Brand Image of Umeå University:

A Quantitative Study of the Effects on Students’ Attachment and Commitment

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Abstract

The main purpose of this thesis was to examine the possible effects of various components of the university brand image on students’ attachment and commitment to the brand of Umeå University. In order to make a theoretical contribution to the university branding research, the conceptual model was developed and tested to find out the possible effects of constructs on each other. The proposed conceptual model focused on the university brand image, which contained nine different constructs. The other three constructs consisted of brand attachment, affective commitment and continuance commitment. The model was developed after revising the existing theory and realizing the knowledge gaps. Although there was previous research on the components of the university brand image as well as the research on attachment and commitment, these two studies were conducted separately. The theoretical contribution of this thesis was to combine these constructs in one conceptual model and test their effects. Besides, none of the found studies on attachment and commitment were conducted in the university context. The following research question was formulated in this study:

*What kind of effects do various components of Umeå University brand image have on students’ attachment and commitment?*

The study was conducted at Umeå University and the respondents were current students of the university. The findings of this study showed that not all hypothesized effects were significant as it was expected. The model on the effects of the components of the university brand image on attachment was not strong enough. However, it was found that mission and vision, social environment, practicability, physical actualities and aesthetic had significant effects on attachment. When testing the effects of the components of the university brand image on affective commitment it was seen that the model itself was strong. Moreover, mission and vision, social environment, practicability and aesthetic also had significant effects on affective commitment. In relation to continuance commitment, the regression analysing the impacts of the components of the university brand image was weak and only physical actualities had a significant effect. Another regression showed the significant effect of attachment on affective commitment. When testing the impact of attachment on continuance commitment, it was found that attachment had a positive effect on continuance commitment.

As a practical recommendation, it was suggested that Umeå University had to improve its graduation prospects, learning facilities, educational standards and external communications as these constructs did not have significant effects neither on attachment nor on affective and continuance commitment. If these areas were improved, it would probably lead to a higher attachment to the university. Higher attachment would, in turn, have a positive impact on commitment and it would probably keep students satisfied and improve the university’s image overall. A special attention should be also paid to the components, which were found to have significant effects, such as mission and vision, social environment, practicability, physical actualities and aesthetic as they currently determine students’ attachment and commitment to Umeå University brand.
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1. Introduction

This chapter will outline the main reasons for choosing a particular topic for this research as well as provide a background of the research problem. Furthermore, research question will be formulated and the research purpose will be explained. The scope of study will clarify the main focus of the research. At the end of the chapter, the most relevant concepts of this study will be defined.

1.1 Choice of subject

This Bachelor thesis has been written by the students of the International Business Program at Umeå University. This study program has consisted of different courses within different area of business. The subject of marketing has been chosen as the thesis’ field of study because of the great interest of the authors in this area. Different topics within the field of marketing had been discussed and university branding had been chosen as the subject of this thesis. After reviewing previous studies about university brand and branding in general, the subject of brand loyalty had been considered in relation to university branding. The existing knowledge gap has increased the curiosity for finding the connection between the subjects in the university context.

The thesis has been conducted about Umeå University brand image and students’ attachment and commitment towards it. The authors’ experiences of Swedish Higher Educational system in general and Umeå University in particular have served as a basis for this topic of university branding. This extensive experience has developed a curiosity in understanding of the subject and writing the thesis about this topic. In addition, the experience of studying abroad and perceiving the competition between the universities for attracting students has enhanced the authors’ interest in this subject.

1.2 Theoretical background and knowledge gaps

In recent times, perhaps the most important change has been the advent of globalization (Tsui, 2007). This rapid development has also affected universities with the increasing necessity to compete in the international environment (Melewar & Akel, 2005). This has been as a result of increased supply of places in universities which exceed demand (Szekeres 2010). Marketing techniques are essential for differentiating a university in attracting students (Hemsley-Brown & Oplatka, 2006). Students have been considered as the most important actors in the university setting and attracting students is one of the most important issues for institutions (Wang et al, 2012). Therefore, building a strong brand can enable a university to stand out from the competition and be more appealing for its current and potential students.

Successful brand-building generates market value and creates differential advantage (Keller, 1993). A successful brand has been defined as a name, symbol, design, or some combination, which identifies the “product” of an organization and contributes to a sustainable differential advantage (Doyle, 1989). Brand is a sort of quality that is established from long-term hard work and it has become the key to winning customer
loyalty as well as long-term survival and development (Wang et al, 2012). The added value that a brand brings to a product is called brand equity (Keller, 1993). Brand equity relies on the knowledge one has for the brand and it consists of brand awareness and brand associations (Keller, 1993). Brand awareness is the ability of a potential buyer to recall or recognize a brand of a certain product category (Ghodeswar, 2008, p. 7). Brand image as the second factor of brand equity has been defined as the “perceptions about a brand as reflected by the brand associations held in consumer memory” (Keller, 1993, p. 3). Brand image is a result of the consumers' interpretation of all the signs such as brand name, visual symbols and marketing communications, which are emitted by the brand (Louis & Lombart, 2010). Brand image is not only important for companies but it also important for institutions. In the university context, brand image can influence decision-making of potential students for choosing a university (Wang et al, 2012). It can also change public’s attitudes towards universities (Wang et al, 2012).

University branding can be also discussed from the perspective of a services branding. Universities supply educational services to students. Nowadays services branding is also becoming increasingly important. The services sector has not only spurred economic growth, it has also challenged the traditional approach of doing business by creating revolutionary service solutions (McDonald et al, 2001). Berry (2000) has developed a model in relation to services-branding and claimed that services represent the primary brand of an organization. This model comprises such components as brand equity, brand awareness, brand meaning, organization’s presented brand image, external brand communications and customer experiences with an organization (Berry, 2000). De Chernatony and Segal-Horn (2001) have also researched on brand building in services context. Although some studies have been found in relation to services in general, studies in relation to services branding and especially branding in higher education were limited.

As it was mentioned earlier, successful brand-building is the goal of many organizations (Keller, 2001). Building a successful brand can generate greater customer loyalty and as a result organizations can gain competitive advantage in the market (Keller, 2001). Brand loyalty has been discussed by Louis and Lombart (2010). Bloemer and Kasper (1995) have outlined the differences between repeat purchasing behaviour and true brand loyalty. Jacoby and Kyner (1973) have clarified the situations when consumers can be actually loyal to the particular brand. Loyalty has been also seen important in relation to Higher Education, where it vital to attract potential students as well as maintain the existing ones (Helgesen & Nesset, 2007). However, different motives could be at the origin of a repeating behaviour and, depending on these reasons, decision about being loyal to a brand is taken over time (Amine, 1998). Therefore, the notion of commitment has been used as a basis for brand loyalty and other forms of repeating behaviour (Jacoby, 1975). This commitment is a result of affective reasons such as attachment (Amine, 1998).

Louis and Lombart (2010) have referred to attachment as a lasting and inalterable affective relationship to the brand and a psychological closeness to it. Park et al (2010) have claimed that brand attachment connects brand with the self, involving thoughts and feelings, therefore there is an emotional component included. Thomson et al (2005) has stated a view of emotional connection between the brands with the self and related this connection to investment in the brand, which means that people who spend more on a brand, are more
Commitment has been defined by Bloemer and Kasper (1995) as the binding of an individual to a brand choice as a result of the extensive decision-making process. Louis and Lombart (2010) distinguished between two types of commitment: affective and continuance commitment. Affective commitment is focused on a positive emotional attachment (Gruen et al, 2000) and includes shared values, identification, and attachment (Fullerton, 2005). In continuance commitment, the member is psychologically bonded to the organization on the basis of the perceived costs of leaving the organization, so the scarcity of alternatives and switching costs can be considered as the main reasons for continuance commitment (Gruen et al, 2000). Both types of commitment can be found in works of Gruen et al (2000), Fullerton (2005), Fournier (1998). In the university context measuring these two types of commitments is important because by this way universities can gain a competitive advantage over the other universities. However, previous researches lack the empirical evidence regarding affective commitment and continuance commitment in the context of Higher Education.

Marketing in the university context is a relatively new area of research (Tas & Ergin, 2012). University brand image is a new area of interest as a subject in research and practical applications in marketing management (Landrum et al, 1998). Therefore only a limited number of studies are available in this area. Chapleo (2005, 2007, 2008) has focused mainly on universities’ successful brands, perceptions of such brands and possible barriers that might arise when building a brand. Bennett and Ali-Choudhury (2009) have discussed various components of university brand image and found consequences of these components on students’ perceptions. Vrontis et al (2007) have developed a student choice-model, which was focusing on students from developed countries.

In recent years marketing of Higher Education with the aim of attracting international students has been applied at different universities around the world (Binsardi & Ekwulugo, 2003). Sweden has also been between the countries which has made an effort to internationalize its Higher Education (Högskoleverket, 2005). In Sweden, the number of students in Higher Education rose by about 50% between 1995 and 2005 (Högskoleverket, 2013). With a greater number of students enrolling, the competition between the universities in Higher Education has also increased considerably.

University branding is considered to be a relatively new subject within the field of marketing and only a few studies have been done regarding this subject (Hemsley-Brown & Oplatka, 2006). Therefore there is a practical need for conducting further research about the possible effects of university brand. Universities seek relevant marketing theories to gain a competitive advantage and consequently increase share of their international market (Hemsley-Brown & Oplatka, 2006). Therefore, there is an essential need for the universities to market themselves among the international competition.

This thesis focuses on Umeå University brand image and its effect on students’ attachment to the university. Umeå University was established in 1965 and is the fifth oldest university in Sweden (Umeå University, 2013). One of the objectives of Umeå University is to provide dynamic environment for students and improve its position in international market (Umeå University, 2013). The previous studies have mostly focused on brand building and brand entity in Higher Education (E.g. Kotler & Fox, 1985; Gibbs & Knapp, 2001). The
research gap exists in realizing the effects of university brand image on students’ attachment and commitment. This thesis has tried to address this knowledge gap. Moreover, the thesis has presented valuable information, which can be used by Umeå University’s marketing department in particular.

The objective of this thesis is to examine the connection of Umeå University brand image with attachment and commitment of the students and develop an integrative framework between these constructs. The thesis considers the existing knowledge gaps in research on the concept of university branding. No studies have been focused on connection between university branding with attachment and commitment. The notion of brand equity and university branding has been considered to provide a better understanding of the subject. Furthermore, the importance of brand-building has been discussed with connection to marketing communications.

1.3 Research question

After reviewing the literature and considering the existing knowledge gaps, the research question has been formulated as follow:

*What kind of effects do various components of Umeå University brand image have on students’ attachment and commitment?*

1.4 Research purpose

The main purpose of this study is to examine the possible effects of various components of the university brand image on students’ attachment and commitment to the brand of Umeå University. The study has considered the following parts of the university brand image: mission and vision, graduation prospects, learning environment, social environment, practicability, educational factors, physical actualities, aesthetic designations and external communications (Bennett & Ali-Choudhury, 2009). The impacts of these components have been tested on students’ attachment and commitment in a university context. Commitment has been categorized into two types such as affective commitment and continuance commitment (Louis & Lombart, 2010). Based on this information Umeå University might consider improving the unsatisfactory components if there are such and focus on the most positive components on its marketing communications in order to enhance its brand image and attract more students in the future.

1.5 Scope of study

The research is conducted at Umeå University and the respondents are current students of the university. As the authors of the thesis are students of the university too, it was easy to get access to the potential respondents. The focus of the research is on different age groups of students, starting with 18 years old and extending to 27 years and older. The aim of the thesis is not only to ask students at Bachelor’s level, but also at Master’s level in order to see how responses differ between students at different levels of study. This thesis focuses on the entire students at Umeå University. The sample of the population consists of free
movers, Swedish students and exchange students. It is supposed that students, who have studied at Umeå University for different period of time, can have different value towards the components of the university brand image.

1.6 Definitions of the concepts

**Brand** is "a name, term, sign, symbol, or design, or combination of them, which is intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competitors" (Kotler 1991, p. 442).

**Brand equity** is “a set of assets and liabilities linked to a brand, its name and symbol that adds to or subtracts from the value provided by a product or service to a firm and/or to that firm’s customers” (Aaker, 1996, pp. 7-8).

**Brand image** is perceptions about a brand as reflected by the brand associations held in consumer memory (Keller, 1993, p.3).

**Brand loyalty** is the biased behavioural response expressed over time by some decision-making unit with respect to one or more alternative brands out of a set of such brands, which is a function of psychological process resulting in a brand commitment (Bloemer & Kasper, 1995).

**Brand attachment** is a psychological variable that reveals a lasting and inalterable affective relationship to the brand and expresses a relation of psychological closeness to it (Louis & Lombart, 2010).

**Brand commitment** is the binding of an individual to his brand choice as a result of the extensive decision-making process (Bloemer & Kasper, 1995).

**Covenant** is as a collection of promises, which “combine the brand functions with descriptive and emotional modifiers” (Balmer & Grey, 2003, p. 982).

**Quiddity** is the nature of brand and its actual performance (Bennett & Ali-Choudhury, 2009).

**Symbolic representation** is visual description of an organization, which can be seen by the public (Melewar & Karaosmanoglu, 2006).

**Marketing communications** are the means by which organisations attempt to inform, persuade and remind customers – directly or indirectly – about the products and brands they sell (Keller, 2009).
2. Theoretical framework

In the following chapter the review of literature on branding will be held. This chapter will start with branding and brand equity, which are the underlying concepts of this stream of research. Then the focus will be on brand-building in the services context. After that, different components of university branding will be discussed. Marketing communications will also explained as they are considered to be important tools in promoting university image and attracting potential students. Finally, brand loyalty, attachment and commitment to the brand will be defined.

2.1 Historical roots of branding

The idea of branding is starting from the time people owned cattle and made goods for trading (Landa, 2005, p.xx). Cattle and sheep were branded by hot iron to mark ownership (Landa, 2005, p.xx). Trademarks also had been used as a symbol or sign to distinguish their goods (Landa, 2005, p.xx). Later on mass-production of goods flooded the market with similar and indistinguishable products (Crosby & Johnson, 2001, p.6). Thereafter, branding became an essential part that was needed in production of goods. Corporate logos appeared in 1880s on products such as Campbell’s soup, Heinz and Quaker Oats cereal. Branding by 1940s was not only a phrase or picture anymore; it was also an identity of a company (Crosby & Johnson, 2001, p. 6).

A brand is defined as "a name, term, sign, symbol, or design, or combination of them which is intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competitors" (Kotler 1991, p. 442). However, brand is not only a “distinguishing name or symbol as a logo and trademark to identify the goods” (Ghodeswar, 2008, p. 4) but also an emotional impression towards a product or service. Emotional impression in addition to functional value is regarded as an important source of differentiation for a brand. In other words, branding should associate the psychological values of the consumer to the product or service (Ghodeswar, 2008).

A successful brand is defined as “a name, symbol, design, or some combination, which identifies the product of a particular organisation as having a sustainable differential advantage” (Doyle, 1989, p. 78). By this definition a successful brand makes differential advantage, in which a customer select a brand over the competitors (Doyle, 1989). Moreover, a brand can be successful by being sustainable. In other words, a successful brand creates barriers to entry of other competitors (Doyle, 1989).

From 1980s, branding has been recognized as an important component of companies’ value by manufacturers (Crosby & Johnson, 2001, P.6). The concept of brand equity has been developed as an important tool for managing and measuring marketing performance. By this time companies like Kraft were purchased for an elevated price which was derived by the value of the brand in particular (Crosby & Johnson, 2001, p. 6). The next section provides clarification of brand equity in more detail.
2.2 Brand equity

The concept of brand equity has been discussed by a number of scholars from different perspectives. Aaker (1996, pp. 7-8) describes brand equity as “a set of assets and liabilities linked to a brand, its name and symbol that adds to or subtracts from the value provided by a product or service to a firm and/or to that firm’s customers”. Brand equity is defined by Keller (1993, p. 1) as “the marketing effects uniquely attributable to the brand”. In other words brand equity is “the degree to which a brand’s name alone contributes value to the offering” (Leuthesser, et al, 1995, p. 57). Therefore, brand equity is an important concept for understanding the impact of marketing activities on a customer's’ attitude towards a brand.

Previous researches on brand equity have two main focuses. Some studies have shown the financial aspects of brand equity. They have focused more on value of the brand from accounting perspective (Pitta & Katsanis, 1995). On the other hand, other studies have been devoted to the study of effect of brand on consumer behaviours (Pitta & Katsanis, 1995). This thesis focuses on the customer-based brand equity and how customer-based brand equity can be related to the university context in particular.

Customer-based brand equity is defined by Keller (1993, p. 2) as “the differential effect of brand knowledge on consumer response to the marketing of the brand”. By this definition, consumers’ reaction to the marketing mix elements of a brand is compared with their reaction to an unnamed product or service. Customer-based brand equity happens when the brand is familiar to the customer and brand association can be found in memory (Keller, 1993). In other words, process of memory within consumers’ minds can be seen as the underlying basis of brand equity (Pitta & Katsanis, 1995).

Keller (1993) states that brand equity evaluation can be beneficial from two aspects. First, it can provide estimation of value of a brand, which can help financial-based activities (Keller, 1993). Successful brand-building generates market value and creates differential advantage. Brand equity has been seen as an asset or resource which accumulates competitive advantage (Day, 1994; Lassar et al, 1995). Second, it can improve marketing productivity by giving greater competition in the market and create higher demand (Keller, 1993). Consistently, effective brand equity generates long-term growth and provides economies of scale within the market (Ghodeswar, 2008).

Brand equity has been assessed in different models. Aaker (1996) suggests three dimensions of brand equity which are brand awareness, associations, other proprietary assets, perceived quality and loyalty. Keller (1993) proposes that brand equity relies on the knowledge one has about the brand and it consists of brand awareness and brand associations. Ghodeswar (2008) claims that various sources of knowledge get linked to a brand and its understanding by the consumer; such sources include brand awareness, attributes, benefits, images, thoughts, feelings, attitudes, and experiences. The focus of this thesis is mainly on the element of brand image in the university context. The brand equity model of Keller (1993) has been used in relation to university image because branding is considered to be a growing issue in universities and by using brand equity, universities can
contribute value to their brand. The following sections provide deeper understanding of Keller’s (1993) brand equity model by explaining each dimension in detail.

2.2.1 Brand awareness

Brand awareness can be described as the strength of a brand in a person's memory, which is defined as the ability to be identified in different situations (Ghodeswar, 2008). It consists of two main components, brand recognition and brand recall. Keller (1993, p. 3) has defined brand recognition as a “consumer’s ability to confirm prior exposure to the brand when given a brand as a cue”. That is, the brand that has been seen or heard before is distinguished by the consumers (Aaker, 1996). Brand recognition is the recollection of brand which is not related to the place or context or time (Aaker, 1996). Brand recall has been defined as a “consumer’s ability to retrieve the brand from memory when given the product category, the needs fulfilled by the category, or a purchase or usage situation as a cue” (Keller, 1993, p. 3). That is, the brand is generated from the consumer’s memory when mentioning the product class (Aaker, 1996).

Nedungadi (1990) discussed that using brand awareness helps a brand by placing it in a consideration set. It also affects consumer’s decision within the consideration set. That is, a brand which is known by a customer has a higher probability to be chosen comparing to an unknown brand (Hoyer & Brown, 1990). Furthermore, it influences brand associations by attaching different information to the brand in memory (Keller, 1993). Effective advertising can enhance brand awareness by exposing brand to customer (Aaker, 1991). Advertising expenditure can be positively related to brand awareness (Huang & Sarigöllü, 2012).

2.2.2 Brand image

Image can be defined as “the total impression an entity makes on the minds of others” (Dichter, 1985, p. 75). Image is “what the audience sees” (Hatch & Schultz, 1997, p. 336). Brand image has been defined as the “perceptions about a brand as reflected by the brand associations held in consumer memory” (Keller, 1993, p. 3). Different types of brand associations are building the brand image. The brand associations are the information related to the brand which remain in the memory and contain the meaning of the brand for a customer. One way to distinguish between different forms of brand associations is by the levels of abstraction. Based on this method, brand associations can be classified into three categories: attributes, benefits, and attitudes (Keller, 1993).

Brand attributes are “those descriptive features that characterize a product or service” (Keller, 1993, p. 4). This relates to the attributes that the consumer thinks that the product or service has. Attributes can be product-related attributes which are defined as “the ingredients necessary for performing the product or service function sought by consumers” (Keller, 1993, p. 4). It also can be non-product-related which is defined as “external aspects of the product or service that relate to its purchase or consumption” (Keller, 1993, p. 4). There are four main types of non-product-related attributes (1) price information, (2) product appearance information, (3) user imagery, (4) usage imagery, (Keller, 1993) as discussed next.
Price is an important feature for the consumers. Price is an attribute that consumers connect to the value of the brand (Keller, 1993). Therefore, consumers may make categories by using price of a product or service (Keller, 1993). Price, in addition, is defined as an indicator of product loyalty (Aaker, 1996). Loyal customers tend to pay higher amount for the brand which they are loyal to, compared with a similar brand (Aaker, 1996). Appearance and packaging is also a part of the purchase and consumption process which might affect product performance indirectly (Keller, 1993). The third type of non-product-related attributes is user imagery (Keller, 1993). That is the type of person who uses the product or service (Keller, 1993). User imageries be formed by a consumer's own experiences or by marketing communication’s tools (Keller, 1993). Finally, usage imagery is the situation and place which the product or service is used (Keller, 1993).

The second category of brand image is brand benefits. They are described as “the personal value consumers attach to the product or service attributes” (Keller, 1993, p. 4). That is, the way the product or service gives value to the consumers (Keller, 1993). Benefits can show the satisfaction that product or service wants to convey (Pitta & Katsanis, 1995). They are representing the consumers’ value and they are often specific (Pitta & Katsanis, 1995). Consumers need to form the basis for clarifying benefits.

Consumer needs are defined in three categories: functional needs, experimental needs and symbolic needs (Park et al, 1986). Functional needs solve consumption related problems of the consumer whereas experimental needs provide sensory pleasure for consumers (Park et al, 1986). Symbolic needs are desires for a product that satisfy a self-enhancement need (Park et al, 1986). These needs can be linked to higher positioned needs like social or self-esteem (Maslow, 1970).

Benefits are also described in connection with consumer needs by three categories: functional benefits, experiential benefits, and symbolic benefits (Keller, 1993). Functional benefits are inner advantages of product or service consumption which are often connected to fairly basic motivations (Keller, 1993). Experiential benefits satisfy the feeling which is fulfilling by using the product (Keller, 1993). Sensory pleasure, variety, and cognitive stimulation can be seen as an example of the experiential needs (Keller, 1993). Symbolic benefits are the advantages of product or service which can be seen from outside (Keller, 1993). This category can fulfil the need of social approval or personal expression and self-esteem (Keller, 1993). Consumers make a connection between a brand and their self-concept; that could be an explanation why they value the prestige, exclusivity, or fissionability of a brand (Solomon, 1983).

An important part of brand image is brand attitudes. They are overall evaluations of a brand by the consumer (Wilkie, 1986, p. 438). Brand attitudes are the basis for consumer behaviour which can result in different brand choice. Fishbein and Ajzen (1980) have proposed a model for attitudes which has two functions: 1) consumer’s belief about the product or service and the extent that attributes or benefits exist within a brand in consumer’s view; 2) the beliefs and attributes are evaluated and a judgment will be made. Thus, “attitudes can serve a value-expressive function by allowing individuals to express their self-concepts” (Keller, 1993, p. 5).
Through its dimensions brand equity provides different advantages to a firm which manages to build a strong brand. Successful brand-building is the goal of many organizations (Keller, 2001). It can generate greater customer loyalty, increase marketing communication effectiveness and gain competitive advantage (Keller, 2001). Brand building in services context is described in next section in detail.

2.3 Brand-building in the services context

The external brand-building relates to the direct communications between an organization and its external stakeholders (Witt & Rode, 2005). In this context, the external representation of the brand is perceived to be a corporate brand image, whereas external stakeholders include customers, investors, suppliers, etc. (Witt & Rode, 2005). So the external brand-building is shaping a corporate image by directly addressing the stakeholders, whereas the internal brand-building is creating a corporate identity within the organization that indirectly influences the corporate image (Witt & Rode, 2005). It is argued that a positive corporate image cannot be created without ensuring that there is a well-developed corporate identity (Witt & Rode, 2005). As it can be seen, the importance of internal brand-building cannot be underestimated.

The internal corporate brand-building refers to the activities that occur before the actual implementation of the brand. It means that organizations must decide how they want the brand’s identity to be perceived before it can be communicated externally (Wallström et al, 2008). Witt and Rode (2005) claim that when building a brand internally, the corporate culture, the corporate design, the corporate behaviour and the corporate communication have to be considered in order to enhance a positive perception of brand image. Doyle (1989) outlines 4 important factors, which contribute to a successful brand-building: quality, superior service, differentiation and being first in the market. High quality is important, because it helps to generate higher profits, boost market share and make a return on investment faster (Doyle, 1989). Superior service is another factor: whereas products can be copied by competitors, it is much harder to copy a service as it relates to organization’s culture and employees’ attitudes (Doyle, 1989). Being first in the market does not mean actually inventing something, but being first in customers’ mind (Doyle, 1989). Usually, if the brand is well-known and successful, customers are most likely to recall it faster. Differentiation, which means making a brand different from competitors, is the last important attribute of brand-building (Doyle, 1989). Doyle (1989) also argues that advertising does not build a brand, it just speeds up the process of generating brand awareness and customers’ interest in a brand.

According to Keller (2009), one key benefit of building a strong brand is increased marketing communication effectiveness, which will be discussed further. Keller (2009) claims that the strength and equity of the advertised brand make customers willing to attend to additional communications for a brand, process these communications more favourably and have a greater ability to later recall the communications. Based on this, it can be concluded that every organizations has their own significant way of building a strong brand.
Berry (2000, p. 130) states that “service companies build strong brands through branding distinctiveness and message consistency, by performing their core services well, from reaching customers emotionally, and by associating their brands with trust.” It is important to build strong brands to help customers to better visualize and understand intangible products (Berry, 2000). In order to do so marketers attach the brand name to the product and then endow the product with certain symbols, signature statements and people (Berry, 2000).

De Chernatony and Segal-Horn (2001) claim that an interpretation of brand, which applies to both products and services considers a brand as a promise. However, some marketers rely heavily on the classical product-branding model and focus on consumers, raising expectations through advertising (De Chernatony & Segal-Horn, 2001). Less emphasis is placed on internal communications, ensuring that staff understand the brand's promise and can consistently deliver this, which is essential in services branding. So, in order to deliver a quality service to the customers, it is vital to establish a strong internal commitment within the organization.

In today’s modern world, branding becomes the basis for competition of unique products and services in attracting a larger market share for ultimate profitability (Yeo, 2008). Nowadays, services sector is becoming increasingly important. The services sector has not only spurred economic growth, it has also challenged the traditional approach of doing business by creating revolutionary service solutions (McDonald et al, 2001). It especially became possible due to widespread use of the Internet, which offers an enormous amount of services in various areas of interest. However, an important choice that services companies have to face is whether to build the brand on a specific product or on the corporate identity (McDonald et al, 2001). Berry (2000) argues that in packaged goods, the product is the primary brand, but when it comes to services, the brand is built on the organization’s name.

Berry (2000) also claims that branding is not only used for tangible brands, but it is also a principal success driver for service organizations. When it comes to services, the organization itself is a brand and it is very important that a strong brand is built. Berry’s (2000) service-branding model comprises several elements: organization's presented brand, external brand communications, customer experiences with organization and brand equity. Berry (2000), so as Keller (1993) claims that brand equity consists of brand awareness and brand meaning (also referred to as brand image).

University services can also be discussed from a service-branding model perspective. It is because universities supply services (education, in particular) to its customers (students). So, it is very important for universities to provide a good level of services to the students because it can increase university’s image and attract more potential students. Yeo (2008) states that quality in higher education can be achieved by having committed staff as contributing to the success of multidimensional experiences created to develop students’ knowledge- and skills-based learning. Yeo (2008) describes teaching as a service and learning as an experience. The levels of such services determine how students’ experiences can be created, which in turn will help to establish university’s competitiveness. However, apart from teaching services, Yeo (2008) also emphasizes the importance of quality support
services, which include availability of such facilities as computer and technical laboratories, printing and Internet facilities as well as administrative and technical support.

2.4 University branding

From mid-1990s, the concept of branding has been recognized as being significant for institutions by multiple scholars. Since then, branding has not only been applied to products and services but also has been used in different institutions (Balmer et al, 2010). It has been discussed that a university brand should evoke associations, emotions, images and the impression needs to be built in a way to make a university distinct from other competitors (Bulotaite, 2003). In other words, a university’s brand should be considered as a demonstration of features which satisfy students’ needs. By applying these features, a university can create trust in its ability to provide a certain type of higher education and consequently distinguish itself from others (Bick et al, 2003).

University branding is an important issue due to the increase in excess capacity for students in universities. Competition between universities therefore is rising with the increased supply of places which exceed demand (Szekeres 2010). Thereafter, a handful of studies have scrutinized factors affecting universities’ image and consequently the students demand. The study of Binsardi and Ekwulugo (2003) examined international students’ perception about the UK education. It has focused on factors such as pricing and promotions for designing and marketing UK education abroad (Binsardi & Ekwulugo, 2003). Chapleo (2010) analyses the universities which are perceived to be successful. The study suggested that even successful brands needs to have higher brand engagement and international resources (Chapleo, 2010).

In the study of Bennett and Ali-Choudhury (2009), a university brand has been conducted by utilizing three main dimensions: covenant, quiddity, and symbolic and external representation. Covenant is the promise that the brand provides, while quiddity refers to the distinctive features of the brand, and symbolic and external representation is the visual descriptions that affect attitude toward the brand. These topics are discussed below.

First, covenant is as a collection of promises which “combine the brand functions with descriptive and emotional modifiers” (Balmer & Gray, 2003 p. 982). The promises are related to the brand’s physical and emotional benefits which are built around the core value of brand (Fan, 2005). According to the brand equity model, benefit is the value that the product or service gives to the consumers (Keller, 1993). Therefore, the promises in a brand should be set according to the actual value of the organization. In this way promises would be equal to the performance of an institution (Hatch & Schultz, 2003). Promises are promoted by multiple ways, such as different channels of communication, experience from using a service and most importantly the behaviour of staff (Balmer & Gray, 2003).

The main aspects of covenant in the university context can include four elements: learning environment, social environment, graduation prospects as well as university’s mission and vision (Bennett & Ali-Choudhury, 2009). Components affecting learning environment include quality of student support services, teachers and administration (Gatfield et al, 1999). Desirability of the social environment can be perceived through the existence of
clubs, societies, and sports facilities and opportunities to socialize on campus (Gatfield et al, 1999). Promises are linked to a student’s career after the graduation and the practicality of degree which is provided by the university in terms of status (Moogan et al, 2001). Mission and vision of a university can be inferred from formal statements or by joining specific group (Bennett & Ali-Choudhury, 2009). The mission of a university also can be demonstrated through published university rankings (Bennett & Ali-Choudhury, 2009).

Second, quiddity is considered as an important element of a university brand. It refers to the nature of brand and its actual performance (Bennett & Ali-Choudhury, 2009). Quiddity can be explained through evaluating brand attributes. As it was mentioned in previous chapter, brand attributes are the essential components which a service needs for performing (Keller, 1993). These components are the service functions searched by consumers (Keller, 1993). Quiddity can also be defined as an organizational identity (Hatch & Schultz, 2003). That is, the core values of an organization in addition to its actual characteristics are taken into account (Hatch & Schultz, 2003).

Quiddity has been described in the university context by three elements of practicability, educational identity and physical actualities (Bennett & Ali-Choudhury, 2009). Practicability for a university is the entry requirements that allow a student to be admitted. It also related to the number of desired degree programs which offered by a university (Binsardi & Ekwulugo, 2003). The location of the university and the accommodation cost should be considered as well (Bennett & Ali-Choudhury, 2009). Educational identity is determined by different nationalities of students which enrol in a university (Bennett & Ali-Choudhury, 2009). The position of a university in world ranking, kind of educational value (traditional and contemporary) and the value of research above teaching can also affect educational identity of a university (Bennett & Ali-Choudhury, 2009). The university’s physical actualities are the third dimension of a university brand’s quiddity. It consists of architecture and campus design, safety and the facilities of the city that the university is placed in (Moogan et al, 2001).

Third, symbolic and external representation has also been considered as a relevant factor for branding an institution. Name, logos, colour schemes, stationery and buildings are included as an aesthetic designations of a brand (LeBlanc & Nguyen, 1996). These aesthetic designations are the visual descriptions of an organization which can be seen by the public (Bennett & Ali-Choudhury, 2009). Various aesthetic designations also help to symbolize aims and values of the organization (Melewar & Karaosmanoglu, 2006). These descriptions form opinions about the organization from what is observed (Pratt & Rafaeli, 1997). Such opinions or brand images are based upon cultural, social and personality factors, as well as commercial stimuli like advertising, public relations and prominence of distribution (Doyle, 1989).

Third, symbolism is also considered to be an important element for service organizations because of the intangibility of their products (Stern et al, 2001). Marketing communications such as advertising, prospectuses, public relations are representing a university to the general public (Melewar & Karaosmanoglu, 2006). In other words, marketing communications can affect public’s attitude towards the brand. As it mentioned before, brand attitude is consumer’s belief about a service (Keller, 1993). Public perceptions of an
institution’s quality and a university’s competitiveness are considered important factors affecting a higher education’s image (Bennett & Ali-Choudhury, 2009). Moreover, the presented brand is connected with the customer’s ability to recall the brand (Berry, 2000). Marketing communications increase brand awareness by exposing a brand to customers (Aaker, 1991).

By establishing a strong brand, a university can enhance awareness among potential students. It can also recruit internationally competitive faculty and administrators and consequently differentiate itself from the others (Rooney, 1995). As it was mentioned, marketing communications play an important role in establishing a strong brand. The next section describes marketing communications tools.

### 2.5. Marketing communications

Marketing communications are the means by which organizations attempt to inform, persuade and remind customers – directly or indirectly – about the products and brands they sell (Keller, 2009). Keller (2009) claims that marketing communications help to establish a dialogue and build relationships with customers. The universities employ various marketing strategies to attract students. According to Rindfleish (2003), university managers are particularly focused on marketing techniques, such as targeting and communicating with market segments. Sometimes it might be also useful to look at the practices of competitive higher education providers and develop own strategies in promoting university’s name (Bulotaite, 2003).

There are two types of brand communications – external and internal. According to Simoes et al (2005), communications have a broad impact on how organizations present image. Berry (2000, p. 129) defines external brand communications as the “information that customers absorb about the organization and its service that essentially is uncontrolled by the organization”. So, external brand communications mean that customers can gain awareness about the brand from independent sources, not only from the organization’s communications of its brand to customers. In the modern society with a wide range of available information, people are becoming active information seekers (Fagerstrøm & Ghinea, 2013). Although information can be obtained from many different sources personal contacts are probably the most influential ones (O’Connor & Lundstrom, 2011). According to O’Connor and Lundstrom (2011), generally people prefer informal, personal forms of information, which also applies to university students.

Apart from external brand communications, internal brand communications also exist. Ahmed and Rafiq (2003) refer to internal communication tools such as advertising or any other internally directed promotional activities. Organization’s own marketing ways of communication are wider comparing to external brand communications, so there is a higher chance to reach as many potential customers as possible. Bennett and Ali-Choudhury (2009) state that a university is represented by its formal marketing communications, which are controlled by the university itself. In a world of increasing competition for students, a student becomes an important focus of the university. Szekeres (2010) outlines a variety of ways that universities use to inform and attract potential students. These include guides, open days, brochures, alumni associations, media advertising and interactive websites.
(Szekeres, 2010). As suggested by Szekeres (2010), some universities develop checklists for prospective students or engage in one-to-one counselling for targeted groups. According to Rindfleish (2003), universities also try to provide accessible information as to what possible career options are available for students. All these ways of communicating to students help to segment a market more carefully as well as enable students to make their choices accordingly.

Various forms of promotion exist nowadays. Berry (2000) claims that word-of-mouth communications are becoming increasingly important with services because of its intangible nature as well as the unbiased, experience-based information of other customers. Keller (2009) describes word-of-mouth communications as people-to-people oral, written or electronic communications, which relate to the experiences of purchasing or using products or services. In relation to the universities, careful identification and satisfaction of students’ needs helps universities to retain a greater number of students. Pesch et al (2008) argues that a key to successfully implementing the marketing concept to the university context is to assess students’ perceptions of the institution’s commitment to understanding and meeting those needs. So, it means that if students are satisfied with the quality of education at a certain university, they are most likely to recommend this university to other prospective students. In turn, it may lead to the university’s improved image over time.

Another growing marketing tool is the Internet, which is the easiest and the best way to look for the information required (Briggs, 2006). Through its websites the universities can promote itself at a relatively low cost. Briggs (2006) claims that the website has the biggest influence on applicants and it is the greatest source of valuable information about the university. Szekeres (2010) states that the websites allow students to apply for courses, access information regarding tuition fees, admissions process, universities’ facilities and a range of offered activities. Internet marketing also includes a growing and influential area of social networking. Social networks are becoming an increasingly important tool for searching information by students and obtaining information from peers. As referred to a “word-of-keyboard” by Berry (2000), a traditional word-of-mouth is reshaping in a modern digital world. Social networks are probably the easiest way to look for reviews by communicating to current students or by obtaining the first-hand information from social network groups.

Briggs (2006) also discusses university rankings, university fairs and advertisements. University rankings or league tables can be used as performance indicators, which aid students in making their choices, with highly ranked universities likely to create positive images in the minds of students (Briggs, 2006). Briggs (2006) also argues that very often university rankings play the most important role in the final choice of the university. University fairs and open days are emerging forms of university promotion (Briggs, 2006). The open days are becoming more and more popular as they allow students to have access to the representatives of different universities, ask questions in person and compare various universities in one surrounding (Briggs, 2006). Universities also use such fairs as an effective tool to promote their departments, facilities and other activities. The least influential marketing tool is advertisement (Briggs 2006). Whilst advertisements can be helpful in promoting university’s brand in general, they have a weak influence on potential students’ choices (Briggs 2006).
2.6 Brand loyalty, attachment and commitment

According to Louis and Lombart (2010), a consumer truly loyal to a brand should not only buy that brand in a repeated manner but he should also develop positive attitudes towards it. As it can be seen, there is a distinction between true brand loyalty and repeat purchasing behaviour. The differences between repeat purchasing behaviour and true brand loyalty have been discussed by Bloemer and Kasper (1995). According to Bloemer and Kasper (1995), repeat purchasing behaviour is no more than the actual rebuying of a brand, regardless of the consumer’s degree of commitment to the brand. True brand loyalty, however, is the biased behavioural response expressed over time by a decision-maker with respect to one or more alternative brands out of a set of such brands, which is a function of psychological process resulting in a brand commitment (Bloemer & Kasper, 1995). Jacoby and Kyner (1973) make further clarifications with regards to brand loyalty. First, individuals can be loyal to two or more brands in a product category, which makes it difficult to find out what brand consumer loves the most (Jacoby & Kyner, 1973). Secondly, brand loyalty can only be identified if the consumer has a choice between several brands, which means that if the consumer chooses a brand from a limited range of brands, then it cannot be said that the consumer is truly loyal (Jacoby & Kyner, 1973). After reading these two definitions it is clear that true brand loyalty involves intentional purchase of a particular brand, which has some meaning for a consumer, whereas repeat purchase is based on inertia. Based on the above definitions, the concept of true brand loyalty involves attachment and commitment to a brand, which apply to this thesis.

Louis and Lombart (2010) refer to several definitions of attachment to the brand. The first definition of brand attachment corresponds to the emotional link between a consumer and a brand (Louis & Lombart, 2010). Another definition refers to the brand attachment as a psychological variable, which reveals a lasting and consistent affective relationship to the brand and expresses a relation of psychological closeness to it (Louis & Lombart, 2010). A definition suggested by Park et al (2010) states that brand attachment relates to the strength of the bond connecting the brand with the self, involving thoughts and feelings about the brand and the brand’s relationship to the self. Such strength of emotional attachment to an object may be associated with investment in the object (Thomson et al, 2005). The idea is developed further and it is suggested that a critical aspect of attachment involves the cognitive and emotional connection between the brand and the self, defined as a brand-self connection (Park et al, 2010). A brand-self connection involves a sense of oneness between a consumer and a brand, however such a connection can be in two ways: the brand can represent who consumers are or the brand can be meaningful to a consumer due to consumer’s personal goals and concerns (Park et al, 2010). As it can be seen from the discussion about attachment, emotions are always involved. Thomson et al (2005) argue that strong attachments are associated with emotional feelings of affection, passion, love and connection. Based on this view, Park et al (2010) claim that when consumers are strongly attached to a brand they are more likely to develop positive and strong attitudes towards it.

The commitment is the binding of an individual to his brand choice as a result of the extensive decision-making process (Bloemer & Kasper, 1995). So, customer commitment is central in the developing and maintaining marketing relationships, because it is a key
psychological force that links the consumer to the selling organization (Fullerton, 2005). Louis and Lombart (2010) distinguish between two types of commitment: affective and continuance commitment (also known as cognitive or calculated commitment). Affective commitment is focused on a positive emotional attachment (Gruen et al, 2000). Fullerton (2005) suggests that affective commitment includes shared values, identification, and attachment. It means that if customers are satisfied with buying products from a particular organization, then they are affectively committed to that organization. Affective commitment partly explains the concept of brand loyalty discussed above, because when a customer has positive attitudes towards brands, then the customer is more likely to become a regular buyer of that brand. As claimed by Fournier (1998), affective commitment is the basis of consumer-brand relationships because consumers are connected to many brands that they consume.

In continuance commitment, in contrast, the membership is psychologically bonded to the organization on the basis of the perceived costs of leaving the organization (Gruen et al, 2000). So, it can be said that the main reasons of continuance commitment are scarcity of alternatives and switching costs. Fullerton (2005) also distinguishes between continuance commitments in business-to-business organizations and in consumer services. In business-to-business organizations the relationships are often maintained because of the binding agreements or contracts between the partners (Fullerton, 2005). In consumer services continuance commitment can also exist in a form of the agreement between the customer and service provider and be supplemented by a certain loyalty program provided by the supplier (Fullerton, 2005). The previous research by Fullerton (2003) shows that consumers may feel dependent on the brands they consume, so the potential loss of something valuable to the consumer is a key feature of continuance commitment.

Fullerton (2005) concludes that commitment can be considered as an attachment to a brand, which, in turn, helps to maintain relationships. Based on this, Fullerton (2005) claims that the nature of commitment is that it is an attitudinal construct because it represents customer feelings about the act of maintaining a relationship with a commercial partner. The link between attachment and commitment to a brand is important as attachment helps to understand the extent to which a consumer is loyal to a certain brand (Louis & Lombart, 2010). In this way attachment is more likely to influence commitment, the attitudinal side of brand loyalty.

### 2.7 Conceptual model and hypotheses

After reviewing previous studies, it was found that theoretical gap exists when it comes to the effect of the university brand image on attachment and commitment. As it was mentioned earlier brand equity relies on the knowledge one has for the brand and it consists of brand awareness and brand image (Keller, 1993). For measuring this knowledge regarding university brand, this thesis focuses on brand image in the university context. The concept of brand awareness is not examined in this thesis, since the concept of brand image is proven to have a higher importance in relation to universities and perceptions of current students about it (Bennett & Ali-Choudhury, 2009). Furthermore, prior research indicates that university image is considered to be the most influential factor in relation to cognitive,
affective, conative and reputational responses of the students (Bennett & Ali-Choudhury, 2009).

Although university branding was not examined much (Tas & Ergin, 2012; Landrum et al, 1998), there are some studies available. Chapleo (2005, 2007, 2008) focuses on successful brands of the universities as well as possible barriers that might arise when building a brand. Vrontis et al (2007) discusses a student choice-model. Bennett and Ali-Choudhury (2009) focus on various components of university brand image. In the conceptual model presented by this thesis, the effect of university branding is examined in relation to brand attachment and commitment. Brand attachment is considered as a consistent affective relationship to a brand (Louis & Lombart, 2010). It involves thoughts and feelings about the brand (Park et al, 2010). In this model attachment is measured in connection to commitment. Commitment is considered as an essential element in the developing and maintaining marketing relationships (Fullerton, 2005). It is the binding of an individual to a brand as a result of the extensive decision-making process (Bloemer & Kasper, 1995). In the proposed conceptual model the binding of students to the university brand is examined by two types of affective and continuance commitment. The conceptual model is based on constructs, which were taken from two previous studies (Louis & Lombart, 2010; Bennett & Ali-Choudhury, 2009).

Literature review shows that no research on the brand image in a university context was conducted in relation to attachment and commitment. Although the concept of brand loyalty, as well as attachment and commitment are discussed extensively, the authors of this thesis cannot find a lot of studies of these concepts in the university setting. Therefore, the present thesis will contribute to the existing knowledge gaps by exploring the university brand image, attachment and commitment in one conceptual model. The underlying purpose of the proposed conceptual model is to identify relationships between the central components of the university brand as well as the constructs of brand attachment and commitment. That is why the suggested model tests the relation between the university brand image and students’ attachment, affective and continuance commitment to this brand. The possible impact of brand attachment on commitment is also tested. The proposed model is shown in Figure 1 below.
It is hypothesized that the specific elements of Covenant, Quiddity and Symbolic and external representation have positive effects on students’ attachment to the university brand, affective and continuance commitment. Attachment is also examined in relation to affective and continuance commitment. Therefore, several hypotheses are developed for this study.

First three hypotheses are aimed to test the positive effects of the components of the university brand image on attachment.

H1: Covenant components of the university brand image such as a) mission and vision, b) graduation prospects, c) learning environment, d) social environment have positive effects on attachment to the brand.
H2: Quiddity components of the university brand image such as a) practicability, b) educational factors, c) physical actualities have positive effects on attachment to the brand.

H3: Symbolic and external representation components of the university brand image such as a) aesthetic and b) external communications have positive effects on attachment to the brand.

Next three hypotheses test the positive effects of the components of the university brand image on affective commitment.

H4: Covenant components of the university brand image such as a) mission and vision, b) graduation prospects, c) learning environment, d) social environment have positive effects on affective commitment.

H5: Quiddity components of the university brand image such as a) practicability, b) educational factors, c) physical actualities have positive effects on affective commitment.

H6: Symbolic and external representation components of the university brand image such as a) aesthetic and b) external communications have positive effects on affective commitment.

Following hypotheses will test the positive effects of the components of the university brand image on continuance commitment.

H7: Covenant components of the university brand image such as a) mission and vision, b) graduation prospects, c) learning environment, d) social environment have positive effects on continuance commitment.

H8: Quiddity components of the university brand image such as a) practicability, b) educational factors, c) physical actualities have positive effects on continuance commitment.

H9: Symbolic and external representation components of the university brand image such as a) aesthetic and b) external communications have positive effects on continuance commitment.

The last two hypotheses are aimed to test the positive effects of attachment on affective and continuance commitment.

H10: Attachment has a positive effect on affective commitment.

H11: Attachment has a positive effect on continuance commitment.
3. Methodology

In the methodology chapter different steps and approaches of research design will be shown. The choices of certain methodology will be also explained. Furthermore, the reasons for choosing a quantitative research method will be examined and evaluated. The consideration will be also given to the ways and techniques of collecting primary data as well as secondary sources will be reviewed. At the end, the data analysis will be described, as well as ethics and criticism of the methods used will be presented.

3.1 Pre-understanding

When it comes to conducting a research, personal values of a researcher play an important role. Bryman and Bell (2011, p. 29) state that values reflect either the personal beliefs or the feelings of the researcher. Such values can have an effect on choice of research area, choice of method, data collection techniques, analysis and interpretation of data (Bryman & Bell, 2011, p. 29). So it can be concluded that personal values are involved in almost all the stages of the research. It is very important to plan everything properly and put a great deal of attention on designing the research.

While the authors of this thesis studied at the International Business Program at Umeå University, a lot of courses in Business Administration have been covered. The Marketing topic found to be particularly interesting and exciting topic to study. However, because the Marketing course in the program was presented for only one month, it did not give us a very deep knowledge about the subject. Therefore, reading a lot of literature in order to get insights about the chosen area of research was essential from the beginning of thesis work. Nevertheless, Marketing is a very fascinating area of study, which is connected to people’s everyday lives. People are daily involved in a decision-making process. So it comes to marketers to promote their offerings and make people buy the products or services. University branding is one of the areas of marketing as well. Therefore, it was decided to make a study about how university brand can affect students’ attachment and commitment to a brand.

As it was mentioned above, the authors of this thesis are both students at Umeå University, so it probably affected the choice of the research topic. After having studied at Umeå University for almost three years, different experiences and wide range of knowledge was gained relating to university facilities, staff, academic matters as well as how university tries to represent and promote itself. So, the authors’ interest was to see the connection between various components of the university brand and their effects on attachment and commitment. The authors think that if the university puts a lot of attention on the students, provides various facilities and creates a good learning environment to satisfy students, then students are likely to be attached to the university more and put higher value and importance to it. Besides, high level of student satisfaction can have an effect on attracting potential students. The authors think that generally Umeå University has good facilities, friendly environment and helpful staff. However, some improvements might be needed in relation to the variety of courses, their structures and the method of teaching. So, the authors of this thesis were interested in finding out how their opinions differ from other
students. Besides, it was interesting to see how much students’ value different components of Umeå University brand and how these values can affect students’ attachment and commitment to the university. If the study shows that students are not very attached and committed to the university, then maybe the university needs to adjust its facilities, courses, and marketing communications in order to increase students’ satisfaction, attachment and commitment.

### 3.2 Ontological assumptions

Ontological assumptions are concerned with the nature of reality (Saunders et al, 2012, p. 130). A central issue in ontology is whether social entities can be considered as objective entities with the reality external to social actors or whether such entities can be considered as social constructs based on the perceptions and actions of social actors (Bryman & Bell, 2011, p. 20).

There are two ontological positions – constructionism and objectivism (Bryman & Bell, 2011, p.20). Objectivists claim that “social entities exist in reality external to and independent of social actors” (Saunders et al, 2012, p. 131). It means that reality is objective and does not depend on social actors. Objectivism can be applied to both organization and culture. In the case of organization objectivism acts as a constraining force, which influences members of the organization and restrains their actions (Bryman & Bell, 2011, p.21). Cultures constrain social actors because people adopt certain values and norms and act in a particular way (Bryman & Bell, 2011, p.21).

Another ontological position is constructionism (Bryman & Bell, 2011, pp.21-23). Constructionists state that that culture should be considered as an emergent reality in a continuous state of change, construction and reconstruction (Bryman & Bell, 2011, pp.21-22). It means that people’s needs are constantly changing and there is a need to satisfy those needs. Saunders et al (2012, p. 131-132) uses the term “subjectivism” to refer to constructionism. According to the authors, subjectivism has a purpose of understanding the subjective reality of people in order to make sense of their motives, actions and intentions in a meaningful way.

The authors of this thesis followed the objectivist point of view. Umeå University is seen as an organization that adopts certain rules and procedures, has a particular structure and makes its participants act in certain way. Different types of factors that are important to students can be seen as objective entities. Such factors can, in turn, affect students’ attachment and commitment to Umeå University. If the authors followed constructionism, then they would not aim to examine how different factors (objective entities) affect students’ attachment and commitment. Instead, constructionism will identify how students’ interpret different factors and how important such factors are. This will be an in-depth analysis of students’ opinions, which is not relevant for the purpose of this thesis.

### 3.3 Epistemological assumptions

Epistemological assumptions are related to the nature of knowledge. A main question with
regards to epistemology is whether or not social world should be studied according to the same principles as the natural sciences (Bryman & Bell, 2011, p.15).

There are three epistemological positions – positivism, realism and interpretivism (Bryman & Bell, 2011, pp. 15-17). Positivists argue that the study of social reality and beyond should be based on application of the methods of the natural science (Bryman & Bell, 2011, p.15). It means that the social science and natural science can be studied in the same way. Mackenzie (2011) considers “positivism” as a single reality independent of human beings. The methods of the natural sciences should be adopted in research on social, and specifically educational, questions (Mackenzie, 2011). So, based on this definition, it is clear that positivist approach can be used in this research relating to educational sector. The purpose of positivism is to generate hypotheses, which can be tested later on and which will allow explanations of facts to be assessed (Saunders et al, 2012, p. 134). In other words, the idea is to explain the motives of people’s behaviour rather than to explore it. Positivists argue that the research should be done in a value-free way (Saunders et al, 2012, p. 134). This means that the outcomes of the research are likely to be objective as the researchers are external to the process and there is almost nothing they can do to influence people’s responses.

Realism is another epistemological position, which is similar to positivism in some way (Bryman & Bell, 2011, pp. 15-17). First of all, both positivism and realism share a belief that the natural sciences and social sciences should be studied in the same way as well as data should be collected and explained similarly (Bryman & Bell, 2011, p. 17). Secondly, realists also argue that there is an external reality that is separate from people’s descriptions (Bryman & Bell, 2011, p. 17). The main difference between these two epistemological positions is that positivists believe that view of reality directly reflects that reality, whereas realists’ view of reality is only a way of knowing that reality (Bryman & Bell, 2011, p. 17).

The last epistemological position is interpretivism (Bryman & Bell, 2011, pp. 16-17). Interpretivists argue that the subject matter of the social sciences – people and their institutions- is fundamentally different from that of the natural sciences (Bryman & Bell, 2011, p.16). It means that the social world and nature cannot be studied in the same way. The idea of interpretivism is to explore the behaviour of people rather than to explain it, so it helps to understand human nature and what guides people’s actions.

The authors of this thesis follow a positivist point of view. Positivist philosophy will be useful in comparing the influence of different factors on students of Umeå University. Another reason for choosing a positivist view is because it is considering a deductive theory approach. It allows to test the theories that have been generated before and see how they affect each other (Bryman & Bell, 2011, p.11). The last important reason for using a positivist view is because the outcomes of the research are likely to be objective as the researchers are external to the process of collecting data as was stated above. During the current research the purpose will be to stay objective as well and not to have any bias or influence on people’s responses. Realism is not appropriate for this research because theories chosen for the research will be used to describe the reality, not just knowing that reality. Interpretivism cannot be chosen because it is usually related to qualitative research, which is not appropriate for this paper. Moreover, the aim of this research is to explain the
effects of different factors on Umeå University students (positivist view), but not to explore them in order to get a deeper understanding (interpretivist view). So, the choice of epistemological position is given to positivism because it is more relevant for the purpose of the study.

3.4 Research approach

There are two main research approaches – induction and deduction (Bryman & Bell, 2011, p.11). Induction means that a researcher collects the data first and then develops a theory (Bryman & Bell, 2011, p.11). Deductive approach allows to test the theories that have been generated before and see how they affect each other (Bryman & Bell, 2011, p.11).

Taking into account ontological and epistemological assumptions of this research, the deductive approach has been chosen. The steps of the deductive approach are outlined in Figure 2 below. Saunders et al (2012, p.144) states that if the research starts with theory developed from reading of the academic literature and then a research strategy is designed in order to test the theory, deductive approach should be used. This approach is appropriate for this study because the aim is to apply marketing theories related to branding in order to see how they will affect students’ attachment and commitment to Umeå University brand. It means that there is a need to develop a hypothesis based on the certain theory and then design a questionnaire to test a hypothesis (Bryman & Bell, 2011, p.11). A deductive approach is usually (but not always) used to collect quantitative data that can be measured and generalized from the general to the specific (Saunders et al, 2012, p. 144). In this research, the theory will be tested to find out how different factors can influence students’ attachment and commitment to Umeå University. In order to find out the results the questionnaire will be distributed to the students.

Induction is not appropriate for this research because it is usually associated with qualitative research method in order to understand the problem (Saunders et al, 2012, p. 146-147). It is not relevant for this study because the aim of the research is to test existing theory and the preferred method of data collection is quantitative. Moreover, inductive approach does not match epistemological and ontological assumptions of this thesis.
3.5 Methodological choice

There are two main methodological choices, which are widely used in various studies: quantitative and qualitative method. Quantitative research is used to describe the cause of change in a social fact (Firestone, 1987). It mostly involves studies with deductive approach (Saunders et al, 2009, pp. 124-126). In this method numerical and correlational designs apply to clarify a social fact (Saunders et al, 2009, pp. 124-126). Thus, questionnaires and statistics are commonly used for data collection (Saunders et al, 2009, p. 145). Qualitative method, on the other hand, is used to for understanding a social phenomenon by contributing in the life of participants (Firestone, 1987). Qualitative method is mostly concerned with inductive approach (Saunders et al, 2009, pp. 124-126). Non-numerical methods such as interviews and data categorization are mostly used in this method (Saunders et al, 2009, p.145).

Concerning the subject of this research, quantitative method is chosen for data collection. As a deductive research, the quantitative method also fits better with the research aim. Therefore the existing marketing theories were applied to describe the effects of university brand on attachment and commitment of the students.

3.6 Choice of theoretical sources

In order to conduct this research a lot of secondary sources have been used. Secondary literature includes journals, books, newspapers and some government publications (Saunders et al, 2012, pp. 82-83). The nature of sources varied depending on the chapter of the thesis. The theory chapter contained references to a lot of academic articles whereas methodology chapter was mainly based on methodological books. In order to get a basic
understanding of the research subject, Google Scholar was used. It helped to find the most relevant and popular academic articles for the topic in question. When such articles were found, they were downloaded via Umeå University library. The main database used was EBSCO (Business Source Premier) as it contains a lot of high quality publications regarding business subjects.

In order to find relevant articles in the database, various keywords have been used. Keywords were mainly branding, brand-building, services-branding, university branding, university image, brand-equity, brand love, brand attachment and brand commitment. When looking through the downloaded articles, some of them referred to other articles, which contained very useful information for our research. In order to find out the original source, the reference lists of the downloaded articles were used. After finding the required article in the reference list, it was then obtained via EBSCO (Business Source Premier). In addition to academic articles methodological books were obtained via Umeå University’s library. The search was done online in order to find out the most popular books. After that, the books were collected from the library. Some references related to the subject were also found in the books which were collected. Therefore, the references from the original sources were obtained.

Saunders et al (2012, p. 107) argue that it is vital to find a literature, which is relevant to the research topic as close as possible as well as valuable. It can be particularly difficult to find a relevant literature for the new research areas, which have not been investigated in details (Saunders et al, 2012, p. 107). The current thesis was mainly based on the previous research of branding and there was a lot of relevant literature available about this topic. However, there was a limited literature about branding in services and university context. Value of the literature is another dimension to be considered. It is important to pay attention on the quality of the research described in the secondary source. Some research can be subjective, for example, autobiographies. In order to minimize the risk of misinterpreting the information, original sources have been used instead of citing an original source found in the secondary literature.

3.7 Research design

A research design means how data is collected and analysed (Bryman & Bell, 2011, p.40). Saunders et al (2012, p. 173) outlines several types of research design: experiment, survey, case study, action research, grounded theory, ethnography and archival research. After looking through each type of research design, it was decided to choose a survey. According to Cohen et al (2007, p. 209), the process of planning a survey moves from the general to the specific, which means that a general research topic is broken down into complementary issues and questions, and for each component questions are set. Bryman and Bell (2011, p. 54) define a survey as a research design where data are collected mainly by questionnaire or by structured interview on more than one case at a single point in time in order to collect quantifiable data with two or more variables, which can be examined later on to detect the patterns.

The reason for choosing a survey is because it allows applying quantitative data collection method (Saunders et al, 2012, p. 177), which will be used in this research. Besides, surveys
are useful in asking “who”, “what”, “where”, “how much” and “how many” types of questions (Saunders et al, 2012, p. 176). Some of these will be exactly the questions that will be asked in the questionnaires to collect data for this study. Saunders et al (2012, p. 177) outline some more reasons for choosing a survey design. First, it allows collecting data in an economical way in terms of both time and money, which is beneficial (Saunders et al, 2012, p. 177). Secondly, collected data are standardized, which allows easy comparison in order to explain and understand it (Saunders et al, 2012, p. 177). Moreover, surveys can be used to suggest possible reasons for particular relationships between variables and to produce models of these relationships (Saunders et al, 2012, p. 177). This also corresponds to the purpose of this study, which aims to identify how different factors can affect students’ attachment and commitment to Umeå University brand. However, there is also a range of problems in using surveys, which can lead to survey errors (Bryman & Bell, 2011, p. 203). There is a risk of poorly worded questions, which can lead to incorrect results (Bryman & Bell, 2011, p. 203). Saunders et al (2012, p. 178) support this view and says that there is a need to piloting the questions in order to ensure that they are clear to respondents. Other problems suggested by Bryman and Bell (2011, p. 203) include possible misunderstanding of the question by the respondent, respondent’s memory problems and the way the information is processed by the researcher. Saunders et al (2012, p. 178) also state that sometimes the progress might be delayed by researcher’s dependence on respondents’ information. The authors of this thesis tried to eliminate these problems as much as possible. First, the survey was tested on five students from other universities in order to see if the questions were understandable. The pre-test showed that the questions were not confusing so they were included to the final survey sent to potential respondents. The authors of this thesis were dependent on respondents replies to the survey, however the reminder was sent in order to speed up the process of answering the survey.

Cohen et al (2007, pp. 218-226), outline four main types of surveys: postal, interview, telephone and Internet-based surveys. After considering different types of surveys, it was decided to use Internet-based surveys. According to Cohen et al (2007, p. 226), Internet-based surveys can be in a form of e-mails, e-mails plus attachments of the questionnaire itself and e-mails directing respondents to a website with a questionnaire. In this study different ways of reaching respondents were used. Some e-mails were sent directly to potential respondents. The e-mails included the questionnaire itself as well as the link to the website with a questionnaire. The e-mails were sent to the current students of the International Business Program at Umeå University as we had their e-mails distributed by Student Services. Another way of reaching potential respondents was a use of social networks, mainly Facebook. The link of a survey was posted in different groups organized by students of Umeå University.

Cohen et al (2007, pp. 229-230) discuss the strengths of Internet-based surveys, which are beneficial for this research. First of all, Internet surveys are cheaper and faster to distribute, which is not the same with postal surveys (Cohen et al, 2007, p. 229). In the case of this thesis it was very fast to post the survey to various Facebook groups and to send them via e-mails. It did not cost anything either. Secondly, the respondent does not have to interact with a researcher directly and is free to answer the survey at any time unlike with a telephone or interview survey (Cohen et al, 2007, p. 230). This was also relevant to the current research because respondents could answer the survey at any time convenient for
them and there was no need for direct interaction with the authors of the thesis. Another advantage is that errors are reduced in entering and processing data, because the data in web-based surveys is processed automatically, which, in turn, increases the quality of the data (Cohen et al, 2007, p. 230). Google Document tool for creating a survey was used for data collection purpose in this thesis. All the responses were summarized in one table and they could be easily transformed to the Excel file for the further analysis. There was no need to enter data manually, which saved time and reduced the risk of incorrect data entering. The data was put into order in this thesis.

3.8 Data collection technique

A technique for collecting data for this study is a questionnaire, because it is an efficient way for collecting responses from a large sample in order to perform a quantitative analysis (Saunders et al, 2012, p. 417). As defined by Saunders et al (2012, p. 416), questionnaire is a technique of data collection in which each person is asked to respond to the same set of questions in a predetermined order. In this research the questionnaires will be sent directly to respondents who will be asked to answer the questions. So the type of questionnaire used is a self-completed questionnaire, which is usually done by the respondents themselves (Saunders et al, 2012, p. 419). Cohen et al (2007, p. 209) state that in order for the data to be reliable and valid, it is important to have several items or questions for each tested construct. As it can be seen from the conceptual framework of this research, the constructs tested are different factors related to university brand image as well as attachment and commitment of the students. In order to test these constructs, there was a need to find reliable measures. Such measures consisted of a set of questions for each construct. The measures for the constructs in this study were found after the review of previous research. The measures for different university factors were taken from Bennett and Ali-Choudhury (2009), whereas the measures for attachment and commitment were found in the study by Louis and Lombart (2010). Based on these measures, the items for the questionnaire were developed. In total, the questionnaire consisted of 46 closed questions. According to Saunders et al (2012, p. 432), closed questions provide a number of alternative answers from which the respondent should choose. Cohen et al (2007, pp. 321-333) identify various types of items that can be used in a questionnaire. The questionnaire developed for this research consisted of three types of questions: multiple choice questions, dichotomous questions and rating scales. Dichotomous questions require a “yes/no” response or in other words, the respondent can choose only one answer out of all suggested (Cohen et al, 2007, pp. 322-323). In the questionnaire dichotomous questions referred to demographics. Multiple choice questions is when the range of choices is designed to capture the likely range of responses to given statements (Cohen et al, 2007, pp. 322-324). Such a question was used to assess how students learned about Umeå University. According to Cohen et al (2007, pp. 325-328), rating scales are useful devices as they build in a degree of sensitivity and differentiation of response while still generating numbers. The majority of the questions in the questionnaire were rating scales. In particular, the Likert scale was used to provide a range of responses to a given question (Cohen et al, 2007, p. 326). In order to evaluate students’ responses a five-point scale was used, where 1 referred to “strongly disagree” and 5 was “strongly agree”. The full questionnaire can be found in the Appendix 1.

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When the set of items for each construct was developed, they were put together along with some demographic measures. The actual questionnaire was starting with a covering letter. Cohen et al (2007, p. 339) define the purpose of the covering letter as “to indicate the aim of the research, to convey to respondents its importance, to assure them of confidentiality and to encourage their replies”. The program used for creating and sending questionnaires was Google Documents. This was an easy way to enter the questions and send the survey to potential respondents. However, before actually collecting the data, there was a pilot study. Cohen et al (2007, p. 341) stress the importance of a pilot study as it allows to increase reliability, validity and practicability of the questions. The pilot study was performed in order to pre-test the questions. The survey was sent to five students at other universities in order to see if the questions were clear to respondents. In case if some questions were confusing, there was a need to change some questions. However, no questions were found to be confusing so they were used in the survey sent out to potential respondents.

As it can be seen from the data collection technique, this research is aimed at collecting primary data. Primary data is gathered for the purposes of the specific research (Saunders et al, 2012, p. 304). In this thesis primary data is necessary in order to see how different factors affect students attachment and commitment to Umeå University brand. Secondary data is the data, which have already been collected for another research (Saunders et al, 2012, p. 304). In this study different books and articles were used as sources of secondary data. Based on those secondary sources the conceptual framework was developed, so as measures for the questionnaire. After that, primary data were collected in order to test the hypotheses and find out the relationships between the constructs of the conceptual model.

### 3.9 Sampling

Sample is a part of the population that is selected for conducting a research (Bryman & Bell, 2011). A population in a research is “a specified group of people or objects for which questions can be asked or observations made to develop required data structures and information” (Shiu et al, 2009, p. 63). In this research Umeå University’s students represented this specific group and the population. The sample was chosen according to the subject of the research. A sample regarded as a representative if it reflects the population. In other words, a representative sample is a small-scale version of the population (Bryman & Bell, 2011, p. 176). In this research different social media channels had been used to inform students of Umeå University. Distribution was made to ensure the representative of the population of students at Umeå University. The sampling has been done through convenience method. The research was restricted on time and access, which can make some sampling bias. The sampling bias arises when “some members of the population stand little or no chance of being selected” (Bryman & Bell, 2011, p.176).

Census is collection of the data by using all the units of the population instead of a sample (Bryman & Bell, 2011). Therefore all the members of a specific target population are observed and questioned (Shiu et al, 2009, p. 63). Census is regarded hard to achieve because of the time, money and access restrictions. This makes the data collection process more difficult for a researcher (Saunders et al., 2009, p.210). In this research regarding the
limitation, collection of data from a whole population was impractical. The limited time in addition to the restricted access to the students make a census research out of ability of this study.

Two types of approaches are mostly used for selecting a sample; probability and non-probability sampling (Shiu et al, 2009, p. 64). By probability method, sample is randomly selected so each unit in the population has an equal chance of being selected (Shiu et al, 2009, p. 64). It makes the generalization of the results possible for the rest of the population. (Shiu et al, 2009, p. 64) The aim of this method is to minimize the error in the sample. On the other hand, in non-probability method, a sample is not selected randomly (Bryman & Bell, 2011, p.176). Therefore, some units of a population have a higher chance of being selected (Bryman & Bell, 2011, p.176).

In this research, because of the limitations such as lack of time and accessibility to students, convenience sampling has been used as a sampling method. A convenience sample is “one that is simply available to the researcher by virtue of its accessibility” (Bryman & Bell, 2007, p.190). The result from this kind of sampling is difficult to generalize (Bryman & Bell, 2007, p.190). The students, who answered the questionnaire, were the ones available to the research. The questionnaire sent through Internet by different channels of communications like email addresses or university’s Facebook page. However, to more widely disseminate this questionnaire to the students at Umeå University was impossible due to the lack of explicit corroboration from the university. Getting access to official channels would likely require more time than allotted for data collection.

3.10 Access to respondents and possible problems

As the authors of this thesis are students at Umeå University it was not hard to get access to potential respondents who are also students of the university. The respondents were mainly accessed via e-mails and Facebook. First, the questionnaire was sent to 109 e-mails of International Business Program students. The rest questionnaires were posted to various Facebook groups organized by students of different departments at Umeå University. The total number of participants of such groups was 524 people. The responses were received from 130 students. So, the response rate was 20.5%. According to Saunders et al (2012, p. 421), the likely response rate to self-completed questionnaires over the Internet can be 11% or lower. Based on this estimate, the response rate of 20.5% is considered to be good. Besides, the respondents were asked to answer all the questions and the set-up of the survey enabled that there were no missing values.

The questionnaire was sent out to all the potential respondents on the 3rd of May, 2013. The survey was active for a whole week and was shut down on the 10th of May, 2013. In order to get more responses one reminder was sent on the 7th of May, 2013, after which many more answers were received.

In general, taking into account the time limit of the survey (one week) and the number of people who received the questionnaire, the response rate is considered to be good. However, there might have been even a higher response rate and there are several possible explanations why it did not happen. First, some questionnaires were sent to student e-mails.
Some students might simply not check their student e-mails often so they might have not noticed the questionnaire. Secondly, many students write their theses in May and send out the questionnaires, so maybe potential respondents got tired of answering the questions and just ignored this survey. Another possible explanation is that potential respondents might not have been interested in participating in the study and completing the survey.

3.11 Data analysis

Statistical Package for the Social Sciences (SPSS) was used to analyse the results. It is a computer program that allows quantitative data to be managed and analysed (Bryman & Bell, 2011, p. 719). First, the data from the questionnaire was converted to the Excel file. After editing it, the data was opened in SPSS software where all the analysis was done.

3.11.1 Cronbach’s alpha

Cronbach (1951) proposed a formula for measuring internal reliability of a test item. This method is used “to measure the consistency of responses to a set of questions (scale items) that are combined as a scale to measure a particular concept” (Saunders et al, 2012, p.430). The result from measuring Cronbach’s alpha would be between 0 (meaning there is no reliability) and 1 (meaning there is a high reliability), whereas 0.70 is a level of data being reliable (Cohen et al, 2007, p.506; Saunders, 2012, p. 430). Saunders et al (2012, p.430) also claim that values of 0.70 and above show that the questions combined in the scale are measuring the same thing.

3.11.2 Descriptive statistics

Descriptive statistics make no inferences or predictions; they simply describe and present data, which has been found (Cohen et al, 2007, p. 504). The measures of mean, standard deviation and Pearson correlation were obtained for this thesis. Mean is defined as “the average value calculated by adding up the values of each case for a variable and dividing by the total number of cases” (Saunders et al, 2012, p. 674). The standard deviation is a measure of the range of scores (Cohen et al, 2007, p. 504). It considers how data values for a variable are spread around their mean, so if the data values are very close to the mean it means that the standard deviation is low, whereas high standard deviation means that the data values are spread over a wide range (Saunders et al, 2012, pp. 506-507). Pearson correlation assesses the strength of relationship between variables (Saunders et al, 2012, p. 521). Positive correlation is when an increase in one variables leads to an increase in another variable (Cohen et al, 2007, p. 530). Perfect positive correlation has a value 1 (Saunders et al, 2012, p. 521). Negative correlation refers to the situation when decrease in one variable will cause a decrease in another variable (Cohen et al, 2007, p. 530). Perfect negative correlation has a value -1. The values close to 0 indicate no relationship between the variables (Saunders et al, 2012, p. 521).

3.11.3 Regression analysis
In order to test the proposed conceptual model a regression analysis was performed. According to Cohen et al (2007, p. 537), regression analysis is a way of modelling the relationship between variables. Saunders et al (2012, p. 523) define regression analysis as “the process of calculating coefficient of determination and regression equation using one independent variable”. Such coefficient of determination (regression coefficient) assesses the strength of a cause-and-effect relationship between numerical dependent variable and one or more numerical independent variables (Saunders et al, 2012, p. 523). There are two types of regression analysis – simple linear regression and multiple regressions (Cohen et al, 2007, pp. 537-539). In simple linear regression there is one explanatory variable (the independent variable) and one explained variable (the dependent variable (Cohen et al, 2007, p. 537). The regression equation \( Y = a + bX + e \) represents the straight line, where “\( Y \)” is the dependent variable, “\( a \)” is the point where the regression line intercepts the X-axis, “\( b \)” refers to the slope of the line, “\( X \)” is the independent variable and “\( e \)” represents the errors (Shiu et al., 2009, p. 565). Multiple regression analysis allows predicting the relationship between two or more explanatory (independent) variables and an explained (dependent) variable (Cohen et al, 2007, p. 539). In the analysis performed for this thesis both simple linear regression and multiple regression analyses were performed. Multiple regression analysis tested the extent to which the components of the university brand image affect students’ attachment to the university, affective commitment and continuance commitment. Simple linear regression was used to test the effect of attachment on affective commitment and then the effect of attachment on continuance commitment.

To understand how good the model is it is important to look at several indicators, which will be explained shortly. As was stated above the result of regression analysis shows the strength of the relationship between variables. Such strength is represented by R square, which measures how much variance in the dependent variable is explained by the independent variable (Cohen et al, 2007, p. 538). Cohen et al (2007, p. 538) states that the higher R square represents the better relationship between variables, however R square should not be less than 0.5. Another important indicator is a significance level that is shown in ANOVA table (Cohen et al, 2007, p. 538). Low significance level (p<0.01) shows that there is a statistically significant relationship between the independent variable and the dependent variable, so if the significance level is low it is possible to proceed further with the analysis (Cohen et al, 2007, p. 538). Low significance level (p<0.05) also means that the effect of the independent variable on the dependent variable have a low probability of occurring by chance (Saunders et al, 2012, p. 523). When analysing data it is also useful to look at collinearity diagnostics, which measures the correlation between the independent variables in the regression model (Shiu et al., 2009, p. 591). If the collinearity between independent variables is high it means that they are highly correlated, so it is not possible to understand to what extent the independent variables influence the dependent variable (Shiu et al., 2009, p. 590). The two important indicators to consider here are tolerance and variance inflation factor (VIF). Tolerance level should be in a range between 0 and 1, it should be more than 0.1, but the higher level is better, whereas VIF should not exceed 5 and the lower level is preferred (Shiu et al., 2009, p. 591). The Beta value (\( \beta \)) of each independent variable was also essential to take into consideration because it represented which independent variable had the strongest impact on the dependent variable (Shiu et al., 2009, p. 584). The \( \beta \) value represented the amount of standard deviation unit of change in the dependent variable for each standard deviation unit of change in the independent

### 3.12 Ethical issues

Ethical issues are directly related to the integrity of a research (Bryman & Bell, 2011, p. 122). Four ethical issues considered important in a business research; invasion of privacy, deception, harm to participants and lack of informed consent (Diener & Crandall 1978, p. 7). One ethical issue that can arise is invasion of privacy. This entails revealing personal information, behaviour or feelings that the participant did not intend to reveal (Diener & Crandall, 1978, p. 54). Anonymity of participants should also be regarded as an important issue. Anonymity is keeping the identities of individual confidential (Bryman & Bell, 2011, p. 128). Another ethical issue is harming the participant by conducting the research. The harm can be regarded as “physical harm, harm to participants development or self-esteem, stress, harm to career prospect and future employment” (Bryman & Bell, 2011, p. 128). The last ethical issue arising is the lack of informed consent. This is, when the participants are not informed well about the research and the purpose (Diener & Crandall, 1978, p. 34). In addition to these four ethical issues leading questions can also make errors in survey. By this issue the selected answer is suggested by the question. The questions in the questionnaire should be proposed in a way not to affect respondent answer (Shiu et al, 2009, p. 234).

In the questionnaire supporting this research, several precautions were performed to guarantee the privacy of the participants. Respondents were clearly informed about the survey’s subject and its purpose. The subject and the purpose of the research were explained at the beginning of the questionnaire. In addition, the respondents remained anonymous in this study by not recording of personal information about respondents. Responding to the questionnaire was optional and voluntary. The research has been distributed widely so individuals cannot be identified. In this way the trustworthiness and quality of the research was greatly enhanced. The questions in this research were proposed as statements instead of open questions. The statements have been chosen from previous scientific models to ensure the quality of research In addition scales of one to five were added to regard the degree of agreement. For example, one of the statements in questionnaires says “degrees from Umeå University have a high status in the outside world” and the respondents could scale their opinion from one to five.
4. Empirical findings

In this chapter the results of the survey will be presented. In order to illustrate the findings, various charts and graphs will be included. These findings will serve as a basis for analysis of the examined effects and discussion of the proposed conceptual model.

4.1 Demographics

In the questionnaire developed for this study certain demographics questions were included. These questions specified age, gender, level of studies, whether respondents were exchange students or free movers and how students obtained information about the university. It was important to ask such questions in order to understand how respondents varied in terms of their age, gender, level of studies, etc.

The first question was about age. The respondents were asked to choose between 4 options: 18-20; 21-23; 24-26; 27 and older. The results are shown in Figure 3 below. As it can be seen the number of respondents aged 21-23 and 24-26 were almost equal (36% and 37% respectively). So these two age groups constituted the majority of respondents. Students, who were 27 and older, represented 24% of the respondents. The rest 3% were those aged 18-20, who were in the minority.

![Figure 3. Age.](image)

The second question concerned gender, because it was important to see what proportion of male/female respondents answered the questionnaire. Figure 4 showed that the proportion of females was higher (59%) compared to males (41%). Although this proportion was not absolutely equal, it was quite representative of male and female participants.
The third and fourth questions were asking whether the students were free movers or if they studied at Umeå University during their exchange period. This question was considered to be important since exchange students, who spent a relatively short period in Umeå and free movers who studied here full-time might have perceived Umeå University image differently. Figure 5 indicated that majority of respondents were not free movers (62%), actually, 28% were free movers whereas 10% of respondents were exchange students.

The fifth question was concerned with the level of studies – either Bachelor’s or Master’s level. As the aim of this thesis was to see how students overall perceived brand image of Umeå University, the sampling needed to be as representative as possible of different levels of studies at the university. That is why it was decided to ask both Bachelor and Master students because it could give a better picture about overall perceptions of students. According to Figure 6, the proportion of Bachelor and Master students was almost equal and constituted 53% and 47% respectively.
The last demographics question aimed to find out the sources of information used by students to learn about Umeå University before their admission. Figure 7 illustrated that Internet websites (46%) and conversations with friends (21%) were the most common sources. Advertisements were used by 10% of respondents. Parents (5%), open days (5%) and teachers (5%) were equally helpful to students. The least useful sources were careers councillors and prospectus and leaflets, which constituted 4% each.

4.2 Cronbach’s alpha

The items needed to be combined as a construct to measure a reliability of a particular concept (Saunders et al, 2012, p. 430). One of the ways to measure reliability was to
perform the Cronbach’s alpha test (Cohen et al, 2007, p. 506). Table 1 summarised the values of Cronbach’s alpha for each construct. Initially, nine out of twelve constructs were reliable, because their values of Cronbach’s alpha were higher than 0.70 (Cohen et al, 2007, p. 506). However, item 3 had to be excluded from social environment and item 3 also had to be excluded from continuance commitment in order to make the measures of those constructs reliable. Practicability, physical actualities and external communications also had insufficient levels of reliability. So, it was decided to use item 2 from practicability, item 3 from physical actualities and item 1 from external communications because these items seemed to be formulated in a more general way and capable of capturing these constructs. Besides, in order to assess the normality of distribution of these constructs, the skewness and kurtosis tests were performed (Cohen et al, 2007, p. 504). Skewness measured how far the data were asymmetrical in relation to a “normal” curve of distribution, whereas kurtosis was a measure of how peaked a distribution was and how steep was the slope or spread of data around the peak (Cohen et al, 2007, p. 504). The selected items for practicability, physical actualities and external communications complied with normality assumptions.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Cronbach's alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mission and vision</td>
<td>0.800</td>
</tr>
<tr>
<td>Graduation prospects</td>
<td>0.738</td>
</tr>
<tr>
<td>Learning environment</td>
<td>0.716</td>
</tr>
<tr>
<td>Social environment</td>
<td>0.753</td>
</tr>
<tr>
<td>Practicability</td>
<td>One item</td>
</tr>
<tr>
<td>Educational</td>
<td>0.752</td>
</tr>
<tr>
<td>Physical actualities</td>
<td>One item</td>
</tr>
<tr>
<td>Aesthetic</td>
<td>0.732</td>
</tr>
<tr>
<td>External communications</td>
<td>One item</td>
</tr>
<tr>
<td>Attachment</td>
<td>0.925</td>
</tr>
<tr>
<td>Affective commitment</td>
<td>0.878</td>
</tr>
<tr>
<td>Continuance commitment</td>
<td>0.733</td>
</tr>
</tbody>
</table>

Table 1. Cronbach's alpha.

4.3 Descriptive statistics

Descriptive statistics were calculated after performing the Cronbach’s alpha test and measuring reliability of the constructs. Descriptive statistics performed for this thesis included mean, standard deviation and Pearson correlation.
Table 2 captured the values of mean and standard deviation for each construct. It could be seen that continuance commitment had the lowest mean score of 2.57, whereas learning environment had the highest mean of 3.84. Since mean values showed average answers only, it was also important to look at standard deviation, which considered how data values for a variable were spread around their mean (Saunders et al, 2012, pp. 506-507). If the data values were very close to the mean it meant that the standard deviation was low, whereas high standard deviation meant that the data values were spread over a wide range (Saunders et al, 2012, pp. 506-507). Table 2 demonstrated that values for standard deviation ranged between 0.676 for learning environment and 1.226 for continuance commitment. This indicated that data values for learning environment were very close to their mean, but data values for continuance commitment were spread over a wider range.

<table>
<thead>
<tr>
<th>Constructs</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mission and vision</td>
<td>3.44</td>
<td>0.899</td>
</tr>
<tr>
<td>Graduation prospects</td>
<td>3.46</td>
<td>0.730</td>
</tr>
<tr>
<td>Learning environment</td>
<td>3.84</td>
<td>0.676</td>
</tr>
<tr>
<td>Social environment</td>
<td>3.55</td>
<td>0.917</td>
</tr>
<tr>
<td>Practicability</td>
<td>3.82</td>
<td>1.210</td>
</tr>
<tr>
<td>Educational</td>
<td>3.49</td>
<td>0.723</td>
</tr>
<tr>
<td>Physical actualities</td>
<td>2.76</td>
<td>1.089</td>
</tr>
<tr>
<td>Aesthetic</td>
<td>2.99</td>
<td>0.830</td>
</tr>
<tr>
<td>External communications</td>
<td>3.66</td>
<td>0.999</td>
</tr>
<tr>
<td>Attachment</td>
<td>3.18</td>
<td>1.049</td>
</tr>
<tr>
<td>Affective commitment</td>
<td>3.51</td>
<td>0.984</td>
</tr>
<tr>
<td>Continuance commitment</td>
<td>2.57</td>
<td>1.226</td>
</tr>
</tbody>
</table>

Table 2. Descriptive statistics.

Pearson correlation assessed the strength of relationship between variables (Saunders et al, 2012, p. 521). Table 3 summarized the correlations between the constructs. After performing Pearson correlation test it could be concluded that almost all the constructs were positively related to each other and statistically significant at a p<0.01. The highest correlation was found between attachment and affective commitment (0.87), which meant that there was a strong relationship between these two variables and fluctuations in one variable would cause fluctuations in another one (Saunders et al, 2012, p. 521). So, it would be beneficial to improve either attachment or affective commitment due to their very high correlation. Social environment and graduation prospects (0.22) as well as practicability
and social environment (0.20) were positively related to each other and statistically significant at p<0.05. However, there were two positive insignificant correlations between external communications and graduation prospects (0.16) and external communications and physical actualities (0.17). Such insignificant correlations meant almost perfect independence when fluctuations in one variable did not cause fluctuations in another variable (Saunders et al, 2012, p. 521).

<table>
<thead>
<tr>
<th>Constructs</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mission and vision (1)</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Graduation prospects (2)</td>
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<td>1</td>
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<td>8**</td>
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<tr>
<td>Learning environment (3)</td>
<td>0.5</td>
<td>0.33</td>
<td>1</td>
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<td></td>
</tr>
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<td></td>
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<td></td>
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<td>Practicability (5)</td>
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<td>0.32</td>
<td>0.36</td>
<td>0.20</td>
<td>1</td>
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<tr>
<td></td>
<td>6**</td>
<td>**</td>
<td>**</td>
<td>*</td>
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</tr>
<tr>
<td>Educational (6)</td>
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<td>0.59</td>
<td>0.43</td>
<td>0.38</td>
<td>0.32</td>
<td>1</td>
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</tr>
<tr>
<td>Physical actualities (7)</td>
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<td>0.42</td>
<td>0.34</td>
<td>0.40</td>
<td>0.38</td>
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<td>0.41</td>
<td>0.29</td>
<td>0.30</td>
<td>0.47</td>
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<tr>
<td></td>
<td>4**</td>
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<tr>
<td>External communications (9)</td>
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<td>0.16</td>
<td>0.56</td>
<td>0.32</td>
<td>0.26</td>
<td>0.23</td>
<td>0.17</td>
<td>0.44</td>
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<td></td>
<td>3**</td>
<td>**</td>
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</tr>
<tr>
<td>Attachment (10)</td>
<td>0.5</td>
<td>0.40</td>
<td>0.47</td>
<td>0.42</td>
<td>0.39</td>
<td>0.50</td>
<td>0.47</td>
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<td>**</td>
<td>*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affective commitment (11)</td>
<td>0.5</td>
<td>0.46</td>
<td>0.48</td>
<td>0.47</td>
<td>0.39</td>
<td>0.55</td>
<td>0.48</td>
<td>0.53</td>
<td>0.30</td>
<td>0.87</td>
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<td></td>
<td>6**</td>
<td>**</td>
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<td>*</td>
<td>**</td>
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<td>**</td>
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</tr>
<tr>
<td>Continuance commitment (12)</td>
<td>0.3</td>
<td>0.28</td>
<td>0.27</td>
<td>0.24</td>
<td>0.28</td>
<td>0.36</td>
<td>0.37</td>
<td>0.31</td>
<td>0.29</td>
<td>0.46</td>
<td>0.55</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>7**</td>
<td>**</td>
<td>**</td>
<td>*</td>
<td>**</td>
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<td>**</td>
<td>**</td>
<td>*</td>
<td>**</td>
<td>**</td>
<td></td>
</tr>
</tbody>
</table>

* Correlation is significant at p<0.05
** Correlation is significant at p<0.01

Table 3. Pearson correlation.
5. Analysis

This chapter will aim to analyze the results of the empirical findings. The regressions will be analyzed in the same order as they are in the empirical findings chapter and a more detailed explanation of such findings will refer to each regression separately.

5.1 University brand image and attachment (Regression 1)

The multiple regression analysis was performed in order to measure the effects of different components of the university brand image (independent variables) on attachment (dependent variable). First, it was necessary to look at the significance of the regression and the R square, which measured how much variance in the dependent variable, was explained by the independent variable (Cohen et al, 2007, p. 538). The higher R square represented a stronger relationship between variables, however R square should not be less than 0.5 (Cohen et al, 2007, p. 538). As it could be seen from Table 4, the R square was 0.473, so the model was not strong and meant that the components of the university brand image were responsible for explaining 47.3% of variance in attachment. The model was significant at p<0.01, F=11.97, so there was a statistically significant relationship between the components of the university brand image and attachment. It meant that the effect of the components of the university brand image on attachment had a low probability of occurring by chance (Saunders et al, 2012, p. 523). Collinearity in this regression (Table 5) was acceptable since the levels of tolerance lay within a range of 0 and 1 (and were higher than 0.1), VIF levels did not exceed a critical level of 5 (Shiu et al., 2009, p. 591).

To assess which components had a significant effect on attachment, it was necessary to consider significance levels first and then Beta (β) values of each independent variable. The model had a significance level p<0.01 so there was a statistically significant relationship between the independent variable and the dependent variable, so it was possible to proceed further with the analysis (Cohen et al, 2007, p. 538). β values represented which independent variable had the strongest impact on the dependent variable (Shiu et al., 2009, p. 584). Table 5 showed that five independent variables had a significant effect on attachment. Mission and vision had a β value of 0.27 and was significant at p<0.05. It can be concluded that mission and vision had a significant positive effect on attachment. Social environment variable also had a significant positive effect on attachment (β=0.17, p<0.10). Practicability had a β value of 0.11 and was significant at p<0.10. Another significant positive effect of β=0.15, p<0.10 was found between physical actualities and attachment. The last significant positive relationship in this model was the impact of aesthetic on attachment (β=0.20, p<0.10). After having considered all the significant variables, it could be summarized that mission and vision had the highest β out of all of them so this variable indicated the strongest impact on attachment. Practicability demonstrated the weakest effect on attachment.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.688a</td>
<td>0.473</td>
<td>0.434</td>
<td>0.78990</td>
</tr>
</tbody>
</table>
a. Predictors: (Constant), Mission and vision, Graduation prospects, Learning environment, Social environment, Practicability, Educational, Physical actualities, Aesthetic, External communications

Table 4. Model Summary (Regression 1 - University brand image and attachment).

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>-.727</td>
<td>.476</td>
</tr>
<tr>
<td></td>
<td>Mission and vision</td>
<td>.273</td>
<td>.112</td>
</tr>
<tr>
<td></td>
<td>Graduation prospects</td>
<td>.020</td>
<td>.126</td>
</tr>
<tr>
<td></td>
<td>Learning environment</td>
<td>.173</td>
<td>.143</td>
</tr>
<tr>
<td></td>
<td>Social environment</td>
<td>.178</td>
<td>.091</td>
</tr>
<tr>
<td></td>
<td>Practicability</td>
<td>.118</td>
<td>.066</td>
</tr>
<tr>
<td></td>
<td>Educational</td>
<td>.080</td>
<td>.144</td>
</tr>
<tr>
<td></td>
<td>Physical actualities</td>
<td>.150</td>
<td>.080</td>
</tr>
<tr>
<td></td>
<td>Aesthetic</td>
<td>.206</td>
<td>.109</td>
</tr>
<tr>
<td></td>
<td>External Communications</td>
<td>-.043</td>
<td>.091</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Attachment

Table 5. Regression 1 - University brand image and attachment.

5.2 University brand image and affective commitment (Regression 2)

In order to test the effects of different components of the university brand image (independent variables) on affective commitment (dependent variable) the multiple regression analysis was undertaken. Table 6 showed that the R square of the model was 0.534, meaning that the components of the university brand image were responsible for 53.4% of variance in affective commitment. According to Cohen et al (2007, p. 538), the R square should not be less than 0.5, so it could be concluded that this model was strong. This model had a significance level of p<0.01, F=15.29, representing a statistically significant relationship between the components of the university brand image and affective commitment. It also meant that the impact of the components of the university brand image on affective commitment had a low probability of occurring by chance (Saunders et al, 2012, p. 523). Collinearity in this regression (Table 7) was at acceptable points since the
levels of tolerance lay within a range of 0 and 1 (and were higher than 0.1), VIF values did not exceed a critical level of 5 (Shiu et al., 2009, p. 591).

Table 7 indicated that four independent variables were significant. Mission and vision had a $\beta$ value of 0.22 and a significance level of $p<0.05$, which meant a significant positive effect of mission and vision on affective commitment. Social environment had a $\beta$ value of 0.22 and was significant at $p<0.05$. Practicability had a $\beta$ value of 0.10 and a significance level of $p<0.10$. The last significant construct was aesthetic, which also showed the strong positive effect on affective commitment ($\beta=0.25$, $p<0.05$). After analysing these significant variables, it could be concluded that aesthetic had the highest $\beta$ value, whereas practicability had the lowest $\beta$ value.

<table>
<thead>
<tr>
<th>Model</th>
<th>$R$</th>
<th>$R$ Square</th>
<th>Adjusted $R$ Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.731$^a$</td>
<td>.534</td>
<td>.499</td>
<td>.69692</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Mission and vision, Graduation prospects, Learning environment, Social environment, Practicability, Educational, Physical actualities, Aesthetic, External communications

Table 6. Model Summary (Regression 2 - University brand image and affective commitment).
Table 7. Regression 2 - University brand image and affective commitment.

5.3 University brand image and continuance commitment (Regression 3)

The effects of different components of the university brand image (independent variables) on continuance commitment (dependent variable) were also tested in the form of the multiple regression analysis. Table 8 showed that the R square of the model was 0.241, which meant that the components of the university brand image were responsible for only 24.1% of variance in continuance commitment. As the R square should not be less than 0.5, this model was considered to be weak (Cohen et al., 2007, p. 538). The significance level of the model was at p<0.01, F=4.22, so the components of the university brand image and continuance commitment had a significant relationship. The effects of the components of the university brand image on continuance commitment had a low probability of occurring by chance as well (Saunders et al., 2012, p. 523). Table 9 summarized tolerance levels and VIF values of the model. These were at acceptable levels since the levels of tolerance lay within a range of 0 and 1 (and were higher than 0.1), VIF values did not exceed a critical level of 5 (Shiu et al., 2009, p. 591).
Table 9 also indicated that only one construct of the university brand image had a significant positive effect on continuance commitment. This construct was physical actualities, which had a $\beta$ value of 0.21 and a significance level of $p<0.10$.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.491*</td>
<td>.241</td>
<td>.184</td>
<td>1.10807</td>
</tr>
</tbody>
</table>

* a. Predictors: (Constant), Mission and vision, Graduation prospects, Learning environment, Social environment, Practicability, Educational, Physical actualities, Aesthetic, External communications

Table 8. Model Summary (Regression 3 - University brand image and continuance commitment).

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B Std. Error Beta t Sig.</td>
<td></td>
<td></td>
<td></td>
<td>Tolerance VIF</td>
</tr>
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<td></td>
<td></td>
<td>.478 2.093</td>
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<tr>
<td>Mission and vision</td>
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<td>.575 1.739</td>
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<tr>
<td>Graduation prospects</td>
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<td></td>
<td></td>
<td>.517 1.933</td>
</tr>
<tr>
<td>Learning environment</td>
<td>-.111 .201 -.061 -.554 .580</td>
<td></td>
<td></td>
<td></td>
<td>.517 1.933</td>
</tr>
<tr>
<td>Social environment</td>
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<td>.698 1.433</td>
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<tr>
<td>Practicability</td>
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<td>.759 1.317</td>
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<td>.188 .202 .111 .933 .353</td>
<td></td>
<td></td>
<td></td>
<td>.447 2.235</td>
</tr>
<tr>
<td>Physical actualities</td>
<td>.218 .112 .194 1.948 .054</td>
<td></td>
<td></td>
<td></td>
<td>.640 1.563</td>
</tr>
<tr>
<td>Aesthetic</td>
<td>.067 .152 .045 .441 .660</td>
<td></td>
<td></td>
<td></td>
<td>.595 1.680</td>
</tr>
<tr>
<td>External communications</td>
<td>.191 .128 .156 1.494 .138</td>
<td></td>
<td></td>
<td></td>
<td>.581 1.721</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Continuance commitment

Table 9. Regression 3 - University brand image and continuance commitment.

5.4 Attachment and affective commitment (Regression 4)

The effect of attachment on affective commitment was examined by using a simple linear regression with attachment being an independent variable and affective commitment being a dependent variable. As it could be seen from Table 10, the R square of the model was 0.762, meaning that attachment was responsible for 76.2% of variance in affective commitment, so this model was strong (Saunders et al, 2012, p. 523). A level of
significance at p<0.01 and F=409.71 represented a significant relationship between the attachment and affective commitment. So, the effect of attachment on affective commitment had a low probability of occurring by chance (Saunders et al, 2012, p. 523). Collinearity (Table 11) was good because both level of tolerance and VIF had a value of 1 (Shiu et al., 2009, p. 591).

Table 11 demonstrated that the only one independent variable tested in this model had a significant positive effect on affective commitment. Attachment had a β value of 0.81 and a significance level of p<0.05.

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.873a</td>
<td>.762</td>
<td>.760</td>
<td>.48243</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Attachment

Table 10. Model Summary (Regression 4 - Attachment and affective commitment).

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>1 (Constant) Attachment</td>
<td>.906</td>
<td>.136</td>
<td>.873</td>
</tr>
<tr>
<td>1 Attachment</td>
<td>.819</td>
<td>.040</td>
<td>.873</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Affective Commitment

5.5 Attachment and continuance commitment (Regression 5)

This simple linear regression tested the effect of attachment on continuance commitment, where attachment was an independent variable and continuance commitment was a dependent variable. Table 12 indicated that the R square of the model was 0.218, meaning that attachment was responsible for only 21.8% of variance in continuance commitment, so the model was weak (Saunders et al, 2012, p. 523). A level of significance of p<0.01, F=35.66 represented a significant relationship between the attachment and continuance commitment. It meant that the effect of attachment on continuance commitment had a low probability of occurring by chance (Saunders et al, 2012, p. 523). Collinearity statistics (Table 13) were at good levels since both level of tolerance and VIF had a value of 1 (Shiu et al., 2009, p. 591).

It could be seen from Table 13 that the only one independent variable tested in this model had a significant positive effect on continuance commitment. Attachment had a β value of 0.54 and a significance level of p<0.05.
### Table 12. Model Summary (Regression 5 - Attachment and continuance commitment).

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.467a</td>
<td>.218</td>
<td>.212</td>
<td>1.08891</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Attachment

### Table 13. Regression 5 - Attachment and continuance commitment.

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>Collinearity Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
</tr>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>.837</td>
<td>.306</td>
<td>.467</td>
</tr>
<tr>
<td>Attachment</td>
<td>.545</td>
<td>.091</td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Continuance commitment
6 Discussion

In this chapter the proposed conceptual model and the stated hypotheses will be reviewed. The findings of this thesis will be also discussed in relation to previous research.

6.1 Revised conceptual model and hypotheses

Based on the analysis above it was possible to evaluate the proposed conceptual model. After performing all the necessary tests to find out the effects between different variables it was concluded that not all the effects were significant as it was expected. The regression that tested the effects of the components of the university brand image on attachment was not strong enough. However, it was seen that some components had an impact on attachment and were significant. These components were mission and vision, social environment, practicability, physical actualities and aesthetic. Then, the effects of the components of the university brand image on affective commitment were tested. The regression itself was strong as well as there were some variables that also had significant effects on affective commitment. These variables included mission and vision, social environment, practicability, aesthetic. In relation to continuance commitment, the impact of the components of the university brand image on it was weak. When testing the effects of the university brand image constructs on continuance commitment separately, it was found that there was only one significant construct – physical actualities. The regression that evaluated the effect of attachment on affective commitment was strong and represented that attachment had a significant positive effect on affective commitment. When testing the impact of attachment on continuance commitment, the regression appeared to be very weak. However, attachment, the only one variable in the regression, was positively significant. The summary of the established effects can be seen in Figure 8 below.
The findings of the research showed that not all the hypotheses were supported in this study. Regression 1 tested the effects of the components of the university brand image on attachment. Some components were found to have positive effects on attachment. Hypothesis H1 tested the positive effects of Covenant components of the university brand image such as a) mission and vision, b) graduation prospects, c) learning environment, d) social environment on students’ attachment to the university. The results showed that the hypotheses H1a) and H1d) were supported, which meant that mission and vision and social environment had significant positive effects on attachment. Hypothesis H2 aimed to find the positive effects of Quiddity components of the university brand image such as a) practicability, b) educational factors, c) physical actualities on students’ attachment to the university. It was found that practicability and physical actualities had significant positive effects on attachment, so the hypotheses H2a) and H2c) were supported. Hypothesis H3 tested the positive effects of Symbolic and external representation components of the university brand image such as a) aesthetic and b) external communications on attachment. The outcomes of the analysis showed that only hypothesis H3a) was supported indicating
significant positive impact of aesthetic on attachment. In relation to insignificant constructs it was suggested to improve them in order to increase the university brand image and have higher chances of attracting new students.

Regression 2 tested effects of the university brand image on affective commitment. The findings showed that students of Umeå University were emotionally committed to the university brand image and the university had a lot of meaning to them. Hypothesis H4 aimed to find the positive effects of Covenant components of the university brand image such as a) mission and vision, b) graduation prospects, c) learning environment, d) social environment on students’ affective commitment to the university. Based on the results, hypotheses H4a) and H4d) were supported, which meant that mission and vision and social environment had significant positive effects on affective commitment. Hypothesis H5 tested the positive effects of Quiddity components of the university brand image such as a) practicability, b) educational factors, c) physical actualities on affective commitment. Only one construct – practicability – was found to have significant positive impact on affective commitment, so only hypothesis H5a) was supported. Hypothesis H6 tested the positive effects of Symbolic and external representation components of the university brand image such as a) aesthetic and b) external communications on affective commitment of the students. Hypothesis H6a) was supported as only aesthetic was found to have a significant positive effect on affective commitment.

Regression 3 tested the effects of the components of the university brand image on continuance commitment. Unlike with affective commitment, it has been shown that the students did not have a strong continuance commitment towards Umeå University brand. Hypothesis H7 aimed to find the positive effects of Covenant components of the university brand image such as a) mission and vision, b) graduation prospects, c) learning environment, d) social environment on students’ continuance commitment. The analysis showed that none of these hypotheses were supported. Hypothesis H8 tested the positive effects of Quiddity components of the university brand image such as a) practicability, b) educational factors, c) physical actualities on continuance commitment of the students. Hypothesis H8c) was found to be the only one supported hypothesis meaning that physical actualities was the only one construct out of other Quiddity components that had a significant positive effect on continuance commitment. Hypothesis H9 aimed to find the positive effects of Symbolic and external representation components of the university brand image such as a) aesthetic and b) external communications on continuance commitment of the students. However, no significant effects were established, which meant that none of these hypotheses were supported.

Regression 4 tested the effect of attachment on affective commitment. So, hypothesis H10 tested the positive effect of attachment on students’ affective commitment. It was concluded that attachment had a positive effect on affective commitment with attachment being a significant positive construct. This meant that hypothesis H10 was supported. So, it could be said that the students felt a lot of closeness to the university.

The final regression 5 aimed at finding the positive relation between attachment and continuance commitment. Hypothesis H11 tested the positive effect of attachment on
students’ continuance commitment. However, the analysis did not show a relation between these two constructs so hypothesis H11 was not supported.

6.2 General discussion

It can be concluded that the proposed conceptual model was partly supported. In order to improve the linkages between the parts that were not strong, the university needs to be more attentive to students, improve its facilities, become more academically developed and offer more services. If the university works on its weak points, it is more likely to keep the current students satisfied as well as to attract a higher number of prospective students. One of the means for Umeå University to increase its brand image is to use various marketing techniques. This will lead to a higher recognition of the university brand and make it easier for students to get necessary information about the university.

As it was mentioned earlier, university branding is a relatively new area of research (Tas & Ergin, 2012). This thesis proposed the relation of the university brand image to attachment and commitment of the students. The university brand image was used as three components of covenant, quiddity and symbolic and external representation (Bennett & Ali-Choudhury, 2009). Covenant was considered as the promise that the brand provides, quiddity referred to the distinctive features of the brand, whereas symbolic and external representation were described as the visual descriptions that affect attitudes towards the brand (Bennett & Ali-Choudhury, 2009). The university brand image was examined from different aspects (Bunzel, 2007; Clyson & Haley, 2005; Bennett & Ali-Choudhury, 2009). However, these studies did not study the effects of the university brand image on attachment, affective and continuance commitment of the students. Therefore, these components could not be compared to the results of previous studies.

Previous research by Louis and Lombart (2010) found that attachment had a significant positive effect on affective and continuance commitment. However, the proposed model of this thesis did not fully support these findings. The test of the effect of attachment on affective commitment in the proposed model was successful. The authors of the thesis suppose that the strong relationship between attachment and affective commitment was established because both of these constructs involved emotional feeling to a brand. Previous research by Thomson et al (2005), Park et al (2010) focused on emotional link between attachment and affective commitment. The relation between these two constructs can be also seen from the questions asked to respondents. Both of the constructs involved questions about attachment to the university, attitude to the university, students’ feelings about the university as well as attractiveness to it. Based on this, it seemed that attachment and affective commitment were similar to each other. Fullerton (2005) also claimed that commitment could be considered as an attachment to a brand. Since the previous research established so many positive links between attachment and affective commitment, it could be one of the possible explanations of the strength of this relationship in this thesis as well. Another possible explanation is that positive attitudes towards a brand are likely to make people attached and committed to a brand. Based on the view of Fullerton (2005) the nature of commitment was an attitudinal construct. Park et al (2010) also claimed that when consumers were attached to a brand they were likely to have positive and strong attitudes
towards it. After looking at the responses about attachment and affective commitment, the authors of the thesis noticed that both of these constructs were ranked high.

However, the regression of attachment on continuance commitment was very weak. Although continuance commitment, as well as affective commitment, was also a component of commitment in general (Louis and Lombard, 2010), there were possible explanations why the relationship between attachment and continuance commitment was not as strong as the relationship between attachment and affective commitment. Thomson et al (2005) claimed that strength of emotional attachment to a brand may be associated with investment in the brand. In the university setting it might mean that the more students spend on their education, the more likely they are to be attached to the university they attend. With regards to continuance commitment, the member is psychologically bonded to the organization on the basis of the perceived costs of leaving the organization, so the main reasons of continuance commitment are scarcity of alternatives and switching costs (Gruen et al, 2000). The low relationship between attachment and continuance commitment can be explained by the fact that no tuition fees are involved in higher education studies in Sweden and in Umeå University in particular. First of all, this means that students do not need to pay for their higher education. Secondly, it also means that if students want to change the university, they can do it without significant costs. They will not lose money paid to the previous education. These reasons can possibly explain the fact of students’ low attachment and continuance commitment to Umeå University.

Another reason of such a low relationship between attachment and continuance commitment is because items for continuance commitment construct were taken from the research of Louis and Lombart (2010), which focused on brands in general, but not on the brands related to the universities. The items involved questioned if the students’ lives will be disturbed if they had to change university or if it is hard to change university in general. As claimed by Fullerton (2003), consumers may feel dependent on the brands they consume, so the potential loss of something valuable to the consumer is a key feature of continuance commitment. The possible explanation of a low continuance commitment is because students do not feel dependent to the university and that changing Umeå University will not significantly affect their lives.
7 Conclusions

This chapter will answer the research question and clarify the theoretical contributions. Furthermore, practical implications for Umeå University will be outlined in order to help the university to improve its brand image, keep students satisfied and stay competitive. The chapter will end with limitations of this thesis and possible recommendations for future research.

7.1 General conclusions

The purpose of this thesis was to examine the possible effects of various components of the university brand image on students’ attachment and commitment to the brand of Umeå University. The university brand image was considered from three perspectives of covenant, quiddity, symbolic and external representation (Bennett & Ali-Choudhury, 2009). Each dimension of brand image consisted of several components. Covenant included mission and vision, graduation prospects, learning environment and social environment. Quiddity consisted of practicability, educational factors and physical actualities. Symbolic and external representations comprised aesthetic designations and external communications. In relation to attachment, affective commitment and continuance commitment, the constructs were taken from the study of Louis and Lombart (2010). The aim of this thesis was to contribute to a theory on the subject of university branding and brand loyalty through the proposed conceptual model. The thesis also aimed at improving Umeå University brand image and measuring the students’ loyalty towards the university brand. Statistical data analysis was used to test the effects of the university brand image on attachment and commitment of the students. The attachment of the students was also tested in relation to affective and continuance commitment. The research had been conducted at Umeå University. The university was chosen as a result of the authors’ experience as students at Umeå University. Conducting this research revealed the answer to the thesis question and provided invaluable information for the university.

What kind of effects do various components of Umeå University brand image have on students’ attachment and commitment?

The research found that several components of the university brand image had significant positive effects on students’ attachment to the university. Mission and vision, social environment, practicability, physical actualities and aesthetic were found to have a significant impact on attachment. It was also found that some components of the university brand image had significant positive effects on affective commitment of the students. Such constructs as mission and vision, social environment, practicability and aesthetic were found to have a significant impact on affective commitment. Only one construct of the university brand image - physical actualities – had a significant positive effect on continuance commitment. The findings also showed that attachment had a positive effect on affective commitment. The final test was aimed to find the positive relation between attachment and continuance commitment. The test indicated a significant positive effect of attachment on continuance commitment. So, the study showed a partial support for the proposed conceptual model.
7.2 Theoretical contributions

According to Tas and Ergin (2012), university branding is a relatively new area of research. Several studies are available in relation to the university branding. Landrum et al (1998) emphasized the importance of university brand image as a subject for study and as a field for practical applications of marketing management. Chapleo (2005, 2007, 2008) focused mainly on universities’ successful brands, perceptions of such brands and possible barriers that might arise when building a brand. Bennett and Ali-Choudhury (2009) discussed various components of university brand image and found consequences of these components on students’ perceptions. Vrontis et al. (2007) developed a student choice-model, which is focusing on students from developed countries.

Previous research by Louis and Lombart (2010) tested the relationship between attachment, affective commitment and continuance commitment. The concept of attachment was also discussed by Park et al (2010), who claimed that brand attachment connected brand with the self, involving thoughts and feelings, therefore there was an emotional component included. Thomson et al (2005) supported the view of emotional connection of brand with the self and explained such a connection with investment in the object (brand). The importance of customer commitment was referred to by Fullerton (2005), who claimed that commitment was central in the developing and maintaining marketing relationships, because it was a key psychological force that linked the consumer to the selling organization. In particular, Gruen et al (2000) discussed affective commitment as emotional attachment. Fullerton (2005) suggested that affective commitment included shared values, identification, and attachment. Fournier (1998) also claimed that affective commitment was the basis of consumer-brand relationships because consumers were connected to many brands that they consumed.

Affective commitment and continuance commitment constitute a one bigger concept of commitment (Louis & Lombart, 2010). Commitment was also discussed in other previous studies. Fournier (1998) discussed brand as a relationship partner. Gruen et al (2000) stated that commitment could be a result of delivering fundamental values to the customer. Fullerton (2005) discussed commitment from the perspective of services in the retail context.

The previous studies on the university brand image did not study the effects of the university brand image on attachment and commitment of the students. Therefore, this thesis contributes to the existing theory by considering specific variables, which were not examined in one conceptual model before.

In order to assess the effects between these constructs, the university brand image was examined in connection to affective commitment, continuance commitment and attachment of students. It was shown that the university brand image had a positive effect on affective commitment of the students. This positive effect could be described as a result of emotional commitment of students to Umeå University. By testing the university brand image in relation to continuance commitment, it was found that only physical actualities had a significant positive effect on continuance commitment. Another aim was to examine the effects of the university brand image on attachment of students. Mission and vision, social
environment, practicability, physical actualities and aesthetic were found to have significant positive effects on attachment. This research also established a link between attachment and affective commitment as well as between attachment and continuance commitment. Therefore, the findings of this research in relation to attachment and commitment supported previous studies.

7.3 Practical implications

According to the findings of this thesis, affective commitment considered to be the most influential in relation to brand image of the university. Therefore, universities can differentiate their brand between the competitors by applying marketing techniques, which increase affective commitment of the students to the brand. In addition, attachment of students had also a strong impact on affective commitment of students.

This study in particular contributed invaluable information to Umeå University, which needs to be considered for improvement of the university brand image. According to the findings of this thesis, brand image of Umeå University influenced the affective commitment of the students. It meant that Umeå University was successful in developing its brand image, which made students closer to the university. However, it was found that the university had to work more on graduation prospects, learning environment, educational aspects, physical actualities as well as external communications as these constructs were not significant, so the students did not value them high. Moreover, the significant positive effect was found between attachment of students and affective commitment. Unfortunately, not all the links between the university brand image and attachment to the brand worked in the proposed conceptual model. It meant that that the university had to take insignificant constructs into account and maybe revise its strategies. For example, it was found that graduation prospects, learning environment, educational factors and external communications were not significant in relation to the attachment of the university. If the university improved these areas, it would most likely to lead to a higher attractiveness of the university to the students. Increasing the attachment of the students could also improve commitment between the students. It was especially relevant in the context of the relationship between attachment and continuance commitment. This regression appeared to be very weak, which meant that students were not really linked to the university and it would not be hard for them to change it. Probably, improving the university services and facilities could increase the level of students’ continuance commitment. Moreover, Umeå University’s image was also in need of improvement in relation to continuance commitment. The performed tests showed only one significant university brand image construct - physical actualities. The rest appeared to be weak and insignificant. A deep consideration of the other parts need to be done in order to maintain the current students and not let to change the university.

7.4 Truth criteria

7.4.1 Generalizability

Generalizability is the extent to which the findings of a research study are applicable to other settings (Saunders et al, 2012, p. 382). Cohen et al (2007, p. 135) support this view
and claim that the generated theory might be useful in understanding other similar situations. The concept of generalizability refers to generalizing within specific groups, communities and situations validly and beyond to specific outsider communities, groups or situations (external validity) (Cohen et al., 2007, p. 135). In the context of this particular research, students at Umeå University answered the questionnaire about their attachment and commitment to Umeå University as well the factors that influenced students to choose this particular university. So generalizability means that the results of the research can apply to individuals other than those who participated in the questionnaire. In this case, it should apply to all students at Umeå University.

One of the important factors to be considered in generalizability is sampling. As it is not possible to ask the whole population in question, it is vital to create a representative sampling to be able to generalize findings afterwards (Bryman & Bell, 2011, p. 164). The concern with regards to generalizability is that the findings of the research cannot be generalized beyond the population of the study (Bryman & Bell, 2011, p. 165). For example, in this thesis the findings can only be generalized to all the students at Umeå University, but not to students at other universities.

### 7.4.2 Replication

Replication is the process of repeating a study in order to obtain the same results (Graziano & Raulin, 2007, p. 45). Replication might be also done in order to see if there was any bias and values of the researcher involved as well as lack of objectivity (Bryman & Bell, 2011, p. 165). If the research cannot be replicated, it might be claimed that the findings of the original research are invalid (Bryman & Bell, 2011, p. 165). So, it is important that the procedures of generating a research are explicit, so it can be replicated further, especially with regards to quantitative research (Bryman & Bell, 2011, p. 167).

However, it is not always possible to replicate the original study. According to Graziano and Raulin (2007, p. 140), replication can be done only if researchers clearly state the details of their procedures, findings and interpretation. This will help others to evaluate the original study more precisely. If the procedures are not outlined clearly enough, then there is a risk that the research might not be replicated. Therefore, researchers usually try to be explicit about their procedures to enable further replication (Bryman & Bell, 2011, p. 165). Follow-up replication can be conducted either by the original researcher or by other researchers (Graziano & Raulin, 2007, p. 45). So, this study can be replicated by the authors of this thesis at some later time or this research can be replicated by other researchers if they would like to find how reliable the findings are. So if the same results are obtained at a later time, then this research is valid and reliable.

### 7.4.3 Validity

Validity is defined as the extent to which a test fulfils to measure what it is supposed to measure (Saunders et al., 2009, p. 157). The concept of validity was considered in this thesis. The thesis assured assessing the intended objective by using reliable scales of measurements. Different theories were also used to support the interpretation of the result.
The conclusion was made in an accurate and actual way, which relates it closely with reality.

Validity can be described by using three types: face validity, internal validity and external validity (Bryman & Bell, 2007, p. 165). Face validity is concerned with whether the constructs measure what they are supposed to measure (Oluwatayo, 2012). It can be assessed by having experts or interested persons in the field of study to rate the measuring instrument (Oluwatayo, 2012). The constructs and measuring instruments in this thesis were chosen from previous models. The constructs were approved by the supervisor as an expert within the field of study. The face validity of the thesis was also assured by pre-testing the questionnaire on five business students from other universities. The second type of validity is internal validity which is concerned with the understanding of whether the variable is responsible for causing the relationship with the other variable (Bryman & Bell, 2007, p. 42). In order to test such a relationship regression analysis should be performed (Cohen et al, 2007, p. 537). Regression analysis measures the strength of a cause-and-effect relationship between numerical dependent variable and one or more numerical independent variables (Saunders et al, 2012, p. 523). Finally, external validity is concerned with the extent that the result of study can be generalized (Graziano & Raulin, 2010, p. 181). In order to generalize the results, the sample of the study needed to be representative (Saunders et al., 2009, p. 367). It is also discussed that the result would be more generalizable if the sample is selected randomly (Graziano & Raulin, 2010, 183). In this thesis sample population has been selected by convenience sampling by sending questionnaire through internet website. This sampling has been chosen as a result of limitation on having larger representative sample. The accessibility to the students and insufficient time were the limitations of study. The thesis was focused on Umeå University students. However the result might be applicable to other universities with the same attributes.

7.4.4 Reliability

Reliability is considered to be an important criterion in quantitative studies for evaluation of a business research (Bryman & Bell, 2007, p. 41). It is concerned with the issue of replication, which refers to the process of repeating a study to obtain the same results (Graziano & Raulin, 2010, p. 45). Therefore, the studies with high reliability can be applied in future research. In conducting quantitative research three factors should be considered regarding reliability: stability, internal reliability and inter-observer consistency (Bryman & Bell, 2011, pp.157-159).

Stability is a form of reliability, which measures consistency over similar respondents over time (Cohen et al, 2007, p.146). In this thesis due to the limitation of time and accessibility to the sample, repeating the study was not applicable. However, the constructs were taken from previously approved models which can be considered as an approval for conducting the research. The second factor to be considered in quantitative research is internal reliability, which measures if constructs are related to each other (Bryman & Bell, 2011, p.158). A widely used estimate of internal reliability is Cronbach’s alpha where 0.70 is considered to be a reliable level (Cohen et al, 2007, p. 506). For testing the internal reliability of the constructs, Cronbach’s alpha test was used on all the constructs in this
thesis. The test of reliability showed that nine out of twelve constructs were reliable. The rest three had a low reliability so they could not be used. Instead, one item with higher reliability from each construct was used for further analysis. The last factor is inter-observer consistency, which concerns the situation when the research is conducted by several researchers and subjectivity regarding the decision-making is likely to be increased (Bryman & Bell, 2011, p.158). Content of every section of the thesis was discussed between the authors. For taking a more consistent decision, questions were asked from the supervisor and discussed thereafter between the authors. Furthermore, statistical tests were used to decrease the subjectivity of the thesis.

7.5 Limitations and future research

Every research has limitations. Four potential limitations of this thesis are discussed here. First, this thesis focused on Umeå University brand image and current students at this university. Although the students of different age, from different departments and from different levels of studies were asked to fill out the questionnaire, it was still hard to get a representative sample of the university students overall. Therefore, future studies are also recommended to examine the proposed conceptual framework on a sample with more variability. A large sample could be chosen from different universities in different countries. Second, this study aimed to target current students at Umeå University. Future studies might be needed to examine the effect of the brand image on the prospective students’ attachment and commitment. This is necessary because the university need not only to maintain the number of current students but also to attract new students. The third limitation of this thesis is the access to respondents. In this thesis the sample has been chosen through convenience sampling by using online distribution of questionnaire. However, the questionnaire was not presented to all the students of Umeå University. The visibility of the research regarding the level of study was not high. More communication methods could be used in future studies in order to have more representative sample. Finally, the study was limited in time. Given more time the survey could have been revised and re-administered to obtain more significant data and a higher number of responses.
List of References


Appendix 1 - Questionnaire

Introduction to the survey

Dear respondents,

We are studying International Business Program at Umeå School of Business and Economics, Umeå University. At the moment we are writing Bachelor thesis about students' perceptions towards Umeå University. In particular, we examine how different factors can affect students' perceptions. In total there are 46 questions and it will take approximately 7 minutes to answer them. Your answers will remain anonymous throughout the whole process of this study.

Thank you in advance for your participation!

If you have any questions, please contact us.

Kind regards,

Kamelia Mohajerani and Valeria Lymar

Kamelia Mohajerani
kamo0026@student.umu.se

Valeria Lymar
valy0003@student.umu.se
1. How old are you?
   • 18-20
   • 21-23
   • 24-26
   • 27 and older

2. What is your gender?
   • Female
   • Male

3. Are you a free mover student?
   • Yes
   • No

4. Are you an exchange student?
   • Yes
   • No

5. What is your level of studies?
   • Bachelor
   • Master

6. Before applying to Umeå University, where have you obtained information about it from?
   • Advertisement
   • Internet websites
   • Conversations with friends
   • Prospectus and leaflets
   • Careers councilors
   • Parents
   • Open days
   • Teachers

For the next questions, please, select one option on the scale from 1 to 5

Key: 1 - strongly disagree, 2 - disagree, 3 - neither disagree nor agree, 4 - agree, 5 - strongly agree

First, we would like to learn about your general perceptions of Umeå University

7. Graduates of Umeå University have excellent job and career prospects
8. Degrees from Umeå University have a high status in the outside world
9. A degree from this university will be useful to a person throughout his or her entire life
10. Umeå University is committed to being among the top universities in its sector
11. This university is committed to improving its position in the university rankings published in national newspapers
12. This university has a clear and desirable mission
13. Umeå University’s name is memorable
14. The university’s name tells me a lot about the nature of the institution
15. Umeå University’s logo is memorable
16. The university’s logo tells me a lot about the nature of the institution
17. The university’s advertisements and/or promotional materials (leaflets, brochures, etc.) present a good image of the institution
18. Things I have heard about Umeå University from newspaper reports, television, conversations with other people, etc. present a good image of the institution

Secondly, we would like to ask questions about academic and physical facilities at Umeå University

19. Umeå University has excellent library, information technology, and other learning facilities
20. This university has excellent student support services (help with study skills, academic writing, etc.)
21. Umeå University has helpful and caring staff
22. The university has teaching and support staff who are easily accessible to students
23. Umeå University has a lively social environment with many opportunities to make new friends
24. The university has many clubs and societies
25. The university has excellent sports and leisure facilities
26. Umeå University offers a wide range of degree programs appropriate for the needs of people like myself
27. The university is located in an area that is convenient for me
28. The university has academic entry requirements that are appropriate for someone like me
29. Courses at Umeå University are of a level of difficulty that are appropriate for someone with my academic background
30. Staff of the university have impressive research and publication records
31. Courses at the university are of a theoretical (rather than practical) level that are appropriate for someone like me
32. Umeå University has academic values that I find desirable
33. The university has a proportion of foreign students that I find desirable
34. The university has a physically attractive campus
35. The university is located in an area that is physically safe
36. The university is located in a geographical area that has many attractions and entertainment facilities

Now we would like to know how much you associate yourself with Umeå University

37. I have a lot of affection (love) for Umeå University
38. I am attached to Umeå University
39. I am attracted to Umeå University
40. Thinking about Umeå University brings me a lot of joy and pleasure
41. I like Umeå University
42. This university has a lot of meaning to me
43. I am strongly related to Umeå University
44. Even if I wanted, it would be hard for me to change my university
45. My life would be disturbed if I had to change my university
46. It would be too costly for me to change the university