Environmental CSR-initiatives influence on Brand Equity:

A Case of Eco-Labeling

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The purpose of this study was to investigate whether environmental eco-labeling CSR-initiatives have an impact on brand equity. Specifically, if Swan eco-labeling on Ariel's detergents have an impact on Ariel´s brand equity from a consumer's perspective. A quantitative study was conducted on Kristianstad University students in Sweden where a sample survey of consumers' attitudes were collected then analyzed using Spearmans' correlation coefficient along with independent-samples t-tests. A modified model of Keller´s (2009) customer-based brand equity model (CBBE) was employed along with five proposition regarding CSR´s impact on brand equity. The findings of this study showed that environmental CSR has positive effect on all of the components of brand equity such as; *brand awareness, brand image, brand meaning, brand response* and *brand resonance*. In conclusion the findings of this study show that the Swan eco-label on Ariel's detergents has an impact on how the respondents view Ariel as a brand. .

Key words: Corporate Social Responsibility (CSR); Brand Equity; Environmental CSR; Brand Management; Consumer Attitude; Eco-Labeling

Introduction

In recent years the surrounding world has had an increased interest, focus and demand for responsibility and sustainability. That is why many companies and brands have been adopting Corporate Social Responsibility (CSR) initiatives such as cause related marketing, corporate philanthropy, manufacturing practices and environmental responsible management in their firms (Bhattacharya and Sen 2004; Babiaka and Trendafilova 2011). CSR can be defined as the firm´s consideration of, and response to, issues beyond the narrow economic, technical and legal requirements of the firm (Davis 1973, 312, Bhattacharya and Sen 2004, 13). During the last decades the discussion of CSR-initiatives have shifted from "why" engaging in CSR-activities to "what" CSR-activities firms should engage in and "how" to engage in these CSR-activities (Bhattacharya and Sen 2004; Lai 2010). Today, many firms are aware of the importance of CSR-initiatives. Societies all over the world have noticed recently that environmental issues are increasing steadily due to the huge amounts of environmental pollution that are produced by the industrial manufacturing (Chen 2008; Mourad and Ahmed, 2012).

Hence, many companies worldwide have transformed their entire business operations to be eco-efficient (Mourad and Ahmed 2012) or adopt an eco-centric management (Babiak and Trendafilova 2011) to gain competitive advantage over their competitors or adopt an eco-centric management. Adopting CSR-activities in corporate strategy enables companies to achieve competitive advantage, improve, strengthen the brand and develop a broader satisfied customer base (Porter and Kramer 2006; Hillestad 2010; Elg and Hultman 2011; Torres, et al. 2012). Previous studies have shown that a positive relationship exists between a company´s CSR-actions and consumer's reaction to that company and its products (Bhattacharya and Sen 2004). Babiak and Trendafilova (2011) study recommend firms to adopt social responsibility and environmental sustainability to their management as it is a value benefit for the firm.

Among these CSR-activities the most widely used domain is the environmental one (e.g. environmental friendly products, hazardous waste management, use of ozone depleting chemicals, animal testing, pollution control and recycling) (Bhattacharya and Sen 2004; Babiak and Trendafilova 2011; Parguel 2011). Babiak and Trendafilova (2011) implies that one of CSR's pillar is the natural environment. Nevertheless, today many retail brands solely focus on this environmental type of CSR-activity to differentiate themselves from other brands (Parguel 2011). Consumers have shown a grown interest, knowledge and awareness concerning sustainability and environmentally friendly products in their daily lives. The Global Environmental Survey (GOES) finds that there has been a positive shift in consumer behavior towards more green and sustainable products (Pickett-Baker and Ozaki 2008). Successful green brands have been linked to alternative technologies, or a green and sustainable company philosophy (Parker 2009; Mourad and Ahmed 2012). Nevertheless, defining environmentally sustainable products is complex because there is no such thing as a truly sustainable or green product, as all products we buy, own, use and discard in our everyday lives will have negative environmental impacts at some stage in their lifecycles (Cooper 2000). However, products can be classified according to the scale of these impacts, and a quality threshold can be drawn. If a product has a low environmental impact, it is regarded as an environmentally sustainable brand and this can be shown to consumers through eco labeling (Mourad and Ahmed 2012).

Furthermore, previous studies on brand management have shown that there is a connection between corporate social responsibility (CSR) and brand equity (Parguel 2011; Mourad and Ahmed 2012). However, to the best of our knowledge there have not been a lot of studies on how CSR-initiatives affect brand equity in the area of Fast Moving Consumer Goods (FMCG). Most previous studies have been about how CSR initiatives affect a firm's internal management, from a managerial point of view, not from a consumer point of view (Bhattacharya and Sen 2004; Elg and Hultman 2011). To the best of our knowledge there have also not been any studies on how environmental CSR activities such as eco-labeling have an impact on brand equity. Additionally, most previous studies on CSR impact on brand equity (Parguel 2011; Blumrodt, Bryson and Flanagan 2012) have conducted their research focusing on consumer loyalty and purchase intent. This study will instead focus on consumer attitudes towards eco-labeling and if eco-labeling has an influence on the five

dimensions of brand equity i.e., brand awareness, brand image, brand meaning, brand response and brand resonance. Keller's brand equity CBBE model have been used in measuring brand equity, therefore, it is suitable to adapt this model when measuring CSR-initiatives. CSR is a current topic in today's society and an important pillar in firm strategies. Nowadays many companies focus their CSR-initiatives on the packaging of their products with the help of different eco-labels to inform their consumers of (Porter and Kramer 2006; Hillestad 2010; Elg and Hultman 2011; Torres, et al. 2012). Therefore, Keller's brand equity model is suitable for this study since there are previous studies of CSR in relation to brand equity but nothing on eco-labeling impact on brand equity. Thus, this study adapt Keller's brand equity model. Consumer attitudes are important because there is a positive relationship between companies CSR actions and the consumers' attitudes towards the brand. It is important to take into consideration consumers attitudes especially in CSR. Consumer attitudes towards CSR are likely to be positive when it is linked to a good cause. Because there have not been many studies on attitudes towards FMCG it would be very interesting to see how the consumers attitudes affect brand equity components. It is important for managers to understand how consumers respond to CSR initiatives and our study takes that into consideration in regards to how consumers' attitudes towards CRS effects brand equity. We therefor find consumer attitudes interesting for this study (Bhattacharya and Sen 2004).

Moreover, this study will investigate the detergent brand Ariel, which is in the domain of fast moving consumer goods, (FMCG). The products under the scope of FMCG are mostly those that are frequently purchased and used fully used up over a short period of days, weeks or months (Mujamdar 2004). However, the FMCG markets are characterized as low-priced, rapidly consumed, frequently purchased products (Leahy 2011) such as food, personal care products such as soaps, shampoos, detergents toothpastes, deodorants and household care products (Mann and Kaur 2013). The detergent brand Ariel has eco-labeling on its products, therefore the brand is suitable for this study. We will be focusing on the eco-label *Swan*, which is frequently used on Ariel's detergents. The Swan eco-labeling is a sign that the product has passed performance and environmental requirements and is seen as a good choice for the environment, with gentle environmental friendly content and lowers the power consumption. Lower power consumption also leads to a reduced impact on the climate (Svanen 2013). The purpose of the Swan is to help consumers choose the best environmental products on the market. The vision is a sustainable society and sustainable consumption. The company is a Nordic Eco-label proof that they are actively working to promote sustainable production and that products have met the stringent environmental requirements (Miljömärkningar 2013).

The aim of this study is to investigate how environmental CSR-initiatives have an impact on brand equity as a whole. Specifically, how CSR-initiatives such as Swan eco-labeling has an influence on consumers attitude and how that influences the value of the brand Ariel. It would be interesting to investigate if a brand with eco-labeling on its products impacts brand equity. Furthermore, to the best of our knowledge there have not been any studies on eco-labeling having an influence on brand equity. It would be interesting to know if eco-labeling such as the Swan has an impact on Ariel's brand

equity (Chen 2001; Blumrodt, Bryson and Flanagan 2012). Labeling on brands has shown to have an importance to consumers and there is a growing interest among consumers in environmentally friendly products and a substantial body of literature investigating the importance of labeling to consumers (Berghoef and Dodds 2011). A study on how eco-labeling has an influence on brand equity can be influential in how companies decide to manage their CSR-initiatives. It is interesting to know if a simple logo on the packaging of a product has an impact on the value of a brand, the brand equity. Can a small Swan eco-label have an influence on how consumers think of the brand Ariel? By investigating the consumer attitudes towards eco-labeling in the area of Fast Moving Consumer Goods, (FCMG), we will hopefully find out if CSR-initiatives such as eco labeling have any affect or impact on brand equity. Thus, we pose the following Research Question:

- How does environmental eco-labeling CSR-initiatives correlate to brand equity from a consumer's perspective?

Theoretical framework

Corporate Social Responsibility
While there are many different definitions of what Corporate Social Responsibility (CSR) is, this study will adopt the definition CSR as when firms take social responsibility by "achieving commercial success in ways that honor ethical values and respect people, communities, and the natural environment" (Davis 1973, Bhattacharya and Sen 2004, 13).

CSR refers to the concept that businesses have broader, societal interests to consider, and not just the financial self-interests of the organization (Chomvilailuk and Butcher 2013; Sen and Bhattacharya 2001), but also having a competitive advantage over the competitors. CSR involves activities that focus on the stakeholders of the firm, i.e. suppliers, employees, customers, community, organizations, and the future generation (Sprinkle and Maines 2010). Bhattacharya and Sen (2004) highlights consumers as important stakeholders of a firm, managers should understand how and why consumers respond to CSR-activities. CSR initiatives have been linked to consumer responses, such as brand equity (Chomvilailuk and Butcher 2013). CSR-initiatives are important pillar in firms. As mentioned earlier, this study will focus on the detergent brand Ariel and how the Swan eco-labeling, on their packaging, has an influence on brand equity. In order to fully understand the brand Ariel, one must understand what brand equity entails and all of its components. This study will explain all of the components of brand equity with suiting proposition and how brand equity is measured. Furthermore, the relationship between CSR and brand equity will also be explained.

Brand
What is a brand? The term brand is a complex symbol. It is the intangible sum of a product´s attributes, its name, packaging and price, its history, reputation, and the way

it´s advertised. A brand is also defined by consumer´s impression of people who use is, as well as their own experience (Keller, 2009). Furthermore, the term brand means that it makes specific promises of value, and helps consumers to recognize the brand much easier than a non-branded product (Kotler, et al. 2010). Brand is intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competition and these different components of a brand that identify and differentiate it are brand elements.

Brand Equity

Brand Equity is the value added by the brand to the product. It is the intangible value associated with the product that cannot be accounted for by price or features. The perceived quality attributed to the product independent of its physical features and can be measured by the additional price a consumer will pay to buy the brand vs. an equivalent non-branded (or store) brand. The real power of a brand is in the thoughts, feelings, images, beliefs, attitudes, experiences and so on that exist in the minds of consumers. This brand knowledge affects how consumers respond to products, prices, communications, channels and other marketing activity, increasing or decreasing brand value in the process (Kapferer 2008; Keller 2009).

Environmental CSR in relation to Brand Equity

The results of visible CSR-initiatives are strong brand recognition/identification, brand advocacy and brand loyalty (Torres et al. 2012). Firms' image and brand will gain an environmentally responsible recognition if adopting an environmental CSR-strategy (Heikkurinen 2010).

Previous studies have used different methods to measure CSR and brand equity. Hsu (2012) measured CSR-initiatives and brand equity by survey questionnaire which was divided into five sections, respondents' perception about CSR initiatives, satisfaction, corporate reputation, the two dimensions of brand equity (brand awareness and brand associations), and lastly the demographic of the respondents. Hsu (2012) used Keller's model to measure brand equity, as we will do in this study. In this study, we will be using Keller's brand equity model called the CBBE model. Moreover, this was examined by how the swan logo has an effect on each dimension of the brand equity model. To test the conceptual model (see fig. 1), five hypothesis were developed. In this study CSR is measured through the Swan eco-label since the Swan logo indicates environmental corporate social responsibility to the consumers (Svanen 2013; Chomvilailuk and Butcher 2013). The question regarding the recognition of Swan eco-label is used as the variable to measure CSR.

Brand Awareness

The first step which is *brand awareness* implies to the identification ability the consumers have of a brand. Brand awareness consists of both brand recognition and brand recall. Brand recall reflects to consumer's ability to name the brand, when the consumer is given the product category, category needed or other similar cue. Brand recognition is when consumers can confirm that they previously have been exposed to

the brand (Keller, 1993; Keller, 2009). Environmental CSR such as eco-labeling on products have shown to have a positive impact on brand awareness. Building brand awareness relates to customers' recall and recognition of the brand. Acts of CSR increases the level of recognition of a brand (Creel, 2012). Thus the following proposition is formulated:

P1:   Environmental CSR has a positive effect on Brand Awareness.

To statistically measure environmental CSR and Brand Awareness Spearman's rho correlation test will be used. The Swan eco-label is visual label a consumer see on a FMCG which represents environmental CSR. Therefore this was used as the environmental CSR component in this study.

Brand Image

The second step *brand image* defines consumers' perception as reflected by the set of associations they hold in their minds when they think of a brand. One vitally important aspect of the brand is its image, as reflected by the associations that consumers hold towards the brand. These associations need to be strong, positive, and unique, so the consumers can differentiate the brand from the competition (Keller 1993; Keller 2009). Keller argues that CSR can enhance the brand image by generating new abstract associations. Furthermore, when a brand communicates about its CSR initiatives it draws consumer's attention to environmental associations. Consumers pay more attention to firm's societal responsibilities when buying and consuming and evaluate positively to brands that behave with diligence (Keller 2009; Parguel 2011).

Hoeffler and Keller (2002) bring up the impact CSR has on brand equity. They argue that CSR can enhance brand image by generalizing new associations and making the brand appear more sincere, caring or genuine. Thus, we pose the following proposition:

P2:   Environmental CSR has a positive impact on Brand Image.

Brand Meaning

Furthermore, the *brand meaning* which is the third step of measuring brand equity, identifies what a brand means to the participants, and what it stands for. The two building blocks in this step are: "performance" and "imagery." Brand meaning is the satisfaction of consumers' functional needs whereas brand imagery is the satisfaction of customers' psychological needs (Maneet and Sudhir, 2011). Moreover, CSR activities can also affect consumers's well-being (Bhattacharya and Sen 2004) and can therefore be linked to brand meaning. Thus, we pose the following proposition:

P3:   Environmental CSR has a positive effect on Brand Meaning

Brand Response

The fourth step is *brand response* and that falls into two categories: "judgments" and "feelings." These are the two building blocks in this step. Brand judgment is a measurement on the consumers own evaluations and opinions in regards to the Swan eco-label (Keller, 2009). CSR generates various types of judgment and feeling from consumers that, may be linked to the brand (Hoeffer and Keller, 2002). When the communication of the CSR activity is credible, the judgment and feelings towards the brand will be more positive than when the communication is not credible (Eerd, 2007).Thus, we pose the following proposition:

P4:   Environmental CSR has a positive effect on Brand Response

Brand Resonance

The last step in measuring brand equity is *brand resonance*. The value of the relationship consumers have for the brand. This focuses on the relationship and level of personal identification the consumer has with the brand and how much the consumers are willing to invest money or other resources into the brand beyond those expended during purchase or consumption (Keller, 2001). CSR can help to enhance the brand value and positively influences the strength, and favorability, therefore improving brand equity (Hoeffler and Keller, 2002; Parguel, 2011; (Lai, et al. 2010). According to Bhattacharya and Sen (2004) consumers are more likely to react postively to CSR activities and may be willing to pay additionally for those products Thus, the following proposition are presented:

P5:   Environmental CSR has a positive effect on Brand Resonance

Method

   A deductive research approach was applied to this research since we rely on both theoretical and empirical findings. The main purpose of this study is to measure consumers brand attitude towards the eco-labeled detergent brand Ariel. In order to accomplish this study, the collection of primary data was gathered through a questionnaire.

Sample

      We have chosen to limit this study to eco-labeled Fast Moving Consumer Goods (FMCG). One FMCG that generally have the most amount of eco-labeling are detergents, since the waste of detergents impact the environment. Furthermore, we have chosen to focus on the detergent brand Ariel. Ariel's detergents are eco-labeled which makes this particular brand very suitable for this study. This study is limited to Sweden, the province Skåne, especially the city Kristianstad where the questionnaire was distributed. The population of this study is FMCG consumers i.e. everyday consumers that purchases everyday consumer goods which is typically purchased in grocery stores, supermarkets, kiosks and hypermarkets (Leahy, 2011; Mann and Kaur 2013).

Kristianstad University students were chosen to participate in this study due to the fact that they are a part of FMCG consumers as well as available in one place, on campus. This way, the chosen sample of students are all gathered in one place and more available to collect data. Due to limited time, other samples other than students were not chosen. Choosing students to participate in this study makes the data collection more concentrated into one demographic. This study is based on students' attitudes towards detergents since, we assume that these students consume detergents and are consequently a part of the definition of FMCG consumers. Furthermore, this was appropriate since students who are living by themselves tend to purchase their own daily necessities, including detergents for washing their own clothes. Some of the disadvantages with having students as respondents are, 1) answers fast and haphazardly because they feel they "must", 2) lack of interest, 3) lack of time due to students have lectures, studies and group studies. In conclusion, this can give inaccurate result.

The 155 questionnaires were handed out face-to-face to students at Kristianstad University. Moreover, out of 155 questionnaires 153 were gathered, while two were never returned. The survey will measure the cognitive attitude (Yoo and Donthu 2001) of detergent consumers. Whether the consumers purchase other brands than the detergent Ariel is not of an importance, the importance is the attitude a consumer of detergents have of the brand.

Pre-study

A pre-study was conducted to gather brand associations to the survey. It entails asking Fast Moving Consumer Goods (FMCG) customers i.e. students in Kristianstad University about what they associate with the brand Ariel. The collected brand associations were then included in our quantitative questionnaire. The gathered associations were necessary for us to collect beforehand because of the way the questionnaire is constructed.

Survey

The questionnaire was constructed in Swedish and included 9 sections which included 20 questions on environmental CSR, brand awareness, brand image, brand meaning, brand response and brand resonance. The last part was demographic questions where the respondents could indicate their personal information such as gender, age, housing and studies. The respondents were given a pencil and a survey to fill in the questionnaire, also time and space was given for them to comfortably answer the questionnaire themselves. Thereafter, we gathered the surveys.

Brand awareness, brand image, brand meaning, brand response and brand resonance were five important components of the survey. Firstly, brand awareness were divided into brand recall and brand recognition. Brand image questions were divided into brand attitude and brand associations. Furthermore, brand meaning was presented into performance and imagery. Brand response was also divided into two parts, feeling and judgment. Lastly, brand resonance was used to capture the respondents' attitudes towards the brand value of the eco-labeled Ariel. Customer's general assessments of a

brand are the summation of brand attitude (Keller,1993; Blumrodt, Bryson and Flanagan 2012).

Measuring brand equity

When measuring brand equity, Keller (2009) CBBE model was applied. *Brand Awareness* was measured through recall and recognition. The participants were asked to name the first five brands that come into their mind given the product category environmentally friendly detergents. This is called brand recall. The brand recall was distinguished according to order. We looked at the first "box", by looking at how many participants had mentioned Ariel as the first brand that came into their minds given the product category "environmental friendly detergent". To measure brand recognition the participants were asked if they had been exposed to the brand Ariel logo as well as the Swan logo, by showing a picture of the Ariel logo and a picture of the Swan logo. The participants was able to give a "yes" or "no" response. The final question of recognition was a question if the consumers have used Ariel's detergents before. The recognition processes requires consumers to discriminate a stimulus, a word, object, image, etc. as something they have previously seen. This is the most basic type of recognition measurement. This gives consumers a set of single items visually and asks them if they thought that they had previously seen or heard these items. By applying these measures of brand recognition, we will be able determine which brand elements exist in memory and, to some extent, the strength of their association. Brand recognition is often visual in nature, visual recognition measures can be used because it is difficult for consumers to describe a logo or symbol in a recognition task either verbally but much easier for them to assess the same elements visually in a recognition task (Keller, 2009).

The second step *brand image was* measured by using a asking the participants questions regarding imagery. Imagery was measured by asking a CSR related question in relation to the brand Ariel. Brand imagery deals with the way the brand attempts to meet customers more psychological or social needs. Brand imagery is how people think about the brand abstractly rather than what they think the brand actually does. The brand imagery measurement refers to more intangible aspects of the brand. The questions for brand meaning, which include questions regarding brand performance and brand imagery were put in the likert scale. We then conducted a t-test for the proposition and measure it against environmental CSR (Keller, 1993; Keller, 2009; Parguel and Benoit-Moreau 2011).

Also, we measured brand response by asking questions regarding judgment and feelings. Judgment was measured by asking participants questions on credibility, perceived quality, consideration, superiority in regards to Ariel and the Swan eco-labeling. Respondents judge a product or brand based on its actual and perceived quality. To measure credibility respondents were asked question on innovation, trustworthiness, and likability of the Swan eco-labeled Ariel detergent. To measure feeling we asked the participants what the feel about Corporate Social Responsibility (CSR), in regards to Ariel. This measurement is used to assess the respondents feeling towards Corporate Social Responsibility. This is the respondent's emotional responses and reactions with respect to the brand and its CSR activities. It answers how the brand

affects respondents feeling about themselves and what type of feeling are evoked when respondents see Swan-eco labeling on Ariel detergent. The questions for brand response which include questions regarding brand judgment and feelings were put in the Likert scale. The questions of brand performance and brand imagery where then put together to measure brand response. We could then conduct a t-test for the proposition and measure it against environmental CSR. Brand response and environmental CSR was also analyzed using independent-samples t-test (Keller, 2009; Keller, 1993)

The last step in measuring brand equity is *brand resonance.* To measure the value of the Swan eco-label a dollar metric was used. According to Keller (2009) the dollar metric measures the additional amount that someone would be willing to pay to trade a non-branded/non-eco-labeled detergent against the branded eco-labeled one. In our case we wanted to know how much the participants would be willing to pay to trade a non-eco-labeled detergent against Ariel. It was measured in Swedish kronor (SEK) currency. This was measured by measuring the Mean value of what the respondents would pay by adding up all the results and divide it with the amount of respondents. The question was asked as following;

- How much could you pay extra for Ariel's eco-labeled detergents as opposed to a "non-eco-labeled detergent?

The model (fig. 1) was modified to fit this study by using Keller's (2009) customer-based brand equity model. This model describes core of the study which is how environmental CSR, as the Swan eco-label, is correlated on the components of Ariel's brand equity.
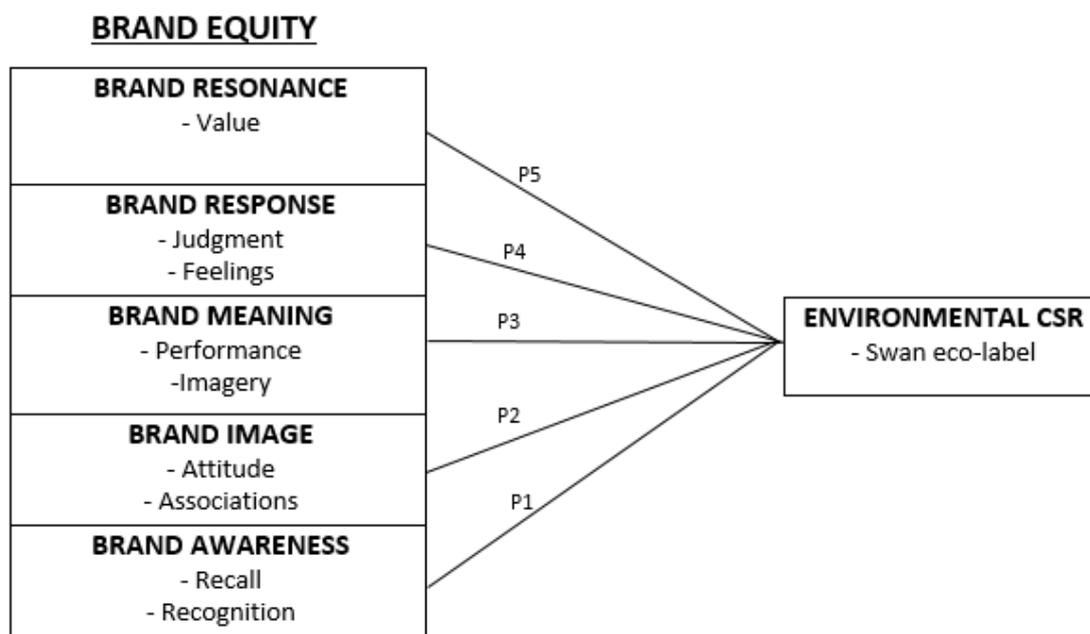

Figure **1**. Environmental CSR correlation to Brand Equity (Amin and Anabtawi, 2013)

Empirical findings

SPSS 20 was used to analyze the questionnaire data. As mentioned earlier, the survey generated a sample of 153 respondents. Out of those 153 respondents 148 respondents indicated their gender while 5 respondents did not indicate gender. Furthermore, 115 of the respondents (77, 7%) were women and 33 of the respondents (22, 3%) were men. The majority of the respondents were between the ages of 19-23, consisting of 56% women and 55% men. To make sure all respondents were students at Kristianstad University we had control variables in our survey that asked them if they studied at the University. 147 respondents answered that they were students; however, 6 respondents did not answer this particular question. The majority, 46, 9%, of the male respondents were studying business and 28,4% of the women were studying business and 28,4% were studying teacher.

The results of the questionnaire on brand awareness, brand image, brand meaning, brand response and brand resonance is analysed. On *brand awareness* 148 respondents out of 153 respondents had answered the question on brand recall. The three most mentioned brands that had been named as the first one were Ariel, Skona and Grumme. However, the majority had answered Ariel as the first choice. Ariel had been mentioned 65 times (43, 9%) out of 148 respondents as the first choice, Skona had only been mentioned 23 times (15, 5%) as their first choice, and Grumme was mentioned 22 times (14, 9%), while the rest of the respondents had mentioned the other brands. This means that the majority of the respondents recalled Ariel given the product category "environmental friendly detergent". Furthermore, 28,8% of the men and 37,5% of the women responded Ariel which a summation of 44,4% of all respondents. On brand recognition 152 respondents (99, 3%) out of 153 respondents had previously seen the Ariel logo before while one respondent had not seen the logo before. 130 respondents (87, 8%) out of 148 respondents answered that they had seen the Swan logo before on Ariel's products, while 18 respondents (12,2%) had not previously seen it before. There were five respondents that didn't answer the question. Lastly, 136 respondents (89, 5%) out of 152 respondents confirmed prior use of the brand, while 16 respondents (10,5%) had not used it before. One respondent did not answer the question.

On *brand image* out of 150 respondents 45 respondents (30%) stated they felt very good. Out of 144 respondents 43 respondents (29,9%), the majority felt neither positive/negative about Ariel. The majority 46 respondents (32,2%) felt neither favourable/unfavourable. Furthermore, on the question on how they feel about the Swan eco-label on Ariel's detergents, showed that their attitudes towards the swan label was more good, positive and favourable than what they felt towards Ariel. Out of 150 respondents 82 respondents (54,7%) felts very good about the Swan eco-label, 72 respondents (50%) felt very positive and 64 respondents (44, 4%) felt very favourable towards the Swan eco-label.

On *brand meaning* where the respondents were asked about performance and imagery of Ariel the majority of the respondents were neutral to the statements. On *brand response* were the respondents were given statements on Ariel and the Swan eco-label the majority 54 respondents (35,8%) agreed to the statement of Swan eco-label

being an indicator of high quality. Furthermore, the majority 56 respondents (37, 8%) agreed to the statement which stated that next time they want to buy an environmentally friendly detergent they will buy Ariel. On brand resonance where the dollar metric was used 140 respondents out of 153 respondents had answered the question on value/price, while 13 respondents did not respond. On average the respondents were willing to pay 16, 37 SEK additionally.

Reliability

To control the internal consistency of the survey, the reliability, Cronbach's alpha reliability test was used. Cronbach's alpha test was conducted through SPSS 20 by using reliability command (Pallant 2005). According to Pallant (2005) the Cronbach alpha values are dependent on a number of items in the scale, small items under 10. The value range is from 0 to 1, moreover, the higher the value is the higher the reliability is. With a Cronbach's alpha coefficient report of .81, brand attitude of Ariel indicted good internal consistency. Brand attitude of the Swan logo had a Cronbach's alpha coefficient report of .878 which indicates reliability. Brand associations, brand meaning and brand response had Cronbach's alpha coefficient report of .837, .762, and .884. The reliability can be considered as high since the numbers are above .7 which indicates internal consistency of the scales (see tab. 2).

Table1. Reliability test of survey.

Questionnaire parts	Cronbach's Alpha Reliability
Brand attitude – Ariel	.811
Brand attitude – Swan logo	.878
Brand associations	.837
Brand meaning	.762
Brand response	.884

Analysis

This study measures if environmental CSR activity has a significant effect on the different components of brand equity and the degree to which it has an influence on each component. To statistically measure brand equity in relation to environmental CSR, this study has solely focused on testing the components of brand equity that is brand awareness, brand image, brand meaning, brand response and brand resonance which is conceptualized into five propositions. Since, the survey of this study was structured with ordinal, nominal and continuous questions different tests were used to measure the five propositions.

When analyzing the data and propositions on SPSS 20, Spearmans's rho correlation coefficient analyze was conducted on environmental CSR and brand awareness (P1). The aim is since both environmental CSR and brand awareness are continuous variables since the respondents could answer several different brands (Pallant 2005). However, to analyze environmental CSR on brand image (P2), brand meaning (P3), brand response (P4), and brand resonance (P5) independent-samples t-test was conducted since we have two different independent variables which is

controlled variables that can be manipulated (Pallant 2005). Independent-sample t-test measures the probability of two scores that comes from the same population, this was done to manipulate to dependent variables (Pallant 2005).

Brand awareness

To measure brand awareness, which consists of brand recall and recognition, two variables were transformed into one variable called brand awareness. Moreover, environmental CSR was one variable. Spearman's rho was used to calculate the strength of the internal relationship between these two variables (Pallant 2005) i.e. environmental CSR and brand awareness, for the reason of that both of these variable are continuous therefore independent-sample t-test could not be conducted to measure CSR with brand awareness. Nevertheless, there was a strong positive correlation between the variables [$r=.169$, $p=<.005$], that environmental CSR has a strong positive effect on brand awareness (see tab. 2). This proposition can therefore not be rejected.

Table 2. Spearman's rho correlation test of P5.

Spearman's rho correlation:	Correlation coefficient:	Sig. (2-tailed):	Conclusion:
Environmental CSR - Brand awareness	,169	,044	Not rejected

*. Correlation is significant at the 0.05 level (2-tailed).

Brand image

To understand if environmental CSR impacts brand equity, an independent-samples t-test was conducted. The t-test was used in order to see if there is a statistical difference in the mean score (Pallant 2005). The Sig. (2-tailed) value of ,000 (see tab. 3) implies that environmental CSR has a statistically significance to brand image. The Mean is high on brand image since the respondents had seen the Swan logo, we can conclude that environmental CSR is correlated to brand image. The proposition P2 is not rejected, and we can conclude that environmental CSR has a positive effect on brand image.

Brand meaning

In order to measure if environmental CSR have an effect on brand meaning, a t-test was conducted. The Mean score was high on awareness of the Swan eco-label which implies that environmental CSR has an impact on brand meaning. Nevertheless, with the Sig. (2-tailed) value of ,000 (see tab. 3) implies that the relation between environmental CSR and brand meaning is statistically significant. We that P3 cannot be rejected.

Brand response

Brand response and environmental CSR was also analyzed with independent-samples t-test. The Mean score was high on awareness of the Swan eco-label, this entails that there is significance between environmental CSR and brand response. The Sig. (2-tailed) value was also .000 (see tab. 3) this mean that there is a statistically significance that environmental CSR has a positive effect on brand response. P4 is therefore not rejected.

Brand resonance

Lastly, the Mean value of what the respondents would pay, i.e. brand resonance and environmental CSR was analyzed with the independent-samples t-test. As table 3 indicates, the Mean score of awareness of the swan logo was high, this is an indication of statistically significance that awareness of environmental CSR has an impact on brand resonance. The high standard deviation implies that the data is largely spread. Furthermore, the Sig. (2-tailed) value is .002 (see tab. 3) which indicates that the relationship between environmental CSR and brand resonance is significant. Therefore, P5 is not rejected and we conclude that environmental CSR has a positive effect on brand resonance.

Table 3. T-test of P2, P3, P4, and P5

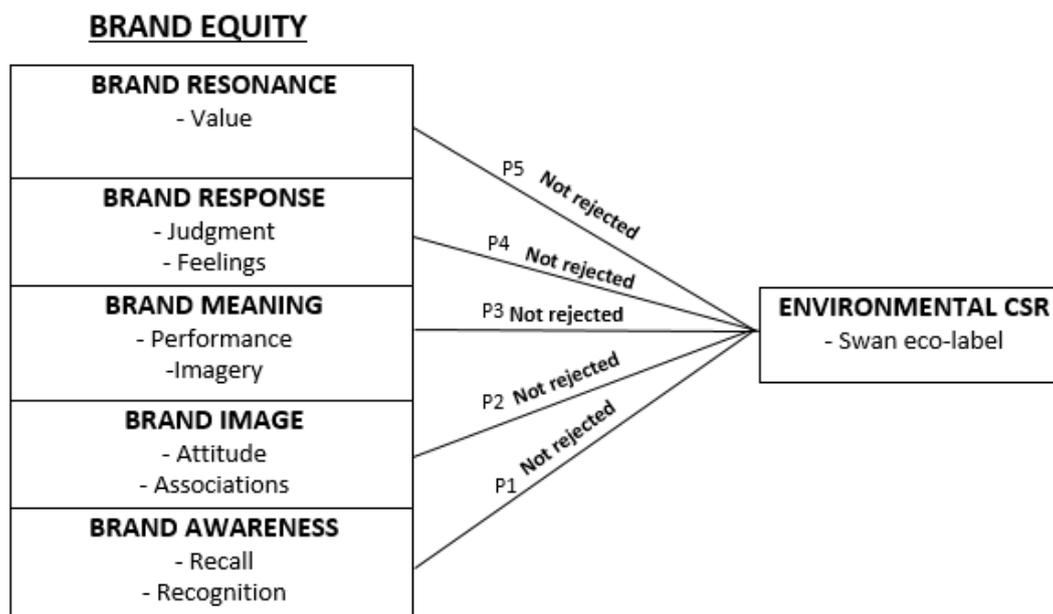| Propositions	Swan logo:	Std. deviation	Sig. (2-tailed)	Conclusion
P2. CSR – Brand image	-Yes	5,228	0,000	Not rejected
	- No	2,229		
P3. CSR – Brand meaning	-Yes	2,249	0,000	Not rejected
	- No	,979		
P4. CSR – Brand response	-Yes	5,081	0,000	Not rejected
	- No	2,888		
P5. CSR – Brand resonance	-Yes	14,550	0,002	Not rejected
	- No	6,854		

Figure 2. Results of the propositions.

Discussion

The value of the brand Ariel depends on the fundamental components of brand equity and by measuring the individual components the value of the brand can be estimated (Keller 2009). If there is statistically significance between CSR and one of the

components of brand equity, it will have a positive correlation on brand equity. Since, all of the five proposition were statistically significant in regards to environmental CSR to each of the brand equity component we conclude that there is a positive correlation on brand equity. The theory of Keller (2009) suggests that if one component is significant, it will have a positive correlation on brand equity.

The findings of this study shows that environmental CSR (Swan eco-label) is statistically significant on each component of the brand equity model. This indicates that environmental CSR has a positive correlation on these components: brand awareness, brand image, brand meaning, brand response and brand resonance. Because all of the five proposition were significant, we can conclude that environmental CSR has a positive correlation on brand equity. According to our results the component with the most significance is Brand Resonance. Brand Resonance is the value of the relationship consumers have for the brand, the personal identification and how much the consumers are willing to invest money into the brand during purchase or consumption (Keller, 2001). The results show that the swan eco-label enhances the brand value and positively influences the strength and favorability, therefore improving brand equity. The consumers are more likely to react positively to swan labeled detergents and are willing to pay additionally for detergents with CSR activities, in this study the Swan eco-label. The results may be due to the knowledge they have of Ariel being an eco-friendly detergent. Consumers are prone to choose to purchase and pay additionally for environmentally friendly detergents, since it may contribute to an eco-friendly environment.

This study showed that the swan eco-label has a significant effect on the way the consumers are aware of the CSR initiatives, their attitudes towards Ariel's brand image, the way they view Ariel's brand meaning, the judgments towards the brand and the value they hold in their minds in regards to Ariel. The finding of this study shows that the consumers are aware of the swan eco-label on Ariel's products and also aware of the CSR initiatives that the swan eco-label conveys. When analyzing the findings of the study, it shows that the respondents view the swan eco-label as more than just a label, it has a significant meaning of CSR values for the consumers. Overall, the results show that the respondents were positive towards eco-labeled detergent Ariel.

We can conclude that the majority of the respondents were aware about the Swan eco-label on Ariel's detergents and felt very good, positive and favorable towards it. Furthermore, the findings from the 153 questionnaires showed that the majority of the respondents answered high on each section on the survey such as brand awareness (recall & recognition), high on brand image (attitude). The respondents felt good about Ariel but better about the Swan eco-label. This could be because the detergent is generally known for being environmentally friendly, since the Swan eco-label is associated with being eco-friendly. The result indicate the Swan eco-label is more favorable and that the respondents value detergents that are labeled as eco-friendly than they do detergents without the Swan eco-label.

Results of the findings show a positive relationship between environmental CSR and brand equity. Nevertheless, to increase the brand equity, Ariel should focus on increasing their brand awareness since it was supported in this study. The more focus on

brand awareness the higher brand equity obtained (Hoeffler and Keller 2002; Keller, 2009; Parguel, 2011; Creel, 2012). The respondents stated because of that eco-labeled detergents have lower power consumption also leads to a reduced impact on the climate lower environmental emissions than non-eco-labeled (Svanen 2013).

Conclusion

In conclusion, the aim of this study was to explore if environmental eco-labeling CSR-initiatives has a positive correlation on brand equity. The Swan eco-label has a positive correlation on brand awareness, brand image, brand meaning, brand response and brand resonance. It is clear to see from the findings that the Swan eco-label has an effect on brand equity. The finding from the five propositions which were tested with Spearman's correlation coefficient and independent-samples t-test showed that the presented proposition were all significant and supported. The Swan eco-label which is a form of environmental CSR has an correlation on Ariel's brand equity. As a result, the findings from this study show that the Swan eco-label on Ariel's detergents has a correlation on how the respondents view Ariel as a brand. This supports the theory given that environmental CSR and CSR in general has a positive impact on brand equity which consists of the components awareness, brand image, brand meaning, brand response and brand resonance. The component with the most significance is Brand Resonance. Brand Resonance is the value of the relationship consumers have for the brand, the personal identification and how much the consumers are willing to invest money into the brand during purchase or consumption (Hoeffler and Keller 2002; Blumrodt, Bryson and Flanagan 2012; Lai, et al. 2010; Parguel, 2011; Creel, 2012). Also, firms' image and brand will gain an environmentally responsible recognition if adopting an environmental CSR-strategy (Heikkurinen 2010).

Practical implications and further research
This study could be useful in the area of brand management which helps to understand that eco-labeling has an influence on brand equity and that eco-labeling in general has an impact on consumers attitude towards the brand. Moreover, this study show that a small eco-label such as the swan eco-label on the actual product can actually change the way consumers view the brand and that most companies should focus on corporate social responsibility initiatives. Eco-labeling on detergents such as Ariel has an impact on the brand equity. Therefore, the findings of this study could be valuable for future brand marketers and for decision of how to manage CSR activities.

Since this study was conducted during a period of ten weeks, one could extend this research to a larger population. Also, to the best of our knowledge, there have not been any studies on how eco-labeling on fast moving consumer goods have an influence on brand equity; therefore it would be interesting if this study could be extended to other possible FMCG. Consumer attitude was the main focus of this study. Therefore, it could be interesting to do this study on purchase behavior. Since this study showed that the respondents have a positive attitude towards eco-labeling it would be interesting to go further and see if this impacts their purchase behavior.

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