

Consumer Evaluations of Green Brand Extensions

The role of parent brand quality and perceived fit

Marketing
Master's thesis
Karoliina Korpela
2016

Author Karoliina Korpela

Title of thesis Consumer evaluations of green brand extensions

Degree Master of Science in Economics and Business Administration

Degree programme Marketing

Thesis advisor(s) Jukka Luoma, Henrikki Tikkanen

Year of approval 2016**Number of pages** 76**Language** English

Abstract

The environmental imperative is increasingly influencing the marketing agenda. The pressure for a more environmentally friendly approach in marketing is derived from the environmental issues such as climate change but also from consumers looking for greener options to support their sustainable lifestyles. Many companies have answered these demands by introducing new green products by exploiting brand extension strategies. That is, using an existing brand name to enter new categories and markets. Despite the growing interest in sustainable living, the adoption of green products has remained relatively low, and questions on what influences the evaluation and adoption of green products has raised managerial and academic interest. This paper investigates how Finnish consumers evaluate hypothetical green brand extensions of Finnish consumer goods brands and what is the role of parent brand quality and perceived fit in the evaluations. What is more, the role of consumer's environmental background to fit perceptions is examined.

The theoretical background for the current research was derived from corporate social responsibility and brand research, and hypotheses were formed based on previous research in these fields. The empirical data was collected through an online consumer survey during spring 2016 with Finnish consumers as the target population. Altogether 238 responses were collected and the results were analysed with descriptive statistics and two different multivariate data analysis methods: factor analysis and multiple regression analysis.

The main finding of the research was that perceived fit between the parent brand and the extension, in addition to perceived fit between the brand and environmental cause were the most important predictors of positive brand extension evaluation. The main contribution of this research is to add understanding on what are the main determinants of green brand extension success.

Keywords brands, corporate social responsibility, brand extensions, green marketing, green brand extensions, brand extension evaluation, consumer behaviour

Tekijä Karoliina Korpela

Työn nimi Kuluttajien arviot ympäristöystävällisistä brändilaaajennuksista

Tutkinto Kauppatieteiden maisteri

Koulutusohjelma Markkinointi

Työn ohjaaja(t) Jukka Luoma, Henriikki Tikkanen

Hyväksymisvuosi 2016

Sivumäärä 76

Kieli Englanti

Tiivistelmä

Ympäristövaatimukset vaikuttavat kasvavassa määrin markkinointiin. Ilmastonmuutos sekä kuluttajien lisääntynyt ympäristötietoisuus ja ympäristöystävälliset kulutustottumukset ovat painostaneet markkinointia kohti ympäristöystävällisempää lähestymistapaa. Monet yritykset ovat vastanneet näihin haasteisiin ja kysyntään tuomalla markkinoille uusia ympäristöystävällisempiä (vihreitä) tuotteita hyödyntämällä olemassa olevaa brändinimeä. Toisin sanoen yritykset käyttävät brändilaaajennusstrategiaa mennäkseen uusille markkinoille.

Vaikka ympäristötietoisuus onkin lisääntynyt ja kysyntä vihreille tuotteille kasvanut, vihreiden tuotteiden kulutus on jäänyt useissa tuotekategorioissa suhteellisen alhaiselle tasolle. Tämä ongelma on lisännyt kiinnostusta tutkimukseen siitä, miten kuluttajat arvioivat vihreitä tuotteita ja mikä edesauttaa näiden tuotteiden omaksumista. Tämän tutkimuksen tarkoituksena on tutkia miten suomalaiset kuluttajat arvioivat suomalaisten kuluttajabrändien kuvitteellisia vihreitä brändilaaajennuksia, ja mikä on emobrändin laadun sekä emobrändin sekä sen laajennuksen yhteensopivuuden rooli arvioinnissa. Lisäksi, tutkimus selvittää mikä on kuluttajan ympäristötietoisuuden vaikutus, kun arvioidaan emobrändin sopivuutta ympäristöystävällisyyden kanssa.

Tutkimuksen teoreettinen tausta pohjautuu teorioihin yrityksen yhteiskuntavastuusta sekä brändeistä, ja tutkimushypoteesit luotiin näihin pohjautuen. Tutkimuksen empiirinen aineisto kerättiin suomalaisille kuluttajille suunnatulla online- kyselytutkimuksella kevään 2016 aikana. Kaikkiaan 238 henkilöä vastasi tutkimukseen ja tulokset analysoitiin kuvailevalla tilastanalyysillä sekä kahdella monimuuttujamenetelmällä: faktorianalyysillä sekä usean muuttujan regressioanalyysillä.

Tutkimustulosten tärkeimmäksi havainnoksi voidaan mainita, että emobrändin ja brändilaaajennuksen yhteensopivuus vaikuttaa eniten vihreiden brändilaaajennusten positiiviseen arviointiin. Tämä koski niin yleistä yhteensopivuutta, kuin myös brändin sopivuutta sen ajaman ympäristöagendan kanssa. Tutkimuksen pääkontribuutio on kuluttajan käyttäytymisen ymmärtämisen syventäminen, mitä tulee vihreisiin brändilaaajennuksiin ja niiden arviointiin.

Avainsanat brändit, yritysten yhteiskuntavastuu, brändilaaajennukset, vihreä markkinointi, vihreät brändilaaajennukset, kuluttajakäyttäytyminen

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1 INTRODUCTION

The environmental agenda is increasingly entering to the marketing theory and practice. During the past decades, companies and marketers have had to reexamine the assumption that the world will provide them with infinite amount of resources and that company's actions have zero impact on the environment (Kotler, 2011). At the same time when the environment is giving us signals and imperative for change with e.g. global warming, consumers are increasingly demanding environmentally friendly, or "green", products to support their sustainable lifestyles (Olsen et al., 2014). Thanks to the increased media coverage about the state of the environment and increased awareness, the green consumption phenomenon has moved from niche markets to a more mainstream market (Kalafatis et al., 1999). To answer these imperatives and increased demand, companies from all over different industries are looking for ways to respond. As an evidence, recent decades have demonstrated an increase in corporate social responsibility (CSR) initiatives by multiple companies, but also the increased amount of green products entering the market (Olsen et al., 2014). Therefore, marketing is moving towards a greener perspective where impact on the environment is reduced in production, design, packaging and consumption (Delafrooz et al., 2014).

The research on green marketing and green consumption has demonstrated optimistic and some less optimistic findings. On the one hand, answering to the environmental imperative with green product portfolio has been seen as a source of competitive advantage (Olsen et al., 2014; Delafrooz et al., 2014). On the other hand, green marketing and consumption of green products have not taken off as would have been expected (Ginsberg & Bloom, 2004). The reasons behind this relatively low consumption can possibly be derived from the overcrowding of the green market place as everyone is trying to get their share of the sustainable consumption trend. This chasing of the environmentally conscious consumer's money has tempted many companies to make environmental claims when there actually is no reason for it. These cases of "greenwashing", where company's green claims about products or activities are merely rhetoric, have led to increased consumer skepticism towards companies' environmental initiatives and communication. Meanwhile, there is a persistent perception that green products are of poorer

quality than their non-green equivalents and consumers are still vary of making trade-offs between attributes. (Chatterjee, 2009; Ginsberg & Bloom, 2004)

Since the trend of sustainable consumption is not showing any signs of disappearing, research has recently been trying to grasp on what influences the consumption of green products, how they are evaluated and how it impacts e.g. the overall brand attitude. For example, Olsen et al. (2014) studied the long-term effects of green new product introductions to brand attitude in fast moving consumer goods market and found the impact to be positive. As many companies enter the green product market with an established brand name by exploiting brand extension strategy, also the factors influencing green brand extension evaluation have been studied. For example, Chatterjee (2009) discovered that the evaluation of green brand extension was higher for products with higher perceived environmental impact, whereas Hill and Lee (2015) demonstrated that green brand extensions are assessed more positively when there is a perceived fit (similarity) between the brand and the extension, but also with the brand and the environmental cause its supporting.

Brand extension studies in general are relatively established in marketing research as several researchers have been trying to determine the success factors when entering a new product category or market with an existing brand name (e.g. Aaker & Keller, 1990; Bottomley & Holden, 2001). However, it is only recently that these studies have been extended to research on green brand extensions and whether same predictors of brand extension evaluation are also present while studying the green counterparts. Studies by Chatterjee (2009) and Hill and Lee (2015) demonstrate the increasing interest in the topic. The perceived fit between the parent brand and its extension has been recognized in brand extension research as one of the main predictors of brand extension evaluation (Aaker & Keller, 1990) and the same result has been found among green brand extensions (Hill & Lee, 2015). In addition to perceived fit, the quality of the parent brand has been recognized as an important predictor of brand extension evaluations (e.g. Bottomley & Holden, 2001). However, whether this holds true also for green brand extension has not yet been studied.

Despite the extensive interest in brand extension strategies and increased attention to environmental issues, there are still multiple contexts where the factors influencing evaluations of brand extensions, let alone green brand extensions, have not been studied. For example, most of the previous research has been conducted in the United States, with student respondents as subjects (e.g. Aaker & Keller, 1990). This particular study is conducted in the Finnish market which can be thought of as a relatively unexplored context for brand extension research and green brand extension research. Nevertheless, previous research in the Finnish context is not non-existent. For example, Tarkiainen et al. (2009) studied the extensions of Finnish print magazines to a web site version and identified the success factors behind these extensions. Another example comes from Konuk et al. (2015) who examined the role of green satisfaction, green brand trust and green brand equity in consumer's purchase behavior and word-of-mouth behavior towards a green product category in Finland and two other countries.

This paper will address the gaps discussed above. Firstly, it will take brand extension research to a relatively unexplored context by studying Finnish brands and Finnish consumers, and whether the perceived fit between the parent brand and the green brand extension influences the extension evaluation in Finnish consumer goods category. Second, it will examine whether the parent brand quality will positively influence also the evaluations of green brand extensions. Third, the interest will also be in the Finnish consumer's environmental background, and how it influences the perceived fit between the brand and the environmental cause its supporting.

How green line extensions are evaluated in Finland can give some insights on the generalizability of the previous studies. In addition, what impacts this evaluation can give insightful information on the appropriate strategies when companies are thinking of entering the green marketplace.

1.1 Research objectives

The first aim of the current research is to determine how Finnish consumers evaluate hypothetical green brand extensions introduced by Finnish consumer goods brands. The second aim is to evaluate how the quality of the parent brand and perceived fit between the brand and its extension influence this evaluation. For perceived fit two measures will be examined: the brand-extension fit and brand-cause fit. The former looks into the perceived fit between the

brand and its extension on a more general level and the latter looks into the fit between the brand and the environmental cause its supporting. The third aim of the research is to examine how consumer's environmental background influences the perceptions of fit between the brand and the environmental cause its supporting.

The research questions are the following:

- 1.) How do Finnish consumers evaluate green brand extensions introduced by Finnish consumer goods brands?
- 2.) What is the role of parent brand quality, brand-extension fit perceptions and brand-cause fit perceptions in these evaluations?
- 3.) What is the role of consumer's environmental background in perceptions of brand-cause fit?

The research questions are answered in the empirical part of the current research with quantitative research approach. The next subchapter will cover the structure of the current research paper.

1.2 Structure of the thesis

The research paper will be organized as follows. This introductory chapter will be followed by a literature review in Chapter 2, which will cover the two theoretical topics that support the research objectives: corporate social responsibility (from now on often referred as CSR) and theory related to brands, brand extensions and green brands. Based on the literature review, the theoretical framework and hypothesis are formed.

Chapter 3 will introduce the research setting and data collection methods with the measures used. Also the statistical methods used in the data analysis will be discussed, and finally the evaluation of the overall trustworthiness of the data and methods is critically examined.

Chapter 4 will discuss the results of the statistical data analysis by going through descriptive statistics, factor analysis and multiple regression analysis. Multiple regression analysis will be used to test the hypotheses presented at the end of the literature review. The results will be more thoroughly discussed in Chapter 5, in the Discussion, where the results are mirrored against the

findings of previous studies in CSR and brand extensions. Furthermore, the results are also more critically analyzed. Finally, Chapter 6 summarizes the research in final conclusions and answers the research questions, but also gives some managerial implications and recommendations based on the results. The chapter ends by recognizing possible limitations of the current study and by suggesting areas for future research in the same field.

2 LITERATURE REVIEW

This chapter reviews literature relevant for the present study focusing particularly on corporate social responsibility (CSR) and theory related to brands. The review will start with a definition of CSR and evaluating its influence on firm performance and marketing. The second part will focus on brands and brand extensions, continuing to how brand extensions are evaluated. In addition, literature on green brands is examined.

2.1 Corporate social responsibility (CSR)

This chapter looks into the concept of CSR. The first subchapter undertakes the definition of CSR, its history, implementation and dimensions. The second subchapter looks into the relationship between CSR and consumer perceptions and firm performance. The third chapter relates CSR more to the marketing field, with a focus on the environmental aspect which is also the main interest of the current study.

2.1.1 Definition and evolution of CSR

There is no universally approved definition of CSR and for different companies it means different things. However, a broad definition of CSR explains it as “company’s activities and status related to its perceived societal or stakeholder obligations” (Luo & Bhattacharya, 2006:2). Another conceptualization of CSR holds that it is the obligation to improve the welfare of the society meanwhile supporting the interests of the organization (Sen & Bhattacharya, 2001). That is, the prevailing idea of CSR is that companies do not do business in a vacuum, instead they are dependent of certain agents meanwhile having an impact and influence on others (Vaaland et al., 2005).

Often in research and in practice, the social responsibility of a company is limited to certain agents close to the company instead of covering the well-being of the society as a whole. These agents closer to and most impacted by company's actions are called stakeholders. Examples of these stakeholders are employees, customers, investors, suppliers, community and environmental groups. Despite the fact that companies might have numerous stakeholders, the tendency of companies is to only focus on just few of them, as some are more primary to the company's interests than others. (Maignan et al., 2005)

Despite the fact that CSR initiatives have officially entered the corporate agenda only quite recently, businesses have had concern over the society for centuries. However, it was not until the 20th century when the preliminary concept of CSR was presented in formal writing. Carroll (1999) in his extensive review of CSR literature throughout the 20th century nominates Howard R. Bowen as "the father of corporate social responsibility". This is because in his book "Social Responsibilities of the Businessman" from 1953 he recognized the power of the decisions made by large corporations in a way that it impacts the lives of multiple citizens in many ways. Hence, Bowen suggests that managers, or "businessmen", should make decisions and take action also in accordance with the objectives of the society. (Carroll, 1999)

After 1950s researchers have intended to state more accurately what CSR means. For example, in the 1970s Harold Johnson defined CSR as manager's ability to balance variety of interests, and he was one of first to name these differing interest groups such as employees, nation, suppliers and local communities. What is more, since the 1960s CSR literature also recognized CSR as being able to bring financial benefits for the firm in a form of maximized long-term financial profits. (Carroll, 1999)

Multiple studies have also represented company's social responsibility towards different stakeholders as a hierarchy where certain obligations undergird another. For example, Carroll (1991) defines CSR as consisting of four building blocks of responsibilities – economic, legal, ethical and voluntary or philanthropic – where economic performance undergirds everything else and that total CSR fulfills all these responsibilities simultaneously. That is to say, companies are expected to produce goods or services and sell them while making profit, and do

this while obeying the law. Beyond these responsibilities comes the ethical responsibility of a company not required by the law but yet still expected by the society. This is the point where many think CSR begins: going beyond companies own interests (making profit) and what is governed by the law (Lee et al., 2012). The voluntary (or philanthropic) responsibilities of a company go even further beyond ethical responsibilities. They are purely voluntary but can also be strategic for company as they might be a source of competitive advantage and profits in the long run. (Carroll, 1999)

Since the 1950s and coming to this century, CSR has evolved from vague and broad definitions to explicit company actions. This can be seen in the body of research focusing on systematic implementation of CSR (e.g. Maignan et al., 2005) but also in the amount of companies putting strategic importance to CSR in a form of explicit CSR initiatives (Luo & Bhattacharya, 2006). In their research Luo and Bhattacharya (2006) noted that 90% of all Fortune 500 companies (largest companies in United States) had explicit CSR initiatives. Despite this, according to a report by a global market research company Ipsos (2013) cited by Kang et al. (2016), 77% of the consumers thought that companies should be doing more for the society. This is not unexpected: according to Maignan et al. (2005) most companies are only addressing specific stakeholder interests and often do this in an uncoordinated way.

For companies CSR can mean anything from mere maximizing of shareholder wealth to being a good corporate citizen by going far and beyond the interests of a firm (Lee et al., 2012). To summarize the big picture, being as broad concept as it is, CSR can take multiple forms in practice and the initiatives can range from small to large investments.

Taking CSR to a more practical level; according to Carroll (1991) corporate's CSR activities should match with its stakeholders. That is, companies must know who are its stakeholders, their stakes and what are the responsibilities of the company regarding these different interest groups. As different companies have different stakeholders and stakeholder interests to consider, it is no wonder that CSR activities vary from company to another. However, these actions companies take can be categorized to different domains or dimensions.

Sen and Bhattacharya (2001) categorize CSR actions into six larger domains: community support, diversity, employee support, environment, overseas operations and product domain. Examples of CSR actions in these domains can be e.g. monetary support to local educational initiatives, support of racial and sexual orientation diversity inside and outside the company, concern about job security, controlling pollution and other environmental impact, respecting human rights and using responsible outsourcing when producing abroad and develop products that are safe to use for consumers. The influence of CSR activities to firm performance will be discussed next.

2.1.2 CSR influence on consumers and financial performance

It was already in 1960 when Keith Davis argued that socially responsible outlook of a company can bring long-term economic gains for the company (Carroll, 1999). Although this view became widely accepted by many, other school of thought considered companies only having economic responsibilities. Most known opponent of CSR is Milton Friedman who in the 1970s stated that the only social responsibility of a company is to increase its profits. In the 1980s the incompatibility between being socially responsible and economically viable took a turn when e.g. Peter Drucker argued that social responsibilities can be transformed into business opportunities. This basically meant that a company can be profitable while being responsible. (Carroll, 1999)

Since the 1980s there has been many studies trying to specifically define the connection between CSR and financial performance with differing results: 50% of the studies found the relationship positive and 5% negative, and the rest remained somewhere in between (Kang et al., 2015). Sen and Bhattacharya (2001) summarize the findings of previous studies as CSR initiatives of a company having a weak but positive relationship with financial performance of a company.

In addition to these aggregate firm-level models of CSR impact, consumer reactions to CSR and its mediating effect to firm performance have also been a focus of researchers. For example, Brown and Dacin (1997) discovered that in addition to consumer's positive attitude towards a company, positive associations about a company's CSR activities enhance consumer's product evaluations. In another study, Luo and Bhattacharya (2006) studied the mediating role of customer satisfaction in the relationship between CSR and firm market value. What the authors

found was that CSR is linked to firm's market value positively through increased customer satisfaction generated from company's successful CSR initiatives. Furthermore, companies with high product quality and high innovativeness generated a positive firm market value from CSR activities. (Luo & Bhattacharya, 2006)

Sen and Bhattacharya (2001) instead found that consumer responses to company's CSR initiatives are dependent of company's CSR domain and product quality but also the consumer's own support and beliefs about CSR, in a way that congruence between the values of a company and those of the consumer influences positively the company evaluations. This heterogeneity in the backgrounds of companies and customers probably also explains why there has been variation in the results of the studies investigating the relationship of CSR and firm performance (Sen & Bhattacharya, 2001).

The importance of fit or congruence between the consumer's point of view and company's CSR activities has been recognized in other research as well. For example, Lee et al. (2012) argue that if consumer's lifestyle and values are congruent with company's CSR initiatives, the consumer will perceive the CSR activities as genuine, favorable and positive. For example, environmentally conscious consumer reacts more positively to a company's CSR activities when they are related to reducing the company's impact on the environment. This positive perception of company's CSR activities instead increases consumer's identification with the company (also called consumer-company or C-C identification), meaning that consumer's idea of himself or herself overlaps with his or her perception of the company. Finally, both positive perception of the company's CSR activities and higher degree of consumer-company identification increases consumer loyalty towards the firm and its products. (Lee et al., 2012)

The findings of these studies suggest that companies should strive to implement CSR activities that are congruent with their target market's values and lifestyle in order to build long-lasting relationships with customers (Lee et al., 2012). Similar results to Lee et al. (2012) and Sen and Bhattacharya (2001) were obtained by Lichtenstein et al. (2004) who discovered e.g. that CSR activities directly transfer into corporate benefits such as better evaluations of a company and increased purchase behavior. What is more, the authors found that CSR behavior of a company

translated to corporate benefits also through increased consumer-company identification (Lichtenstein et al., 2014).

Despite all the positive outcomes CSR can bring, research has also recognized negative consequences of CSR to firm performance. Hence, the mere implementing of CSR activities and matching them with consumers' point of view is not enough to reap financial benefits. For example, Luo and Bhattacharya (2006) found that if the company is perceived to have low abilities in a form of low levels of innovativeness, the impact of CSR activities to firm market value is negative. Furthermore, if company's abilities are perceived low in a sense that its products are perceived as low quality, CSR has very little impact on firm market value. According to Sen and Bhattacharya (2001) these results might indicate that consumers perceive that a company should be focusing on improving its core abilities (e.g. improve product quality) instead of investing in CSR activities. That is, companies are seen as incapable of prioritizing.

Moreover, if a company's CSR initiatives are inconsistent with its current reputation and previous activities, these initiatives might be considered as insincere. Hence, consumers often are not inclined to blindly accept and believe company's so called good citizenship if their previous record conflicts with it. This suggests that there also needs to be a fit between the cause (e.g. environmental) a company is supporting with its CSR initiatives and e.g. company's products and brand image. New knowledge about company's CSR activities is not easily integrated to existing memory structures if these two are not congruent. (Becker-Olsen et al., 2006)

This lack of consistency between e.g. past and current actions can be translated into consumer skepticism and negative attitudes towards the company. However, even the perceived fit between the cause and the company does not help if consumers think that company's motivation for CSR actions are profit-oriented. In other words, if a company is seen to serve more itself than the public with its CSR activities, the positive effect of company-cause fit diminishes (Becker-Olsen et al., 2006). According to Kang et al. (2015), one motivation for companies to engage in CSR activities is actually to offset past corporate irresponsibility. In other words, companies are trying to make amends for the previous irresponsibility or social scandals by

engaging into good deeds after. However, what Kang et al. found was that negative effect of irresponsible actions is not diminished any faster with CSR activities implemented afterwards. This could perhaps be explained with lack of fit between the past and the current actions of the company; and consumers viewing the company's CSR actions as insincere after corporate social irresponsibility.

The next subchapter will look into CSR more from the marketing perspective.

2.1.3 CSR and marketing

Like CSR in general, what social responsibility means in the context of marketing remains unclear without a universal definition. In addition, research and practice shows that marketing focuses only on limited dimensions of CSR such as cause related marketing and environmental marketing (Vaaland et al., 2008; Maignan & Ferrell, 2004). What is more, marketing research tends to focus only on two stakeholder groups: customers and channel members (Maignan & Ferrell, 2004). However, considering that marketing operates between the firm and the society, it could take wider perspective and more responsibility in exploring CSR (Vaaland et al., 2008).

Indeed, according to Maignan et al. (2005), marketing is moving from the mere customer focus to managing the relationship with all the company's stakeholders. That is, the marketing function creates, communicates and delivers value to customers in a way that also benefits other stakeholders such as employees, investors, suppliers, community and environmental groups. This particular research will focus only on the environmental aspect of CSR, hence the end of this subchapter will focus on the environmental domain of CSR, or green marketing.

Marketing and the environmental domain of CSR: Green marketing

Currently the world is facing multiple environmental challenges such as the depletion of ozone layer and natural resources with increased pollution; challenges that also need to be addressed by the marketing function of companies. Marketers no longer work in an environment and live in a comprehension where there is an endless supply of natural resources and no need to worry about the consequences of consumption. The 4 Ps of marketing – product, price, place and promotion – will need to be reconsidered when taking into consideration the environmental imperative. Using biodegradable packaging, sustainable distribution channels and less print in

advertising are examples of marketing actions that take the environment into consideration. (Kotler, 2011) This so called greening of different aspects of traditional marketing is called green marketing in the marketing literature (Kilbourne, 1998).

However, the imperative for environmentally friendly marketing does not come only from the environment or environmental groups itself. Instead, the pressure for change is also coming from the consumers who are increasingly aware of environmental challenges and want to live and consume in an environmentally friendly way and hence are demanding green products (Kotler, 2011). The phenomenon has moved from niche markets to become a mainstream issue because of e.g. increasing media coverage and awareness (Kalafatis et al., 1999).

Some marketers have answered to the environmental needs by focusing on demarketing by trying to reduce demand (Kotler, 2011) while others have seen the consumer demand as a business opportunity and started offering green products to consumers, thus engaging in green marketing (Kalafatis et al., 1999). On the one hand corporate environmentalism (environmental orientation coupled with environmental strategies) or green marketing has been seen as a source of competitive advantage by lowering costs of production and by entering new markets of environmentally aware consumers (Banerjee et al., 2003). On the other hand, green marketing has not been able to live up to its expectations. That is to say, despite the increasing concern over the environment among consumers, this concern has not been translated into environmentally friendly consumer choices as much as would be expected (Kalafatis et al., 1999). This paradox has been of large interest among researchers. One common reason for the mismatch between consumer values and behavior (also called value-action gap) is that consumers do not want to make trade-offs between attributes (Ginsberg & Bloom, 2004). As an example, buying a green product can sometimes require the consumer give up on certain attributes (e.g. product quality or features) or convenience (e.g. electric car needs to be recharged often). As social scientists explain it, consumers will not sacrifice their self-interest over the environment's interests (Ginsberg & Bloom, 2004).

Other reasons for this value-action gap can arise from the consumer skepticism towards company's green marketing efforts. When companies realized consumers demand

environmentally friendly products and investors are looking for sustainable companies to invest in, they started promoting and publishing news and reports on their sustainable and environmental efforts and values. However, in many cases it was only rhetoric and symbolic without any practical fulfillment (Laufer, 2003). This type of environmental orientation without concerns about its strategic implementation is called greenwashing (Banerjee et al., 2003). These various cases of greenwashing can lead a consumer to suspect greenwashing every time any company communicates on their green efforts.

To sum up the CSR research: it takes multiple forms and its influence on firm performance and customer satisfaction is a combination of multiple issues. The next subchapter and theoretical part will take a look into theories about brands.

2.2 Brands

This part of the literature review will look into theory related to brands. The first subchapter defines the concept of the brand. The second subchapter introduces brand knowledge and its building blocks such as brand awareness and brand image. The third subchapter discusses brand equity, which is followed by a subchapter on brand extensions. The final subchapter will take a look at green brands and their peculiarities.

2.2.1 Definition of a brand

According to the marketing author Philip Kotler (2005:549), brand is “a name, term, sign, symbol or design, or a combination of these, intended to identify the goods or services of one seller or group of sellers and to differentiate them from those of competitors”.

Brand names and the concept of a brand are centuries old. For example, already in the 18th century producers wanted to e.g. practice branding and associate their products with brand names in order to make them easier to remember for consumers, but also to differentiate them from the products of competitors. In the 19th century, producers used brands to signal product's value through associations. That is, the acquired reputation of a branded product as e.g. a product of good quality could be taken advantage of when the same producer introduced new products. (Farquhar, 1989)

Since 19th century the theories and strategies of branding have been developed further and the importance of branding has been widely recognized (Farquhar, 1989). For example, since the 20th century it has been general knowledge that selling a product under a brand name, that is, engaging in branding can add value to a product (Kotler, 2005:549). However, brand is more than just a name or label given to a product, instead it is a complex symbol representing different things (Gardner & Levy, 1955). Companies treating a brand merely as being a name are not fully taking advantage of branding. The name of the brand should also carry some meaning and associations which is the challenge of brand managers today. This is important since when choosing between products, a branded product with a meaning can e.g. give cues of reliability and quality compared to an unmarked product. (Kotler, 2005) This reliability and quality is a result of a company's previous marketing activities such as products launches and advertising (Keller, 1993).

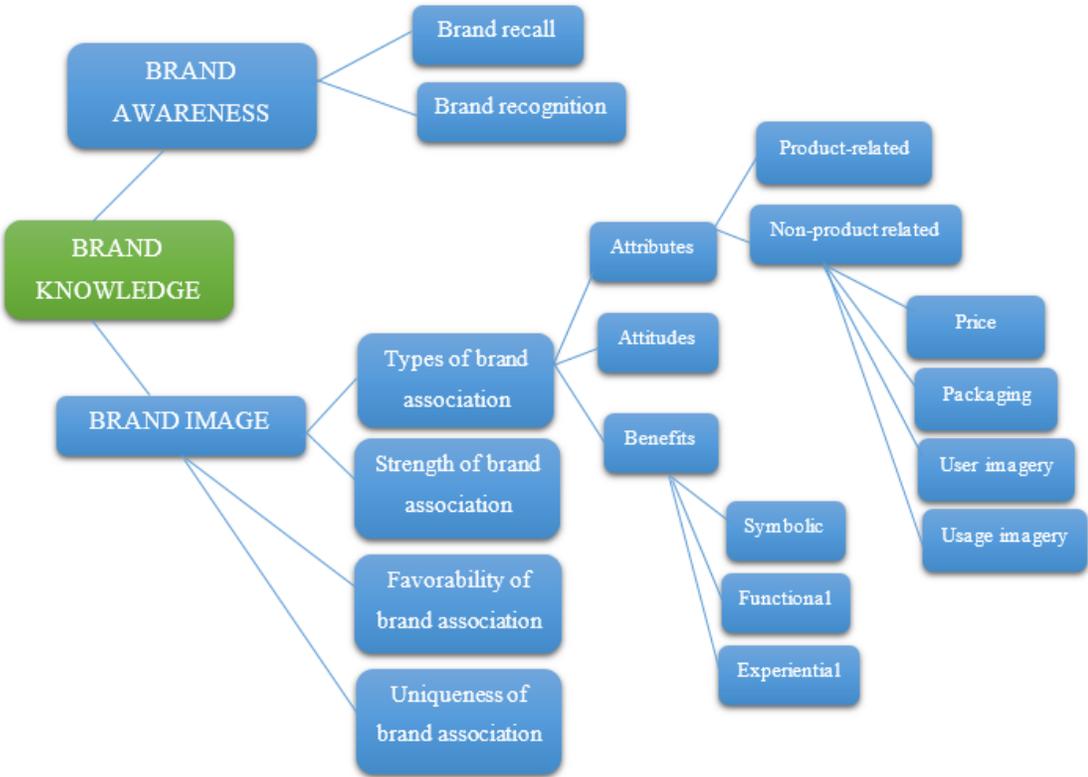
Almost all products are branded and building a strong brand has become the main objective for many companies and focus of extensive research, as strong brand can bring financial rewards (Keller, 2001). This added value of a brand is often called brand equity (Farquhar, 1989) and it is based on the knowledge consumers have in their minds about the brand (Keller, 1993). Aaker (1992) instead conceptualizes brand equity as built from different assets such as brand loyalty, brand awareness, perceived brand quality and other brand associations and in addition to more tangible and measurable brand assets such as patents and trademarks. The following subchapters look into more detail what constitutes brand knowledge in the consumer's minds and what brand equity is.

2.2.2 Brand knowledge

According to Keller (1993) brand knowledge improves the efficiency and effectiveness of marketing activities, that is, increases company's marketing productivity. This brand knowledge is the result of a company's previous marketing actions which can be thought of as successful or unsuccessful depending on the knowledge consumers have about the brand in their minds. This knowledge about the brand is much more relevant in the long run than financial figures of a company. Large amount of capital is not valuable if it is not used sensibly for the development of the brand. (Keller, 1993)

Keller divides brand knowledge into two components: brand awareness and brand image, where the former is related to the brand recall and recognition and the latter to associations consumers have in the memory about the brand. Figure 1 illustrates the dimensions of brand knowledge introduced by Keller (1993).

Figure 1. Dimensions of Brand Knowledge. Adapted from Keller (1993)



Knowledge about brands is built to consumer’s memory as a set of nodes and links. That is, information is stored and connected by links of varying strength. Information stored to nodes is retrieved when a person encounters new information and encodes it, or when something is retrieved from long-term memory. For example, new information can activate a related node in consumer’s memory but also other related nodes via links, depending on the strength of association between the nodes. The information from all these nodes is then retrieved from memory. As an example, if consumer wants to buy cereals he or she might think of Kellogg’s cereal brand as it is strongly associated with that product category and the nodes are connected.

However, in addition to this, consumer probably also retrieves other knowledge related to the brand such as its taste, price or advertising campaigns. (Keller, 1993)

Based on this associative network memory model, consumers have a “brand node” in their memory which is linked to different associations about this particular brand. Important for building a brand is to understand what is stored in the brand nodes and to the nodes associated with the brand. Relevant for building a strong brand is the favorability, strength and uniqueness of these associations in consumer’s mind in addition to brand awareness. (Keller, 1993) The following subchapters will clarify in more detail how brand knowledge is built in consumers’ minds and explains what constitutes brand awareness and brand image.

Brand awareness

Brand awareness is the ability of the consumer to recognize the brand in different circumstances. Brand awareness can be further divided into brand recognition and brand recall, both of which strength is dependent on the trace of the brand in the consumer memory, that is, the strength of the brand node. Brand recognition means that consumer is able to identify prior engagement with the brand, simply put, remembers having seen or heard about the brand previously. Brand recall goes into more detail as it signifies the consumer ability to remember the brand when thinking of a certain product category. (Keller, 1993)

Especially brand recall can be important in consumer’s decision making. This is because in some low involvement product categories (requires little emotional or monetary investment and consideration) mere awareness of the brand can lead to product choice. Consider a case where a consumer needs to buy a product of low involvement without much previous knowledge on the product category. If only one brand is remembered it is very likely that it will be chosen instead of the unknown ones, especially if the consumer is not motivated to do comparison between the products. Brand awareness is a good starting point for building a strong brand but in most cases it is necessary to attach more meaning to the brand name. Hence, in most cases companies start building themselves brand image in addition to brand awareness. (Keller, 1993; 2001)

Brand image

Keller (1993) defines brand image as consumer perception and meaning about the brand. This meaning is built in the consumer's memory from the associations linked to the brand and these associations can be related to the attributes the product or service has, its benefits and attitudes towards it.

Brand image is a known and relevant marketing concept and researchers have had multiple suggestions for its definition, Keller's being one. Already in 1955 Gardner and Levy suggested that consumers do not pick products rationally based on mere product qualities and features but instead there are attitudes, ideas and feelings behind the decision making. According to the authors this image of the brand can be relatively vague and sometimes even quite irrational but yet they contribute to the decision making when consumer chooses a particular brand over others (Gardner & Levy, 1955). Park et al. (1986:135) instead note that brand image is "the understanding consumers derive from the total set of brand-related activities engaged in by the firm". That is, brand image is built from several activities a company takes, not just from mere advertising of the brand.

Companies often try to select a suitable and favorable brand image, operationalize it in their actions and maintain that image (Gardner & Levy, 1955; Park et al. 1986). According to Park et al. (1986) brand meaning selected by the company is brand concept and it is derived from functional, symbolic and experiential consumer needs that the particular brand has. This chosen concept will then influence on the positioning of the brand in the market compared to competitors and marketing activities that follow. If a brand is managed well, the brand image in consumers' minds match with the selected brand concept(s). It is this communication of brand image to target market that is one of the fundamental marketing activities. (Park et al. 1986)

As already implied, brands can have different types of associations linked to it in the minds of consumers, and it is these associations that are vital in building brand image. Keller (1993) divides these associations into three categories, all contributing to brand image: attributes, benefits and attitudes.

Firstly, according to Keller (1993) associations related to attributes can be further divided into product-related attributes and non-product related attributes. Product-related attributes are the functions that the consumers seek from this particular product or service category. These are related more to the product's physical attributes or service's expected requirements that are required to perform a certain function. For example, music streaming services are expected to have music to listen to and a phone must be expected have a function of keeping in touch with others.

Non-product related attributes are more external to the product or service but they are still present in the purchase and consumption process. Keller (1993) lists four types of these non-product related attributes: price information, packaging or product appearance, user imagery and usage imagery. Price is relevant part of a product as it is an important part of acquiring the it in the first place. What is more, it can generate strong feelings among consumers and enable them to categorize products to price tiers. Packaging often is not a necessary ingredient of a product but it is still present in the purchase and consumption process.

Keller (1993) also recognizes more extrinsic properties of a product or service: brand imagery. User and usage imagery are part of brand imagery as they are more abstract and intangible. User and usage imagery is related to the consumer's experience and encounters with users and usage situations of a brand, be it in real life or through images created in advertising the brand. For example, consumer might have an association what kind of people are using a particular brand based on demographics or psychographic factors. As an example, some might expect that organic products are consumer by environmentally aware people and that Apple products are used by so called cool people. Finally, consumers also might hold imagery on the typical usage situations of a product or service which can be e.g. time of the day or week. User and usage imagery can contribute to the brand personality itself, e.g. Apple as a brand can be thought of as cool, just like its users are considered sometimes to be.

The second association category are the benefits that consumers expect the product or service to do for them and it is more about the personal value customer incorporates with the product. Researchers have further recognized (Keller, 1993; Park et al. 1986) three different categories

among benefits: functional benefits, experiential benefits and symbolic benefits. Functional benefits are strongly related to product-related attributes of the brand, that is, related to the function the product or service is expected to perform. Functional benefits fulfil the consumer's quite basic need and solve consumer's consumption-related problems by e.g. fulfilling consumer's physiological or safety needs. For example, often when buying some particular food brand, it first of all solves quite basic level physiological problem: hunger. The experiential benefits are related to the feelings consumers have when they consume the product or service. These benefits are also derived from the product-related attributes of a product as they can be e.g. sensory pleasure or variety. Food is a good example of a product with the chance to also bring other than functional benefits. That is, it might solve the problem of hunger but also bring experiential benefits with its great taste. The last benefit category, symbolic benefits, bring more extrinsic advantages for the consumer when he or she uses a product or service. These benefits are often derived from non-product-related attributes which were things such as user imagery or product appearance. When a consumer obtains symbolic benefits from a usage of a product or service, he or she might satisfy the underlying needs of social belongingness or approval. For example, a consumer buying prestige or luxury brands might want to signal belongingness to an upper social class. Thus, these symbolic benefits are especially important for prestige or fashion products, but also any other products and brands that are socially visible. (Keller, 1993)

The third type of brand association in addition to attributes and benefits is brand attitudes, which is the overall consumer evaluation of a brand (Keller, 1993). That is, it is the summary of the evaluation of the brand the consumer has in his or her memory (Farquhar, 1989). Attitude is an important factor to consider as it plays an important part in consumer behavior by e.g. influencing brand choice. A common view of brand attitude is a view that attitudes are a function of the beliefs of the most salient attributes and benefits of the brand and the judgment of those beliefs in consumers' minds. For example, a brand is believed to have certain attributes and bring certain benefits and do this well or not. (Keller, 1993) The perceived quality of the brand is also often used as a measure of brand attitude (Aaker & Keller, 1990).

These associations, be it attributes, benefits or attitudes, can alternate what comes to their strength, favorability and uniqueness. According to Keller they are the strong, favorable and

unique associations that will distinguish the brand from others in a way that it creates differential response and increases brand equity. This distinguishable consumer response is especially important when buying high-involvement products which require more consideration from consumer's side. (Keller, 1993) That is, brands can have multiple associations in consumers' minds but it is not until they are strong, favorable and different from those of competitors that can be increased additional value in a form of brand equity.

Naturally companies want their brands to have favorable associations. That is, often the goal is that consumers would think of the brand having positive attributes and benefits which would further create positive attitudes towards the brand, which in turn increases consumer choice and brand equity. Whether this goal is achieved depends on the success of company's marketing activities but also whether an attribute or benefit is important for the customer in that consumption moment or in general. (Keller, 1993)

In addition for the associations to be favorable, they should be strong. That is, the attributes, benefits or attitudes must be strongly identified with the brand. To have a strong association means that the brand node in consumer memory is strongly linked to these associations. Farquhar (1989) calls this attitude accessibility. That is, if an association between a brand and an association is strong it is more easily accessed in consumer memory and thus also retrieved more easily (Keller, 1993). As an example, when thinking of check pattern one might immediately think of Burberry fashion brand or Volvo when thinking about safety. Mere positive evaluation of a brand is not beneficial if it is not strongly linked to a brand.

Finally, strong and favorable associations should also be unique to the brand. Uniqueness of brand association gives the consumer a unique selling proposition which improves brand choice over competing brands creating sustainable competitive advantage. For example, consumer looking to buy a safe car would not necessarily choose or consider Volvo if another car brand would be associated with safety. Naturally brands share associations with other brands, especially those related to product-related attributes, and some categories have their prototypical associations. This is not a negative thing as it helps the establishment of category membership, that is, a product or service brand is recognized to perform a certain function. However, brands

may also face competition outside the same product category if two different product categories fulfil the same need. For example, a car rental brand might directly compete with other car rental companies but also indirectly with e.g. bus companies as they fulfil the same consumer need for transportation. (Keller, 1993)

A final dimension worth noting about brand associations is the congruence of brand associations. This means the extent to which different brand associations of a particular brand share meaning with each other. Associations that are somehow linked and go together are more easily learned and later remembered compared to a situation where brand associations do not resemble one another. For example, it is more congruent if a brand that is perceived as low value would also be associated with low rather than high price. This type of situation is more easily understood by a customer instead of inconsistent associations (such as low quality – high price). Congruence of brand associations creates a cohesive brand image where the meaning of the brand does not confuse the consumer. (Keller, 1993)

To sum up, brand image is built from different types of associations consumers have about the brand in their mind. These associations can be related to attributes the product or service has (product-related and non-product related), benefits it brings and attitudes consumers have about it. Furthermore, depending on the brand, these associations will alternate based on their strength, favorability and uniqueness. Together with brand awareness, brand image constitutes brand knowledge and it is the knowledge consumers have about the brand in their memory that influences their response to all marketing activities. When a brand has extensive awareness in terms of brand recall and recognition in addition to positive brand image in a form of strong, favorable, unique and congruent associations, it is also likely a strong brand capitalizing on high brand equity.

2.2.3 Brand equity

Brand equity can be defined “in terms of the marketing effects uniquely attributable to the brand” (Keller, 1993:8) or as the “added value with which a given brand endows a product” (Farquhar, 1989:24). Aaker (1992) defines brand equity as the commercial value acquired from the consumer perception of the brand name itself instead of the mere product. In other words,

brand name gives value to a product beyond its functional benefits (Farquhar, 1989) by giving it a name, symbol and above all, a meaning.

In particular, managers and researchers have been interested in measuring brand equity in financial terms, e.g. what is its value in the balance sheet (Keller, 1993; Park & Srinivasan, 1994; Lassar et al., 1995). The traditional financial accounting methods leave the majority of the company's assets unaccounted. That is, the hidden asset value of brand equity can cause that company's value in books is much less than the market (consumers, sellers) considers the value to be (Neal & Strauss, 2003:7).

Another line of studies on brand equity is motivated by more strategic goals as brand equity can be exploited to improve marketing productivity (Keller, 1993). This line of research has e.g. tried to identify the blueprint for building brand equity (Keller, 2001) but also how to manage brand equity (Farquhar, 1989; Keller, 1993) or how to leverage and capitalize brand equity (Tauber, 1988).

In these studies, brand equity is often viewed from the perspective of the firm or the customer (Farquhar et al. 1990), these both being interrelated. At a firm level brand equity increases effectiveness of marketing activities, increases brand loyalty, permits premium pricing and provides a strategy for growth (Aaker, 1992). Keller (1993) takes brand equity into consumer level by recognizing also customer-based brand equity. Positive customer-based brand equity means that previous knowledge a consumer has about a brand in his or her memory creates a more favorable response to marketing activities (e.g. advertising, new product launch) compared to same activities performed by an unbranded product. They are the high brand awareness and positive brand image that increase the efficiency of marketing activities compared to a situation where consumers have no previous knowledge about the brand. This favorable response to marketing activities and the effectiveness of marketing activities signifies lower marketing costs and higher profits as consumers become loyal to the brand and more immune to competitors' marketing activities. High brand awareness and positive brand image can also enable a company to ask higher prices and increase its margins as consumers are more willing to pay premium for brands that they like. (Keller, 1993)

When a company has reached some level of brand equity with its brand, it is common to start thinking about strategies for leveraging and taking advantage of the acquired high brand awareness and positive brand image. One widespread strategy for companies wanting to leverage their brand equity has been the introduction of brand extensions under the same brand name. These strategies are of particular interest for the current study and discussed in the next subchapter.

2.2.4 Brand extensions

Brand extension strategies – that is, using established brand name when introducing new products – have been recognized already from the 1960s, but it was not until the 1980s when brand extensions really took off (Tauber, 1988; Völckner & Sattler, 2006). The marketing environment in the 1980s in the United States was characterized by increased media and distribution costs and aggressive promotions of established firms while at the same time demand remained stagnant. This overwhelming, increased financial risk associated with new product introductions led many companies to start capitalizing on the equity and image of existing brand names and launch brand extensions instead of introducing new products and brand names. (Aaker&Keller, 1990; Völckner & Sattler, 2006) The motivation behind this strategy is the assumption that the parent brand has awareness and positive associations in the consumers' minds that are helpful and applicable also to the extension (Aaker & Keller, 1990).

Brand extensions can be further categorized to line extensions and category extensions where the former means extending the current brand to new market segment in the same product class, and the latter using the current brand name to enter a completely different product class (Aaker & Keller; 1991). According to Nijssen (1999) line extensions are the most popular method of introducing new products as 89 percent of all introductions are line extensions, while 6 percent are category extensions and 5 percent are completely new product introductions. Another way of categorizing brand extension is classifying them as horizontal or vertical extensions. Horizontal brand extensions are new products in the same or new product category, whereas vertical brand extensions are related brands introduced in a same product category but in a different price or quality category (Pitta & Katsanis, 2015).

There are multiple benefits with brand extension strategy that has made it one of the most frequently used branding strategy for companies (Völckner & Sattler, 2006). Most importantly, brand extensions can enable the company to grow into new markets and reach new customers with significantly reduced costs and risks (Aaker & Keller, 1990). Based on the knowledge of the core brand consumers will form expectations towards the brand extension as well. That is, awareness and inferred associations e.g. on the quality, attributes and benefits can be transferred from the established brand to the extension (Keller, 1993). This can have significant impact on the expenses associated with new product introduction as the costs of advertising through increased efficiency and gaining distribution are lower (Aaker & Keller, 1990; Völckner & Sattler, 2006). Another motivation for brand extension strategy is its positive reciprocal spillover effects to the parent brand and its existing products. For example, Balachander and Ghose (2003) found that advertising of brand extension also affected favorably the sales of brand's other products. Olsen et al. (2014) on the other hand found out that green new product introductions can improve brand attitude. Based on this evidence, it can be concluded that the starting point provided by brand extension strategy compared to new brand strategy is appealing for companies.

However, brand extension strategies are not always deemed to be successful, on the contrary. According to Völckner and Sattler (2006) failure rate of brand extensions in many product categories of fast moving consumer goods (FMCG) is 80 percent. Even though the costs of introducing a brand extension might be relatively low, these costs and resources will not be recovered if the extension fails. In the meantime, a company might be missing on other growth opportunities (Aaker & Keller, 1990). The more serious consequence of an unsuccessful brand extension is its possible impact to the most important asset of a company, its brand equity. First of all, unsuccessful brand extension can dilute the equity of the established brand. That is, if the brand extension evokes e.g. negative feelings and associations, the danger is that these associations are transferred to the parent brand and thus diminishing the once favorable attribute beliefs associated with it. Secondly, repeated brand extensions can “eventually wear out a brand name”. (Loken & John, 1993:71)

It is these potential benefits but also the huge risks associated with brand extension strategy that have evoked strong research and managerial interest in determining how consumers evaluate brand extensions and what are the success factors of brand extensions (Völckner and Sattler, 2006). The following section looks into these studies.

How consumers evaluate brand extensions

The theories of categorization and schemas are often used when trying to understand what determines brand extension success (Loken & John, 1993; Bousch & Loken, 1991; Gürhan-Canli & Maheswaran, 1998). According to these theories, a long-term memory has different, categorized schemas about specific objects, people or events (Chatterjee, 2009). This kind of grouping in memory improves information processing: new objects and events are identified and evaluated based on these integrated knowledge structures and their similarity to a certain category, or memory schema. For example, we can form a general understanding about someone we have just met based the categories we have formed about other people. (Cohen & Basu, 1987)

This theory suggests that consumer knowledge also about brands are at least partially integrated into schema-like structures in memory (Cohen & Basu, 1987). That is, brands are also categories in the memory of consumers. What is more, over time these categories have become associated with certain attributes based on the individual category members, in this case, products (Loken & John, 1993). Consider for example Apple; in the Apple category or schema one might associate it with attributes such as user friendliness and sleek design based on the Apple products such as the iPhone and iPod. When Apple launched iPad some consumers already had expectation on its attributes based on the previous knowledge and experience with the products.

When a parent brand launches a brand extension under the same name it can either be consistent or inconsistent with the parent brand schema (Loken & John, 1993). Researchers have been interested on the fact that how incongruent information affects the category or schema of the parent brand. That is, if a company launches a brand extension that is inconsistent e.g. because of its attributes, will it damage the image of parent brand in the minds of consumers. Previous research has recognized three different models concerning the modification of schemas, or schema change: sub-keeping model, book-keeping model and conversion models (Gürhan-Canli

& Maheswaran, 1998). These models hold different beliefs about the manner in which inconsistent information is incorporated to the existing set of beliefs (Loken & John, 1993).

According to the sub-typing model, if a brand extension is inconsistent or atypical with the parent brand and deviates from its conceptions, this will be viewed as an exception and stored to a separate cognitive category, as a subtype. This creation of a subcategory diminishes the influence of incongruent information to the evaluations of the parent brand. Hence, only typical and similar extensions will be blended to the same category as the parent brand and thus have an impact on the overall evaluations of the brand. The book-keeping model on the other hand asserts that each new piece of information, such as each new brand extension, will lead to minor alterations of the schema, regardless of how atypical or typical the information is. In other words, the more inconsistent the brand extension is with the parent brand the more it changes the brand schema and thus the more it can dilute the parent brand equity. Finally, the conversion model states that schema change happens when new information is extremely atypical. Previous research on brand extension have produced findings that support the first two models, sub-typing and book-keeping models. (Gürhan-Canli & Maheswaran, 1998; Chatterjee, 2009)

Determinants of brand extension success

Previous research has recognized approximately 15 determinants of brand extensions success (Völckner & Sattler, 2006). Of these determinants perceived fit between the parent brand and the brand extension in addition to perceived quality of the parent brand have been recognized as highly important success factors (Bottomley & Holden, 2001; Völckner & Sattler, 2006). Other determinants of brand extension success recognized by previous studies are e.g. ownership status and liking of the parent brand (Kirmani et al., 1999), marketing support (Reddy et al., 1994), retailer acceptance (Nijssen, 1999) and consumer innovativeness (Klink & Smith, 2001). The next subchapter will look into the two most recognized determinants of brand extension success: perceived fit between the brand and its extension and perceived quality of the parent brand.

Perceived fit

Based on the categorization and schema theory, it can be concluded that successful brand extensions can positively impact and change parent brand evaluations if it is seen as a suitable

member of the same category. It is this suitability which is one of the most important drivers of brand extensions success. This perceived fit between the parent brand and the extension enables the positive attitudes and affect towards the parent brand to transfer to the brand extension as well (Aaker & Keller, 1990).

The parent brand and its extension can fit in many ways and researchers have recognized multiple measures for it. For example, Aaker and Keller (1990) recognized three dimensions of fit. The first dimension, complement, means the extent to which consumers view the two products (core brand product and brand extension) as complementary and used jointly to satisfy the same need. Second dimension, substitute, measures the extent to which consumers perceive the two products as being substitutable with each other, where one product can be used instead of another to satisfy the exact same need. The third dimension, transfer, is the perceived ability of the company to make the extension product, e.g. are the skills and resources associated with making the extension the same as making the core brand product. What Aaker and Keller found in their study on brand extension evaluations was that especially transferability and complementarity predict better brand extension evaluations.

The dimensions of fit introduced by Aaker and Keller (1990) center around product features. Later research has recognized fit along two dimensions where product level dimensions such as complementarity are accompanied with non-attribute components such as brand image and brand concept consistency (Park & Srinivasan, 1994). For example, Park et al. (1991) introduced additional dimensions of fit that not only take into account the similarities in physical product features but also in the brand concept. According to the authors, category members can also be tied to one another based on a shared concept. These concepts can be abstract meanings that accommodate the brand, e.g. prestige, fun, particular usage situation or cool users. On product feature level the parent brand and the extension might not fit but they might share the same abstract meanings which makes consumers see them as fitting together. (Park et al., 1991)

Finally, according to Chatterjee (2009) perceived fit can be based on multiple dimensions be it e.g. physical, functional or conceptual similarity or relatedness of brand associations. These findings that demonstrate the positive impact of perceived fit to brand extension evaluations

have led researchers to recommend that companies should launch brand extensions in perceptually close product categories compared to the core product of the brand (Smith & Andrews, 1995).

However, the importance of perceived fit is challenged by examples of companies that have successfully entered perceptually distant product categories. As a matter of fact, there are some researchers who have found that the perceived fit variable has no influence on how brand extensions are evaluated (Martínez & Pina, 2003). What Smith and Andrews (1995) propose is that the relationship between perceived fit and brand extension evaluations is mediated by consumer certainty instead of being a direct relationship. By certainty the authors mean consumer's certainty that the company is able to make the new product that fulfills his or her expectations. In particular, when consumer certainty is accounted for, the perceived fit no longer explains the brand extension evaluations. Instead, perceived fit affects only consumer certainty in a positive way, and it is the consumer certainty that has a direct influence on brand extension evaluation. In a similar vein, Lane (2000) discovered that even incongruent brand extension can be viewed more positively after advertisement repetition. That is, the initial, perhaps negative perceptions of an incongruent brand extension can be changed after multiple exposures to advertisements of that brand extension.

Quality and brand affect

Previous research has found that brand extension evaluations are dependent of consumer perceptions of the original brand (Keller & Aaker, 1992). Different product feature level and concept level components will influence how consumer evaluates a brand, that is, what is his or her attitude towards a specific brand. According to Aaker and Keller (1990) brand attitude is based on items such as features and performance but also on affect that is based on something else than brand attributes. In their research Aaker and Keller (1990) chose perceived quality, that is "consumer's judgment about the superiority or excellence of a product", as the most appropriate measure to evaluate brand attitude (1990:29). Argument behind the measure is that it can better grasp and identify the level of abstraction that reflects the complexity of what makes up a brand attitude.

Aaker and Keller (1990) hypothesize in their study that the higher consumers perceive the quality of the parent brand to be, the more favorable will be the attitudes towards the brand extension as well. Even though Aaker and Keller themselves did not find support for the hypothesis, a series of replication studies did. In their research Bottomley and Holden (2001) performed a secondary analysis on eight replication studies of Aaker and Keller's research and concluded that consumer evaluations on brand extensions are primarily determined by the parent brand quality and perceived fit. Unlike Aaker and Keller, Bottomley and Holden found that the perceived quality of the parent brand is a remarkable predictor of consumers' brand extension evaluations.

The last subchapter will end the brand literature review by focusing on green brands and their peculiarities.

2.2.5 Green brands

This subchapter will discuss brand extension theory from the perspective of green brands and green brand extensions. As already discussed earlier, living in an environmentally sustainable way has become one of the top consumer trends, which has meant an increase in the demand for environmentally sustainable, or green, products. Firms are increasingly trying to respond to this demand with green marketing and by offering them products with reduced impact on the environment. This phenomenon and trend has not left unnoticed either from the researchers who have been e.g. trying to profile a green consumer, understand the motivation behind consumption of green products and find ways to translate environmental concerns to environmentally friendly consumption choices. (Olsen et al., 2014)

Although being a relatively new concept, green brand extensions have also received attention among researchers. For example, there have been studies that have investigated how green brand extensions are evaluated or how they influence the parent brand attitude (Hill & Lee, 2015; Olsen et al., 2014; Chatterjee, 2009). This phenomenon has been of special interest of researchers and managers as many companies and existing brands enter the green markets with brand extensions, instead of launching a completely new brand. Additional interest to this phenomenon and studies bring the fact that green products have had the tendency to be viewed

as less competent than their non-green core products, which in turn could harm the parent brand equity (Chatterjee, 2009).

Just like in the case of so called normal brand extensions, introducing a green brand extension – using established brand name to enter markets of environmentally friendly products – can bring companies many benefits but also risks. It is also more typical for companies to enter green markets with a green brand extension instead of introducing a completely new brand (Chatterjee, 2009). Thus, there has been academic research interest in discovering the consumer reaction towards green products but also their impact on parent brand attitude.

As an example, in her research Chatterjee (2009) studied how current and prospective customers of a brand view green brand category and line extensions and how the evaluations differ based on the perceived environmental impact of the product category. The main discovery was that purchase intentions for green brand extensions were higher when the perceived environmental impact of the product category was viewed as being high level. That is, consumers' desire to make environmentally friendly consumption choices is better fulfilled when buying products that normally have a large impact on the environment (such as detergents and paper towels). This suggests that if companies want to build brand equity through green brand extensions, they should choose product categories with higher perceived environmental impact. (Chatterjee, 2009)

In their longitudinal study, Olsen et al. (2014) researched how green new product introductions change the attitude towards the brand. The study of 75 brands during a four-year time period revealed that green new product introductions improved brand attitude in the long run. This is contradictory compared to previous beliefs and findings that green products have inferior quality or that consumers are suspicious of green claims after many cases of greenwashing. Another relevant finding of the study was that quantity of green claims has a negative impact on the relationship between green new product introductions and change in brand attitude. That is, fewer green claims used in the marketing of the green new products enhances the positive relationship between green new product introductions and change in brand attitude. This finding is contradictory to Lane's (2000) study where the finding was that ad repetition improves the

evaluation of an incongruent (extension to a category far from brand's current offering) brand extension. This can be a particular finding characteristic only to green products as it can be that extensive use of green claims creates skepticism among consumers, especially when there have been multiple greenwashing cases during the recent years. The authors also used environmental legitimacy of a parent company as one moderating factor, only finding that brands of environmentally legitimate companies actually improved less brand attitude (Olsen et al., 2014).

A third example from green brand extension studies comes from Hill and Lee (2015) who studied the consumer perceptions of potential green line extensions introduced by fast fashion retailers. In accordance with many brand extension studies, the authors found that perceived fit between the parent brand and the extension had positive impact on brand extension evaluation. As another dimension of fit, the authors used brand-cause fit, which is the fit between the cause (being environmentally friendly) the brand is supporting and the brand itself. This is in line with CSR research introduced earlier in the current study: CSR initiatives (such as introducing a green product) are considered insincere if these initiatives are inconsistent with company's previous activities and brand image (Becker-Olsen et al., 2006). The finding of Hill and Lee was that brand-cause fit positively impacts the brand extension evaluations.

An additional finding of the study was the consumer's environmental knowledge and involvement had positive influence to brand-cause fit perceptions. This likely because more knowledgeable customers can more easily access and process new information presented to them in the form of green brand extension. What is more, consumer's involvement with the environmental cause makes them process new information about the brand more deeply as they are more motivated and attach emotions to the cause, instead of cognitively evaluating the product. (Hill & Lee, 2015).

2.3 Theoretical framework and hypothesis

The proposed research model studies the relationships between evaluations of green line extensions and quality of the parent brand, brand-extension fit and brand-cause fit. Furthermore, the influence of consumer's environmental background to the perception of brand-cause fit will be examined.

2.3.1 Factors influencing brand-cause fit

Consumer's background might not have a direct influence on how extensions are evaluated but instead it can impact how well consumers see the brand fitting with the cause its supporting through its brand extension. Previous research done by Hill and Lee (2015) found that consumer's environmental knowledge and involvement influences positively the perceptions on brand-cause fit. First of all, consumers that are more knowledgeable with environmental issues tend to form a more positive attitude towards environmental behavior. Previous knowledge about the environment also enables faster processing of new related information that is presented to them in a form of green line extension. (Hill & Lee, 2015)

In addition to environmental knowledge, Hill and Lee (2015) found that the environmental involvement of the consumer can influence positively on how consumer perceives the brand fitting with the environmental cause. This argument is supported also in the CSR literature, where Lee et al. (2012) argued that when consumer's values and lifestyle are congruent with company's activities, these activities are viewed more favorably (Lee et al., 2012). Derived from this argument, the assumption is that environmentally conscious consumers would view positively a company's environmentally friendly initiatives. Consumers who are more concerned about the environment and more environmentally aware can more easily access and process more deeply the new information presented to them. Attachment to the environmental cause also can make the consumer evaluate the brand's relationship with a cause more emotionally instead of cognitively. That is, the environmental background of the consumer makes him or her more motivated to perceive a fit between the environmental cause and the brand. On the other hand, one could also expect the contrary as consumers are growing increasingly distrustful of companies that labels products as being environmentally friendly, considering the numerous greenwashing cases in the past (Chatterjee, 2009). However, since we find precise evidence on the positive impact from the past research, the following is anticipated and hypothesized:

H1a: Consumer's knowledge on environmental issues will have a positive relationship on brand-cause fit.

H1b: Consumer's environmental involvement will have a positive relationship on brand-cause fit.

2.3.2 Factors influencing brand extension evaluation

Previous marketing literature has recognized the importance of perceived fit in brand extension evaluations (e.g. Park et al., 1991; Aaker & Keller, 1990; Bottomley & Holden, 2001). Several dimensions of fit have been recognized ranging from those related to product features (e.g. Aaker & Keller, 1990) to those more related to the intangible attributes of the products such as brand concept consistency (Park et al., 1991) or brand-cause fit (Hill & Lee, 2015).

The perceived similarity, or perceived fit, between the parent brand and the extension positively influences the consumer evaluations of brand extensions. The rationale behind is that similarity, or fit, enables the previous knowledge and affect towards a brand transfer more easily to the extension as well (Hill & Lee, 2015). What is more, since this study will focus only on line extensions that are new products in the same product category (instead of entering a new product category with category extension), it is likely that the perceived fit between the parent brand and extension is more easily perceived (Chatterjee, 2009). All these findings considered, the following can be hypothesized:

H2: The perceived fit between the brand and its green line extension will have a positive relationship on the evaluations of green line extensions.

In addition to the more general level of perceived fit, previous research on green products and green brand extensions has considered also the perceived fit between the brand and the environmental cause its supporting with its new products (e.g. Olsen et al., 2014; Hill & Lee, 2015). That is, some brands can be more credible in supporting the environmental cause than others. This is in line with previous CSR research where company's CSR initiatives were viewed insincere if they conflicted with company's previous actions and reputation (Becker-Olsen et al., 2006). In their research Hill and Lee (2015) studied the consumer evaluations of green line extensions introduced by fast fashion retailers and observed that perceived fit between the brand and the environmental cause was positively related to the attitudes towards the extensions. Thus if there is a fit between the cause and the brand, the consumer should be able to process the new

information on green line extensions more efficiently and generate more positive attitudes towards the extension. Based on these consideration, the following can be hypothesized:

H3: The perceived fit between the brand and the environmental cause will have a positive relationship on evaluations of green line extensions.

In addition to the dimensions of fit, consumer attitudes towards the parent brand have been studied to influence consumer evaluations of brand extensions. That is to say, often in research it is assumed brand extension success is dependent on consumer's positive beliefs about the parent brand in their memory (Aaker & Keller, 1990). The consumer attitude towards the brand is often in research conceptualized as the perceived quality of the brand. This is because it tells the consumer's opinion and feelings about the brand's superiority or excellence at a higher level of abstraction (Aaker & Keller, 1990). In their research Bottomley and Holden (2001) reanalyzed eight brand extension studies and came to a conclusion that the quality of the parent brand significantly predicts brand extension evaluation. In a similar vein, inferior quality should lead to inferior brand extension evaluations (Aaker & Keller, 1990). In light of these arguments, the following is expected:

H4: The perceived quality of the parent brand will have a positive relationship on the evaluations of green brand extensions.

3 DATA AND METHODS

This chapter will look into the empirical data and methods used in order to answer the research questions and test the hypothesis. The first subchapter will introduce the research setting or context where the current research takes place. The second subchapter examines the data collection method used and the third subchapter summarizes the different measures used to evaluate e.g. extension evaluation and perceived fit. The fourth subchapter will introduce the research data obtained from the data collection. The last two subchapters introduce the methods of statistical analysis used in the current research and critically examines the trustworthiness of the research design and data collection.

3.1 Research setting

The hypotheses of the research were tested through five Finnish consumer goods brands and their hypothetical, possible green line extensions. Line extensions instead of category extensions were chosen as it puts the brands more closer to a same starting point, that is, already having products in that category. Altogether five relatively known Finnish brands were chosen representing different product categories. In addition to different product categories, variation was sought from different levels of quality and product type. Although all the brands had some environmental initiatives, none of them were strongly profiled as a particularly environmentally friendly organization.

Similar to the study done by Aaker and Keller in 1990, hypothetical brand extensions were used in the research. This way all brands have a relatively similar starting point when they are being evaluated. All hypothetical brand extensions were green line extensions meaning that brand's current product was made green, that is, environmentally friendly. Table 1 summarizes the brands used in the study and their hypothetical green line extensions.

Table 1. Brands and green line extensions used in the study

<i>Original brand</i>	<i>Green line extension</i>
<i>Fazer</i>	Organic UTZ-certified chocolate
<i>Marimekko</i>	Environmentally friendly fabrics
<i>Hesburger</i>	Organic vegetarian burger meals
<i>Rainbow</i>	Eco- washing liquid
<i>Olvi</i>	Organic beer

3.2 Data collection

The data for the research was collected through a self-administered online survey between February 13th and April 2nd in 2016. Before publishing the survey for the larger audience, the survey was pretested with 16 people and corrections e.g. to the wordings were made based on some of the suggestions. Since the research setting was in the Finnish consumer goods market, the population of the study is all Finnish consumers. The link to the online questionnaire was distributed through researcher's online social networking platforms such as Facebook, Twitter

and LinkedIn. As the public link was further shared by people in researcher's network, it makes it difficult to determine the amount of participants invited to fill out the questionnaire and thus response rate is not reported. Altogether 238 responses to the online questionnaire were collected, none of them missing any data.

As the subjects for the sample were selected based on the accessibility and proximity to the researcher, convenience sampling method was chosen. The benefit of convenience sampling is that it is the least expensive and least time-consuming for the researcher. However, there are limitations to its usage. For example, selecting people that are most accessible can lead to selection bias as the targeted respondents do not represent the entire population. (Malhotra & Birks, 2000:353) In other words, the sample might be too homogeneous either e.g. geographically or demographically. Hence, despite being an appropriate sample for this particular study, the results of this sample are not valid to make generalizations about the whole Finnish population.

The survey design with its questions were adapted from two pieces of previous research done by Aaker and Keller (1990) and Hill and Lee (2015). In order to lower the barrier to respond, the survey questions were translated from the original English language to Finnish. Effort was put to the translations trying one's best not to distort the original meaning.

The online survey was divided into three parts. The first part introduced the five chosen Finnish consumer goods brands and asked respondent's knowledge and attitude towards their quality. Although known brands were chosen, the knowledge about the brand was tested as a precaution in case results show some incomprehensible variation. The second part introduced hypothetical green line extensions of these same brands with a name and a brief introduction (see previous subchapter for brands and their green line extensions). In this part respondents were enquired about their attitude towards this type of extension and perceived fit. The third and last part of the survey included questions about the respondent's knowledge and attitude towards environmental issues and other basic background data such as gender, age and educational background. The survey in Finnish can be seen in Appendix A. The next subchapter will look more into the measures used in the survey.

3.3 Measures

In order to answer the research questions and test the proposed hypothesis, the following constructs need to be measured: attitude towards the parent brand (perceived quality), evaluations of the hypothetical green line extension, perceived fit between the brand and the extension, perceived fit between the brand and the environmental cause and respondent's environmental knowledge and involvement.

3.3.1 Attitude towards the brand and evaluation of green line extension

The attitude towards the parent brand was operationalized with the perceived quality measure with seven point Likert-scale where 1 = inferior and 7 = superior quality. The evaluation of the green line extension was operationalized with the same quality measure but also with a seven-point Likert- scale for likelihood of purchase where 1 = not at all likely and 7 = very likely. The scales used were adapted directly from a study by Aaker and Keller (1990), with a difference that the middle values were also given descriptions to facilitate the respondent's answering. These measures were used to measure each of the five brands and their hypothetical green line extensions.

3.3.2 Brand extension fit

In the second part of the study the respondents were introduced with the brand's hypothetical green line extension and were asked to evaluate its fit to the parent brand. The measure for perceived fit construct were adapted from Hill and Lee (2015) who used a five item scale to measure the consumer's perception of fit and a green line extension. Each item was a seven-point Likert-scale ranging from (1) strongly disagree to (7) strongly agree measuring consumer's unanimity towards fit related statements. Two original items were excluded from the current research in order to avoid respondent fatigue as the items were somewhat alike. The excluded items or statements were "This new line conveys the same impressions as Brand X" and "This new line would be an integral part of Brand X". The same three item brand extension fit- construct was used to measure perceived fit for all five hypothetical brand extensions.

3.3.3 Brand-cause fit

In addition to brand-extension fit construct, the brand-cause fit construct was measured with three different items adapted from Hill and Lee (2015). These three items measured the

respondent’s perception on the fit between the parent brand and the environmental cause its supporting with its green line extension. These items were seven-point Likert-scale asking respondents opinion towards statements regarding how well the brand fits with the environmental cause. The scale ranged from (1) very poorly to (7) very well, and the items were tested for each of the five brands.

3.3.4 Respondent’s environmental background

In the third and last part of the survey, the respondent’s perceived environmental knowledge and involvement were inquired. These constructs were operationalized both with three seven-point Likert-scale items adapted from Hill and Lee (2015). Environmental knowledge construct was measured by inquiring on the level of agreement (1= strongly disagree, 7= strongly agree) to three different statements related to respondent’s own perception of environmental knowledge. Again, in order to avoid respondent frustration and fatigue, one original item was excluded from the environmental knowledge construct from the current study (“When it comes to environmental issues, I really know a lot”), as it had a strong resemblance to another item (“I know a lot about environmental issues”).

Environmental involvement construct measures were adapted from Hill and Lee’s bipolar seven- point scale to statements and respondents’ level of agreement with them with a similar scale from 1-7. From environmental involvement construct two original items were excluded (“Environmental issues are significant” and “Environmental issues are meaningful”) for the same reasons as mentioned before. Table 2 summarizes the constructs and items in them.

Table 2. Constructs and items measured

<i>Construct</i>	<i>Items</i>	<i>Adapted from</i>
Attitude towards the parent brand	<ul style="list-style-type: none"> • Perceived quality of the brand 	Aaker & Keller (1990)
Green line extension evaluation (attitude towards the extension)	<ul style="list-style-type: none"> • Perceived quality of the extension • Likelihood of buying 	Aaker & Keller (1990)
Brand-extension fit	<ul style="list-style-type: none"> • This new line fits with my idea and image of Brand X • This new line and other products sold by Brand X are very similar 	Hill & Lee (2015)

	<ul style="list-style-type: none"> •This new line is a natural extension of Brand X 	
Brand-cause fit	<ul style="list-style-type: none"> •Brand X's products fit with efforts to consider environmental issues •The image of Brand X fits with efforts to consider environmental issues •The consumers of Brand X fit with efforts to consider environmental issues 	Hill & Lee (2015)
Environmental knowledge	<ul style="list-style-type: none"> •I know a lot about environmental issues •I feel very knowledgeable about environmental issues •I think I know more about environmental issues than most people 	Hill & Lee (2015)
Environmental involvement	<ul style="list-style-type: none"> •To me, environmental issues are significant •To me, environmental issues are of concern •To me, environmental issues are vital 	Hill & Lee (2015)

3.4 Research data

The data collection resulted in 238 responses to the online survey. Altogether there were 1190 observations as each respondent answered questions regarding five different brands. The demographic characteristics of the respondents is summarized in Table 3. More than half of the respondents, 54,2%, represent younger generation being 30 years old or below that. In addition, majority of the respondents (68,1%) were female. Considering the sampling method, this is no surprise as respondents represent researcher's social network. However, there is variation in the demographics as respondent ages range from 15 to 79. The researcher did not feel necessary to exclude underage respondents as they were few (16 respondents) and because in general underage are also making purchase decisions. The educational background of the respondents was most often upper secondary (high school) or vocational school representing more than one third of the respondents (36,1%). Almost the same amount of respondents (32,4%) had undergraduate or bachelor's degree as their highest level of education.

Table 3. Demographic characteristics of the sample

<i>Demographic variable</i>		<i>N of respondents</i>	<i>% of respondents</i>
<i>Age</i>	20 or below	44	18,5
	21-30	85	35,7
	31-40	34	14,3
	41-50	27	11,3
	51-60	22	9,2
	61-70	18	7,6
	70 and over	8	3,4
<i>Gender</i>	Female	162	68,1
	Male	76	31,9
<i>Education</i>	Primary school	18	7,6
	High school or vocational	86	36,1
	Undergraduate	77	32,4
	Graduate	53	22,3
	Post-graduate	2	0,8
	Other	2	0,8
<i>Total N</i>		238	

3.5 Statistical analysis methods

Descriptive statistics were used in order to examine how consumers evaluate green line extensions and evaluations of different brands were compared with analysis of variance tests. In addition to this, two multivariate techniques were used in the data analysis. First, factor analysis was used to evaluate the appropriateness of the items included in brand extension evaluation as well as the two fit constructs (brand extension fit and brand-cause fit) and for the two environmental background constructs. Second, multiple regression analysis was used to test the

hypothesis and evaluate the relationship between the dependent variable and the independent variables.

3.5.1 Factor analysis

Factor analysis is a data reduction technique which examines the correlations between the original variables or items and uses them to create smaller sets of new, latent variables. The correlations between variables might mean that they measure a same underlying characteristic. In other words, factor analysis combines similar items into one construct, or factor. In marketing research factor analysis can be used e.g. in market segmentation or in identifying the main drivers of brand preference. Data reduction through factor analysis simplifies data analysis as the number of variables is reduced. What is more, when correlated items are part of the same construct, it eliminates the issue of correlating variables in the data analysis that follows (e.g. regression analysis). (Hair et al., 2010:693).

Factor analysis can be either exploratory or confirmatory. In exploratory factor analysis (EFA), the underlying patterns - such as number of factors and the variables that belong to them - are unknown to the researcher *a priori*. In EFA the factors are obtained and discovered from the data itself and its statistical results, and the factors can be named only after the factor analysis has been done. The confirmatory factor analysis (CFA) instead tests the previously defined, hypothesized structure under each variable. That is, the researcher determines the factors and variables (or items) loading on each factor before the analysis. The assignment of variables to factors is done based on previous theory and the CFA procedure verifies or confirms that the theory matches with the reality or with the current data of a particular study. (Hair et al., 2010:693).

In order to conduct a factor analysis, it is recommended that there are enough cases or observations. Several propositions on the number of cases have been introduced, but one common guideline is suggested by Malhotra and Birks (2000:580): appropriate amount is to have four or five times the observations than there are variables included in the factor analysis. That is a 5:1 cases-to-variables ratio. The current study has 238 cases or observations and 14 variables (3x2 for fit measures, 3x2 for environmental background and 2 for extension evaluation) to be included in the factor analysis, making the cases-to-variables ratio 17:1, above

the recommended. Thereby the findings from the factor analysis can be expected to have explanatory power (Malhotra & Birks, 2000:580).

Based on previous research, the current study has hypothesized 14 items which are part of five larger constructs. That is, based on previous research constructs for green line extension evaluation, respondent's environmental awareness and involvement, brand-extension fit and brand-cause fit were formulated. Since the factors and variables belonging to each factor were determined *a priori* analysis, CFA was the chosen method for factor analysis. The suitability of the measurement model to the current study and its collected data was tested with a SPSS Amos 23.0 software before using the constructs in testing the hypothesis with multiple regressions analysis.

3.5.2 Multiple regression analysis

Multiple regression analysis examines the relationship between one metric dependent variable and one or more metric independent variables. One objective of multiple regression analysis is to find those independent variables that explain the variation in the dependent variable the most. In other words, the predictive power of the independent variables should be maximized. In order to find the independent variables with most predictive power, a researcher can test multiple alternative models. Second objective is to examine the relationship between independent variables and depended variables. That is, after confirming there is a relationship between the variables, the regression analysis also examines the strength of the relationship and whether it is negative or positive. Finally, by knowing the strength and direction of the relationship, the researcher is able to predict the values of independent variables. That is, how much a change in an independent variable contributes to the change in the dependent variable. Based on the characteristics, regression models are thus useful in e.g. determining how consumers make decisions or form attitudes towards products. (Malhotra & Birks, 2000:521; Hair et al. 2010:169-170)

There are different kinds of estimation techniques to be used in multiple regression analysis. The difference between techniques arise from the way independent variables are included in the model. In the confirmatory specification the independent variables included in the regression equation are chosen by the researcher. This approach is more confirmatory and suitable for

situations where prior research is replicated. Other common estimation techniques are the sequential methods such as stepwise estimation. In this approach the researcher examines how each independent variable contributes to the regression model. In the stepwise procedure the independent variable with highest correlation with the dependent variable is added to the model first, then additional independent variables are added and maintained in the model depending on how much they contribute to the variation of the dependent variable. (Hair et al. 2010:187-188)

The current study will examine how the quality of the parent brand, brand-extension fit and brand-cause fit (independent variables) are related to evaluation of green line extensions (dependent variable). What is more, the relationship between respondent's environmental knowledge and involvement (independent variables) and perceptions of brand-cause fit (dependent variable) are examined. The independent variables used are the constructs confirmed by the factor analysis represented as arithmetic means of items, instead of testing the relationship of multiple individual items. Since prior researched has acknowledged the importance of quality and fit measures in evaluation of brand extension (e.g. Bottomley & Holden, 2001), as well the relationship between respondent's environmental background and perceptions of brand-cause fit (Hill & Lee, 2015), a confirmatory estimation technique is chosen. Hence, the researcher will be choosing the independent variables to be included in the model. Nonetheless, the current research takes place in a different context which might bring differing results compared to previous research. In case of low predictive power of independent variables or high correlation between independent variables (multicollinearity) a more sequential estimation method should be considered.

Lastly, recommendation for the sample size also exist for multiple regression. According to Hair et al. (2010:175) the ratio of observations to independent variables should never be below 5:1. This is the minimum but the desired level lies between 15 and 20 observations per each independent variable. The current study has 13 individual items as independent variables making the ratio above 18:1, between the desired level of observations.

3.6 Trustworthiness of the study

Research intends to avoid errors but yet however the trustworthiness varies from study to study. Acknowledging this, a researcher should evaluate the validity and reliability of his or her research (Hirsjärvi et al. 2004:216). In research, design validity means that the research measures actually what it intends to measure. In other terms, the scales and measures used in a particular research are appropriate to represent the concept that the researcher is interested in. Reliability instead signifies that the measurements yield similar results if repeated e.g. at different time or with a random sample taken from the same target group. (Hair et al. 2010:137)

When designing the data collection with a survey, it is important that the chosen scales and measures depict the phenomenon of interest. Thus for the current research it was crucial that the Likert-scales capture the phenomena such as brand-cause fit and respondent's environmental background as rigorously as possible. In order to improve the validity of the survey, one can run pre-tests of the survey and use measures that have already been validated by previous research. For the current research, the survey design was pre-tested with 16 individuals and items were selected from previous research instead of creating an own set of measures (studies by Hill & Lee, 2015 and Aaker & Keller, 1990). An additional challenge of validity came translating the original items from English to Finnish. However, wordings were carefully considered in order to translate the original English meaning into similar Finnish one.

In order to avoid respondent fatigue with multiple similar questions, some similar items were deleted leaving three items per larger construct to be measured (e.g. three items for brand-cause fit). This can be thought of as a minor risk to validity as three is often considered as a minimum number of items in measuring larger, latent constructs (Hair et al., 2010:698) and if an item does not represent that construct in question.

What comes to reliability, the measures are evaluated based on the extent they are free from random error. Different from systematic error, random errors do not affect the research measurements in a constant way, but instead create inconsistency which in turn lowers the reliability. This type of random error in data collection can arise from a self-conducted survey where errors might happen if respondents fail to understand the question, decreasing the

precision of a reply. Conducting an open online survey also makes it impossible to control who answers the survey, e.g. whether they are even part of the target group or give meaningful answers. Other sources of errors to survey scores can arise from social desirability where the responses do not represent the reality but instead what the respondents believe is a desirable answer. (Malhotra & Birks, 2000:305) This type of error needs to be considered in the current study where the respondents were asked to evaluate their own behavior and attitudes.

Last, it is important to discuss generalizability, or its lack thereof. This arises from the convenience sampling method as the respondents represented researcher's extended social network which could be seen in the sample demographics (biased towards young females). Because of the sampling method it is not possible to make generalizations from this research to Finnish population as a whole. However, the data collected fulfills the criteria for the current study.

The validity and reliability measures of confirmatory factor analysis and multiple regression analysis will be discussed in the Results chapter that follows.

4 RESULTS

This chapter introduces how green line extensions were evaluated and looks into the differences observed between brands. In addition, this chapter examines the results of the confirmatory factor analysis and tests the hypothesis with multiple regression analysis.

4.1 Descriptive statistics and analysis of variance (ANOVA)

The average quality of the chosen parent brands was 5.19 (out of 7), representing quite good quality in the minds of respondents. The averages for perceived fit measures lie somewhere between a neutral response and quite good fit (4.52 and 4.62). On average the green line extensions were evaluated to 4.66, meaning that the extensions were on average considered between "neither good nor bad" and "quite good". Fazer was rated as the highest regarding parent brand quality and extension evaluation, whereas Rainbow was rated lowest in these measures. Table 4 summarizes the results per brand and the means associated with the measures.

Table 4. Descriptive statistics per brand and means

Brand	Parent brand quality	Brand-extension fit	Brand-cause fit	Evaluation of the green line extension
<i>Fazer</i>	6.21	4.94	5.16	5.16
<i>Marimekko</i>	5.54	5.10	5.29	4.80
<i>Hesburger</i>	4.96	3.97	4.12	4.50
<i>Rainbow</i>	4.34	4.17	4.11	4.35
<i>Olvi</i>	4.90	4.45	4.44	4.50
Mean	5.19	4.52	4.62	4.66

The means of different brands can be further analyzed with analysis of variance tests which examine the differences among means for different populations (here: brands). For the current research it is possible to examine whether the differences in the evaluation of green line extensions from brand to brand stem from sampling error or from treatment effect (Hair et al., 2010:440). That is, whether the differences are explained by the different brands.

One-way analysis of variance test was conducted to study the mean differences in the evaluation of green line extension for one categorical variable: brands (Malhotra & Birks, 2000:491). The assumption for the homogeneity of variances was not met (Levene statistic $p < 0.05$), which means that the robust tests of equality of means are considered when determining whether the differences between means are significant. Both the Welch and Brown-Forsythe tests give significant results ($p < 0.05$) meaning that we can reject the null hypothesis that means between brands are equal, and instead assume that the effect of the brand to the extension evaluation is significant. To further study which mean differences especially are significant, Games-Howell post hoc test was carried out. The mean differences between Fazer and each of the four brands were significant with the biggest mean difference between Fazer and Rainbow (0.81 for the benefit of Fazer). Other significant difference between means were between Marimekko and Rainbow (0.45 for the benefit of Marimekko). The results for one-way analysis of variance tests can be seen in the Appendix B.

4.2 Confirmatory factor analysis (CFA)

Amos 23.0 software was used to run a confirmatory factor analysis on the five constructs: brand-extension fit, brand-cause fit, environmental knowledge, environmental involvement and green line extension evaluation. The attitude towards the parent brand was measured with a single

item (Perceived quality), hence it was not included in the factor analysis. Items involved in each construct have been derived from previous research. However, it is not evident that the same theoretical specification matches with all research and can be used in all studies. CFA thus is used in the current study to examine whether the hypothesized theoretical specification matches with the empirical data. (Hair et al., 2010:693)

One important objective of CFA is to evaluate the construct validity of the proposed theoretical specification, or measurement theory. Construct validity means the set of items measured actually reflect the latent variables (constructs) they are meant to measure. One important component of construct validity is convergent validity which is measured with factor loadings, average variance extracted (AVE) and construct reliability. Table 5 summarizes these measures for the current study.

Table 5. Results of confirmatory factor analysis (CFA)

<i>Construct</i>	<i>Loadings*</i>	<i>CR</i>	<i>AVE</i>	<i>Items</i>	<i>Adapted from</i>
<i>Brand-extension fit</i>	0.909	0.894	0.739	·This new line fits with my idea and image of Brand X	Hill & Lee, 2015
	0.793			·This new line and other products sold by Brand X are very similar	
	0.873			·This new line is a natural extension of Brand X	
<i>Brand-cause fit</i>	0.864	0.902	0.755	·Brand X's products fit with efforts to consider environmental issues	Hill & Lee, 2015
	0.945			·The image of Brand X fits with efforts to consider environmental issues	
	0.790			·The consumers of Brand X fit with efforts to consider environmental issues	
<i>Environmental knowledge</i>	0.852	0.892	0.734	·I know a lot about environmental issues	Hill & Lee, 2015
	0.940			·I feel very knowledgeable about environmental issues	
	0.770			·I think I know more about environmental issues than most people	
<i>Environmental involvement</i>	0.911	0.864	0.681	·To me, environmental issues are significant	Hill & Lee, 2015
	0.777			·To me, environmental issues are of concern	
	0.781			·To me, environmental issues are vital	

<i>Green line extension evaluation</i>	0.856	0.772	0.630	· Perceived quality of the extension	Aaker & Keller, 1990
	0.726			· Likelihood of buying	

* All loadings significant at $p < 0.01$

All items in the analysis load on their expected factors with loadings above the ideal threshold of 0.7, meaning that the items are appropriate for measuring the larger, latent variable. Construct reliability for all five constructs is higher than the recommended 0.7 indicating high internal consistency. Average variance extracted (AVE) for all five constructs is above 0.5 suggesting adequate convergence. (Hair et al., 2010:695)

After construct validity the discriminant validity was examined. That is, the measure of the extent to which each construct is unique and distinct from other constructs. This is especially important to study in the current research as there are strong correlations between some of the constructs (above 0.71). One way of measuring discriminant validity is by Fornell and Larcker (1981) procedure which uses the square root of AVE and compares it to the absolute value of standardized correlation with other constructs. For the current research, good discriminant validity is reached as the square root of AVE is bigger than the standardized correlation with other constructs (presented in bold in the correlation table below). Summary statistics for the measurement model is presented in Table 6.

Table 6. Summary statistics

<i>Construct</i>	<i>Mean</i>	<i>SD</i>	<i>1.</i>	<i>2.</i>	<i>3.</i>	<i>4.</i>	<i>5.</i>
<i>1. Environmental involvement</i>	4.90	1.18	0.825				
<i>2. Environmental knowledge</i>	4.55	1.11	0.711	0.857			
<i>3. Brand-extension fit</i>	4.52	1.33	0.205	0.128	0.860		
<i>4. Evaluation</i>	4.66	1.39	0.294	0.165	0.712	0.794	
<i>5. Brand-cause fit</i>	4.62	1.36	0.195	0.104	0.758	0.707	0.869

Finally, several fit measures were used in order to evaluate how well the empirical data fits with the research model. The comparative fit index (CFI) and Tucker-Lewis index (TLI) indicate satisfactory fit with values above 0.95 (values of 0.975 and 0.966, respectively). The root mean

square error of approximation (RMSEA) value of 0.06 also signals satisfactory fit being below the recommended cutoff value of 0.08 (Hair et al., 2010:667).

After the theoretical specification was confirmed appropriate for the current research, the new confirmed constructs were formed as average variables from individual items. These constructs were used in the multiple regression analysis to test the hypothesis with SPSS 23.0. The results of this analysis will be discussed in the next subchapter.

4.3 Multiple regression and testing hypothesis

The following subchapters will demonstrate the results of hypothesis testing with multiple regression analysis but also consider the cases of multicollinearity and assumptions related in the analysis.

4.3.1 Testing the hypothesis

Multiple regression analyses were conducted to test hypothesis H1-H4. The standardized coefficients reported represent the strength and direction of the relationship between independent variables and the dependent variable. The value tells whether the relationship is positive or negative but also how much the dependent variable changes when an independent variable changes by one unit. (Hair et al. 2010:197)

The first model of multiple regression was conducted to discover the relationship between consumer's environmental background (knowledge and involvement) and perception of how well brand fits to support environmental cause. Unlike hypothesized, consumer's environmental knowledge had negative relationship to brand-cause fit perceptions but the relationship was not significant ($\beta = -0.040$, with significance level $p = 0.283$). Thus H1a is not supported. On the other hand, consumer's environmental involvement had positive relationship to brand-cause fit perceptions ($\beta = 0.192$, $p < 0.01$), supporting H1b. The regression model explaining brand's cause-fit was statistically significant ($p < 0.01$) with R^2 value of 0.029, hence the model explains approximately 3 percent of the variance in brand-cause fit variable.

The second part of multiple regression analysis was conducted to evaluate the relationship between brand-extension fit, brand-cause fit, parent brand quality and the extension evaluation.

The model was statistically significant ($p < 0.01$) and the R^2 for the model is 0.404, hence it explains relatively well the variance in the dependent variable (40%). Brand-extension fit ($\beta = 0.316$, $p < 0.01$) and brand-cause fit ($\beta = 0.307$, $p < 0.01$) were both positively related to brand extension evaluation thus lending support to hypotheses H2 and H3. Finally, the perceived quality of the parent brand was also positively related to the brand extension evaluation ($\beta = 0.119$, $p < 0.01$), supporting H4. The results of these two models can be seen from the Table 7 below.

Table 7. Results of multiple regression analysis for the two models

<i>Dependent variable</i>	<i>R²</i>	<i>Adjusted R²</i>	<i>F</i>	<i>Standardized coefficient β</i>	<i>Signif.</i>	<i>VIF</i>
Independent variable						
<i>Brand-cause fit</i>	0.029	0.027	17.527			
Environmental knowledge				-0.040	0.283	1.676
Environmental involvement				0.192	0.000	1.676
<i>Green line extension evaluation</i>	0.404	0.402	267.975			
Quality of the parent brand				0.119	0.000	1.293
Brand-extension fit				0.316	0.000	1.880
Brand-cause fit				0.307	0.000	1.983
<i>All models significant at $p < 0.01$</i>						

4.3.3 Comparison between different brands and respondent groups

Since the current research collected responses to evaluations of five different brands, the results of multiple regression were also able to be examined at brand level. The importance of different independent variables in explaining the variation in the dependent variable varied from brand to brand, and the results can be seen in Appendix C. To summarize, the standardized coefficients (β) varied for brand-extension fit variable from 0.271 to 0.468, for brand-cause fit from 0.189 to 0.529 and for parent brand quality from 0.109 to 0.217.

The results were also compared to the background of the respondents – their gender, age and educational background. There were no significant differences between female and male,

although brand-extension fit and brand-cause fit had slightly more important role in evaluating green line extensions for males ($\beta = 0.305$ and 0.277 for females compared to $\beta = 0.353$ and 0.333 for males, respectively), The quality of the parent brand was not a significant predictor of green line extension evaluation for males as it was for females ($\beta = 0.136$).

For respondents between 31-50 and 61-70 years old, the brand-cause fit played a more important role compared to brand-extension fit (β for brand-cause fit ranging from 0.298 to 0.516). For respondents between 51-60 years old, the quality of the parent brand was the strongest predictor of positive green line extension evaluation ($\beta = 0.300$).

For different educational backgrounds there were no significant differences, although brand-cause fit was a slightly more important predictor than brand-extension fit in green line extension evaluation for respondents in the second educational level (upper secondary or vocational school).

4.3.4 Multicollinearity and assumptions related to multiple regression

The validity and reliability of multiple regression analysis for the current data can be examined with multicollinearity statistics and by checking that assumptions related to multiple regression analysis are met.

When conducting multiple regression analysis it is important to check for collinearity and multicollinearity which stand for correlation between independent variables. This type of correlation can influence the regression model in a sense that increased collinearity can decrease the unique variance explained by an independent variable. This can be seen in the overall predictive power of the model, where each independent variable added to the model increases the power of the model much more slowly than in case of low multicollinearity. (Hair et al. 2010:165) To check for collinearity, the statistics for tolerance and variance inflation factor (VIF) can be evaluated. If VIF figure is 1, it means the independent variable is uncorrelated with others (Berenson et al., 2005:635). The threshold value for too much correlation is often set to 10, which indicates too much correlation between independent variables (Hair et al., 2010:204).

In the current research, the VIF values are well below the cutoff threshold of 10 being below 2 for all independent variables. Hence the independent variables are appropriate to be used in the analysis (Hair et al., 2010:204).

Finally, there are certain assumption that must not be violated in the multiple regression model. These assumptions are linearity of the phenomenon, independence of error terms, constant variance in error terms (homoscedasticity) and normality in error term distribution (Malthotra & Birks, 2000:530). The graphs related to testing these assumptions can be found in the Appendix D. First, the correlation between an independent variable and a dependent variable should be a linear relationship. By examining the partial regression plot graphs for current research, the variables can be considered linear. After linearity, the independence of error terms was examined by plotting residuals against the depended variable. The pattern did not show linearity by appearing relative random for both models, thus the assumption of independence was confirmed. The same plot can be used for evaluating homoscedasticity and make sure error terms are constant. The error terms lie on a horizontal line and indicated consistency thus problems of heteroscedasticity can be discarded. Finally, normality of the error terms was tested with normal probability plots where residuals are compared with normal distribution. The residual line closely followed the diagonal line of normal distribution indicating normality of the error terms. The next section will discuss the results more closely and compare them to previous research.

5 DISCUSSION

The purpose of the current research was to examine how Finnish consumers evaluate hypothetical green line extensions of Finnish consumer goods brands, and how quality of the parent brand and perceived fit between the parent brand and the extension influences that evaluation. In addition, the relationship between consumer's environmental background and perceptions of the brand's fit with the environmental cause was studied. The current research takes brand extension research to a relatively unexplored context – the Finnish market, but also examines whether quality of the parent brand predicts positive brand extension evaluation also when it comes to green line extensions.

First, the evaluations of the hypothetical green line extensions were on average between “neither good nor bad” and “quite good”, which was in general lower than the evaluations of the parent brands. The reason for the relatively low evaluation can stem from consumer’s unfamiliarity with the product (being hypothetical) or because green products have been traditionally viewed as lower quality, and purchasing them requires some trade-offs between attributes (Ginsberg & Bloom, 2004). There were statistically significant differences between the green line extension evaluations for different brands. For example, the mean differences in extension evaluation between Fazer and every other brand was significant. The differences might stem from Fazer’s strong position and long-term presence in the Finnish market as e.g. it is considered to be the most appreciated Finnish brand (Markkinointi & Mainonta, 2015).

Unlike discovered in previous research by Hill and Lee (2015) consumer’s environmental knowledge did not create a positive impact on perceptions of brand fit with the environmental cause. On the contrary, the relationship between the two was slightly negative however not significant. On the other hand, consumer’s environmental involvement (e.g. consider environmental issues as vital and important) showed a positive relationship towards brand-cause fit perceptions. The rationale behind this can be that environmental concern makes the consumer more motivated to see the fit between the brand and the environmental cause its supporting. To be more precise, it is likely that motivated consumers are viewing the relationship more emotionally and positively as someone is supporting the same cause that is important for them. Support for this can also be found from CSR studies: congruence between consumer’s lifestyle and company’s CSR initiatives (such as introducing green products) enables consumer to perceive the company’s efforts more favorably (Lee et al., 2012).

Based on these results it can be concluded that the consumer needs to be more involved with the environmental issues in order to be motivated to see the fit between the brand and the cause. What is more, a knowledgeable person without concern over environment can be more inclined to be suspicious about company’s efforts to be green. All in all, the environmental background explained very little variance (only 3 percent) in the brand-fit variable, meaning that these are

not the best measures for determining what influences brand-cause fit perceptions at least in the context of the current research.

The perceived fit between the parent brand and the extension had the most positive impact to evaluations of green line extensions. Brand-extension fit (e.g. product and image similarity) is the most important predictor of brand extension evaluation, closely followed by brand-cause fit. These results are in line with findings of Hill and Lee (2015) when studying fast fashion retailers and their green line extensions. The results can also be explained with categorization and schema theory discussed in the literature review. The respondents were familiar with the brands included in the research, hence we can assume each respondent held certain associations in their memory about each brand. When new information was presented to them in a form of a new line extension, the respondents used existing information in its identification and evaluation. The better the fit between the existing and new information about the brand, more easily the new information entered the existing knowledge structures and was accepted, thus improving evaluation of brand extension. (e.g. Cohen & Basu, 1987; Loken & John, 1993)

The discovered importance of brand-cause fit in the evaluation also supports CSR research as company's CSR initiatives need to be consistent with company's previous activities, otherwise these initiatives could be considered insincere (Becker-Olsen et al., 2006). Based on the results it is also possible to agree with Park et al. (1991) that in addition to product features similarity, brand concept consistency is an important predictor of brand extension evaluation. However, here it is worth noting that since the research was done on line extensions that are extending to the same product category, the perceptions of fit are expected to be relatively high.

The quality of the parent brand explained relatively little change in the extension evaluation compared to brand fit measures ($\beta = 0.119$ compared to 0.316 and 0.307). This is contrary to the findings of several brand extension studies that found that quality of the parent brand was the most important predictor of brand extension evaluation (e.g. Bottomley & Holden, 2001). The results could be mirrored against the results from a study by Aaker and Keller (1990) which found no significant impact of parent brand quality to brand extension evaluation. The authors argue that this may be due to the fact that consumers perceive the extension to be easy-to-make

which does not go hand in hand with high quality. This can also be true for green line extensions. The relationship between the parent brand quality and the extension evaluation might not be as strong in green product categories which have traditionally been perceived as low quality (Chatterjee, 2009), and even perhaps relatively easy-to-make.

Finally, comparing the explanatory power of the model in the current research to previous research by Hill and Lee (2015), we find stronger predictive power ($R^2 = 0.404$ compared to 0.210). That is, fit measures, and lesser extent parent brand quality, are extremely important predictors of green line extension evaluation in the current setting.

6 CONCLUSIONS

This chapter summarizes the main findings by answering the three research questions, suggests some practical managerial implications, recognizes the limitations of the research and introduces ideas for further research.

6.1 Research summary

The goal of the current research was to answer three research questions by conducting a quantitative consumer research. The data was collected with an online survey and analyzed with descriptive statistics and multivariate data analysis methods.

The first research question *“How do Finnish consumers evaluate green brand extensions introduced by Finnish consumer goods brands?”* was examined with consumer evaluations of hypothetical green line extension of five Finnish consumer goods brands. The overall reception of these extensions were relatively neutral, evaluations being between “neither good nor bad” and “quite good”.

The second research question, *“What is the role of parent brand quality, brand-extension fit perceptions and brand-cause fit perceptions in these evaluations?”* was answered with the conclusion that especially the perceived fit between the parent brand and the extension is an

important predictor of green line extension evaluation. The quality of the parent brand had less explanatory power compared to the fit measures.

The last research question asked “*What is the role of consumer’s environmental background in perceptions of brand-cause fit?*”. The conclusion was that only consumer’s involvement with the environmental issues were positively related to perceptions of brand being suitable with the cause, while knowledge about environmental issues showed negative impact but with no significance. However, it was also concluded that the environmental background explains little of the variation in the brand-cause fit perceptions.

The next subchapter will discuss how these findings can be taken into a more practical level and what are the managerial implications of the findings.

6.2 Managerial implications

The greening of the product portfolio is becoming increasingly topical considering the current negative state of the environment and consumer demand for green products. Companies have started to offer green products in order to decrease the environmental impact and also to answer consumer needs for sustainable living and consumption (Kotler, 2011). The current research gives some insights to marketing managers and brand managers who are considering to enter the green product market but are unsure how to do that and what is the key to success.

Considering its relative ease, it is tempting for many companies to take advantage of the brand equity of the established brand and enter new green markets with brand extensions. However, before doing this companies must understand brand knowledge and what their “brand node” in consumer memory consists of. In other words, what kind of associations are linked to this particular brand. (Keller, 1993) It is important to understand that if there is a conflict between the existing knowledge and the new information, the new information is not easily entered into existing knowledge structures which can confuse the consumer and even dilute the name of the parent brand (e.g. Boush & Loken, 1991). For this reason, it is important to introduce products that fit to the company’s current portfolio and design products accordingly. In addition to this, companies must look into a more conceptual level of fit as well, such as their previous actions and reputation, and only then determine whether it would be believable in supporting the

environmental cause publically. If the previous record in sustainability is not admirable, consumer's might be highly skeptical of green product introductions (Becker-Olsen et al., 2006).

Even though there would not be an immediate fit between the existing brand knowledge and green brand extension strategy, it does not mean companies should give up on the green brand extension strategy. Actually, entering the green product market can be a highly recommended and forward looking strategy in any case – the recent news suggest that the green consumption trend is not going anywhere. Consider e.g. the global climate agreement reached in Paris in December 2015, when 200 countries reached consensus on limiting global temperatures well below 2°C meanwhile our current actions are taking us towards temperature rise of closer to 3°C (BBC, 2015).

Nothing prevents companies from taking the environmental initiative and reduce carbon footprint in a form of introducing green products – the important decision lies in how to approach the green market and what kind of strategy to adopt. A comparison of existing brand knowledge and green brand extension strategy and how well they fit together is a good reference point. In case of an existing brand knowledge vs. new knowledge conflict, companies could e.g. tone down on the communication and incrementally introduce new, greener attributes to their brand knowledge. Starting from product categories that are typical for the company can also be a good starting point (Boush & Loken, 1991). Another solution for brand-extension and brand-cause conflict is to introduce a completely new brand instead of using the existing brand name. However, as discussed in the literature review, this option is much costlier considering that the awareness must be built up from the start (Aaker & Keller, 1990).

6.3 Research limitations and suggestions for further research

One of the biggest limitations in the current research is in the convenience sampling method which has resulted in biased set of data at least age- and gender- wise. Limited amount of time and resources restricted the collection of a sample that would represent the whole population: Finnish consumers. Hence, the lack of generalizability of the results to larger population can be seen as a large limitation and the results of the current study should be interpreted with this in mind. In addition to the sampling method, the selection of brands studied could have biased the results to one direction or another. Careful planning was put in selecting representative and

distinctive Finnish brands, but nonetheless further research could include more brands in the study, and extend the study to cover also extensions to other product categories.

Hypothetical brand extensions have been often used in brand extension research (e.g. Aaker & Keller, 1990), but this can be a limitation in a sense that evaluations are based on estimations and not actual experience. Following research could test how green line extensions are evaluated with actual green brands. Furthermore, the responses to evaluations of different brand extensions could have been influenced by product category in a way that a respondent might have difficulties in evaluating purchase probability in a product category they are not even consuming. Further research could thus involve only current customers to the research, or study the differences between potential and actual customers.

Although the selected fit measures had high predictive power to changes in green line extension evaluation, further research could look into other fit measures as well, or look into the interaction of parent brand quality and fit measures, as studied by Aaker and Keller (1990). The impact of communication and message framing, and differences between product type (vice vs. virtue) and company age could be studied like done by Olsen et al. (2014). The attitude towards the parent brand could also be measured with many items, instead of just one perceived quality-measure. Finally, similar longitudinal study conducted by Olsen et al. would give valuable information on the long-term effects of green new product introductions in the Finnish market. Another interesting aspect to study would be to examine the relationship of green products introductions to firm performance (e.g. market share) as this would eliminate the problems often faced with consumer research (e.g. social desirability when answering survey questions).

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APPENDIX

APPENDIX A: Online survey

Kyselytutkimus suomalaisista kuluttajabrändeistä

Tämä kysely pyrkii selvittämään suomalaisten kuluttajien mielipiteitä suomalaisista kuluttajabrändeistä ja niiden mahdollisista uusista tuotteista.

Kysely kestää n. 10 minuuttia ja vastanneiden kesken arvotaan SOK:n 50 euron lahjakortti. Jätä yhteystietosi mikäli haluat osallistua arvontaan. Vastaukset käsitellään luottamuksellisesti. Kysely on osa pro gradu- tutkielmatyötä.

Sinulta kysytään ensin mielipiteitä viidestä suomalaisesta kuluttajabrändistä

* = pakollinen kysymys

Seuraava -->

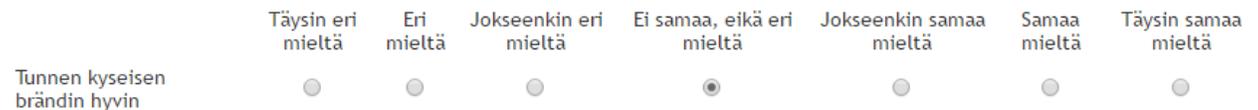
7% valmiina

Brändi 1: Fazer

Vastaa seuraaviin kysymyksiin ajatellen Fazeria brändinä

1. Brändin tunnettavuus *

Vastaa seuraavaan väittämään:



2. Brändin laatu *

Arvioi kyseisen brändin laatu asteikolla 1-7

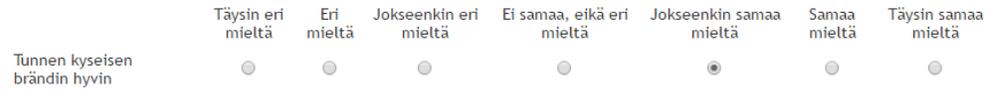


Brändi 2: Marimekko

Vastaa seuraaviin kysymyksiin ajatellen Marimekkoa brändinä

3. Brändin tunnettavuus *

Vastaa seuraavaan väittämään:



4. Brändin laatu *

Arvioi kyseisen brändin laatu asteikolla 1-7

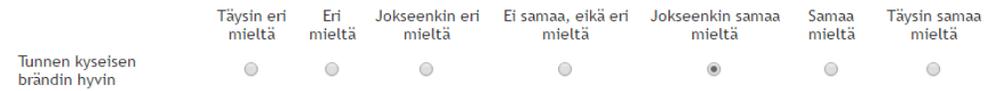


Brändi 3: Hesburger

Vastaa seuraaviin kysymyksiin ajatellen Hesburgeria brändinä

5. Brändin tunnettavuus *

Vastaa seuraavaan väittämään:



6. Brändin laatu *

Arvioi kyseisen brändin laatu asteikolla 1-7

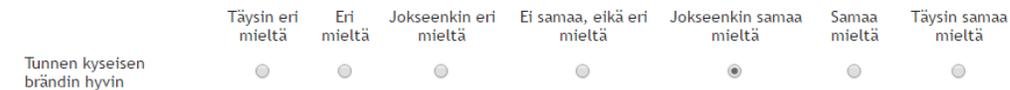


Brändi 4: Rainbow

Vastaa seuraaviin kysymyksiin ajatellen Rainbow'ta brändinä

7. Brändin tunnettavuus *

Vastaa seuraavaan väittämään:



8. Brändin laatu *

Arvioi kyseisen brändin laatu asteikolla 1-7

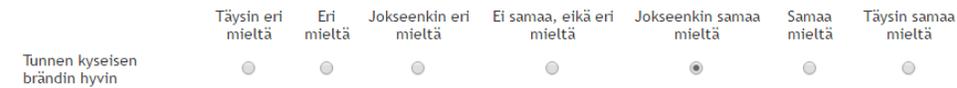


Brändi 5: Olvi

Vastaa seuraaviin kysymyksiin ajatellen Olvia brändinä

9. Brändin tunnettavuus *

Vastaa seuraavaan väittämään:



10. Brändin laatu *

Arvioi kyseisen brändin laatu asteikolla 1-7



Brändien uudet tuotteet

Seuraavaksi sinua pyydetään arvioimaan samojen brändien uusia, kuvitteellisia, ympäristöystävällisiä tuotteita. Lue jokaisella sivulla tuotteen lyhyt kuvaus ja vastaa kysymyksiin

Uusi tuote 1: Luomu Fazerin Sininen

Arvioi seuraavaksi Fazerin Sininen UTZ- sertifioitu luomusuklaa (luomu=luonnonmukainen, UTZ-sertifioitu= tuotettu vastuullisesti huolehtien ihmisten ja ympäristön hyvinvoinnista)

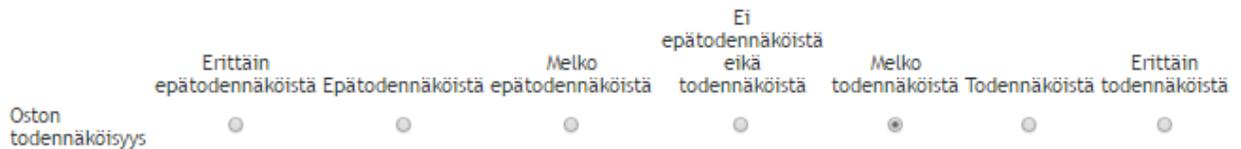
11. Mielikuvasi tuotteen laadusta *

Arvioi uuden tuotteen laatu asteikolla 1-7



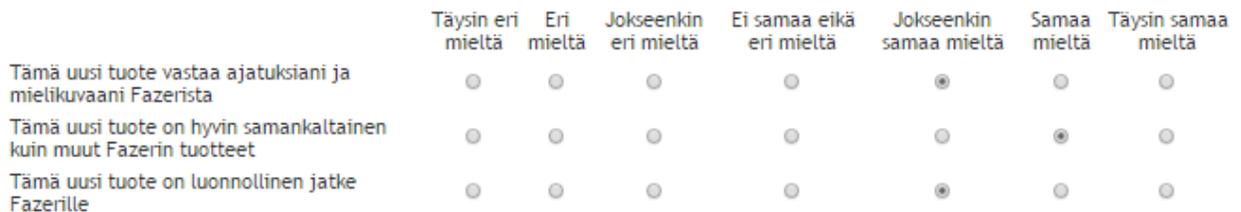
12. Oston todennäköisyys *

Arvioi todennäköisyys sille, että ostaisit tuotteen, mikäli harkitsisit ostoa samasta tuoteryhmästä (suklaa)



13. Tuotteen sopivuus brändin kanssa *

Vastaa seuraaviin väittämiin asteikolla 1-7



14. Ympäristöystävällisyyden ja brändin yhteensopivuus *

Arvioi seuraavat väittämät asteikolla 1-7



Uusi tuote 2: Marimekon ympäristöystävälliset kankaat

Arvioi seuraavaksi Marimekon kangastuotteet, jotka on valmistettu kierrätetystä kuidusta ja joiden valmistus vaatii vähemmän energiaa ja luonnonvaroja

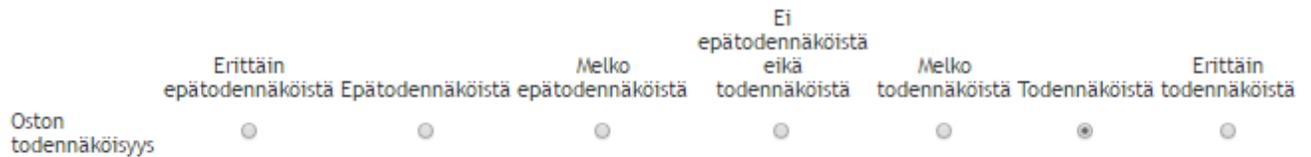
15. Mielikuvasi tuotteen laadusta *

Arvioi uuden tuotteen laatu asteikolla 1-7



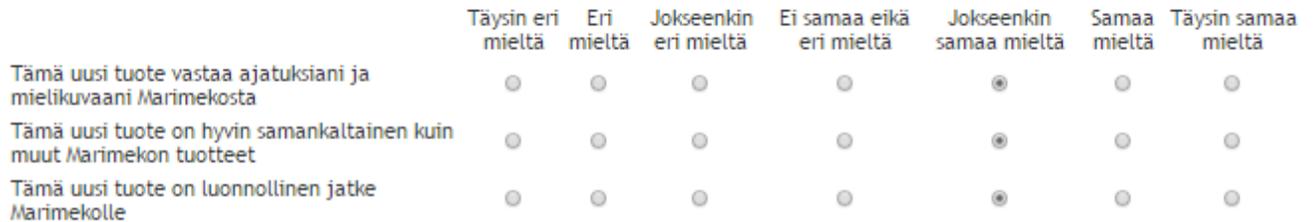
16. Oston todennäköisyys *

Arvioi todennäköisyys sille, että ostaisit tuotteen, mikäli harkitsisit ostoa samasta tuoteryhmästä (kangas)



17. Tuotteen sopivuus brändin kanssa *

Vastaa seuraaviin väittämiin asteikolla 1-7



18. Ympäristöystävällisyyden ja brändin yhteensopivuus *

Arvioi seuraavat väittämät asteikolla 1-7



Uusi tuote 3: Hesburgerin luomu-kasvisateriat

Arvioi seuraavaksi Hesburgerin ateria, jonka valmistuksessa hyödynnetty lähellä tuotettuja luomukasvisraaka-aineita (luonnonmukaisesti tuotettu)

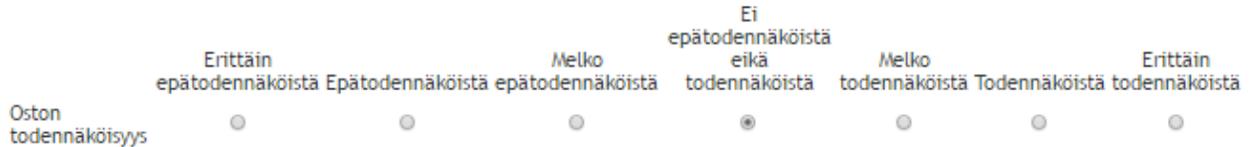
19. Mielikuvasi tuotteen laadusta *

Arvioi uuden tuotteen laatu asteikolla 1-7



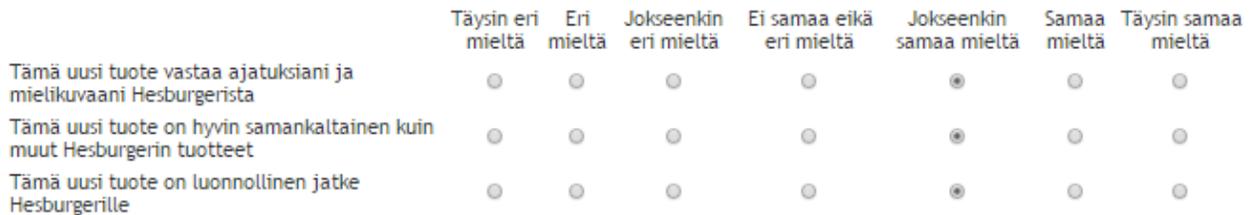
20. Oston todennäköisyys *

Arvioi todennäköisyys sille, että ostaisit tuotteen, mikäli harkitsisit ostoa samasta tuoteryhmästä (hampurilaisateria)



21. Tuotteen sopivuus brändin kanssa *

Vastaa seuraaviin väittämiin asteikolla 1-7



22. Ympäristöystävällisyyden ja brändin yhteensopivuus *

Arvioi seuraavat väittämät asteikolla 1-7



Uusi tuote 4: Rainbow eko-pyykinpesuaine

Arvioi seuraavaksi Rainbow'n biohajoava pyykinpesuaine, joka ei sisällä vesistöjä rehevöittävästä fosfaattia, ja joka pesee pyykkiä matalissa lämpötiloissa säästämällä energiaa.

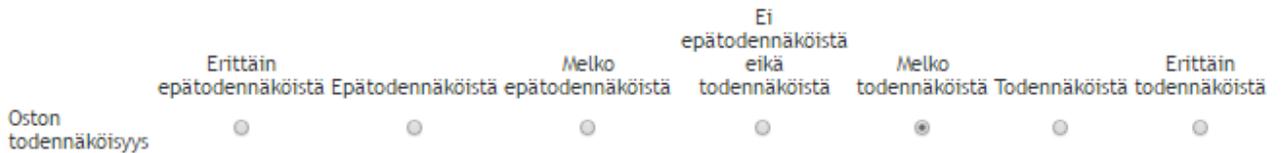
23. Mielikuvasi tuotteen laadusta *

Arvioi uuden tuotteen laatu asteikolla 1-7



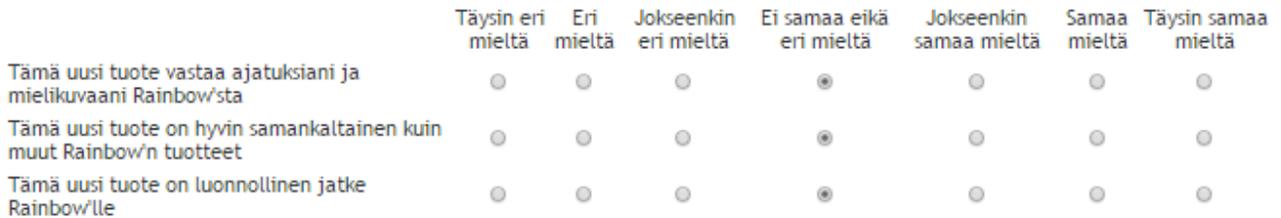
24. Ostos todennäköisyys *

Arvioi todennäköisyys sille, että ostaisit tuotteen, mikäli harkitsisit ostoa samasta tuoteryhmästä (pyykinpesuaine)



25. Tuotteen sopivuus brändin kanssa *

Vastaa seuraaviin väittämiin asteikolla 1-7



26. Ympäristöystävällisyyden ja brändin yhteensopivuus *

Arvioi seuraavat väittämät asteikolla 1-7



Uusi tuote 5: Olvi Luomu III-olut

Arvioi seuraavaksi Olvin luomuolut jonka valmistuksessa on hyödynnetty kotimaista luomuviljaa, 100% uusiutuvaa energiaa sekä kierrätettyjä pakkausmateriaaleja.

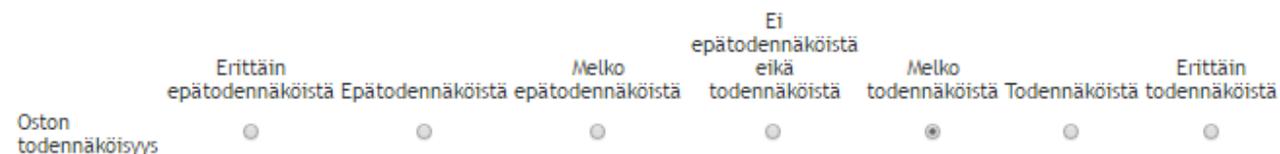
27. Mielikuvasi tuotteen laadusta *

Arvioi uuden tuotteen laatu asteikolla 1-7



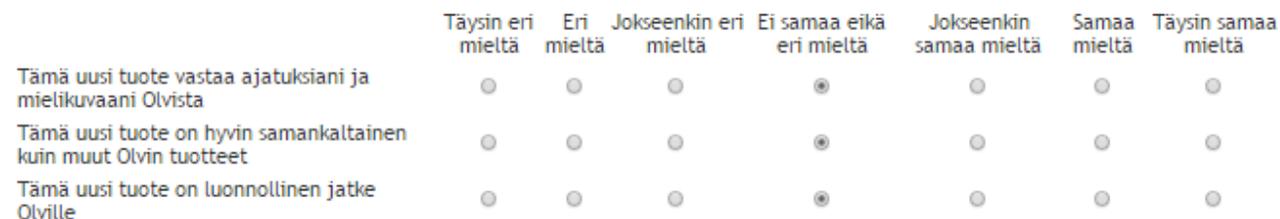
28. Oston todennäköisyys *

Arvioi todennäköisyyttä sille, että ostaisit tuotteen, mikäli harkitsisit ostoa samasta tuoteryhmästä (olut)



29. Tuotteen sopivuus brändin kanssa *

Vastaa seuraaviin väittämiin asteikolla 1-7



30. Ympäristöystävällisyyden ja brändin yhteensopivuus *

Arvioi seuraavat väittämät asteikolla 1-7



Vastaa vielä muutama taustakysymykseen

31. Tietämys ympäristöasioista *

Vastaa väittämään asteikolla 1-7

	Täysin eri mieltä	Eri mieltä	Jokseenkin eri mieltä	Ei samaa eikä eri mieltä	Jokseenkin samaa mieltä	Samaa mieltä	Täysin samaa mieltä
Tiedän paljon ympäristöasioista	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Olen hyvin perehtynyt ympäristöasioihin	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Uskon tietäväni ympäristöasioista enemmän kuin useimmat ihmiset	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ympäristöasiat ovat minulle merkittäviä	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ympäristöasiat huolestuttavat minua	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ympäristöasiat ovat minulle elintärkeitä	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

32. Sukupuoli *

- Nainen
- Mies

33. Syntymävuosi *

---- ▾

34. Koulutus *

- Peruskoulu
- Lukio tai ammatillinen koulutus
- Alempi korkeakoulututkinto
- Ylempi korkeakoulututkinto
- Lisensiaatti tai tohtori
- Muu

35. Jätä yhteystietosi mikäli haluat osallistua arvontaan. Tietojasi käsitellään luottamuksellisesti.

Etunimi

Sukunimi

Sähköposti

0% valmiina

APPENDIX B: One-way analysis of variance

Test of Homogeneity of Variances

Evaluation

Levene Statistic	df1	df2	Sig.
4,716	4	1185	,001

ANOVA

Evaluation

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	100,041	4	25,010	13,432	,000
Within Groups	2206,392	1185	1,862		
Total	2306,433	1189			

Robust Tests of Equality of Means

Evaluation

	Statistic ^a	df1	df2	Sig.
Welch	14,393	4	591,433	,000
Brown-Forsythe	13,432	4	1151,796	,000

a. Asymptotically F distributed.

Multiple Comparisons

Dependent Variable: Evaluation

Games-Howell

(I) Index1	(J) Index1	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Fazer	Marimekko	,36345 [*]	,11336	,012	,0530	,6739
	Hesburger	,66597 [*]	,12875	,000	,3134	1,0186
	Rainbow	,81303 [*]	,12061	,000	,4827	1,1433
	Olvi	,66176 [*]	,12434	,000	,3213	1,0023
Marimekko	Fazer	-,36345 [*]	,11336	,012	-,6739	-,0530
	Hesburger	,30252	,12602	,117	-,0426	,6477
	Rainbow	,44958 [*]	,11770	,001	,1273	,7719
	Olvi	,29832	,12151	,103	-,0345	,6311

Hesburger	Fazer	-,66597*	,12875	,000	-1,0186	-,3134
	Marimekko	-,30252	,12602	,117	-,6477	,0426
	Rainbow	,14706	,13259	,802	-,2160	,5101
	Olvi	-,00420	,13598	1,000	-,3766	,3682
Rainbow	Fazer	-,81303*	,12061	,000	-1,1433	-,4827
	Marimekko	-,44958*	,11770	,001	-,7719	-,1273
	Hesburger	-,14706	,13259	,802	-,5101	,2160
	Olvi	-,15126	,12830	,763	-,5026	,2001
Olvi	Fazer	-,66176*	,12434	,000	-1,0023	-,3213
	Marimekko	-,29832	,12151	,103	-,6311	,0345
	Hesburger	,00420	,13598	1,000	-,3682	,3766
	Rainbow	,15126	,12830	,763	-,2001	,5026

*. The mean difference is significant at the 0.05 level.

APPENDIX C: Multiple regression for different brands

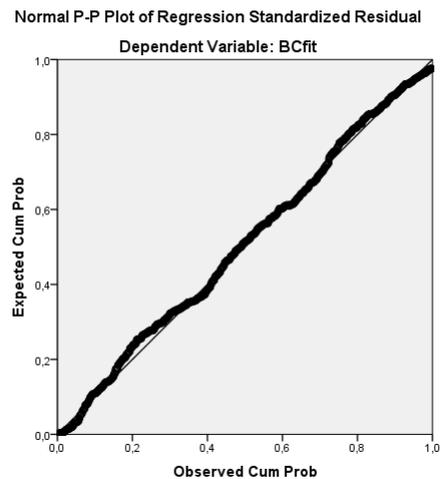
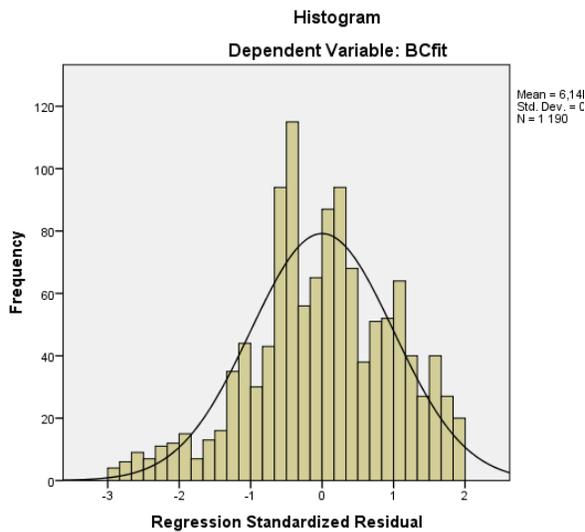
<i>Dependent variable</i> Independent variable	R²	Adjusted R²	F	Standardized coefficient β	Significance	VIF
<i>Fazer extension evaluation</i>	0.368	0.360	45.457			
Quality of the parent brand				0.025	0.656	1.127
Brand-extension fit				0.468	0.000	1.551
Brand-cause fit				0.189	0.004	1.566
<i>Marimekko extension evaluation</i>	0.431	0.424	59.109			
Quality of the parent brand				0.217	0.000	1.295
Brand-extension fit				0.271	0.000	1.932
Brand-cause fit				0.302	0.000	2.158
<i>Hesburger extension evaluation</i>	0.382	0.374	48.298			
Quality of the parent brand				0.058	0.315	1.256
Brand-extension fit				0.362	0.000	1.762
Brand-cause fit				0.290	0.000	1.743
<i>Rainbow extension evaluation</i>	0.388	0.380	49.356			
Quality of the parent brand				0.109	0.046	1.122

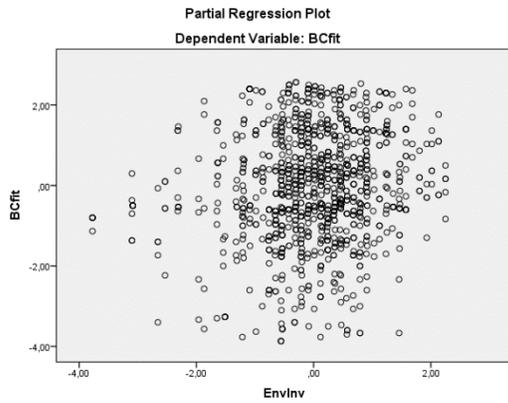
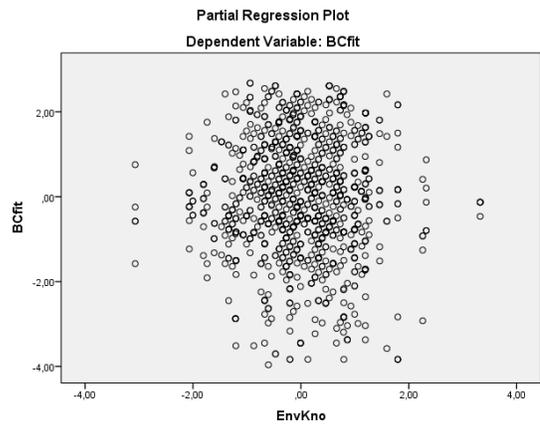
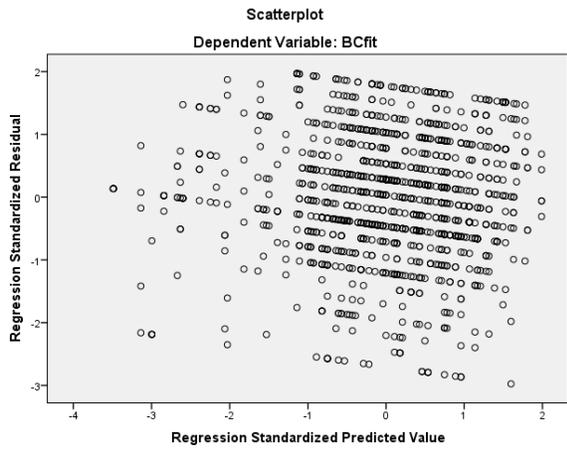
Brand-extension fit			0.072	0.286	1.740
Brand-cause fit			0.529	0.000	1.786
<i>Olvi extension evaluation</i>	0.477	0.470	71.137		
Quality of the parent brand			0.148	0.004	1.142
Brand-extension fit			0.407	0.000	1.688
Brand-cause fit			0.284	0.000	1.640

All models significant at $p < 0.01$

APPENDIX D: Multiple regression assumptions (linearity, normality, independence and heteroscedasticity)

Dependent variable: Brand-cause fit (BCfit), independent variables: environmental knowledge (EnvKno) and environmental involvement (EnvInv)





Dependent variable: Brand extension evaluation (eva), independent variables: Brand-extension fit (Befit) and Brand-cause fit (BCfit) and Parent brand quality (ParentQuality)

