ibid). As our sustainability communications primarily dealt with environmental issues, the existing good reputation on this front might have had an impact on the effectiveness of the communication, leading to a limited effect.

In 2014, Sustainable Brand Insight for the first time also measured the credibility of sustainability communications. Quality Hotels' credibility when it comes to sustainability communications was relatively low in comparison with other Hotel Chains and this has likely had an impact on our experiment results.

Having said that, the consumers have been aware of Quality Hotels efforts when it comes to recycling and reducing waste. (SBI report 2014)

Another possible explanation to our findings could be that the customers felt that Quality Hotels was not doing enough. According to SBI (2014), consumers saw that bigger companies should take greater responsibility than smaller ones. Being a large chain, Quality Hotel's customers might therefore put higher expectations for the hotel's sustainability efforts.

# Communication contents

#### Labels

As previously stated, our experiment with using third party verification in sustainability communications did not turn out to have a significant effect on any of the variables that were of interest. One explanation for the results could be the conformity brought by so many companies using third party verification that it did not offer differentiation anymore (Johansen & Nielsen, 2012. This differentiation would have been particularly important for the increase of the Brand Attitude and Promoter Score variables.

Pedersen and Neergard (2006) also discussed several reasons to why using third party verification might turn out to be ineffective. According to the authors, labels might have a different effect depending on the product category as consumers prefer certain products to be green and know the labels for those, but then do not know the meaning of the label or even care to know the meaning of the label when it comes to other products. The authors also warned about greenwashing possibly eroding the overall credibility of environmental labeling.

Understandably academics have also pointed out that environmental labels can only increase sales and improve an image if consumers find them credible (Gallastegui, 2002). Having picked labels and an organization that are very well known in Sweden, we believe that lack of credibility in the labels would not have played a part in our results.

Even though no significant differences between the control group and the group subject to the third-party sustainability communication could be observed, we can still see that this communication content performed best out of all three.

One explanation for our results could be that when the customers noticed the communication on sustainability, they started cognitively processing the hotel's sustainability claims and comparing it their beliefs and perceived trustworthiness of the Quality Hotels Brand. This cognitive processing might have lowered the (reported) Sustainability Perceptions. As the labels message content would have been

perceived as more credible, it might have offset the negative effect of hotel's tangibly observable and perceived sustainability not matching the message. The labels message content can probably be said to be both more credible (the hotel actually only serves Fairtrade organic coffee, which is also communicated at the coffee machines) and more trustworthy (with the KRAV and Fairtrade labels enjoying high trust among Swedish consumers) than the other two message contents.

# Coupling to other benefits

As discussed previously, bringing the sustainability matter into the customers' attention might actually have a negative impact. Communication about organic options might have gotten the customer thinking about the organic options available, and deeming that there were not enough options available, resulting in a more negative result on the satisfaction of ecological options available at breakfast. This impact might have particularly been emphasized by expressing the commitment towards providing organic options as the customer might have felt that even though the company had been working with this matter for so long, they still had not done enough.

The benefits that we coupled the sustainability with emphasized health, quality and safety of organic food. Our choice of benefits might have also been a factor and one could achieve different results by using other benefits. Having said that, according to SBI's report from 2014, a focus on health and quality was a huge driver for sustainability and that there had been an increased interest in organic food. Therefore one would think that our benefits were appropriate and the reason for the results could be found elsewhere.

Also, our last sentence in the sign: "Let's eat our way to a better world" can be considered as personal orientation towards the customer. According to Schmeltz (2014), better results in relation to brand attitude and loyalty can be achieved by using non-personal orientation in the sustainability message, at least when it comes to young consumers.

#### Goals

Our experiment with using future goals in sustainability communication came back with the most unexpected results, actually resulting in a negative impact on the sustainability perception and more negative scores when it came to the satisfaction with the brand's sustainability communication. We were also hesitant with this type of communication and would have rather discussed the actual results that Quality Hotels has achieved, a method also recommended by several academics (Du et al., 2010; Tian et al., 2011; Pomering&Johson, 2009; Davis, 1993)

This was the only communication that actually did not refer to any previous or even current sustainability efforts but was more aimed at future goals. This might have gotten the customer suspicious as to whether this was just "all talk" and would actually result to anything.

According to Parasuraman et al. (1996), promising too much, or coming across as not credible, will have a negative effect on customer perceptions. A similar advertising campaign by Ford, where the company chairman promised that the company was "dramatically ramping up its commitment" to environmental issues was seen as an exaggeration by the public and drew a lot of critique (Peattie et al., 2009). The goal to save food waste by 20% might have been seen as an exaggeration and not a feasible objective, especially since there was no additional information provided to back up the claim.

The message might have also possibly been seen as an attempt by the hotel to save costs, rather than save the environment. Having said that, as previously discussed, the consumers have been aware of Quality Hotels' efforts in relation to recycling and reducing waste so out of any type of goals to communicate this should have been the most believable.

Also, since we indirectly talked about consumers' own responsibility in relation to waste, this might have been interpreted as putting part of the blame on the customer. Framing the communication differently, by for example thanking the customers for the help they had provided in order for the company to reach its sustainability goals, could prove to be more beneficent. Also, linking the goals and results more directly to benefits for the consumer might have lead to a better result.

# Theoretical implications

Though we found a link between Sustainability Perception, Brand Attitude and Brand Loyalty, our results show that communicating sustainability does not necessarily translate into an increase of these variables. Companies also need to be careful about the way they communicate their sustainability efforts, as doing it in the wrong way can even lead to the communications having a negative effect on the consumers sustainability perception of the company.

We believe that we have also contributed to the discussion about the importance of specific message contents when it comes to sustainability communications and hope to encourage more researchers to look into this topic.

Environmental labeling has been recommended as well as argued by several academics. We found no direct evidence to support those recommending using third party verification in sustainability communications.

Also, we found no evidence to support Rose et al. (2007) recommendation of coupling sustainability to other benefits.

As previously stated, many companies tend to use their sustainability goals in order to increase sustainability perceptions. We found no evidence to support that this would be an effective way to increase perceived sustainability. Rather, we found that by using just goals and nothing else to support the claims, the brand's perceived sustainability can actually go down rather than up.

# Managerial implications

As we can see in the correlation results, there is a link between Sustainability Perceptions and Brand Attitude as well as Promoter Score. Satisfaction with sustainability communication actually had a greater impact (was more heavily correlated with) Brand Attitude and Promoter Score. Therefore, communicating sustainability is important; the hard part is to get it right, as there are so many moderating effects one has to take into consideration.

It is also difficult to determine whether our results are just due to not enough exposure to the messages. Having customers seeing labels on the table in the breakfast buffet was, unsurprisingly, not enough to change the view they had of the brand or the likelihood that they would promote the hotel to friends or colleagues. Quality Hotels might benefit from communicating sustainability visibly in the long-term. We can see that this has worked for hotels in the past, a great example being Scandic, who have been seen as the most sustainable hotel chain.

Regarding the message contents, we cannot recommend Quality Hotels to use any of the message contents that we have looked at here, and Quality Hotels should be particularly careful with communicating sustainability with expressing future sustainability goals. This is because it migh easily be interpreted as greenwashing, and Quality Hotels would have to at least have a very strong sustainability perception in order to communicate sustainability in this way. We believe it would be better to use actual results rather than future goals, and emphasize the corporate competence to reach these goals (Schmeltz, 2014).

What we have also found is that when a company brings something out to the customers' attention, they create expectations by doing this, and therefore should be prepared to back up those claims. If something is brought to the customers' attention, like the organic options available at breakfast, then the customer will take more notice of the options available, and if they feel that there are not enough options then they can get disappointed. Therefore, when it comes to communicating about the different benefits of organic food, Quality Hotels should have more organic options available at the breakfast and also clearly label and communicate which options are organic.

We also cannot be sure whether signs are a proper way to communicate sustainability. We can see in the results that the customers had noticed and processed the messages, but we cannot be sure as to how they felt about the media, as that is something that we did not test. According to Rademaker (2013) communicating sustainability in a media that the consumers see as being less sustainable will have a negative impact on the effectiveness of the message, i.e. it is not as credible.

An important recommendation is that companies should not do sustainability and communications as half-measures. Our findings support the academics, who claim that the most reasonable way to go for companies and brands that wish to be perceived as more sustainable, is a full-fledged sustainability positioning (Du et al (2010) presenting a congruent message (Benoit-Moreau and Parguel (2011). Anything less will have a very limited effect, and might even end up as counter-productive.

# Limitations and further research

#### Limitations

We recognize that there are some limitations related to our research, most of which being concerned with the selected research method. Our main limitation is that we only looked at two hotels of the same brand in one specific city, restricting the generalization of our results. Other brands, industries, as well as locations would possibly produce different results. Our research are also narrow in the sense that we communicated only the sustainability efforts in relation to the breakfast serving, and throughout the whole hotel.

We also understand that the time span for which the customers were exposed to the messages was relatively short, with several of the hotel guests only being exposed to the messages once. The communications might not have made a strong enough impression to change the brand attitude and brand loyalty, leading us to results that had no impact on the Brand Attitude and Promoter Score.

Also, though we have discussed the benefits of conducting a field experiment, we still recognize that this method leaves some room for error. Due to its nature, we have run a risk of contamination from the outside to have an effect on our results. Also, since responding to the check-out survey is voluntary, our sample is not completely random but self-selected. The fact that the sample consisted only of existing customers might also have had an effect on the results.

We also understand that a larger sample size might have produced more significant results. We can see some differences in the results between the different experiment groups. A larger sample size might have provided us with more ability to confirm or reject hypotheses.

Also since we were assigned a task by an actual company, this limited our scope a little and forced us to also take their wishes into consideration. By having conducted the research at their locations and not being there everyday and every second, we gave some of the control over the experiment to others. This resulted in problems in one of hotels leaving us to dismiss some of results gathered from the other hotel.

Having said that, we believe that a field experiment was in order to contribute to the field of CSR communications. So far several of the experiments in the field have been conducted using fictional brands and communications, as well as convenience samples, often consisting of young business students. With our research method, we were able to get a real life customer sample without the customers knowing that they were taking part in an experiment.

We also set out to conduct the experiment on a bigger sample and make the results more generalizable by conducting the experiment in two hotels. But, due to our experiment being a real life experiment, everything did not go according to plan in our second hotel, leaving us to having to dismiss some of the results.

The limitation with the time span was mainly due to our time constraints with the thesis and the experiment. As interesting as it would have been to conduct a longer experiment and see whether consistently communicating sustainability in a specific way would have a larger impact on the brand attitude and promoter score, we were forced to conduct our experiment in the time span of four weeks. A longer time span would have also possibly introduced more external contamination into our research, therefore making it less reliable.

Since we are comparing our results to a control group with the same sampling method, we believe that this also decreases the limitation brought up by our respondents being self-selected.

#### Further research

The research into sustainability communication is still in its infancy, especially when it comes to which message contents are most effective. We only tested three, rather specific content types. Future research could try to replicate our research, but perhaps trying with different contents and tones-of-voice, for example by appealing to emotions, having stronger calls-to-action, etc. Also, measuring the impact of different kinds of sustainability communication on actual observed customer behavior is a field that we find very interesting.

We would recommend more research into the topic, for example, by seeing what happens when one tries to communicate sustainability through different media. The consumer reactions could also be tested across different products and services, to find which mechanisms are universal and which one are more industry-

specific. Research could also be conducted to see if there are differences between countries and demographical groups. Doing larger case studies over a longer period of time could result in more generalizable findings.

To minimize the distortive effect of externalities, a similar test to ours could also be conducted in a more controlled setting, for example as a scenario experiment. Also, using a more random sampling would help solve the issue of self-selected bias. One important methodological learning experience is that, if one was to carry out a field experiment like the one done for this thesis, we would recommend daily visits to the site to make sure that everything runs according to plan.

More explorative research is needed to build a better conceptual framework to explain which factors influence Sustainability Perceptions. Also, a deeper understanding is needed for which variables moderate the relationship between Sustainability Communications and Sustainability Perceptions, as well as between Sustainability Perceptions and Brand Attitude/Customer Loyalty.

# 7. Conclusion

In this thesis, we have looked into how sustainability efforts can be communicated to increase Brand Attitude and Brand Loyalty. What we found is that favorable perceptions of sustainability are indeed related to a strong brand. Communicating sustainability is thus important. As we have seen, it is also very difficult.

Favorable perceptions cannot be built overnight. Customers need to be continuously approached with a congruent, credible and trustworthy sustainability message, which, with time, will hopefully lead to them changing their existing perceptions about a brand. When communicating sustainability, brands need to be ready to meet the expectations that the communicated message creates in the customer's mind. Otherwise the message might even have a negative effect (at least in the short term). On top of this, there are many other factors, such as previous company reputation, customer attitude, brand and communication fit, to name a few, which will influence the effectiveness of the communication. It will be up to future research to map how these factors interact with different sustainability message contents, in order to develop best practices for what kind of communication is most suitable in a certain context.

For now, sustainability does not seem to be at the top of the priority list for most customers, at least not in the hotel and travel industry. With time, this can however change. As more companies and brands actively start working with sustainability, communicating about it might soon become a hygiene factor expected by all customers, across industries.

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# 8. Appendix

# Appendix 1 – Experiment signs in Swedish







# Appendix 2 –Check out questionnaire

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# Appendix 3– Test for normal distribution of variables

# Test for of normal distribution (sig. > 0,950)

	Variable	Kolmogorov-Smirnov test significance	Shapiro-Wilk test significance
	Promoter Score	0,000	0,000
Hotel A	Brand Attitude	0,000	0,000
	Sustainability Perceptions	0,000	0,000
	Satisfaction with Sustainability Communications	0,000	0,000
	Quality of breakfast	0,000	0,000
	Satisfaction with ecological options at breakfast	0,000	0,000
	Promoter Score	0,000	0,000
	Brand Attitude	0,000	0,000
Hotal D	Sustainability Perceptions	0,000	0,000
Hotel B	Satisfaction with Sustainability Communications	0,000	0,000
	Quality of breakfast	0,000	0,000
	Satisfaction with ecological options at breakfast	0,000	0,000

# Appendix 4 – Regression analysis tests for mediation.

Mediation effect of Satisfaction with Sustainability Communications on Sustainability perceptions, with Brand Attitude as dependent variable.

# Regression 1.

Brand Attitude as dependent variable.  $R^2 = 0,171$ 

Independent variable	Standardized beta coefficient	Significance	
Sustainability Perceptions	0,413*	0,000	

<sup>\*</sup>significant beta coefficient (sig. < 0,050)

#### Regression 2.

Brand Attitude as dependent variable.  $R^2 = 0.252$ 

Independent variable	standardized beta coefficient	significance
Sustainability Perceptions	0,038	0,788
Satisfaction with Sustainability Communications	0,472*	0,001

<sup>\*</sup>significant beta coefficient (sig. < 0,050)

Mediation effect of Promoter Score on Sustainability perceptions, with Brand Attitude as dependent variable

# Regression 1.

Brand Attitude as dependent variable.  $R^2 = 0,171$ 

Independent variable	Standardized beta coefficient	Significance	
Sustainability Perceptions	0,413*	0,000	

<sup>\*</sup>significant beta coefficient (sig. < 0,050)

# Regression2.

Brand Attitude as dependent variable.  $R^2 = 0,447$ 

Independent variable	standardized beta coefficient	significance
Promoter Score	0,588*	0,000
Sustainability Perceptions	0,153**	0,052

\*significant beta coefficient (sig. < 0,050)

Mediation effect of Promoter Score on Satisfaction with Sustainability communication, with Brand Attitude as dependent variable.

# Regression 1.

Brand Attitude as dependent variable. R<sup>2</sup>= 0,241

Independent variable	standardized beta coefficient	significance
Satisfaction with sustainability communication	0,494*	0,000
	*significant beta coefficient (sig. < 0,05	

# Regression 2.

Brand Attitude as dependent variable. R<sup>2</sup>= 0,495

Independent variable	standardized beta coefficient	significance	
Promoter Score	0,582*	0,000	
Satisfaction with sustainability communication	0,203*	0,015	

<sup>\*</sup>significant beta coefficient (sig. < 0,050)

<sup>\*\*</sup> partially significant beta coefficient (sig. < 0,010)

# Appendix 5 – Descriptive values for different treatment groups.

Table X. Descriptive values - Results from Hotel A

Treatment/Variable	Observations	Mean	Median	Standard deviation
Control Group				
Promoter Score	42	8,333	9	1,776
Brand Attitude	43	3,419	3	0,626
Sustainability Perceptions	31	2,677	3	0,475
Satisfaction with Sustainability Communications	28	2,571	3	0,523
Quality of breakfast	42	2,738	3	0,445
Satisfaction with ecological options at breakfast	27	2,740	3	0,526
Labels				
Promoter Score	18	8,228	8,5	1,776
Brand Attitude	16	3,125	3	0,806
Sustainability Perceptions	14	2,643	3	0,497
Satisfaction with Sustainability Communications	13	2,385	3	0,870
Quality of breakfast	15	2,733	3	0,594
Satisfaction with ecological options at breakfast	13	2,769	3	0,439
Benefits				
Promoter Score	40	7,925	8	1,940
Brand Attitude	41	3,244	3	0,767
Sustainability Perceptions	32	2,500	3	0,622
Satisfaction with Sustainability Communications	27	2,333	3	0,877
Quality of breakfast	40	2,725	3	0,452
Satisfaction with ecological options at breakfast	27	2,407	2	0,636
Goals				
Promoter Score	52	8,231	9	1,592
Brand Attitude	50	3,320	3	0,513
Sustainability Perceptions	43	2,419	2	0,626
Satisfaction with Sustainability Communications	34	2,147	2	0,821
Quality of breakfast	54	2,648	3	0,649
Satisfaction with ecological options at breakfast	39	2,513	3	0,756

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