# Differentiation of secondary brand benefit associations: 

## Are preferred brands any different?

## Bettina Therese Rognås Ellefsen and Torbjørn Furu Krogstad

## Supervisor: Magne Supphellen

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## NORWEGIAN SCHOOL OF ECONOMICS

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## ABSTRACT

The brand management literature focuses on differentiation of brand benefits. However, associative network theory has taught us that associations do not have independent meaning, but receive its content from surrounding nodes, i.e. secondary associations. Thus, we must study secondary brand benefit associations (SBBAs) in order to learn more about differentiation.

We compared the SBBAs of preferred and acceptable brands using a randomized 4 (car-, beer-, grocery store- and clothing store categories) x 2 (preferred- and acceptable brands) factorial between subjects design. Furthermore, we investigated whether the same effects apply for products and services, thus providing a new and important contribution to the research on differentiation. The experiment was conducted online, with a sample of 818 current and former students at the Norwegian School of Economics.

In accordance with the traditional view on brand differentiation, our experiment only investigated SBBAs with positive valence. We focused on four dimensions of differentiation: The first is the number of positive SBBAs. Secondly, instrumental differentiation is specific evidence for why a brand is better than the competitors on a driver. Finally, graded differentiation is to what extent a secondary association is shared with other brands, where dichotomous differentiation implies that it is solely connected to the brand.

The results of our main study show that preferred brands had a higher number of positive SBBAs for both products and services. While only services had preferred brands with a higher score on instrumental- and graded differentiation. We also used regression analyses to test whether our differentiation dimensions could explain any variance in evaluations of brand benefits. Results showed that instrumental differentiation had a positive effect for product brands, whereas graded differentiation had a positive effect for service brands. The number of positive SBBAs had a positive effect for all brands, hence supporting the traditional view on brand differentiation.

## PREFACE

This paper is a master thesis written as part of our Master of Science in Economics and Business Administration at the Norwegian School of Economics (NHH). It accounts for 30 credits within our major in Marketing and Brand Management. The purpose of the thesis is to examine the effects of differentiation of secondary brand benefit associations (SBBAs). In this regard, we want to discover whether preferred brands are different from acceptable brands. Furthermore, are products any different from services on this matter?

The reason behind the choice of topic was due to our personal interest in consumer behavior and brand positioning. Ever since attending the introduction course in marketing at our bachelor's degree, we have both shared a passion for marketing. Consequently, when writing our master thesis we wished to work with the most qualified person on the subject, and were fortunately chosen as part of a research study for Professor Magne Supphellen. Under his guidance, we wished to address the ongoing debate on whether or not differentiation is important for brands. Few studies have looked at the implications of differentiation of SBBAs, and none have addressed differences between products and services on this subject. Furthermore, our paper can be viewed as a continuation of the work started by Erlandsen (2013), to investigate the importance of differentiation.

We acknowledge that this study would not be a reality if it were not for certain individuals. Firstly, we would especially like to thank our supervisor Professor Magne Supphellen, for his drive and expertise as an advisor and constructive feedback along the way. Working with him has been a pleasure, as his commitment to the subject has inspired us both. Secondly, we would like to thank both Arild Schanke at the Study Administration and Torill Sommerfelt Ervik at the Office of Communications at NHH, for helping us distributing the questionnaire through email and the NHH Alumni newsletter. Finally, we would like to thank the current and former students at NHH who responded to our pre-test and final online questionnaire, as well as friends and family for excellent support and encouragement during the process.

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Torbjørn Furu Krogstad

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## 1. INTRODUCTION

Imagine a zebra quenching its thirst at a waterhole in Africa. Zebras are known for their distinctive black and white striped coats, and each animal has a unique pattern of stripes. Just like a human's fingerprint. By studying this particular zebra, you could easily memorize how it looks like and recognize it at a later point in time. However, now try to imagine this zebra as part of a herd of thousands. The same animal is nearly impossible to find.

The phenomenon illustrated above describes an important challenge in marketing; it is the marketer's job to separate his or her brand from the herd. Today, our society consists of buyers and sellers who exchange products and services in organized markets across the world. Globalization has granted the modern consumer with endless possibilities and choices. However, the job as a marketer is becoming increasingly more difficult. In this very jungle of alternatives - how do you differentiate your brand from the competition?

Brand positioning has been a part of traditional marketing theory for years, defined as the act of designing the company's offer and image so that it occupies a distinct and valued place in the target consumers' minds (Keller, 2013, p. 79). However, a paradox in the literature presents itself; even though differentiation is known as the core of brand positioning, very little research is conducted to understand it. Consequently, it is crucial to understand consumers' associative networks, as the key in building customer-based brand equity is through strong, unique and favorable brand associations (Keller, 1993).

In recent years, Supphellen (Supphellen et al., 2014) has further developed traditional theory from Keller (1993), arguing that the differentiation happens in a combination between two levels in associative networks for brands. The primary level illustrates the direct associations, or drivers, to the brand, while the secondary level provides meaning or an interpretation to these associations. The differentiation therefore takes place in the combination between the levels, as illustrated in the following example. A consumer at a grocery store might find "good taste" as the most important primary driver for buying coffee. For this particular person, Evergood and Friele might score identically on the benefit "good taste". Still, the consumer consistently chooses Evergood when buying coffee. Why is this happening? Evidently, because the brands activate different secondary associations, the taste-experience becomes different when drinking Evergood, compared to Friele (Supphellen

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et al., 2014, p.290). Thus, the taste-associations could be clustered with other associations referring to exclusive drinking situations, English aristocracy and price ("litt dyrere for smakens skyld") (Supphellen, 2011). From now on, these associations will be referred to as secondary brand benefit associations (SBBAs).

The background for this paper is that the traditional view on differentiation has been challenged by several researchers (Sharp, 2010; Romaniuk et al., 2007). They state that differentiation in its traditional form does not deserve its current place in literature, and that it has been blindly followed for years without sufficient empirical support. This conflict about brand positioning and differentiation was also debated on kampanje.com between Alf. B. Bendixen and Professor Magne Supphellen. Here, Bendixen claims that differentiation in general is a bad goal for branding, and that it works between categories, but not between brands within the same category (Bendixen A., 2011). He claims that it is more important to be equally good as your competitors, than focusing on being differentiated (Supphellen, 2011). Supphellen disagrees.

The purpose of this study is to investigate the traditional view on differentiation in depth, by both statistically testing and exploring theory. We seek to investigate differentiation of SBBAs by comparing preferred and acceptable brands, thus continuing the work of Erlandsen (2013). We know that humans seek to reduce the cognitive load of information when evaluating brands, as we always seek to maximize our "return on time" (Andreassen et al., 2014). Thus, when a consumer is buying coffee at the grocery store, every single brand or alternative is not likely to be considered. Shocker et al. (1991) defines the consideration set at the goal-satisfying alternatives that are salient or accessible on a particular occasion. As we only compare brands within each consumer's consideration set, we are performing a strict test that can provide valuable implications for cluttered markets. Additionally, we also investigate differences between product and services, to discover whether or not they require different marketing strategies.

Our research questions are as follows:
RQ1: In which way and to what extent are preferred brands differentiated from acceptable brands?
RQ2: In which way and to what extent is the differentiation of preferred brands moderated by the type of brand (product brands vs. service brands)?

## 2. THEORETICAL FRAMEWORK

In this chapter we will present a literature review and develop a set of hypotheses to answer our research questions. When appropriate, we will provide the reader with examples from the coffee category to illustrate and help interpret theory. Firstly, general definitions and perspectives on brand positioning will be outlined. Secondly, we will present theory on consumers' brand knowledge, associative networks, and the consideration set. Furthermore, we will look into differentiation in brand positioning, consumers' need for uniqueness and differences between products and services. Finally, our hypotheses will be presented.

### 2.1 BRAND POSITIONING

A brand can be defined as a name, term, sign, symbol, or design, or combination of them, intended to identify the goods or services of one seller or groups of sellers and to differentiate them from those of competitor (Kotler, 1991, p. 443). Brands have existed for years for the purpose of separating products and services from those of competitors. According to Keller (1993), the process of building a strong brand must begin with a clear understanding of what the brand should represent and how it should be positioned. Today, branding has become a strategic issue for all companies, making brands major players in the modern society (Kapferer, 2008).

There are several recognized definitions on brand positioning in the marketing literature. Some apply a more internal perspective, like David Aaker (1996) who defines brand positioning as the part of the brand identity and value proposition that is to be actively communicated to the target audience and that demonstrates an advantage over competing brands (Aaker D. A., 1996, p. 176). However, regardless of how strong the company might perceive their value-proposition, ultimately the consumer decides the true value. This brings us over towards more external perspectives, as recognized in the definition by Kevin Lane Keller (2013) when defining brand positioning as the act of designing the company's offer and image so that it occupies a distinct and valued place in the target consumers' minds (Keller, 2013, p. 79). Keller emphasizes the importance of adapting the offer to match the personal needs of the consumer. Consequently, Supphellen et al. (2014) have categorized different definitions and understandings of brand positioning in a matrix of four different focuses, presented in Figure 1.

FIGURE 1: Four focuses on brand positioning


Firstly, the horizontal line in the matrix separates the "ideal" from the "actual" definitions of positioning. The ideal approach focuses on the desired positioning, while the actual approach focuses on today's achieved positioning. Furthermore, the vertical line separates external and internal perspectives. An external perspective refers to how the target group perceives, or is supposed to perceive, the positioning, while an internal perspective is how the company itself sees it or desires to see it (Supphellen et al, 2014).

Supphellen et al. (2014) argue that route four in the matrix, the "ideal position and external perspective", is the most beneficiary focus for brand positioning. They argue for an external perspective, because it is the customers in the end who decides whether or not a brand is chosen. Whereas an ideal definition is preferred to provide a clear goal for where the brand is headed in the future. However, this ideal-external focus does not mean that internal beliefs and the actual position do not matter, as they will always be part of the fundament that the brand positioning is based on (Supphellen et al., 2014).

To conclude, providing satisfying benefits of products and services is not the only thing that matters, it is just as important how they are positioned and perceived in the market. Branding concerns assigning abstract benefits and values to a brand through positioning (Supphellen et al., 2014). In this regard, brand positioning refers to clarifying what associations we wish customers to have about the brand (Supphellen et al., 2014, p. 397). In order to succeed with the brand positioning, we need to understand the mind of the consumers, which brings us to the next section.

### 2.2 BRAND KNOWLEDGE

Keller defines customer-based brand equity as the differential effect of brand knowledge on consumer response to the marketing of the brand (Keller, 1993, p. 2). This means that in order to understand branding; it is essential to understand the structure of brand knowledge (Keller, 1993). The following model (Figure 2) explains its components, dividing brand knowledge into brand image and brand awareness.

FIGURE 2: Keller's (1993) dimensions of brand knowledge


Brand image can be defined as the set of associations linked to the brand that consumers hold in memory (Keller, 1993, p. 2), while Brand awareness refers to the strength of the brand node or trace in memory (Keller 1993, p.3). In other words, brand image is the consumer's general impression of the brand, whereas brand awareness is how strong this impression or associations are in memory. As illustrated in the figure, brand awareness further consists of brand recognition and brand recall. Brand recognition relates to consumers' ability to confirm prior exposure to the brand when given the brand as a cue, whereas brand recall relates to consumers ability to retrieve the brand from memory when
given the product category (Keller 2013, p.73). Before we address these components further, we will first explain how brand information becomes brand knowledge.

### 2.2.1 Memory and the perceptual process

Brand knowledge is stored in consumers memory, where memory can be defined as the persistence of learning over time, via the storage and retrieval of information, which can occur consciously or unconsciously (Hoyer et al., 2013, p.100). How long the information is stored in consumers' minds depends on what kind of memory that is used. It is common to separate between sensory-, short-term- and long-term memory (Hoyer et al., 2013). Firstly, sensory memory is the ability to store input from the five senses temporarily. Secondly, short-term memory, or "working memory", is the part of the brain where consumers interpret information and keep it available for further use. Finally, long-term memory is the most enduring part of memory where information is permanently stored for later use (Hoyer et al., 2013). Here, the information can be stored as either semantic or episodic memory. Semantic memory represents facts and general knowledge, whereas episodic memory refers to knowledge consumers have about themselves, i.e. feelings and experiences. Consequently, the long-term memory is most interesting for brand positioning.

In order for brand information to be stored in memory, it must make it through the perceptual process (cf. Figure 3). When consumers encounter a stimulus, such as marketing stimuli, the process of perception begins. Perception can be defined as the process that uses previous knowledge to compile and interpret the stimuli that are registered by our senses (Matlin, 1998, cited in Bagozzi et al., 2002, p. 132). Thus, consumers choose, organize and interpret stimuli to make sense of the world around them (Hoyer et al., 2013). The process can be divided into exposure, attention and interpretation (Solomon, 2013).

FIGURE 3: The perceptual process, Solomon (2013)


The first part of the perceptual process, exposure, is the process by which the consumer comes in physical contact with a stimulus through one or more of the five senses (Hoyer et al., 2013). Consumers must pay attention to the stimulus, where attention is defined as how much mental activity a consumer devoted to a stimulus (Hoyer et al., 2013, p. 76). Finally, interpretation, or comprehension, is where higher-order meaning is extracted from what they have perceived based on their existing knowledge, e.g. brand knowledge (Hoyer et al., 2013; Solomon, 2013).

Just as people differ in terms of what kind, and amount, of stimuli they devote their attention to, the meaning consumers assign to these stimuli can also vary (Solomon, 2013). This is closely linked to consumers' existing knowledge in memory. It is therefore crucial for marketers to understand consumers' knowledge structures. They can be understood as the set of brand associations that consumers have in memory, which can be used to either recall or to recognize a brand. In this regard, it is common to refer to these sets as associative network models, the most widely accepted conceptualization of memory structures (Keller, 1993). This term will be discussed more thoroughly in the following section.

### 2.2.2 Associative networks

Consumers' knowledge is not stored as random facts, but in organized forms of scripts or schemas (Hoyer et al., 2013). A script is a cognitive knowledge-structure that helps consumers remember how to do a sequence of actions involved in performing an activity (Hoyer et al., 2013, p. 108). A schema on the other hand, is a structure that represents all knowledge consumers have about a given concept in an organized web of associations, where consumers can search for old, or storage new, information (Hoyer et al., 2013). This is why schemas are referred to as associative networks. Thus, consumers can have associative networks about anything, e.g. people or objects such as brands (Bagozzi et al., 2002).

Associative networks consist of groups of nodes connected together through paths of links that vary in strength (Matlin, 2009; Keller 1993). A node is a basic element or concept, and it represents a piece of information, i.e. knowledge such as brand associations (Teichert \& Schöntag, 2010; Anderson, 1983). This can be as concrete as the brand name, or a more abstract representation of the brand in terms of an experience (Anderson, 1983). An illustration of an associative network is presented in Figure 4.

FIGURE 4: An associative network


According to Hoyer et al., (2013) since a consumer's memory is individual, associative networks are based on subjective knowledge and interpretations of reality. Therefore, nodes can take any form from personal experiences with the brand to attributes, influences from mass media, attitudes and so on. We will now explain this process with a quick example. When a consumer encounters a stimulus in the perceptual process, e.g. a brand name, that specific brand name node is activated in their associative network; meaning that the consumer become conscious of that particular piece of information and retrieves it. The activation will then spread in the web of links to other nodes it is connected to, such as the logo, products or feelings associated with the brand. This is an automatic process called spreading activation, and the information that is retrieved is completely individual from consumer to consumer (Matlin, 2009).

The activation of a particular node will depend on the link's strength to the initial source of activation (Anderson, 1983). Here, we remember from the definition that brand awareness is the strength of the brand node or trace in memory; hence high brand awareness requires strong links in the associative networks. According to Keller (1993), strength is a function of both the amount and the nature of the information processing, i.e. the latter referring to the manner in which the consumer thinks about the information. Strong links (cf. the bold links in Figure 4) are well established in memory as they have been rehearsed, recycled, chunked and/or elaborated over time, while weak links are thought of less frequently and are therefore less processed (Hoyer et al., 2013). The more a consumer experience a brand through the five senses or thinks about it, the more likely is that brand to be strongly registered in memory, i.e. the brand awareness is high (Keller, 2013). Repetition of brand elements over
time will increase brand recognition, whereas improving brand recall demands a creation of links to appropriate product categories, purchase- or consumption situations (Keller, 2013).

Links can differ in how essential they are to the meaning of the node. To illustrate, it is vital for the understanding of the node "Evergood" that it is "coffee", thus creating a strong link. While it is not necessary as important for the understanding of the node "coffee" that one type is "Evergood". As a result, the latter link will be weaker (Collins \& Loftus, 1975).

Memory is believed to be enduring, implying that once information is stored, it will decay very slowly (Keller, 1993). Even though information is available and has the potential of being retrieved, it does not imply that all information is equally accessible. Some associations require more cues than others to get elicited (Keller, 1993). The degree of activation is said to be the sum of activation received from all associated links, meaning that many links will provide a higher probability of node activation (Anderson, 1983).

In the traditional theory of Keller (1993), the term "brand associations" has been used to refer to all associations related to the brand. However, as some associations are more closely linked to the brand, whereas others are more peripheral, an understanding of the different levels in the associative network is important to truly understand brand knowledge.

### 2.2.3 Primary and secondary level of associative networks

The associative network of brands can be further categorized into two levels, separating between primary and secondary brand associations. Primary associations are according to Supphellen (2000, p.329) the most central conscious and verbal associations in memory. They are directly related with the brand name and are central drivers for choice (Supphellen et al., 2014; Henriksen, 2012). These associations are usually well known and often refer to product class, price, quality, or overall attitudes toward the brand (Supphellen, 2000. The Norwegian coffee brand Friele can be used as an example. Primary associations that are main drivers for choice could be "good taste", "nice aroma" and "acceptable price", as illustrated in Figure 5. These associations are easily elicited when consumers activate the brand node "Friele", or other brand nodes of competing coffee brands for that matter. This
implies that primary associations tend to be easily shared across the category (Supphellen, 2000; Supphellen et al., 2014).

FIGURE 5: The associative network of Friele with primary and secondary associations


Secondary associations on the other hand are less directly linked to the brand or category, but can be elicited when primary associations are used as stimulus, e.g. "what do you associate with good taste?" (Supphellen, 2000). For Friele, we have secondary associations "passion for coffee", "coffee competence", "Norway's oldest coffee house" and "NOK 20$30^{\prime \prime}$. Unlike primary associations, secondary associations are often more uniquely attached to the brand (Supphellen et al., 2014), e.g. none of Friele's competitors can claim to be "Norway's oldest coffee house".

We have now established how brand knowledge is stored in associative networks. The next step is to study the conceptualization of brand image, in terms of the characteristics of brand associations (cf. Figure 2).

### 2.2.4 Types of brand associtations: Attributes, attitudes and benefits

According to Keller (1993) brand associations can be divided into three types, namely attributes, attitudes and benefits (cf. Figure 2). This categorization is done based on a continuum of abstractness. Firstly, attributes are the most concrete and objective form of associations. They are the descriptive features of a product or service, explaining what something is or has (Keller, 1993). An example of an attribute-association of Friele could be "100 \% Arabica coffee beans". Secondly, attitudes serve as the most abstract form of associations, as they are very individual. They can be defined as consumers' overall evaluations of a brand or as a predisposition to respond to the object in a consistently favorable or unfavorable manner (Wilkie 1986, cited in Keller, 1993 p.4; Fishbein \& Ajzen, 1974, p.59). Attitudes are very important for brands, as they often form the basis for consumer behavior such as brand choice (Keller, 1993). An attitude towards Friele could be "I like this coffee brand".

Finally, in between attributes and attitudes we find benefits. Keller defines them as the personal value that consumers attach to the product- or service attributes (Keller, 1993, p. 4), i.e. what consumers think a product or service can do for them. An example of a benefit association for Friele could be "wakes me up in the morning". However, all customers do not necessarily share the same benefit association, as benefits are more subjective than attributes (Keller, 1993). Since this paper seeks to investigate secondary brand benefit associations, a more thorough discussion of brand benefit associations is necessary.

## Functional, experiential and symbolic benefits

Park et al., (1986) state that basic consumer needs can be functional, experiential or symbolic, and that benefits are solutions that consumers believe a brand can offer these needs (Park et al., 1986, p.136). Thus, Keller categorizes benefit associations into functional, experiential- and symbolic benefit associations (Keller, 1993).

Firstly, functional benefits serve externally generated needs such as problem- solving or avoidance (Park et al., 1986). A functional benefit will reflect whether a brand works as intended, implying that functional benefits are often highly related to the attributes or
product itself (Vriens \& Hofstede, 2000). An example of a functional benefit for coffeebrand could be "wakes me up in the morning". Secondly, experiential benefits are more abstract, and focus on internally generated needs, i.e. how it feels to use the brand or product. Such benefits can provide consumers with sensoric satisfaction or cognitive stimulation (Park et al., 1986). An experiential benefit for a coffee-brand could be the "taste of Italy". Finally, symbolic benefits are also focused on internally generated needs, but more personal needs like self-expression or social approval (Park et al., 1986). A symbolic benefit for an expensive espresso-machine could be "status among rich friends". It is further argued that any brand from any product-class can be positioned with either a functional, symbolic, or experiential image or even a mixture of the three (Park et al., 1986).

In the marketing literature, benefit associations are often mentioned as the best associations to base a brand positioning on. This is because it is difficult in well-evolved markets to base it on concrete attributes alone, as attributes are almost identical across brands (Vriens \& Hofstede, 2000). Basing the brand positioning on benefits, could be more effective as it is more closely related to consumers' evaluations. Thus, making it more meaningful and important (Vriens \& Hofstede, 2000). Graeff (1997) supports this view, arguing that consumers should be more persuaded by thoughts about what products can do for them and their relevance to personal goals or objectives, than thoughts about physical product characteristics (Graeff, 1997, p. 167). This is also supported by Fuchs \& Diamantopoulos (2010), who in their research find that benefit-based and user-based positioning strategies, generally outperform feature-based positioning strategies along three dimensions; favorability, differentiation and credibility.

In addition to separating brand associations into attributes, benefits and attitudes, Keller further states that brand associations can also differ in terms of favorability, strength and uniqueness, which will be the subject for the next section (Keller, 1993).

### 2.2.5 Favorability, strength and uniqueness of brand associations

Firstly, favorability refers to how consumers evaluate brand associations in terms of valence. As an example, coffee beans of "poor quality" could be negatively evaluated, while "sustainable coffee", i.e. coffee certified as organic or fair trade, could have positive valence.

Secondly, strength of brand associations refers to the strength of the link between two association nodes (Keller, 1993). As an example, the association "Herman Friele" will often come first to mind when consumers think of Friele coffee. Finally, uniqueness refers to band associations being differentiated from those of competing brands, i.e. the essence of brand positioning (Keller, 1993). Keller (1993) defines uniqueness in terms of brand associations that may or may not be shared with other competing brands. This implies that associations do not need to be solely connected to the brand in order to be perceived as unique; they can also be shared.

Now that we have provided the reader with a deeper insight in consumers' minds, we will continue by presenting how consumers organize brands in different evaluation sets.

### 2.2.6 The consideration set of brands

In addition to organizing brand knowledge in associative networks, consumers tend to organize brands in their decision making process into different sets. The decision complexity is as in any other decision process; it is influenced by the number of available alternatives and the amount of information available for each alternative (Suh, 2009). When consumers search for information, they always start with an internal search in memory (Hoyer et al., 2013). The brands consumers elicit from memory can be categorized in a hierarchal structure of different sets (cf. Figure 6 below).

FIGURE 6: Hierarchical structure of consumers' individual choice


According to Shocker et al. (1991) all brands belong to the universal set, i.e. which any consumer under any circumstances can obtain or purchase. The universal set is further subcategorized into the awareness set, or knowledge set, where only appropriate alternatives for certain occasions, goals or objectives are present (Shocker et al., 1991). Further on, the awareness set can be categorized into a consideration set and a non-consideration set. The non-consideration set contains brands that are not considered as suitable alternatives for the given purpose, and can be further divided into the inert set and the inept set. The inert set are brands that consumers are aware of, but have not been processed enough to become alternatives for choice. While in the inept set are alternatives that are not perceived as valid, as other brands are considered better (Shocker et al., 1991).

Our study is focusing on brands in the consideration set. This set can be defined as those goal-satisfying alternatives salient or accessible on a particular occasion (Shocker et al., 1991, p.183). It is found that approximately two to eight brands are present in the consideration set (Hoyer et al., 2013). This is however highly determined by several factors, e.g. the size of product category or personal preferences (Hoyer et al., 2013). Even though sizes can vary, it is a fact that only a few of the brands from the universal set will qualify for the consideration set (Shocker et al., 1991; Hoyer et al., 2013). The alternatives in the consideration set are the only alternatives that further qualify for becoming the chosen and purchased brand, also defined by other researchers as the "evoked set" (Shocker et al., 1991). In this setting, brand awareness plays an important role (Keller, 1993). When your
target consumers think about your product or service category, it is important that your brand is easily elicited from memory. Hence, high brand awareness will increase the likelihood of your brand being part of the consideration set (Keller, 1993).

We have now provided the reader with a deeper insight about consideration sets, as our study seeks to investigate differences between preferred and acceptable brands within each consumer's consideration set. We will now use this insight to further address the implications for differentiation in brand positioning.

### 2.3 DIFFERENTIATION IN BRAND POSITIONING

According to Theodore Levitt, differentiation is one of the most important strategic and tactical activities in which companies must constantly engage (cited in Trout \& Rivkin, 2008, p.33). As we remember from the beginning of the chapter, the purpose of brands is to differentiate goods and services from those of competitors (Kotler, 1991), where brand associations play an important role in determining the differential response that makes up brand equity (Keller, 1993, p.3).

According to Keller (2013), a successful brand positioning concerns both being similar to, and different from, your competitors. Some brand associations may therefore serve as the source of differentiation, while others are important to obtain parity with competitors. This involves theory on points of difference (PODs) and points of parity (POPs) (Keller, 2013).

### 2.3.1 Points of parity and points of differentiation

Firstly, PODs can be defined as attributes or benefits that consumers strongly associate with a brand, positively evaluate, and believe that they could not find to the same extent with a competitive brand (Keller, 2013, p. 83). For associations to be suitable as PODs, they must be strong, favorable and unique in the mind of the consumer and linked to drivers for choice. According to Keller (2013) there are two criteria determining whether or not a brand association has this potential, namely desirability and deliverability. The first criterion, desirability, is met when the brand association is distinctive and relevant for the consumer.

The second criterion, deliverability, is met if the association is feasible, sustainable and can be communicated (Keller, 2013).

Secondly, PODs are associations that are connected to drivers for choice, but are not necessarily unique to the brand. The goal is often to be in parity with the competition, meaning POPs can be shared with other brands (Keller, 2013). Consequently, it is better to be similar to your competitors on associations that are important for choice, than being differentiated on something that is irrelevant for the target group (Supphellen et al., 2014). Furthermore, POPs can be subcategorized as either category or competitive. Category POPs represent necessary conditions for consumers to choose a brand within the category, e.g. attributes at the generic product level. They are regarded as minimum requirements for a brand, in order for the brand to be perceived by consumers as a legitimate and credible actor within the frame of reference (Keller et al., 2002). Competitive POPs however, are designed to neutralize competitors' PODs, by "breaking even" where competitors try to establish an advantage (Keller, 2013).

We have now established that PODs are suitable candidates for differentiation of the brand whereas POPs ensures the brand's membership in the category. These terms are well supported in theory of brand positioning (Keller, 2013; Hoyer et al., 2013; Suppellen et al., 2014; Keller et al., 2002). Even though many researchers support the importance of differentiation, there is little focus in the literature on its very nature. Supphellen et al. (2014) have therefore suggested a conceptualization of differentiation.

### 2.3.2 Differentiation at primary- and secondary level

In the associative networks of brands, differentiation can in theory occur through both primary and secondary associations (Supphellen et al., 2014). Again, we apply the Norwegian coffee brand Friele as an illustration (cf. Figure 7).

FIGURE 7: The associative network of Friele with PODs and POPs


To be differentiated on the primary level means that a driver is exclusively associated with a brand (Supphellen et al., 2014). Friele could thereby differentiate from competitors like Evergood, e.g. by focusing on "good coffee taste" alone. However, this is nearly an impossible task, as Evergood just as easily can claim that they are as good as or even better on taste than Friele. Accordingly, the drivers are abstract associations closely related to consumer needs, which all actors in the category can meet. Therefore, we seldom find brands that manage to differentiate with its primary associations alone (Supphellen et al., 2014). Another possibility is to differentiate through different combination of drivers (Supphellen et al., 2014). For Friele this is also a hard task as competitors can provide the same combination of good taste and nice aroma to an affordable price. The combination is not unique enough. How can Friele claim to have successfully differentiated their brand?

In most cases, the differentiation must happen through the combination between primary and secondary associations (Supphellen et al., 2014). In other words, the secondary associations must provide content or interpretation of the primary associations, and it is these connections between the two levels that should be unique for the points of differentiation (Supphellen et al., 2014). This is illustrated in the Friele example where the primary drivers "good coffee taste" and "nice aroma" can be regarded as PODs in the unique combination of
the secondary associations "passion for coffee", "coffee competence" and "Norway's oldest coffee house".

## Instrumental differentiation

Supphellen et al. (2014) refers to instrumental differentiation ${ }^{1}$ as defining actual, logical evidence for why a brand is better than its competitors on a driver, e.g. facts about the product, the brand or the organization behind. Friele's secondary association "coffee competence" is an example of an association on the secondary level that provides instrumental evidence for the primary driver "good coffee taste".

Moreover, a reference can be made to the traditional marketing term "unique selling proposition", or USP, from Rosser Reeves and the Ted Bates agency that introduced it during the sixties (Trout \& Rivkin, 2008). They specified that the USP consist of three parts, the first claiming that a proposition must be made to customers in terms of benefits and not just words. Secondly, it preposition must be unique compared to their competitors and finally, it must be strong enough to attract new customers (Trout \& Rivkin, 2008). Aaker 1982; Ries \& Trout 1979; Wind 1982 claim that the essence of brand positioning is that the brand has a sustainable competitive advantage or "unique selling proposition" that gives consumers a compelling reason for buying that particular brand (cited in Keller, 1993, p.6). UPSs can therefore considered as an instrumental form for differentiation. In this paper we define the nature of the relationship between the secondary and primary level as the degree of instrumentality, measuring to what degree the SBBA is the reason for the PBBA.

## Graded- and dichotomous differentiation

In terms of differentiation, Supphellen n.d. further divides uniqueness into two types, graded- and dichotomous differentiation (cited in Erlandsen, 2013). According to Supphellen (n.d), graded differentiation involves consumers sharing a secondary association with more than one brand (cited in Erlandsen, 2013), i.e. to what extent a secondary association is

[^0]shared with other brands. Here, dichotomous differentiation is regarded as the purest form of ownership, where the association is solely connected to the brand and not shared by any competitors (Supphellen n.d. cited in Erlandsen, 2013). "Dichotomous" is a synonym for binary values, i.e. a variable with only two categories (Field, 2009). An example of a dichotomous brand association for Friele is "Norway's oldest coffee house", as naturally, there can only be one coffee house that is the oldest one in Norway.

Dichotomous uniqueness can however be hard to obtain in competitive markets, as competitors seek to negate each other's PODs (cf. chapter 2.3.1). Therefore, we most often witness uniqueness in a graded form. This is closely linked to the traditional definition by Keller (1993), where the associations "may or may not be shared" with other brands. The fact that uniqueness is graded does not necessarily mean that the consumer associates the secondary association equally with other brands. Thus, marketers seek to achieve positive associations that are more related to their brand than competing brands, so that their brand can become the preferred choice (Erlandsen, 2013).

So far in this section, we have presented differentiation as found in most marketing literature; as a centerpiece of the marketing strategy (Sharp, 2010). Theory of Keller (1993) and Supphellen et al. (2014) acknowledge that it is the perceived difference that gives consumers a reason to buy and be loyal to a brand. When a brand is not differentiated, it will most likely fail to attract consumers; brands therefore need differentiation as a way to grow (Sharp, 2010). However, in recent years there have been several advocates for an alternative view on differentiation, which will be further addressed in the next section.

### 2.3.3 Different views on differentiation

Several researchers claim that marketers have for years followed the traditional view on differentiation, blindly based on theories that are not adequately supported by empirical evidence. Among the advocates for the alternative view on differentiation are Byron Sharp, Jenni Romaniuk and Andrew Ehrenberg. In their article "Evidence concerning the importance of perceived brand differentiation", and in Sharp's book "How brands grow: What marketers don't know", they claim that differentiation does not deserve its place in marketing and that it plays smaller role in brand competition than what is claimed in the traditional literature (Romaniuk et al., 2007; Sharp, 2010). In the following, we will provide
the essence of this alternative view on differentiation. For a more comprehensive review, we refer to the original work of Romaniuk et al., (2007) and Sharp (2010), as well the reviews provided by Henriksen (2012) and Erlandsen (2013).

Sharp (2010) claims that the differentiation in real life is weak, and varies little between competing brands. It is argued that competition in the real world is more about matching your competitor (Sharp, 2010). This is supported by research and empirical evidence that category leaders in general share brand image associations with their rivals. Gaillard \& Romaniuk (2007) find scientific evidence of more successful brands not necessarily having more unique associations. In an investigation of image data of 130 brands in 13 product and service categories, they show that people only three percent of the time find a single brand as being exclusively related with a certain image (cited in Sharp, 2010). It is though worth mentioning that the alternative view of differentiation only argues against uniqueness in a dichotomous form, whereas a graded form is not mentioned in their arguments.

Furthermore, it is claimed that brand loyalty does not differ that much between brands when there is differentiation; loyalty is more a characteristic of consumer behavior, than driven by differentiation (Sharp, 2010). Romaniuk et al. (2007), find that consumers still buy brands, even though they do not perceive them as different (Romaniuk et al., 2007). Here, it is claimed that the brand is chosen because of salience and awareness. Marketers should therefore not spend their time convincing consumers that the brand is different in order to get them to buy their brand (Romaniuk et al., 2007). Consumers will perceive brands as "differentiated" in terms of knowing more or less about a brand, but not perceived differentiated in the sense that brands are meaningfully different from competitors (Romaniuk et al., 2007).

With this alternative view, the advocates further claim that branding becomes more important in the absence of differentiation (Romaniuk et al., 2007). As they consider branding to be more enduring than differentiation, marketers should rather seek meaningless distinctiveness, i.e. brands standing out from its competitors so that consumers can easily, and without confusion, identify them (Romaniuk et al., 2007; Sharp, 2010). This can be achieved by utilizing distinctive elements such as colors, logos, taglines, symbols, celebrities, advertising styles or other elements that can supplement the brand in showing what the product or services is (Sharp, 2010). This means that even though the traditional
view on differentiation is not supported, the advocates for the alternative view do not reject that differentiation exist (Sharp, 2010). For instance, different brand names make brands non-identical, and there is also situational differentiation; e.g. a brand is present while the others are not, you are in a mood for a certain brand or only one brand has your size or desired color. Such situational differentiation will affect all brands, meaning there will be differentiation to a certain extent (Sharp, 2010).

Unlike "meaningful" differentiation, distinctive elements that make the brand stand out can be legally protected, thus representing a strong competitive advantage (Sharp, 2010). Additionally, each distinctive element can be developed so that it is uniquely linked to a brand, e.g. the "Friele logo" on Friele's coffee products. When brands have a high number of distinctive elements, stimuli can act as identification triggers for the brand. Thus, distinctiveness can make life simpler for consumers by reducing the cognitive effort needed to process brand information. Thereby, in order to become the chosen brand it is more important to stand out than to be differentiated from competitors (Romaniuk et al., 2007; Sharp, 2010).

The alternative view on differentiation is also recognized in the Norwegian marketing community. In September 2011, Alf Bendik Bendixen wrote a post called "Differentiate and die" in Kampanje. On the basis of his own experiences working with branding and theory by Romaniuk et al., (2007) and Sharp (2010), he claims that differentiation works between categories, but is almost not possible between brands within the same category (Bendixen A., 2011). Moreover, Bendixen claims that it is a misconception that purchase and loyalty can be traced back to consumers finding attractiveness in the uniqueness of a brand. The different brand segments are often very similar, and marketers should therefore rather ask the question "what attracts consumers to your category?" than "what makes your brand unique?" (Bendixen A., 2011). He refers to the drivers in the category being most important, not the differentiation. Positioning is a tool for growth, not differentiation, and the way to create large, strong brands is through ownership of the most important drivers for choice (Bendixen A., 2011).

Being an advocate for the traditional view, Professor Magne Supphellen answered Bendixen's statements, creating a debate on Kampanje between the two during the fall of 2011. Supphellen argues that the research of Romaniuk et al., (2007) is not adequate in terms
of its methodical and interpretative weaknesses, thus supporting why the view has not gained greater acceptance among scientists (Supphellen, 2011). Furthermore, he naturally agrees that brands should focus on the main drivers for choice and deliver on this, but adds that differentiation is not irrelevant and should most definitely be a goal for the brand positioning as well. Differentiation is not hard to accomplish within categories, as the key is the link that differentiation has to the main drivers for choice (Supphellen, 2011). It is the combination between the primary and secondary level in the associative network that provides the differential effect. Relevant differentiation is therefore an important strategy for brand positioning (Supphellen, 2011).

We have now given a review of the debate on differentiation. Further, differentiation is not just important for brands, as people too can feel the need to separate themselves from others. In the next section we will therefore look into how some consumers may use consumer goods as signals for uniqueness to become distinctive among a larger group of people (Tian et al., 2001). This phenomenon is called the "need for uniqueness".

### 2.3.4 Consumers' need for uniqueness

Fromm (1941, 1955), Horney (1937) and (Maslow 1962) all suggest that consumers have a "need for separate identity" or a "need for uniqueness" (cited in Fromkin, 1970, p.521). Need for uniqueness can be defined as an individual's pursuit of differentness relative to others that is achieved through the acquisition, utilization and disposition of consumer goods for the purpose of developing and enhancing one's personal and social identity (Tian et al., 2001, p.50). The need for uniqueness arises when consumers feel a threat to their identity, when perceiving that they are highly similar to others (Tian et al., 2001). Consumers then experience a counterconformity motivation, i.e. feel the urge to differentiate themselves through the usage and visual display of consumer goods. As a result, consumers can use brands, product-categories, versions or styles to reclaim their self-esteem and reduce negative consequences that may have occurred (Tian et al., 2001).

According to Snyder (1992) there is a common assumption in marketing that the scarcity of products will enhance consumers' desirability. He refers to the research of Lynn (1991), where consumers with a high-need for uniqueness have been found to be especially attracted to scarce products (Snyder, 1992, p. 9). Advertising messages in marketing are often designed to appeal to these consumers (Tian et al., 2001). However, when unique products,
brands or lifestyles achieve success, it is followed by increased marketing and scale of their production. As they will become commonplace, naturally, it diminishes the level of uniqueness. Snyder (1992, p.20) refers to this as a catch-22 carousel. Consumers with a high need for uniqueness, will resist the acceptance of popularized goods, and may dispose of good that become too popular. This way the cycle of innovations and trends continues (Tian et al., 2001).

We have now provided the reader with theory on consumers' brand knowledge structures and its implications for differentiation in brand positioning. Finally, we will end our literature review by addressing differences between product and service brands.

### 2.4 PRODUCTS AND SERVICES

Marketing literature started out focusing on physical goods, as services were not as large a part of economies as they are today (Fisk et al., 1993). Now, service industries represent about 60 to 70 percent of GDP and 70 to 80 percent of employment in most western economies (Pedersen, 2014). Consequently, service marketing has become a well-known term. This has raised the question on whether services and products differ in terms of branding and marketing strategies (Blankson \& Kalafatis, 1999).

Some argue that marketing strategies for services automatically become more complex than those of goods, and that services therefore need alternative marketing strategies to succeed (Zeithaml, 1981; Bitner \& Booms, 1981; McDonald et al., 2001). Consequently, positioning of service brands is a less developed concept in the field of marketing than that of consumer goods (Ennew \& Waite, 2013). However, some argue that many of the assumed differences only exist because of the initial need researchers had to justify service marketing in itself. Thus, products and services are in fact similar enough to share practices (Fisk et al., 1993; Wyckham et al., 1975). Nevertheless, there is no consensus in the ongoing debate in the marketing literature, which is outside the scope of this paper. Still, to understand the possible implications that the differences between products and services have on brand positioning, the foundation for the debate will be addressed. This implies a review of the characteristics of services, namely intangibility, heterogeneity, perishability and simultaneity (Bateson, 1979; Zeithaml, 1981; Blankson \& Kalafatis, 1999).

According to Zeithaml (1981, p.1), intangibility refers to the inability of services to be seen, felt, tasted or touched. Thus, the meaning of the brand becomes different for packaged goods and services (Berry, 2000). For packaged goods, it is the product that is the primary brand, whereas for services it is the company as services lack the tangibility that allows packaging, labeling and displaying (Berry, 2000). Hence, it can be difficult for service brands to communicate its vague and intangible characteristics to the consumers, which makes brand positioning difficult (Assael, 1985). It is therefore argued that differentiation of services is often challenging (Bloom 1984, cited in Lee 1989).

The intangibility of services makes the consumers focus on the service and the company behind as an entity (Berry, 2000). To meet this challenge, it is argued that service brands must cannibalize its intangibility through its corporate brand, and communicate their service through a clear defined set of values and a good reputation (McDonald et al., 2001). When services are made more tangible, consumers will obtain well-defined reference points, just as they have for product brands (McDonald et al., 2001). This has been the traditional view of positioning of service brands; marketers have relied on positioning with respect to practices already established in product positioning and adapted them accordingly.

The second characteristic of services is heterogeneity. Heterogeneity, originally termed nonstandardization, refers to service providers being unable to have a consistent performance or quality of their service (Zeithaml, 1981). Products on the other hand can be standardized and mass-produced, thus creating a consistent output. This means that the quality and essence of the service can vary from producer to producer, from customer to customer, and from day to day (Zeithaml et al., 1985, p.34). Heterogeneity occurs because the value proposition from the service provider encounters the human dimension of the consumer, thus creating individual differences in the interaction (Lewis \& Klein, 1985). Because of this, services become solely dependent on "the way company does things" (McDonald et al. 2001).

The employees in service companies become increasingly more important as the intensive involvement of people in the production of a service often leads to a high degree of variability in the outcome (Lee , 1989, p. 293). According to Grönroos (1994) it is the staff that embodies the service brand in the consumer's eyes (cited in McDonald et al., 2001, p.346). Zeithaml \& Bitner (1994) further argue that the interfaces between consumers and
employees will vary across the organization, resulting in different experiences with the brand (cited in McDonald et al., 2001). This implies that services are experiences, experiences that will be perceived differently for each service encounter, both for each consumer individually and across consumers. This can be illustrated with the following example. Imagine two consumers visiting the same coffee shop. The first consumer experience good service, while the other meets a rude employee. These two consumers will have completely different associations linked to the same brand. Because of this, a service brand can end up with an unclear brand positioning; a positioning that is interpreted differently from consumer to consumer (de Chernatony \& Dall'Olmo Riley, 1997)

The third characteristic of services is perishability. This means that services disappear after the production and consumption, and cannot be stored for further use (Bateson, 1979). This implies that services that are not used cannot be reclaimed (Zeithaml et al., 1985). An example of this could be empty seats at Starbucks. A customer can never claim a chair when all the seats in the shop are taken, even though he experienced available seats at his last visit. This implies that for services, it can often be difficult to match the supply and demand (Zeithaml et al., 1985). Additionally, because services disappear after production and consumption, memory is often the only remaining evidence (Darley \& Smith, 1993). This makes brand image and associations very important for services.

The fourth and final characteristic of services is simultaneity, or inseparability, referring to products being produced, sold and then consumed, while services are sold, and then produced and consumed simultaneously (Zeithaml, 1981; Bateson; 1979). The simultaneous production and consumption requires the service provider to be present when the service is consumed, hence a high level of interaction between the buyer and seller will occur (Lee , 1989). An important implication here is that the quality of the service is not separable from the quality of the service provider (Chase 1978, cited in Lee 1989). Consequently, it is hard to distinguish the production from the offering, the provider from the service, and also the consumer from the process. The consumer therefore plays an important role in services (Berry, 2000). As services interact with consumers, they easily transform the brand vision to the brand reality (Berry, 2000). Therefore, the actual experiences with a service will always triumph in defining the brand for consumers, either in a favorable or non-favorable way. This makes favorable experiences particularly important for brand differentiation, as
superior customer experiences are hard for competing service brands to imitate, regardless of their marketing communications (Berry, 2000).

According to Berry (2000), a strong service brand is a promise of a superior future satisfaction. It is therefore the beliefs the consumer has of future service encounters that build the brands, either in a favorable or non-favorable way. An important implication here is that the experience-based beliefs are different between new and existing customers. For new customers, the brand image will to a large extent be affected by what the company communicates as their value proposition, as this is the customer's only evidence for what the service is. For existing customers however, Berry (2000) argues that it is the past experience that is the main factor in shaping the service brand image. These beliefs are powerful, as consumers always trust their own experiences first, before evaluating what other might say.

Keller (1993) argues that experience-based associations are clearer, more stable and easier to encode and recall than those deriving from communication (Phan \& Ghantous, 2013, p.460). Additionally, Franke et al. (2010) argue that psychological factors play an important role in consumers' behavioral-decision-making, where subjective attributions, such as experience-based beliefs, sometimes can matter more than objective facts. It can therefore be difficult to compete against service brands that provide superior customer experiences, and thus also to rescue a weak service (cited in, Berry, 2000). Such beliefs can be illustrated with the following example. Imagine a consumer looking for a coffee shop in an unfamiliar country. From back home, this consumer is pleased with the service provided at the coffee shop Starbucks. When noticing Starbucks, this consumer will most likely be drawn towards that coffee shop, as he knows the quality of the service from past experiences. Starbucks as a strong brand in the mind of the consumer, appears as a "safe place" among the alternatives in the category (Richards 1998, cited in Berry 2000).

The characteristics of services show the differences between products and services. This may have implications for the theory presented earlier on differentiation. Because services are dependent on the perceptions of the experience, it is important that the services are performed well, i.e. deliver on drivers in the category. This is confirmed by Berry (2000), who argues that a service brand is strong when it stands for something that is important to its targeted customers, i.e. it represents a valuable market offer.

Furthermore, service brands do not only need to fulfill the needs of the consumers, they need to perform better than competitors. According to Berry (2000, p. 131), top service brands are almost always mavericks that defy convention and forge new paths to reach and please customers. He further states that the goal for services' marketing strategy is to demonstrate different experiences with a different brand presentation (Berry, 2000). Thus, differentiation is an important term also for service brands. This can be illustrated with an example from Starbucks as presented in Berry (2000, p.131). This coffee shop could meet the high demand of their service by squeezing in more chairs and tables. However, Starbucks do not sell coffee, they sell a respite and social experience, and more chairs and tables would consequently undermine their brand (Berry, 2000). Finally, Berry (2000, p.131) also states that invention, rather than imitation, rules branding efforts, which supports the traditional view on differentiation.

### 2.5 HYPOTHESES

The literature review provides the theoretical foundation and aims for our master thesis. The first aim is to examine how preferred brands differentiate from acceptable brands in terms of differentiation of secondary brand benefit associations. The second aim is to examine whether these effects are different for products and services. Consequently, the two following main research questions are presented:

RQ1: In which way and to what extent are preferred brands differentiated from acceptable brands?

RQ2: In which way and to what extent is the differentiation of preferred brands moderated by the type of brand (product brand vs. service brands)?

Before we present our hypotheses to answer our research questions, we will provide the reader with a brief overview of the different terms used throughout the study.

First of all, the paper will investigate differences between preferred and acceptable brands, i.e. close competitors within the consumer's consideration set for the given category of product- or service brands. Secondly, benefits are personal values, or solutions, that consumers believe a brand can offer their needs. These consumer needs can be further divided into functional-, experiential- and symbolic benefits (Keller, 1993; Park et al., 1986). Thirdly, primary associations are directly linked with the brand name and are central drivers for choice, whereas secondary associations are not directly linked to the brand, but can be elicited when primary associations are used as stimulus (Supphellen et al., 2014).

As follows, primary brand benefit associations are the associations that are elicited when consumers are asked; "what can this brand do for you?" Whereas secondary brand benefit associations are elicited when the primary brand benefit association is used as stimulus, e.g. "what do you associate with this (functional, experiential, symbolic) benefit?" These terms will be referred to as PBBAs and SBBAs. In the following we will present the hypotheses to answer our research questions. Please note that the hypotheses refer to RQ1, whereas the differences between products and services will be investigated accordingly to answer RQ2.

### 2.5.1 (H1) Positive differentiation

According to Keller (1993) brand associations need to be evaluated favourably ${ }^{2}$ by consumers, in order to build customer-based brand equity. A brand is said to have positive customer-based brand equity when consumers react more favorably to an element of the brand, than they do when the same element is attributed to a fictitious or unnamed brand (Keller, 1993). As this is considered a rule of thumb for all brand associations, it is expected that favorability is also present for secondary associations in the associative network. We want to examine if preferred brands are differentiated from acceptable brands in having favorable associations on the secondary level, i.e. they have a higher number of positive SBBAs than acceptable brands. We therefore posit the following hypothesis:

## H1: Preferred brands have a higher number of positive SBBAs than acceptable brands.

### 2.5.2 (H2) Instrumental differentiation

According to Supphellen et al. (2014) brand differentiation happens in the combination between the primary and secondary level in the association networks of brands. They refer to instrumental differentiation as defining actual, logical evidence for why a brand is better than its competitors on a driver. In other words, the secondary associations provide content or interpretation of the primary associations (Supphellen et al., 2014). We seek to examine if such relationships are present, and more importantly, whether they are more salient for preferred brands than acceptable brands. We define the relationship between the primary and secondary level as a "degree of instrumentality". As it should always be a goal for marketers to differentiate their brand in a favorable way from competitors, the element of favorability is also included when investigating instrumental differentiation. Hence, we posit the following hypothesis:

H2: Preferred brands have a higher score on instrumental differentiation of positive SBBAs than acceptable brands.

[^1]
### 2.5.3 (H3 and H4) Dichotomous and graded differentiation

In accordance with the definition of customer-based brand equity, brands should have unique brand associations (Keller, 1993). As presented in the literature review, uniqueness can appear in a dichotomous or graded form; brands can be exclusively associated with a brand association (dichotomous), or share brand associations with other brands (graded). In competitive markets, it is easier to obtain a graded than dichotomous differentiation (Erlandsen, 2013). This is closely linked to the theory of Keller (2013), where brands design competitive POPs to neutralize its competitors' PODs, i.e. "breaking even" where competitors try to establish an advantage (Keller, 2013).

In the alternative view on differentiation, uniqueness is referred to as the number of unique associations consumers have solely for a brand, i.e. dichotomous uniqueness. With this definition, they claim that successful brands not necessarily have more unique associations (Romaniuk et al., 2007; Sharp, 2010; Gaillard \& Romaniuk, 2007). As advocates for the traditional view of differentiation, we want to examine if the alternative view can be argued against and provide evidence for uniqueness in a dichotomous form. We therefore expect preferred brands to be differentiated from acceptable brands in having a higher number of dichotomously differentiated SBBAs. As in the previous hypotheses, we also here expect successful brands to be differentiated in a favorable way from competitors. We therefore present the following hypothesis:

## H3: Preferred brands have a higher number of dichotomously differentiated positive SBBAs than acceptable brands.

Since dichotomous differentiation can be hard to obtain in competitive markets, we may not find support for H 3 when investigating differences between brands within the consideration set. However, we know from theory of Supphellen that uniqueness can also appear in a graded form, when consumers share a secondary association with more than one brand (cited in Erlandsen, 2013). If H3 is not supported, we can still find support for uniqueness being a way to differentiate by finding significant results for graded differentiation. As the goal from a managerial point of view is to have consumers' desired associations more strongly linked to their brand than competitors, we expect this to be more present for preferred brands. As
for the prior hypotheses, the element of favorability is also included when investigating graded differentiation. We therefore posit the following hypothesis:

## H4: Preferred brands have a higher score on graded differentiation for positive SBBAs than acceptable brands.

### 2.5.4 (H5) Does Need for Uniqeness moderate differentiation?

According to Fromm (1941, 1955), Horney (1937) and (Maslow 1962), all consumers have a "need for separate identity" or a "need for uniqueness" (cited in Fromkin, 1970 p. 521). Consumers with a high need for uniqueness want to differentiate themselves from others by the use of consumer goods. They are attracted towards trends and innovations, seeking products, brands or product categories to distinguish themselves from their piers (Tian et al., 2001). It is likely to believe that theory on need for uniqueness can be combined with theory on brand differentiation. Accordingly, brands that are differentiated from competitors, will by definition be suitable candidates for consumers with a high need for uniqueness, to use as distinguishing means. It is therefore plausible that consumers with a high need for uniqueness, to a larger extent than those who do not have this need will be attracted by differentiated brands.

On the other hand, one can argue that differentiated brands would be desirable both for consumers with high and low levels of uniqueness. Our literature review provides some support for this view, as Keller (1993) claims that uniqueness of brands is a basic key element to build brand equity. This can support the logic that all consumers, regardless of their need for uniqueness, are attracted by brands that are favorably differentiated from competitors. Consumers have a need to choose the best possible option available. Thus, even though variation caused by need for uniqueness may apply, this variation may be on a high level, i.e. differentiation of brands can be a general effect. We therefore want to examine whether the effects we find in the previous hypotheses still remain after controlling for need for uniqueness (cf. Figure 8). We therefore posit the following hypothesis:

H5: The hypothesized differences between preferred and acceptable brands (H1-H4) will remain after controlling for consumers' need for uniqueness.

FIGURE 8: NFU as covariate


### 2.6 OVERVIEW OF ANALYSES

To provide the reader with a pedagogical overview of the different hypotheses and analyses conducted in this paper, we have made three explanatory models. We stress that these models are simply meant to ease the interpretation of the paper, and not illustrate causal relationships. Each overview displays the different analyses that are conducted and where they can be found in the paper. We will now in turn present the overviews of research question 1 , research question 2 and finally, our additional analyses.

FIGURE 9: Research question 1: Differentiation dimensions
One-way ANOVA


FIGURE 10: Research question 2: Products vs. Services


FIGURE 11: Pre-test of theory and additional analyses


[^2]
## 3. METHODOLOGY

In this chapter we will explain the methodological choices made for answering our research questions and hypotheses outlined in chapter 2 . We will start by providing a general description of our research approach and design. Secondly, we will go through our data collection and sample. Thirdly, we will explain our variables and measurements. Finally, we will provide an overview of our data analysis and statistical assumptions.

### 3.1 RESEACH APPROACH AND DESIGN

The purpose of this master thesis is to investigate the differentiation of SBBAs to discover what distinguishes preferred brands from acceptable brands within each consumer's consideration set. Furthermore, we wish to identify whether these effects are different for product brands and service brands.

In order to answer our research questions, as outlined in chapter 1 , we need to choose a suitable research approach. We have performed an extensive literature review and taken a look at prior empirical findings, to form certain expectations about brand differentiation that we seek to confirm. As we are utilizing existing theory to develop and test hypotheses, it can be argued that we use a deductive approach (Jacobsen, 2000; Saunders et al., 2009). Note, we do not seek to explain causal relationships, but rather explore data to establish new insight about differentiation of SBBAs and differences between product- and service brands. Thus, our approach can be argued to also contain an inductive nature.

Comparing preferred and acceptable brands can be regarded as a complex phenomenon. We have therefore chosen a quantitative method, assuming that reality can be measured by numbers and analyzed with statistical techniques (Jacobsen, 2000). By performing statistical analyses, the quantitative method helps us to "simplify the complex" (Saunders et al., 2009). Additionally, as we wish to obtain statistically significant comparisons, we need to acquire a lot of data. A quantitative method is therefore preferable.

Our research design involves collecting quantitative data to support our theory and confirm several hypotheses empirically. We have therefore chosen a descriptive design, as the

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objective is to produce information on phenomena that already exist (Fink, 1995). However, as we also seek to generate new insight, the study can be said to contain exploratory elements (Saunders. et al., 2009).

### 3.1.1 Experiment design

Our research builds on the questionnaire from the study of Erlandsen (2013). Since our questionnaire incorporates product and service brands, and four predefined categories, the nature of the questionnaire is more of an "experiment". It resembles the classical experiment by randomly assigning participants to each of the eight groups (Saunders et al., 2009). However, our experiment lacks control-groups, as all eight groups are assigned manipulation tasks, i.e. asked to elicit a preferred and acceptable brand, three benefits and three SBBAs. As a result, we are not able to examine causal relationships ${ }^{4}$, but can utilize the data to establish new insight about differentiation of SBBAs and differences between product- and service brands.

Our experiment randomly assigned participants to a 4 (cars, beer, grocery stores and clothing stores category) x 2 (preferred- and acceptable brand) factorial between subjects design as illustrated in Table 1 The logic behind our design will be further explained in chapter 3.2.4, Questionnaire Design.

## TABLE 1:

4X2 FACTORIAL BETWEEN SUBJECTS DESIGN

|  |  | Preferred brand | Acceptable brand |
| :---: | :---: | :---: | :---: |
|  | 1. Cars | 1 | 2 |
|  | 2. Beer | 3 | 4 |
|  | 3. Grocery stores | 5 | 6 |
|  | 4. Clothing stores | 7 | 8 |

[^3]Naturally, a questionnaire is chosen for our experiment-design, due to its ability to collect large amounts of data from a sizeable population in a highly economical way (Saunders et al., 2009). Furthermore, data collected from questionnaires are easy to compare, understand and explain (Jacobsen, 2000). We will now describe our data collection and questionnaire in detail in the following section.

### 3.2 DATA COLLECTION AND SAMPLE

### 3.2.1 Data type: Primary data

In today's marketing literature, research on differentiation of SBBAs is fairly limited to the studies done by, or in collaboration with, Professor Magne Supphellen. Therefore, in order to obtain further insight to answer our research questions, we have chosen to gather primary data, i.e. new data collected for the specific purpose (Saunders et al., 2009). By collecting the data ourselves, we ensure control over both the sample structure and the data assembled. We thereby increase the probability of collecting data that is suitable (Jacobsen, 2000).

### 3.2.2 Time horizon

Our paper is a master thesis with a timeframe of only five months. Naturally, this puts constraints on both time and resources. We have therefore chosen a cross-sectional study for our data collection, which provides descriptive data at one fixed point in time (Fink, 1995). It gives a "snapshot" of reality, as we only gathered data for a time-period of nine days (Saunders et al., 2009). Had our aim been to study change and development over time, a longitudinal study would have been preferable. Nevertheless, for our research purpose such an approach was not necessary, as our objective is to describe characteristics and correlations. Our cross-sectional study may limit our ability to predict causal relationships between phenomena, but it can provide valuable insight for future research (cf. chapter 6.4).

### 3.2.3 Sample

In the process of deciding on a sample, a critical question is whether the sample should consist of a homogenous group or be more a representative of the population (Calder et al., 1981). The population for this study is Norwegian consumers. The experiment should

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therefore ideally be conducted using a representative sample from the Norwegian population. Unfortunately, due to time and resource constraints, we were not able to use probability sampling (Saunders et. al, 2009). Furthermore, as our experiment was quite demanding, we were dependent on eligible respondents who could provide sufficient answers. This led to a nonprobability sampling method with a convenience sampling being chosen (Saunders et al. 2009). Together with Professor Magne Supphellen, we agreed to collect data from current and former students at the Norwegian School of Economics. This was due to their higher education and familiarity with answering questionnaires. Additionally, these respondents are convenient and easy to get hold of, thereby being both time and cost effective (Jacobsen, 2000).

We distributed the questionnaire through a Qualtrics-link in three chosen channels, inviting potential respondents to take the questionnaire. Firstly, we had two Facebook-posts on the closed group "NHH Kjøp og salg", targeting roughly 5600 current and former NHH students. Secondly, we asked the NHH Communication Center for distribution help and received an ad in their monthly NHH Alumni-newsletter to 8300 members, where approximately 50 percent opens the letter. Finally, we received 1100 email-addresses from students who started NHH between 2005 and 2009. Our approach resulted in self-selection, as the respondents chose whether or not to participate.

According to Cohen (1992), the sample size depends on the desired level of statistical significance, statistical power and the expected effect size (see chapter 4.2 for further explanation of the terms). Cohen recommends a standard significance level ( $\alpha$ ) of . 05 and a power $(1-\beta)$ of .80 . We have utilized ANOVAs, ANCOVAs and both simple and multiple linear regressions for the analyses in this paper. When using one-way analysis of variance (ANOVA) to test for differences between two groups with a desired power of 80 and $\alpha$ of .05 , one should acquire a minimum of 26,64 or 393 respondents per group for large, medium or small effect sizes respectively (Cohen, 1992). Furthermore, when conducting multiple regressions with seven predictors (desired power of .80 and $\alpha$ of .05 ), the required sample size is 48,102 or 726 respondents respectively (Cohen, 1992). The minimum sample size to detect large sample was thus (26+26) 52 respondents for ANOVAs and 48 respondents for regressions. However, as we obtained a total of 818 respondents, we were able to detect even small effect sizes with our desired power.

The response rate of the questionnaire is important, as nonresponse may introduce bias because of differences between respondents and others in terms of motivation or other factors (Fink, 1995). The response rate refers to the number of actual respondents divided by the number of eligible respondents (Saunders et al. 2009). When estimating the number of eligible respondents, it is important to note that former students may appear in all three channels, some emails may be outdated and it is not likely that every single person noticed the questionnaire. A rough estimate could be to divide the number in half $((5600+8300+$ 1100)/2), implying 7500 respondents. This provides an estimate of the response rate of (818/7500) 10.9 percent. According to Fink (1995) no single response rate is considered the standard, and all questionnaires are accompanied by a loss of information because of nonresponse. Thus, for our type of study the response rate can be considered sufficient.

In order to obtain a highest possible response rate and sample size, we made sure to both pre-test the questionnaire (chapter 3.2.5) and provided an incentive for participation by randomly awarding an iPad Air 2, or one of four VISA gift certificates for NOK 500, to five lucky respondents. The respondents had to complete the questionnaire in order to take part in the drawing for the prices, by leaving their email address in a redirected, independent survey. This way, we made sure that the experiment and email-addresses were not connected, hence securing full anonymity. Moreover, it was done to ensure a higher completion rate. When closing the experiment after nine days, we had 1244 opened and 818 ( 65.8 percent) completed experiments.

### 3.2.4 Questionnaire

As our study is a cross-sectional study with only one opportunity to collect the data, it is important that the questionnaire is well thought of and able to answer our research questions. The design of our questionnaire will affect the response rate, reliability and validity of our collected data, making careful design, planning and execution crucial for our paper (Saunders et al., 2009). Our experiment is based on the questionnaire used in the master thesis written by Erlandsen (2013). This questionnaire was also developed together with and approved by Magne Supphellen, making it a trustworthy source to build on. We adjusted the questionnaire so that it would be suitable for our research. The complete questionnaire can be found in Appendix 1.4.

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## Questionnaire instrument

To create and conduct the questionnaire we used the electronic research tool Qualtrics. The tool made several actions possible. Firstly, we were able to design and easily duplicate the questionnaire into suitable randomizations for our experiment. Thus, respondents were evenly assigned one of eight different versions of the experiment, illustrated in Figure 12.

FIGURE 12: Randomization of respondents


Secondly, Qualtrics made it possible to have answers respondents gave "follow" the questionnaire into later questions. This way, answers from open questions about brands, benefits and SBBAs, were efficiently linked to designated sections. This helped making the questionnaire easier to understand and answer. Thirdly, Qualtrics was an excellent tool for downloading the data into SPSS for the data analysis, without affecting the validity. Finally, it made it possible to use a "force response" function on all questions, preventing the
respondents in continuing the questionnaire without answering all the questions. This helped us avoid partial questionnaires and reduce bias.

## Questionnaire design

Our questionnaire consisted of a total of 19 questions, using a mixture of mostly closed and some open questions (cf. Appendix 1.4). This is due to the fact that closed questions are easier to interpret and use for statistical analyses, which is particularly important considering our large sample size (Fink, 1995).

The closed questions were primarily rating questions, using ordinal response choices to rate their answers (Fink, 1995). They were organized as both single and matrix questions to save space and time, using two or more questions in the same grid (Saunders et al. 2009). Throughout the questionnaire, we have used the Likert-style rating scale in which the respondents are asked how strongly they agree or disagree with a statement. It is normal to use a scale between five and seven values, so that respondents have the possibility of nuancing their answers (Haraldsen, 1999). We chose a seven-point rating scale, which is consistently used throughout the questionnaire to avoid confusion (Dillman, 2007). Throughout the questionnaire, the scale had both numbers and explanatory text to ease and aid the respondent's interpretation. The scale included for example " 1 ) totally disagree" and "7) totally agree". By using an odd number for the scale, the middle value (4) was named "neutral", thus serving as an alternative in case some respondents had no opinion.

In order to obtain deep insight about differentiation of SBBAs, one can argue that a qualitative method would be preferred. This is due to the fact that the majority of associations, especially on the secondary level, are pre-conscious and non-verbal. This makes certain associations difficult to elicit (Supphellen, 2000). Note that the focus of our study is not to elicit respondents' entire associative networks, but to take a look at the characteristics of associations in terms of differentiation. To secure a sound questionnaire design, we made sure to ask questions that were easy and concrete, made sense to the respondents, used conventional language and avoided biasing words (Fink, 1995).

## Questionnaire Introduction

The questionnaire starts with a short introduction of the purpose of our study (cf. Appendix 1.3). The respondents are informed that the questionnaire is related to our master thesis at the Norwegian School of Economics and part of a larger science project led by Professor Magne Supphellen. The school's logo is present at the header throughout the questionnaire, constantly providing credibility to our study. In the introduction, we encourage the respondents to take their time to reflect upon and answer the questions to the best of their capability. We inform them that the questionnaire will take approximately ten minutes, is completely anonymous, and that leaving their email-address to win one of the prizes will not be connected to their responses. We thereby set the stage for the respondents to answer as honest as possible, without having to worry about their answers being recorded. They are also informed that control questions will be included along the way, to prevent them from lingering over similar matrix-questions. Information about the questionnaire's content is limited to the topic being about brands, thus priming respondents as little as possible for the questionnaire to come.

## Questionnaire flow

Our questionnaire can be summarized in three main features. Firstly, the respondents are randomly handed one of four possible brand categories (two product- and two service categories), and will continue the questionnaire with one of their two elicited brands in the given category. Secondly, they elicit benefits and SBBAs, which are to be further evaluated. Finally, the respondents answer some general questions about brands (a graphical overview of the questionnaire flow is presented in Appendix 1.1). We will in the following explain the questionnaire flow more in detail.

After the introduction, the questionnaire starts with Qualtrics conducting two randomizations. Firstly, each respondent is randomly assigned one of the four following brand categories: cars, beer, grocery- or clothing stores. Further, the respondent names two brands in the given category: the brand they prefer the most (preferred brand) and a brand they consider acceptable, but not what they prefer the most (acceptable brand). From here on the respondent is randomly assigned to one of the two chosen brands, to be further used
throughout the experiment. This resulted in a total of eight different questionnaires, depending on the assigned brand category and chosen brand (cf. Figure 12).

After being assigned a brand, respondents answer a matrix-question about the given brand. This provides us with valuable insight about attitude, differentiation, brand attachment, trustworthiness and buying-intentions. This question is introduced early in the questionnaire to get the respondents in the right mindset about the given brand. This is highly valuable prior to the more demanding questions. With the respondents' mindsets focusing on the brand, the following questions use a laddering technique by first asking the respondents to elicit benefits, then SBBAs for the most describing benefit for the brand, and finally evaluate these SBBAs. This process can be illustrated with an example for a preferred car brand, where the functional benefit is chosen as most describing for the brand (cf. Figure 13 below).

FIGURE 13: Illustration of laddering - Preferred car brand, functional PBBA chosen as most describing


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Consequently, as the open questions demand a lot of cognitive effort, and are very important for our research, we included examples and informative texts to ease the answering. In addition we included a lot of space and page separations, making each question less overwhelming and breathable. Next, respondents are asked to name a functional-, experiential- and symbolic benefit that is obtained by using the brand, and later evaluate the PBBAs respectively. Then, after choosing which benefit they considered most describing for the brand, they had to name three SBBAs. These associations are further included in the questions that follows, to evaluate graded- and dichotomous differentiation, as well as instrumental differentiation. When eliciting SBBAs, respondents are also asked to rate the three associations as positive, neutral or negative. This evaluation of valence is highly important for our study as we according to theory, only focus on positive SBBAs. By letting the respondents evaluate the valence themselves, we avoid a subjective interpreting of the data compared to previous studies (Erlandsen, 2013; Hem \& Teslo, 2012).

Before commencing to the final part of the questionnaire containing some general questions about brands, we added an extra page notifying the respondents that the last part was not related to their chosen brand (cf. Appendix 1.4, page 14). This increases the validity and avoids priming or confusion. In the last part of the questionnaire the respondents were first asked about their knowledge of the given brand category. Further on, they were asked questions about brands in general, indirectly answering questions about the terms "brand schematicity" ${ }^{5}$ and "need for uniqueness". Before finishing the questionnaire, respondents provided information about their gender, occupation and age. When completing the questionnaire, they could choose to follow a link to an independent survey regarding the prizes (cf. chapter 3.2.3).

### 3.2.5 Pre-test

Hunt et al (1982) defines a pre-test as the use of a questionnaire in a small pilot study to ascertain how well the questionnaire works (Hunt et al, 1982, p.269). Naturally, the ultimate

[^4]way of determining how well our questionnaire works it to try it out on actual people. It is therefore advisable to pre-test an instrument and revise if necessary (Hunt et al, 1982).

## Pre-test sample

When deciding on the size of the pre-test sample, different authors argue on sizes ranging from 12 to 30 respondents, depending on the experiment instrument and target population (Hunt et al., 1982). We decided to conduct a pre-test on a selection of sixteen of our closest friends. It is not a randomly selected part of the population, but we wanted to secure a thorough test of the questionnaire. Two respondents for each of the eight versions of the questionnaire were therefore kindly asked to work through the questionnaire. We chose our respondents based on people we knew would provide an honest and rich feedback. The group consisted of both NHH students and NHH Alumni to make it representable for our final sample of respondents. The respondents were asked a list of questions to discover whether any question could be perceived as confusing or leading, calculate the average time to complete the questionnaire, evaluate the prizes to be won and add general comments.

## Results from the pre-test

The results from the pre-test showed that the average time of completing the questionnaire was closer to fifteen minutes. However, we still informed the actual respondents that it took ten minutes, to maximize their motivation. Other tactical adjustments involved separating some questions to individual pages, making it easier to comprehend and focus on each page. Additionally, we included a "self-made" progress bar, so that both a graphical bar and text for the number of completed pages was illustrated (cf. Appendix 1.2). We also added more prizes than just the iPad, making the probability to win higher for each respondent. Hence, increasing their motivation to complete the questionnaire.

Bearing in mind that the average student at NHH does not have the same knowledge and marketing-vocabulary as we do, we made sure to adjust the phrasing to make the questions as easy and comprehensible as possible. The pre-test gave us valuable insight in what questions that were hard to understand. Thus, questions regarding differentiation, and

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especially instrumentality of SBBAs, were perceived as difficult and needed rephrasing. Problems were particularly evident regarding the laddering technique. As the respondents were asked to answer questions related to their prior answers, it was perceived as frustrating not being able to change their answers. Thus, to avoid respondents losing their motivation, we included the option of going back and change answers. This way we also improved the validity, as the answers the respondents gave were well thought out.

Both before and after the pre-test, we discussed the experiment several times with Professor Magne Supphellen, making sure that our adjustments did not compromise the theory behind the questions. Finally, after making the necessary adjustments to the questionnaire, we did a last pre-test on eight respondents. The feedback was better than the initial pre-test, implying that our adjustments were successful. We were now ready to distribute the experiment.

### 3.3 MEASUREMENTS

In order to answer our research questions and hypotheses, we are dependent on collecting sufficient data for our chosen variables and constructs. When measuring popular constructs, it is normal to make use of the same measurements as those of prior theory and literature (Johannessen et al., 2011). We therefore used several of the questions from the work of Erlandsen (2013), and formulated additional questions based on our chosen literature and advice from Magne Supphellen. Most of the constructs were therefore measured with multiple questions to improve the validity, and tests for internal consistency were performed on our computed variables.

Our study consists of 74 different variables, as presented in Appendix 2.1. Since some analyses demanded separate variables for each type of benefit, an acronym was put in front of the variable to symbolize the difference. Thus, "F", "E" and "S" stands for functional-, experiential- and symbolic benefits respectively. Furthermore, the variables for graded- and instrumental differentiation are calculated by only including the scores belonging to SBBAs with positive valance. Thus, examples of the calculations will be included as footnotes to ease the reader's interpretation. We will now explain each variable in turn, and refer to where it can be found in the questionnaire (cf. Appendix 1.4).

### 3.3.1 Preferred_Acceptable

The first question (Q1) asked the respondent to name both a preferred and an acceptable brand in the given category. Consequently, Preferred_Acceptable is a dummy variable $(1,2)$ consisting of 413 preferred- and 405 acceptable brands.

### 3.3.2 Products_Services

The respondents were randomly assigned a product- or service brand. Thus, Products_ Services is a dummy variable $(1,2)$ consisting of 409 product- and 409 service brands.

### 3.3.3 Attitude_Index

The second question (Q2) asked the respondent to evaluate their chosen brand, designed as a matrix question of eleven items from Erlandsen's (2013) questionnaire. The first three items measured "attitude towards the brand ${ }^{6}$ " on a 7-point Likert Scale ranging from "1. Helt uenig" to "7. Helt enig", and were computed into the variable Attitude_index (Cronbach's $\alpha$ = .807, Appendix 4.2).

1. "Dette er et merke jeg liker svært godt."
2. "Jeg har et nært forhold til dette merket."
3. "Jeg har gode følelser for dette merket"

### 3.3.4 Eval_ben and Diff_ben

Questions Q3, Q4 and Q5 were open questions, asking the respondents to elicit a functional-, experiential- and symbolic benefit respectively. Furthermore, Q6, Q7 and Q8 asked the respondents to evaluate each benefit on four different items based on Erlandsen (2013), and measured on a 7-point Likert scale ranging from "1. Helt uenig" to "7. Helt enig". Next,

[^5]
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question 9 asked the respondents to choose which one of the benefits that was most describing for the brand. Based on these 818 chosen benefits from all of the respondents, we computed variables for evaluation of benefits and perceived differentiation of benefits.

1. "Merket er meget bra på denne egenskapen."
2. "Jeg liker veldig godt denne egenskapen ved dette merket."
3. "Denne egenskapen ved dette merket er annerledes enn for andre merker."
4. "Dette merket er helt spesiell på denne egenskapen."
"Evaluation of benefits" was computed as a mean of item 1 and 2, thus providing the variables Eval_ben ( $\mathrm{N}=818$, Cronbach's $\alpha=.698^{7}$ ), F_Eval_ben ( $\mathrm{N}=496$, Cronbach's $\alpha=.829$ ), E_Eval_ben ( $\mathrm{N}=164$, Cronbach's $\alpha=.597$ and S_Eval_ben (N=158, Cronbach's $\alpha=.598$ ) (cf. Appendix 4.2 for Cronbach's alpha).
"Perceived differentiation of benefits" was computed as a mean of item 3 an 4, providing the variables Diff_ben ( $\mathrm{N}=818$, cronbach's $\alpha=.855$ ), F_Diff_ben $(\mathrm{N}=496$, cronbach's $\alpha=$ .877), E_Diff_ben (N = 164, cronbach's $\alpha=.877$ ) and S_Diff_ben ( $\mathrm{N}=158$, cronbach's $\alpha=$ .817) (cf. Appendix 4.2 for Cronbach's alpha).

### 3.3.5 Pos_number_SBBA, Pos_number_SBBA_2

Each respondent was asked to elicit three associations related to the chosen PBBA (Q10) and further evaluate the valance of these as positive, neutral or negative (Q11). The variable Pos_number_SBBA is computed as each respondent's number of positive associations.

An alternative calculation was also conducted. The variable Pos_number_SBBA_2 was computed as an index $=\frac{(\text { number of positive } \text { SBBA }- \text { number of negative } S B B A)}{3}$.

[^6]
### 3.3.6 Pos_grad_SBBA, Pos_grad_SBBA_2, Pos_grad_567_SBBA, Pos_grad_67_SBBA

Question 12 measured graded differentiation. The respondents were asked to evaluate to what degree the SBBAs were shared with other brands on a 7-point Likert scale from " 1 . Kobler assosiasjonen mindre til dette merket enn andre merker" to 7. Kobler assosiasjonen kun til dette merket", based on Erlandsen (2013). The variable Pos_grad_SBBA was computed as the sum of positive scores on graded differentiation divided by the number of positive SBBAs. Thereby calculated as a weighted average ${ }^{8}$, depending on the number of positive associations.

An alternative calculation ${ }^{9}$ for graded differentiation was also conducted. The variable Pos_grad_SBBA_2 was computed as the sum of positive scores on graded differentiation divided by all three associations (regardless of valence). This can be regarded as a less strict test than the standard calculation, and is only included in our paper to increase the robustness of our findings.

Additionally, two more variables were computed to examine only top scores. Thus, Pos_grad_567_SBBA and Pos_grad_67_SBBA were calculated as the number of positive 5,6 and 7 , as well as 6 and 7 , for each variable respectively.

### 3.3.7 Pos_dich_SBBA, Pos_neu_dich_SBBA

Question 12 also measured dichotomous differentiation. A score of seven implied that the SBBA was exclusively associated with the brand, i.e. dichotomously differentiated. The variable Pos_dich_SBBA is computed as each respondent's number of positive dichotomous associations (values of " 7 ").

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An alternative calculation for dichotomous differentiation was also conducted. The variable Pos_neu_dich_SBBA was computed as each respondent's number of positive and neutral dichotomous associations.

### 3.3.8 Pos_instr_SBBA, Pos_instr_SBBA_2

Question 13 measured instrumental differentiation. The respondents were asked to evaluate to what degree the three different SBBAs were the reason for the chosen PBBA, on a 7 -point Likert scale from "1. Liten grad" to "7. Stor grad", based on Erlandsen (2013). For each respondent, the variable Pos_instr_SBBA was computed as the sum of positive scores on instrumental differentiation divided by the number of positive SBBAs. Thereby calculated as a weighted average (cf. the calculation for Pos_grad_SBBA), depending on the number of positive associations.

An alternative calculation (cf. the calculation for Pos_grad_SBBA_2) for instrumental differentiation was also conducted. The variable Pos_instr_SBBA_2 was calculated as the sum of positive scores on instrumental differentiation divided by all three associations (regardless of valence).

### 3.3.9 Knowledge

The variable Knowledge (Q14) was measured on a 7-point Likert scale ranging from " 1 . Mye mindre kunnskap" to "Langt mer kunnskap", based on Erlandsen (2013).

### 3.3.10 NFU_Index

Question 16 measured consumers' need for uniqueness. In line with literature on the construct, three items were developed together with Professor Magne Supphellen, measured on a 7-point Likert scale from " 1 . Helt uenig" to " 7 . Helt enig".

1. "Jeg unngår ofte produkter og merker som brukes av folk flest."
2. "Jeg foretrekker ofte produkter og merker som få andre jeg kjenner bruker."
3. "Jeg synes ofte de produktene og merkene som folk flest kjøper er kjedelige."

The items were computed into the variable NFU_index with a satisfactory Cronbach's $\alpha=.83$, and a good model fit from a confirmatory factor analysis (cf. chapter 3.4.3).

### 3.3.11 Gender, Occupation and Age

Finally, question 17 asked the respondents about demographics. Thus, Gender is a dummy variable $(1,0)$ consisting of 482 males and 336 females, Occupation is a dummy variable $(1,0)$ consisting of 494 students and 324 workers and Age ranges from 18 to 70 years of age.

### 3.3.12 Variables for the distribution of our sample

As explained in chapter 3.4.1, we needed to make eight additional variables in order to conduct ANOVAs to test the distribution of respondents in terms of gender, occupation and age, for our three different groups of preferred and acceptable brands. This included the variables Preferred_Acceptable_Products, Preferred_Acceptable_Services, Age_Products, Age_Services, Gender_Products, Gender_Services, Occupation_Products and Occupation_Services, with 409 respondents for each variable respectively.

### 3.4 DATA ANALYSIS

Our statistical analyses were conducted by using SPSS Statistics version 22.0 and SPSS Amos version 22.0. We have utilized the following main statistical analysis techniques; oneand two-way ANOVAs, one- and two-way ANCOVAs, and simple- and multiple linear regressions (cf. graphical overview of our analyses in chapter 2.6).

In this chapter, we will start by presenting descriptive statistics of the data obtained through the experiment. Secondly, we will assess the correlations between our chosen variables. Thirdly, the reliability analyses with Cronbach's alpha tests and confirmatory factor analysis will be presented. Furthermore, we will discuss whether our study meets the assumptions for the applied statistical tests. Finally, we will conduct pre-analyses to confirm theory and provide increased reliability to our main analyses.

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### 3.4.1 Descriptive statistics

Descriptive statistics for all variables in this study are presented in Appendix 2. Our experiment had 818 participants randomly divided between eight questionnaires. We are performing several sets of comparisons in this paper for our sample, based on differences between preferred and acceptable brands. We will compare preferred and acceptable brands for the total sample ( $\mathrm{N}=818$ ), and for products and services respectively. Thus, we have conducted cross tabulations to examine how age, occupation and gender are divided between these three groups. The distribution is summarized in Table $\mathbf{2}$ below.

## TABLE 2:

## DESCRIPTIVE STATISTICS

## RESPONDENTS

|  | Gender |  | Occupation |  | Age intervals |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Groups | Females | Males | Student | Work | 18-25 | 26-30 | 31-40 | 41-50 | 50+ | Sum |
| PB | 168 | 245 | 256 | 157 | 253 | 93 | 33 | 18 | 16 | 413 |
| AB | 168 | 237 | 238 | 167 | 242 | 95 | 40 | 16 | 12 | 405 |
| Sum | 336 | 482 | 494 | 324 | 495 | 188 | 73 | 34 | 28 | 818 |
| Percentage | 41 \% | 59 \% | 60 \% | 40 \% | 61 \% | 30 \% | 9 \% | 4 \% | 3 \% | 100 \% |
| PB Products | 78 | 129 | 128 | 79 | 124 | 50 | 19 | 5 | 9 | 207 |
| AB Products | 71 | 131 | 118 | 84 | 115 | 52 | 21 | 8 | 6 | 202 |
| Sum | 149 | 260 | 246 | 163 | 239 | 102 | 40 | 13 | 15 | 409 |
| Percentage | 36 \% | 64 \% | 60 \% | 40 \% | 58 \% | 25 \% | 10 \% | 3 \% | 4 \% | 100 \% |
| PB Services | 90 | 116 | 128 | 78 | 129 | 43 | 14 | 13 | 7 | 206 |
| AB Services | 97 | 106 | 120 | 83 | 127 | 43 | 19 | 8 | 6 | 203 |
| Sum | 187 | 222 | 248 | 161 | 256 | 86 | 33 | 21 | 13 | 409 |
| Percentage | 46 \% | 54 \% | 61 \% | 39 \% | 63 \% | 21 \% | 8 \% | 5 \% | 3 \% | 100 \% |
| Note: PB= Preferr | AB= Acceptab | brands |  |  |  |  |  |  |  |  |

Out of the 818 respondents, 482 were males and 336 were females. 494 respondents were students and 324 were working. The most dominant age group in our data collection is 18-25 year olds ( 61 percent). The two sets of groups from the total samle $(\mathrm{N}=818)$ were fairly even, with 413 preferred brands, 405 acceptable brands. Further, the respondents were evenly distributed across products and services with 409 respondents in each group.

To test whether age, gender and occupation were evenly distributed between the groups displayed in Table 2 above, we conducted one-way ANOVA analyses (Appendix 6.1). Thus, eight additional variables had to be computed, as presented in chapter 3.3.10. The following independent variables were used: Preferred_Acceptable, Preferred_Acceptable_Products
and Preferred_Acceptable_Services. All analyses yielded p-values $>0.05$ for Gender, Occupation and Age, hence we cannot reject the null hypothesis of there being no differences. The ratio between males/females, student/working and the age are therefore evenly distributed among preferred- and acceptable brands for our groups.

### 3.4.2 Correlations

Our analyses have no value if the variables analyzed are not sensible, and consequently we should study the intercorrelations (Field 2009). In order to evaluate the strength of the relationships between the dependent and independent variables, we have analyzed the correlation between them using Pearson's correlation coefficient. It ranges from -1 to 1 , and determines whether the relationships among the variables are positive or negative. The results are presented in a correlation matrix below (Table 3).

## TABLE 3: <br> CORRELATION MATRIX <br> FOR DEPENDENT AND INDEPENDENT VARIABLES

| Measure | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Pos_number_SBBA | 1 | $.472^{* *}$ | $.144^{* *}$ | $.491^{* *}$ | -.029 | .046 | .006 | $.307^{* *}$ | $.369^{* *}$ | $.246^{* *}$ |
| 2. Pos_instr_SBBA | $.472^{* *}$ | 1 | $.106^{* *}$ | $.600^{* *}$ | -.010 | $.088^{*}$ | -.018 | $.223^{* *}$ | $.282^{* *}$ | $.177^{* *}$ |
| 3. Pos_dich_SBBA | $.144^{* *}$ | $.106^{* *}$ | 1 | $.365^{* *}$ | -.003 | .032 | .008 | .009 | .035 | $.195^{* *}$ |
| 4. Pos_graded_SBBA | $.491^{* *}$ | $.600^{* *}$ | $.365^{* *}$ | 1 | .037 | $.093^{* *}$ | -.021 | $.227^{* *}$ | $.286^{* *}$ | $.311^{* *}$ |
| 5. Gender | -.029 | -.010 | -.003 | .037 | 1 | .038 | $.106^{* *}$ | -.034 | $-.070^{*}$ | -.021 |
| 6. Knowledge | .046 | $.088^{*}$ | .032 | $.093^{* *}$ | .038 | 1 | .061 | $.127^{* *}$ | $.080^{*}$ | $.108^{* *}$ |
| 7. NFU_index | .006 | -.018 | .008 | -.021 | $.106^{* *}$ | .061 | 1 | -.018 | .002 | .038 |
| 8. Attitude_index | $.307^{* *}$ | $.223^{* *}$ | .009 | $.227^{* *}$ | -.034 | $.127^{* *}$ | -.018 | 1 | $.455^{* *}$ | $.338^{* *}$ |
| 9. Eval_ben | $.369^{* *}$ | $.282^{* *}$ | .035 | $.286^{* *}$ | $-.070^{*}$ | $.080^{*}$ | .002 | $.455^{* *}$ | 1 | $.342^{* *}$ |
| 10. Diff_ben | $.246^{* *}$ | $.177^{* *}$ | $.195^{* *}$ | $.311^{* *}$ | -.021 | $.108^{* *}$ | .038 | $.338^{* *}$ | $.342^{* *}$ | 1 |

NOTE: Correlation is significant at ** 0.01 level, * 0.05 level (2-tailed)
SBBAs: Secondary Brand Benefit Associations

Firstly, there does not seem to be any problems with multicollinearity, as there are no cases of high correlations ( $\mathrm{r}>.8$ ). Secondly, as we would expect from theory; Eval_ben (evaluation of PBBAs) is correlated with all the independent variables (except Pos_dich_SBBA and $N F U_{-}$index), and Diff_ben (perceived differentiation of PBBAs) is correlated with all independent variables (except Gender and NFU_index). This provides a valid reason for

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looking more closely into the proposed relationship for how the predictors affect the different dependent variables in multiple linear regressions (cf chapter 4.2).

Furthermore, as we would expect from theory; Attitude_index is positively correlated with Eval_ben and Diff_ben, and Eval_ben is positively correlated Diff_ben. This provides valid reasons for performing simple linear regressions to confirm theory (see chapter 3.4.5).

### 3.4.3 Reliability analysis

Reliability analysis refers to examining whether individual items, or set of items, produce results consistent with the overall questionnaire (Field 2009). Accordingly, measures containing more than one item (scale measurements) should be tested for internal consistency, to make sure that all items represent the same construct.

## Cronbach's Alpha

A widely accepted measure of internal consistency is the reliability coefficient Cronbach's Alpha $\alpha$. Researchers argue for different acceptable thresholds for Cronbach's $\alpha$, varying between .7 to .8 (Field, 2009). However, Kline (1999) argues that when dealing with psychological constructs, even values below .7 can be expected because of the diversity of the constructs being measured (cited in Field, 2009). Bearing this in mind, we will use a threshold of .7 in this study. Therefore, in order to examine the internal consistency of our 13 scale measures ( $F_{-}-, E_{-}$-, $S_{-}$- and Attitude_index, $F_{-}$-, $E_{-}$-, $S_{-}$- and Eval_ben, $F_{-}-, E_{-}$-, $S_{-}$- and Diff_ben and $N F U_{-}$index), we calculated their Cronbach's alpha values. These are presented in Appendix 4.2. All the values were above the suggested threshold, except Eval_ben ( $\alpha=.698$ ), E_Eval_ben $(\alpha=.597)$ and S_Eval_Ben ( $\alpha=.598$ ). But, in line with Kline's argument as mentioned above, we find these acceptable. We therefore conclude that our scale measurements are reliable and suitable for our research.

## Confirmatory factor analysis

We conducted a confirmatory factor analysis (CFA) in SPSS Amos for our three items for consumers' need for uniqueness, specifying a one-factor structure. The full analysis can be found in Appendix 4.1. The standardized solution showed satisfactory loadings for all three
items $>.7$ (.80, .79, and .78), and the tests conducted showed a good model fit ${ }^{10}$ (Hu \& Bentler, 1999). The results for the model fit are summarized in Table 4. The three items were confirmed to load to same factor, and were computed into an index for need for uniqueness (NFU_Index) to be used in our ANCOVA-analyses and regressions.

## TABLE 4:

CONFIRMATORY FACTOR ANALYSIS:

## MODEL FIT FOR NFU

| Measure | Requirement | Value | Fit |
| :--- | :--- | :--- | :--- |
| RMSEA | $\leq .6$ | .000 | Good fit |
| NFI | $>.9$ (acceptable fit), $>.95$ (good fit) | .999 | Good fit |
| GFI | $>.9$ (acceptable fit), $>.95$ (good fit) | .999 | Good fit |
| CFI | $>.9$ (acceptable fit), $>.95$ (good fit) | 1.000 | Good fit |
| TLI | $>.9$ (acceptable fit), $>.95$ (good fit) | 1.002 | Good fit |

### 3.4.4 Analysis of assumptions of statistical tests

In order to use our statistical tests, certain assumptions are required to be met (Field, 2009). We will start by providing a summary of our assumptions, before explaining each one in detail. Firstly, one of three of the assumptions for the ANOVAs was met. However, it is not considered a threat for the validity of our results because of our large sample size. Furthermore, the same assumptions for ANOVAs apply for ANCOVAS, in addition to two more assumptions that were met. Lastly, for our simple- and multiple linear regressions, seven out of eight assumptions were met. Consequently, as we consider the required assumptions for the different statistical tests to be met, we can use the tests in our subsequent analyses. According to Field (2009) when the assumptions for our statistical tests are met, we increase the average chance of our sample being the same as the population model, i.e. current and former students from the Norwegian School of Economics being a representative of Norwegian consumers. A summary of the assumptions is presented in Table 5 below and the full discussions are presented in the following sections.

[^8]
# TABLE 5: SUMMARY OF ASSUMPTIONS OF STATISTICAL TESTS ANOVA ANCOVA AND REGRESSIONS 

| Assumption | Assumption met | Appendix |
| :--- | :--- | :--- |
| ANOVA (ANCOVA) |  |  |
| 1. Independent observations | Yes | Appendix 2.1 |
| 2. Normal distribution | No* | Appendix 5.1.1 |
| 3. Homogeneity of variance | $\mathrm{No}^{*}$ |  |
| ANCOVA |  | Appendix 5.2.1 |
| 4. Linear relationship | Yes | Appendix 5.2.2 |
| 5. Homogeneity of variance |  |  |
| MULTIPLE LINEAR REGRESSION | Yes | Appendix 2.1 |
| 1. Variable types | Yes | Appendix 3 |
| 2. Non-zero variance | Yes | Appendix 7.3,7.4,10.1 |
| 3. No perfect multicollinearity | Uncertain | - |
| 4. Predictors are uncorrelated with external variables | Yes | Appendix 5.3.1 |
| 5. Homoscedasticity | Yes | Appendix 7.3,7.4,10.1 |
| 6. Independent residuals | Yes | Appendix 5.3.1 |
| 7. Normally distributed errors | Yes | - |
| 8. Linearity |  |  |

## Assumptions for ANOVA

There are several assumptions of ANOVAs, the first being that of independent observations (Pallant, 2005). The observations in the data must be independent of one another, i.e. each observation or measurement answer must not be influenced by any other observation or measurement (Pallant, 2005). According to Weinberg \& Abramowitz (2008), observations are independent if they are randomly selected from their respective parent population. As our sample is randomly selected within the current and former student population at NHH, we consider the assumption of independent observations to be met.

A second assumption for ANOVAs is that of normal distribution (Stevens, 2009). It requires that the parent population that the sample is collected from must be normally distributed (Pallant, 2005). We can test this assumption by examining the Skewness and Kurtosis for each variable. Skewness indicates the symmetry of the distribution, whereas Kurtosis provides information about the peak of the distribution (Pallant, 2005). For both terms, values of zero indicate a perfectly normal distribution; hence, the further away the value is from zero, the greater the probability that the data is not normally distributed. However, the value of zero is a rather uncommon case for research in social sciences (Pallant, 2005). Field (2009) state that an absolute value of 1 is the critical value for both measures. The Skewness- and Kurtosis values can be found in Appendix 2.1 in the list of all variables.

For almost all our dependent variables in the ANOVA-analyses, we have Skewness- and Kurtosis values far away from zero. This may be an indication that our variables are not normally distributed and that we need to consider excluding these variables from our analyses. Note that according to Weinberg \& Abramowitz (2008) violations of this assumption do not affect, or minimally affect, the validity of the ANOVAs as long as the subgroups consist of at least 30 subjects (Weinberg \& Abramowitz, 2008). Moreover, Field (2009) states that because of the central limit theorem, the sampling distribution in big samples tends to be normal distributed anyway (Field, 2009). In our sample, we have 818 respondents in total, divided in subgroups of 409 products and 409 services, and 413 preferred- and 405 acceptable brands. Therefore, we do not consider the values as critical for the validity of our results, and will keep our variables for the subsequent analyses.

A final assumption for ANOVAs is homogeneity of variance, assuming that the samples are obtained from populations of equal variances (Pallant, 2005). Levene's test of homogeneity was conducted to test this assumption. The results can be found in Appendix 5.1.1. The test showed no significant differences at the .05 level for 12 of 19 variables: Age_Products $(\mathrm{p}=.280)$, Age_Services $(\mathrm{p}=.454)$ Gender_Products $(\mathrm{p}=.290)$, Gender_Services $(\mathrm{p}=.136)$ Occupation_Products $(\mathrm{p}=.165)$, Occupation_Services $(\mathrm{p}=.217)$, Pos_dich_SBBA $(\mathrm{p}=.435)$, Pos_neu_dich_SBBA $(\mathrm{p}=.295)$, Pos_grad_567_SBBA ( $\mathrm{p}=.958$ ), Pos_grad_67_SBBA $(\mathrm{p}=.866)$, Eval_ben $(\mathrm{p}=.934)$ and Diff_ben $(\mathrm{p}=.010)$. Thus, we can conclude that the variances are significantly different for 7 of our variables, hence violating the assumption. However, the ANOVA is reasonably robust to this violation. According to Stevens (2009) and Weinberg \& Abramowitz (2008), as long as the group sizes are approximately equal and large, the F statistic is robust against heterogeneous variances (Stevens, 2009; Weinberg \& Abramowitz, 2008). In all our ANOVA analyses, the group sizes are large and almost equal. For these reasons, we accept that the assumption of homogeneity of variance is violated.

## Assumptions of ANCOVA

ANCOVAs have the same assumptions as ANOVAs, and two additional considerations concerning the regression part of the ANCOVA (Field, 2009; Stevens, 2009). The first assumption, the linear relationship, implies that the relationship between our covariate (NFU_index) and each of the dependent variables should be linear (Field, 2009). To test this assumption, we can examine scatterplots to check for linearity for each level of the 64

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independent variable (Pallant, 2005). In our paper this implies examining the two groups preferred and acceptable brands, hence we have included subgroups in the plot. The results from this analysis can be found in Appendix 5.2.1. As the scatterplots showed linear relationships, we consider this assumption to be met.

The second assumption, homogeneity of regression slopes, refers to the relationship between the outcome and the covariate being the same in each of our treatment groups (Field, 2009). This can be tested by conducting a new ANCOVA with interaction effects. The null hypothesis is that the regresson lines are parallel, hence significant effects imply that we have broken the assumption (Field, 2009). The results from this analysis can be found in Appendix 5.2.2. As none of the effects were significant ( $\mathrm{p}>.05$ ), the assumption is met.

## Assumptions for (Multiple) Linear Regression

According to Berry (1993) several assumptions must be true in order to draw accurate conclusions about a population from regression analyses (cited in Field, 2009). As explained earlier, we have run both simple- and multiple linear regressions. However, we will only discuss the assumptions of multiple regressions, as many requirements are identical.

Firstly, all predictor variables must be measured at the interval or categorical level, and the dependent variable must be interval, continuous and unbounded, i.e. the latter meaning no constraints on the variability of the outcome (Field, 2009). In our regressions, Gender is the only categorical variable, being a binary variable for male and female. The rest of the dependent and independent variables are measured as continuous, interval variables on 7point Likert scales. As a result, the first assumption is met. Secondly, the non-zero variance assumption is also met, as no independent variables have variances equal of zero (Field, 2009) (cf. descriptive statistics for all variables in Appendix 2.1).

Thirdly, no perfect multicollinearity assumes no perfect linear relationship between two or more of the independent variables, i.e. the variables should not be too highly correlated. We used collinearity diagnostics in SPSS to calculate variance inflation factors (VIFs) for our variables. Although there is no given threshold, Myers (1990) suggest that as long as the VIF values do not exceed a value of 10 , there is no need to worry (cited in Field, 2009). The VIF values for our simple- and multiple linear regressions are presented in Appendix 7.3, 7.4 and
10.1 for each regression respectively. As they range between 1 and 2.9 , we consider the assumption of no multicollinearity to be met.

A fourth assumption is that the predictors are uncorrelated with external variables, i.e. variables that have not been included which influence the outcome variable (Field, 2009). We conducted an extensive literature review to run our "forced entry" regressions, were all predictors are forced into the model simultaneously (Field, 2009). As follows, we had sound theoretical reasons for including our chosen predictors, and some researchers believe this method to be the only appropriate method for theory testing (Studenmund \& Cassidy 1987, cited in Field 2009). As our regressions are part of our additional analyses, we have not performed more advanced statistical tests for this assumption due to constraints of the paper. There is therefore a risk of this assumption being violated.

A fifth assumption is that of homoscedasticity, demanding that the variance of the residuals should be constant (Field, 2009). Possible cases of heteroscedasticity can be detected by examining scatterplots of the estimated squared residuals. The scatterplots for our variables are displayed in Appendix 5.3.1. As there are no strong indications of increasing or decreasing variance, the residuals of all our variables seem to have constant variance. Another assumption is that of independent errors, or lack of autocorrelation, claiming that for any two observations the residual terms should be independent (Field, 2009). We tested this assumption with Durbin-Watson tests, which identify serial correlations between errors. The test statistic varies between 0 and 4 , with a conservative rule of thumb claiming that values less than 1 or greater than 3 are causes for concern (Field, 2009). The Durbin-Watson values from our tests are presented in Appendix 7.3, 7.4 and 10.1 for each regression respectively. As they were all within the accepted range, ranging from 1.5 to 2.1 , we consider the assumption to be met.

A seventh assumption is normally distributed errors, assuming that the residuals are random, normally distributed variables, with a mean of zero (Field, 2009). This can be tested by examining normal probability plots (P-P plots) and histograms (Field, 2009). P-P plots and histograms are presented in Appendix 5.3.1. The P-P plots for all variables indicate that the residuals are on a straight line, and the distribution of the residuals in the histograms seems to be bell-shaped (Field, 2009). Consequently, the residuals seem to be normally distributed.

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Finally, the last assumption is that of linearity, i.e. there is a linear relationship between the dependent variable and the predictors (Field, 2009). This was tested by producing partial plots between the residuals of the dependent variable and each of the independent variables, looking for patterns in the scatterplots (not presented in the Appendix). As we detected no clear pattern, we consider the assumption to be met.

### 3.4.5 Pre-test of theory

We will now conduct some statistical tests to increase the reliability of our findings in the main research, by confirming natural assumptions from well-established theory in the marketing literature. The full analyses can be found in Appendix (One-way ANOVAs 7.1, Two-way ANOVAs 7.2, and simple linear regressions 7.3 and 7.4) and the results are summarized in Table 6 below.

## TABLE 6:

TEST OF THEORY
ANOVAs AND SIMPLE LINEAR REGRESSIONS

| Tests | Supported | Appendix |
| :---: | :---: | :---: |
| ONE-WAY ANOVA |  |  |
| PB have higher score on Eval_ben than AB | Yes*** | 7.1.1 |
| PB have higher score on Diff_ben than AB | Yes*** | 7.1.2 |
| PB have higher score on Attitude_Index than AB | Yes*** | 7.1.3 |
| SIMPLE LINEAR REGRESSION |  |  |
| Eval_ben have a positive effect on Attitude_Index | Yes*** | 7.3.1 |
| F_Eval_ben have a positive effect on F_Attitude_Index | Yes*** | 7.3.2 |
| E_Eval_ben have a positive effect on E_Attitude_Index | Yes*** | 7.3.3 |
| S_Eval_ben have a positive effect on S_Attitude_Index | Yes*** | 7.3.4 |
| Diff_ben have a positive effect on Attitude_Index | Yes*** | 7.3.5 |
| F_Diff_ben have a positive effect on F_Attitude_Index | Yes*** | 7.3.6 |
| E_Diff_ben have a positive effect on E_Attitude_Index | Yes*** | 7.3.7 |
| S_Diff_ben have a positive effect on S_Attitude_Index | Yes*** | 7.3.8 |
| Diff_ben have a positive effect on Eval_ben | Yes*** | 7.4.1 |
| F_Diff_ben have a positive effect on F_Eval_ben | Yes*** | 7.4.2 |
| E_Diff_ben have a positive effect on E_Eval_ben | Yes*** | 7.4.3 |
| S_Diff_ben have a positive effect on S_Eval_ben | Yes*** | 7.4.4 |
| NOTE: * $\mathrm{p}<.10$, ** $\mathrm{p}<.05$, *** $\mathrm{p}<.01$ <br> PB: Preferred brands, AB: Acceptable brands <br> F: Functional benefits, E: Experiential benefits, S: Symb |  |  |

Firstly, we expected preferred brands to have both more favorably evaluated PBBAs, higher perceived differentiation of PBBAs, and more favorable attitudes than acceptable brands. Results from the one-way ANOVAs supported our assumptions, with p-values <.01. In addtion, we tested for possible differences between products and services on this matter in two-way ANOVA analyses (not displayed in Table 6, see Appendix 7.2.1 to 7.2.3). We
found no significant interaction on a .05 significance level with p-values of $.903, .714$ and .537 , thus no differences between products and services.

Secondly, we wished to confirm that both evaluation- and perceived differentiation of PBBAs had a positive effect on attitude towards the brand. This was done for all three types of benefits. The simple linear regressions were significant with p -values $<.01$, and the independent variables were all positively related to the dependent variable. Thus, confirming our expectations (cf. Appendix 7.3).

Lastly, we confirmed that perceived differentiation of PBBAs had a positive effect on evaluation of PBBAs, for all the different types of benefits. The models were significant with p -values $<.01$, and the independent variables were all positively related to the dependent variable (cf. Appendix 7.4)

## 4. TEST OF HYPOTHESES

In this chapter we will start by testing our five hypotheses to answer our first research question. Potential differences between products and services are addressed accordingly, to answer our second research question. Finally, we will present our additional analyses.

### 4.1 MAIN ANALYSIS

In the following, hypotheses $\mathrm{H} 1-\mathrm{H} 4$ are tested using one-way ANOVAs to analyze differences in mean scores between preferred- and acceptable brands. Moreover, alternative calculations have been added to increase the robustness of our results. Furthermore, potential differences between products and services are addressed by analyzing interaction variables in two-way ANOVAs. Finally, moderating effects of NFU (H5) are examined by addressing by one- and two-way ANCOVAs.

### 4.1.1 (H1) Number of positive SBBAs

The data was analyzed by a one-way ANOVA to test our hypothesis for the number of positive SBBAs (Appendix 8.1.1). The results are summarized in Table 7.

## TABLE 7:

ONE-WAY ANOVA
(H1) NUMBER OF POSITIVE SBBAs

|  |  | Mean | Mean |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Variable | $N$ | Preferred | Acceptable | $F$ | P-value |
| Pos_number_SBBA | 818 | 2.5375 | 2.1086 | 47.373 | $.000^{* * *}$ |

NOTE: * p<.10, ** p<.05, *** p<. 01
SBBAs: Secondary Brand Benefit Associations

The results from the ANOVA show a higher mean for preferred brands (2.5375) than acceptable brands (2.1086). The difference is statistically significant with a high F-value of 47.373 and a p-value of .000 . Consequently, H1 of preferred brands having a higher number
of positive SBBAs than acceptable brands is supported. Moreover, the alternative calculation provided further support for $\mathrm{H} 1^{11}$.

Finally, we examined the differences between products and services by a two-way ANOVA (Appendix 8.2.1). The interaction-effect was only significant at a significance level of . 10 ( $\mathrm{p}=.077, \mathrm{~F}=3.144$ ), with no-overlapping confidence intervals for products (2.415-2.657 and 2.095-2.341), nor services (2.417-2.660 and 1.878-2.122). Thus, at a .05 significance level, there were no differences between products and services.

### 4.1.2 (H2) Instrumental differentiation of positive SBBAs

The data was analyzed by a one-way ANOVA to test our hypothesis for instrumental differentiation of positive SBBAs (Appendix 8.1.3). The results are summarized in Table 8.

## TABLE 8:

ONE WAY ANOVA
(H2) INSTRUMENTAL DIFFERENTIATION OF POSITIVE SBBAs

| Variable | $N$ | Mean <br> Preferred | Mean <br> Acceptable | $F$ | P-value |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Pos_instr_SBBA | 818 | 5.2748 | 4.8971 | 10.103 | $.002^{* * *}$ |

NOTE: * $p<.10$, ** $p<.05$, *** $p<.01$
SBBAs: Secondary Brand Benefit Associations

The results from the ANOVA show a higher mean for preferred brands (5.2748) than acceptable brands (4.8971). The difference is statistically significant with a F-value of 10.103 and a p-value of .002 . Consequently, H 2 of preferred brands having a higher score on instrumental differentiation of positive SBBAs than acceptable brands is supported. Moreover, the alternative calculation provided further support for $\mathrm{H} 2^{12}$.

Finally, we examined the differences between products and services by a two-way ANOVA (Appendix 8.2.2). The results are summarized in Table 9 below, showing that the

[^9]interaction-effect was statistically significant with a F-value of 5.816 and a p-value of .016 . Further, the confidence intervals were overlapping for products (4-841-5.304 and 4.7465.214), but not for services (5.246-5.710 and 4.581-5.049). This shows a significant difference between preferred- and acceptable brands for services. Moreover, this was also supported in the alternative calculation ${ }^{13}$.

## TABLE 9: <br> TWO-WAY ANOVA

INSTRUMENTAL DIFFERENTIATION - PRODUCTS VS. SERVICES

|  | Mean <br> Pos_instr_SBBA | Lower <br> bound | Upper <br> bound | F | P-value |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Variable |  |  |  | 5.816 | $.016^{* *}$ |
| Preferred_Acceptable*Products_Services | 5.072 | 4.841 | 5.304 |  |  |
| Preferred product brands | 5.478 | 5.246 | 5.710 |  |  |
| Preferred service brands | 4.980 | 4.746 | 5.214 |  |  |
| Acceptable product brands | 4.814 | 4.581 | 5.049 |  |  |
| Acceptable service brands |  |  |  |  |  |

NOTE: * $p<.10$, ** $p<.05,{ }^{* * *} p<.01$
The means are statistically different at a $95 \%$ confidence interval when the mean value does not fall within the opposing range (lower and upper bound)
SBBAs: Secondary Brand Benefit Associations

### 4.1.3 (H3) Number of dichotomously differentiated positive SBBAs

The data was analyzed by a one-way ANOVA to test our hypothesis for the number of dichotomously differentiated positive SBBAs (Appendix 8.1.9). The results are summarized in Table 10.

## TABLE 10:

ONE-WAY ANOVA
(H3) NUMBER OF DICHOTOMOUSLY DIFF. POSITIVE SBBAs

|  |  | Mean | Mean |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Variable | N | Preferred | Acceptable | F | P-value |
| Pos_dich_SBBA | 818 | .2034 | .1852 | .238 | .626 |

NOTE: * $\mathrm{p}<.10$, ** $\mathrm{p}<.05$, *** $\mathrm{p}<.01$
SBBAs: Secondary Brand Benefit Associations

The results from the ANOVA show a higher mean for preferred brands (.2034) than acceptable brands (.1852). However, the difference is not statistically significant with a F-

[^10]value of .238 and a p-value of .626 . Hence, H3 of preferred brands having a higher number of positive dichotomous SBBAs than acceptable brands is not supported. Moreover, we neither find support when also including neutral associations ${ }^{14}$.

Finally, we examined the differences between products and services by a two-way ANOVA (Appendix 8.2.4). The results showed that the interaction-effect was not statistically significant ( $\mathrm{p}=.724$ and $\mathrm{F}=.125$ ). The confidence intervals overlapped for both products (.125-.271 and 119-.267) and services (.136-.282 and .104-.251). Ultimately, there were no significant differences between preferred and acceptable brands for products or services.

### 4.1.4 (H4) Graded differentiation of positive SBBAs

The data was analyzed by a one-way ANOVA to test our hypothesis for graded differentiation of positive SBBAs (Appendix 8.1.5). The results are summarized in Table 11.

TABLE 11:
ONE-WAY ANOVA
(H4) GRADED DIFFERENTIATION OF POSITIVE SBBAs

|  |  | Mean | Mean |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Variable | $N$ | Preferred | Acceptable | $F$ | $P$-value |
| Pos_grad_SBBA | 818 | 4.9305 | 4.4747 | 19.904 | $.000^{* * *}$ |

NOTE: * $\mathrm{p}<.10$, ** $\mathrm{p}<.05$, *** $\mathrm{p}<.01$
SBBAs: Secondary Brand Benefit Associations

The results from the ANOVA show a higher mean for preferred brands (4.9305) than acceptable brands $(4,4747)$. The difference is statistically significant with a F-value of 19.904 and a p-value of .000 . Thus, H 4 of preferred brands having a higher score on graded differentiation of positive SBBAs than acceptable brands is supported. Moreover, the alternative calculation ${ }^{15}$ and top scores ${ }^{16}$ provided further support for H 4 .

[^11]Finally, we examined the differences between products and services for preferred brands by a two-way ANOVA. The full analysis can be found in Appendix 8.2.5. The results are summarized in Table $\mathbf{1 2}$ below, showing that the interaction-effect was statistically significant ( $\mathrm{p}=.003$ and $\mathrm{F}=8.736$ ). The confidence intervals were overlapping for products (4.595-4.992 and 4.437-4.839), but not for services (4.870-5.268 and 4-112-4.512). Thus, there is a significant difference between preferred and acceptable brands for services. Moreover, this was also supported in the alternative calculation ${ }^{17}$.

TABLE 12:
TWO-WAY ANOVA
GRADED DIFFERENTIATION - PRODUCTS VS. SERVICES

|  | Mean <br> Pos_instr_SBBA | Lower <br> bound | Upper <br> bound | F | P-value |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Variable |  |  |  | 8.736 | $.003^{\star * *}$ |
| Preferred_Acceptable*Products_Services | 4.793 | 4.595 | 4.992 |  |  |
| Preferred product brands | 5.069 | 4.870 | 5.268 |  |  |
| Preferred service brands | 4.638 | 4.437 | 4.839 |  |  |
| Acceptable product brands | 4.312 | 4.112 | 4.512 |  |  |
| Acceptable service brands |  |  |  |  |  |

NOTE: * $p<.10$, ** $p<.05,{ }^{* * *} p<.01$
The means are statistically different at a $95 \%$ confidence interval when the mean value does not fall within the opposing range (lower and upper bound).
SBBAs: Secondary Brand Benefit Associations

### 4.1.5 (H5) Need for Uniqueness

The data was analyzed by conducting one- and two-way ANCOVAs, by adding the covariate NFU (NFU_index) to each of the prior one- and two-way ANOVAs. We thereby investigated whether NFU had a moderating effect on the prior results, i.e. strengthens or weakens the differences between preferred and acceptable brands. The results are presented in Appendix 9.

The results from the one-way ANCOVAs showed that the observed effects in hypotheses H1 to H 4 remained significant after controlling for NFU, as there were minimal changes (Appendix 9.1). Hence, H5 is supported. In addtion the results from the two-way ANCOVAs also showed no significant changes to our previous findings (Appendix 9.2)

[^12]
### 4.2 ADDITIONAL ANALYSIS

Little research has been conducted to understand differentiation of SBBAs. We therefore performed additional analyses to further investigate the relationship between SBBAs and PBBAs. We will now look into the results from twelve multiple linear regression analyses, to investigate how different predictors effect the respondents' evaluation of PBBAs and perceived differentiation of PBBAs.

### 4.2.1 Evaluation of PBBAs

Firstly, we conducted six different multiple linear regressions to investigate effects on the dependent variable evaluation of PBBAs (Eval_ben). Regression A examines evaluation of all the PBBA types together (Eval_ben), while regression D, E and F address functional(F_Eval_ben), experiential- (E_Eval_ben) and symbolic PBBAs (S_Eval_ben) respectively. Finally, we looked at product brands (regression B) and service brands (regression C) separately. The tests are presented in Appendix 10.1.1-10.1.6 and summarized in Table 13.

The results showed that the six models had explanatory powers $\left(\mathrm{R}^{2}\right)$ ranging from 13.0 to 27.1 percent, and were statistically significant with sufficient $F$-values and p-values $<.01$, indicating acceptable model fit. Additionally, there were no threats of multicollinearity as the VIF-values ranged from 1.007 to 2.897 , implying that each predictor had sufficient variability not explained by the others in the models (cf. Appendix 10.1.1-10.1.6). Furthermore, we wanted to examine whether possible interaction effects were present. Ten different interaction variables were in turn separately added to regression A (cf. Appendix 10.2). Note that we faced big problems with multicollinearity, i.e. VIF-values ranging from 10.265 to 84.366 . Thus, no interaction variables were added to the regression models.

## TABLE 13: <br> MULTIPLE LINEAR REGRESSION <br> EVALUATION OF PBBAs

| Variable | A. Eval_ben | $B$. <br> Products <br> Services | C. <br> Products Services | $\begin{aligned} & \hline \hline \text { D. } \\ & \text { F_Eval_ben } \end{aligned}$ | E. E_Eval_ben | $\begin{aligned} & \hline \hline \text { F. } \\ & \text { S_Eval_ben } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Pos_number_ } \\ & \text { SBBA } \end{aligned}$ | $\begin{aligned} & .275^{* * *} \\ & (7.212) \end{aligned}$ | $\begin{aligned} & .303^{* * *} \\ & (5.629) \end{aligned}$ | $\begin{aligned} & .243^{* * *} \\ & (4.439) \end{aligned}$ | $\begin{aligned} & .204^{* * *} \\ & (4.202) \end{aligned}$ | $\begin{aligned} & \hline .338^{* * *} \\ & (3.875) \end{aligned}$ | $\begin{aligned} & .281^{* * *} \\ & (2.979) \end{aligned}$ |
| $\begin{aligned} & \text { Pos_instr_ } \\ & \text { SBBA } \end{aligned}$ | $\begin{aligned} & .079^{*} \\ & (1.890) \end{aligned}$ | $\begin{aligned} & .127^{* *} \\ & (2.117) \end{aligned}$ | $\begin{aligned} & .036 \\ & (.598) \end{aligned}$ | $\begin{aligned} & .134^{* *} \\ & (2.565) \end{aligned}$ | $\begin{aligned} & .028 \\ & (.304) \end{aligned}$ | $\begin{aligned} & .004 \\ & (.035) \end{aligned}$ |
| $\begin{aligned} & \text { Pos_dich_ } \\ & \text { SBBA } \end{aligned}$ | $\begin{aligned} & -.059^{*} \\ & (-1.705) \end{aligned}$ | $\begin{aligned} & -.047 \\ & (-.954) \end{aligned}$ | $\begin{aligned} & -.063 \\ & (-1.241) \end{aligned}$ | $\begin{aligned} & -.044 \\ & (-.974) \end{aligned}$ | $\begin{aligned} & -.109 \\ & (-1.418) \end{aligned}$ | $\begin{aligned} & .025 \\ & (.307) \end{aligned}$ |
| Pos_grad_ SBBA | $\begin{aligned} & .123^{* * *} \\ & (2.720) \end{aligned}$ | $\begin{aligned} & .100 \\ & (1.571) \end{aligned}$ | $\begin{aligned} & .144^{\star *} \\ & (2.199) \end{aligned}$ | $\begin{aligned} & .087 \\ & (1.575) \end{aligned}$ | $\begin{aligned} & .241^{* *} \\ & (2.285) \end{aligned}$ | $\begin{aligned} & .155 \\ & (1.215) \end{aligned}$ |
| Gender | $\begin{aligned} & -.069^{* *} \\ & (-2.136) \end{aligned}$ | $\begin{aligned} & -.087^{*} \\ & (-1.933) \end{aligned}$ | $\begin{aligned} & -.062 \\ & (-1.323) \end{aligned}$ | $\begin{aligned} & -.117^{* * *} \\ & (-2.765) \end{aligned}$ | $\begin{aligned} & -.048 \\ & (-.680) \end{aligned}$ | $\begin{aligned} & .023 \\ & (.297) \end{aligned}$ |
| Knowledge | $\begin{aligned} & .053 \\ & (1.639) \end{aligned}$ | $\begin{aligned} & .094^{* *} \\ & (2.055) \end{aligned}$ | $\begin{aligned} & .032 \\ & (.679) \end{aligned}$ | $\begin{aligned} & .070^{*} \\ & (1.660) \end{aligned}$ | $\begin{aligned} & .052 \\ & (.722) \end{aligned}$ | $\begin{aligned} & .011 \\ & (.141) \end{aligned}$ |
| NFU_index | $\begin{aligned} & .008 \\ & (.260) \end{aligned}$ | $\begin{aligned} & -.016 \\ & (-.359) \end{aligned}$ | $\begin{aligned} & .025 \\ & (.532) \end{aligned}$ | $\begin{aligned} & .048 \\ & (1.136) \end{aligned}$ | $\begin{aligned} & -.057 \\ & (-.808) \end{aligned}$ | $\begin{aligned} & .006 \\ & (.082) \end{aligned}$ |
| Constant | $\begin{aligned} & 4.841^{* * *} \\ & (30.260) \end{aligned}$ | $\begin{aligned} & 4.684^{* * *} \\ & (21.431) \end{aligned}$ | $\begin{aligned} & 4.987^{* * *} \\ & (20.722) \end{aligned}$ | $\begin{aligned} & 5.154^{* * *} \\ & (27.338) \end{aligned}$ | $\begin{aligned} & 4.421^{* * *} \\ & (12.778) \end{aligned}$ | $\begin{aligned} & 4.484^{\star * *} \\ & (10.990) \end{aligned}$ |
| $\mathrm{R}^{2}$ | . 166 | . 201 | . 130 | . 142 | . 272 | . 161 |
| $F$ value | 23.045 | 15.627 | 8.557 | 11.518 | 8.327 | 4.124 |
| $P$ value | . 000 | . 000 | . 000 | . 000 | . 000 | . 000 |
| N | 818 | 409 | 409 | 496 | 164 | 158 |

NOTE: * $p<.10$, ** $p<.05$, *** $p<.01$. We have applied a significance level $\alpha=.05$ (cf. chapter 3.2.3).
Standardized beta coefficients $\left(\boldsymbol{\beta}^{*}\right)$ are presented in order to compare the different independent variables' relative effect on "evaluation of PBBAs", as the variables are measured in different units of measurement.
Numbers in parentheses are t statistics.
SBBA: Secondary Brand Benefit Associations.

Regression A included the dependent variable Eval_ben. Results showed that Pos_number_SBBA $\left(\beta^{*}=.275, \mathrm{p}<.01\right)$ and Pos_grad_SBBA $\left(\beta^{*}=.123, \mathrm{p}<.01\right)$ were positively related to respondents' evaluation of PBBAs, while Gender ( $\beta^{*}=-.069, \mathrm{p}<.05$ ) was negatively related.

Regression B included the dependent variable Eval_ben for product brands. Results showed that Pos_number_SBBA $\left(\beta^{*}=.303, \mathrm{p}<.01\right)$, Pos_instr_SBBA $\left(\beta^{*}=.127, \mathrm{p}<.05\right)$ and Knowledge ( $\beta^{*}=.053, \mathrm{p}<.05$ ) were positively related to respondents' evaluation of PBBAs.

Regression C included the dependent variable Eval_ben for service brands. Results showed that Pos_number_SBBA $\left(\beta^{*}=.243, \mathrm{p}<.01\right)$ and Pos_grad_SBBA $\left(\beta^{*}=.144, \mathrm{p}<.05\right)$ were positively related to respondents' evaluation of PBBAs.

Regression D included the dependent variable F_Eval_ben. Results showed that Pos_number_SBBA $\left(\beta^{*}=.204, \mathrm{p}<.01\right)$ and Pos_instr_SBBA $\left(\beta^{*}=.134, \mathrm{p}<.05\right)$ were positively related to respondents' evaluation of functional PBBAs, while Gender ( $\beta^{*}=-.117$, $\mathrm{p}<.01$ ) was negatively related.

Regression E included the dependent variable E_Eval_ben. Results showed that Pos_number_SBBA $\left(\beta^{*}=.338, \mathrm{p}<.01\right)$ and Pos_grad_SBBA $\left(\beta^{*}=.241, \mathrm{p}<.05\right)$ were positively related to respondents' evaluation of experiential PBBAs.

Regression $\mathbf{F}$ included the dependent variable S_Eval_ben. Results showed that Pos_number_SBBA ( $\beta^{*}=.281, \mathrm{p}<.01$ ) was positively related to respondents' evaluation of symbolic PBBAs.

### 4.2.2 Perceived differentiation of PBBAs

Next, we conducted six multiple linear regressions to investigate effects on the dependent variable perceived differentiation of PBBAs (Diff_ben). Regression G examines all the PBBA types together (Diff_ben), while regression J, K and L examine functional( $F_{-}$Diff_ben), experiential- ( $E_{-}$Diff_ben) and symbolic PBBAs (S_Diff_ben) respectively. Finally, we looked at product brands (regression H) and service brands (regression I) separately. The tests are presented in Appendix 10.1.7-10.1.12 and the results are summarized in Table 14.

## TABLE 14: <br> MULTIPLE LINEAR REGRESSION PERCEIVED DIFFERENTIATION OF PBBAs

| Variable | G. Diff_ben | H. <br> Products <br> Services | I. <br> Products Services | $\begin{aligned} & \hline \hline \text { J. } \\ & \text { F_Diff_ben } \end{aligned}$ | K. <br> E_Diff_ben | L. S_Diff_ben |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Pos_number_ } \\ & \text { SBBA } \end{aligned}$ | $\begin{aligned} & .134^{* * *} \\ & (3.435) \end{aligned}$ | $\begin{aligned} & .133^{* *} \\ & (2.315) \end{aligned}$ | $\begin{aligned} & .142^{* * *} \\ & (2.658) \end{aligned}$ | $\begin{aligned} & \hline .149^{* * *} \\ & (3.097) \end{aligned}$ | $\begin{aligned} & \hline .108 \\ & (1.132) \end{aligned}$ | $\begin{aligned} & \hline .150 \\ & (1.546) \end{aligned}$ |
| $\begin{aligned} & \text { Pos_instr_ } \\ & \text { SBBA } \end{aligned}$ | $\begin{aligned} & -.041 \\ & (-.953) \end{aligned}$ | $\begin{aligned} & -.020 \\ & (-.321) \end{aligned}$ | $\begin{aligned} & -.040 \\ & (-.681) \end{aligned}$ | $\begin{aligned} & -.052 \\ & (-1.003) \end{aligned}$ | $\begin{aligned} & .023 \\ & (.232) \end{aligned}$ | $\begin{aligned} & -.030 \\ & (-.247) \end{aligned}$ |
| $\begin{aligned} & \text { Pos_dich_ } \\ & \text { SBBA } \end{aligned}$ | $\begin{aligned} & .094^{* * *} \\ & (2.619) \end{aligned}$ | $\begin{aligned} & .148^{* * *} \\ & (2.831) \end{aligned}$ | $\begin{aligned} & .059 \\ & (1.192) \end{aligned}$ | $\begin{aligned} & .064 \\ & (1.432) \end{aligned}$ | $\begin{aligned} & .147 \\ & (1.743) \end{aligned}$ | $\begin{aligned} & .150^{*} \\ & (1.759) \end{aligned}$ |
| Pos_grad_ SBBA | $\begin{aligned} & .230^{* * *} \\ & (4.962) \end{aligned}$ | $\begin{aligned} & .115^{*} \\ & (1.705) \end{aligned}$ | $\begin{aligned} & .322^{* * *} \\ & (5.048) \end{aligned}$ | $\begin{aligned} & .294 * * * \\ & (5.394) \end{aligned}$ | $\begin{aligned} & .053 \\ & (.462) \end{aligned}$ | $\begin{aligned} & .136 \\ & (1.040) \end{aligned}$ |
| Gender | $\begin{aligned} & -.033 \\ & (-.989) \end{aligned}$ | $\begin{aligned} & -.069 \\ & (-1.438) \end{aligned}$ | $\begin{aligned} & -.011 \\ & (-.233) \end{aligned}$ | $\begin{aligned} & -.056 \\ & (-1.336) \end{aligned}$ | $\begin{aligned} & -.076 \\ & (-.967) \end{aligned}$ | $\begin{aligned} & .084 \\ & (1.050) \end{aligned}$ |
| Knowledge | $\begin{aligned} & .080^{* *} \\ & (2.422) \end{aligned}$ | $\begin{aligned} & .172^{* * *} \\ & (3.560) \end{aligned}$ | $\begin{aligned} & -.001 \\ & (-.031) \end{aligned}$ | $\begin{aligned} & .074^{*} \\ & (1.761) \end{aligned}$ | $\begin{aligned} & .246^{\star * *} \\ & (3.102) \end{aligned}$ | $\begin{aligned} & -.033 \\ & (-.432) \end{aligned}$ |
| NFU_index | $\begin{aligned} & .039 \\ & (1.179) \end{aligned}$ | $\begin{aligned} & .015 \\ & (.325) \end{aligned}$ | $\begin{aligned} & .055 \\ & (1.196) \end{aligned}$ | $\begin{aligned} & .041 \\ & (.988) \end{aligned}$ | $\begin{aligned} & -.031 \\ & (-.406) \end{aligned}$ | $\begin{aligned} & .057 \\ & (.715) \end{aligned}$ |
| Constant | $\begin{aligned} & 2.929^{* * *} \\ & (11.143) \end{aligned}$ | $\begin{aligned} & 3.159^{* * *} \\ & (8.333) \end{aligned}$ | $\begin{aligned} & 2.822^{* * *} \\ & (7.606) \end{aligned}$ | $\begin{aligned} & 2.437^{* * *} \\ & (6.910) \end{aligned}$ | $\begin{aligned} & 3.408^{* * *} \\ & (5.985) \end{aligned}$ | $\begin{aligned} & 3.830^{* * *} \\ & (7.007) \end{aligned}$ |
| $\mathrm{R}^{2}$ | . 126 | . 110 | . 171 | . 161 | . 124 | . 115 |
| $F$ value | 16.715 | 7.100 | 11.816 | 13.345 | 3.144 | 2.782 |
| $P$ value | . 000 | . 000 | . 000 | . 000 | . 004 | . 010 |
| Observations | 818 | 409 | 409 | 496 | 164 | 158 |

NOTE: * $p<.10,{ }^{* *} p<.05$, *** $p<.01$. We have applied a significance level $\alpha=.05$ (cf. chapter 3.2.3).
Standardized beta coefficients ( $\boldsymbol{\beta}^{*}$ ) are presented in order to compare the different independent variables' relative effect on "perceived differentiation of PBBAs", as the variables are measured in different units of measurement.
Numbers in parentheses are $t$ statistics.
SBBAs: Secondary Brand Benefit Associations

The results shows that all six models (regression G to L ) had explanatory powers ( $\mathrm{R}^{2}$ ) ranging from 11.0 to 17.1 percent, and were statistically significant with sufficient F -values and p -values $<.05$, indicating acceptable model fit. Additionally, there were no threats of multicollinearity as the VIF-values ranged from 1.007 to 2.897, implying that each predictor had sufficient variability not explained by the others in the models (cf. Appendix 10.1.710.1.12). Furthermore, we wanted to examine whether possible interaction effects were present. Ten different interaction variables were in turn separately added to regression $G$ (cf. Appendix 10.2). However, we faced big problems with multicollinearity, i.e. VIF-values ranging from 10.265 to 84.366 . Thus, no interaction variables were added to the regressions.

Regression $\mathbf{G}$ included the dependent variable Diff_ben. Results showed that Pos_number_SBBA $\left(\beta^{*}=.134, \mathrm{p}<.01\right)$, Pos_dich_SBBA $\left(\beta^{*}=.094, \mathrm{p}<.01\right)$, Pos_grad_SBBA
( $\beta^{*}=.230, \mathrm{p}<.01$ ) and Knowledge ( $\beta^{*}=.080, \mathrm{p}<.05$ ) were positively related to respondents’ perceived differentiation of PBBAs.

Regression H included the dependent variable Diff_ben for product brands. Results showed that Pos_number_SBBA $\left(\beta^{*}=.133, \mathrm{p}<.05\right)$, Pos_dich_SBBA $\left(\beta^{*}=.148, \mathrm{p}<.01\right)$, and Knowledge $\left(\beta^{*}=.172, \mathrm{p}<.01\right)$ were positively related to respondents' perceived differentiation of PBBAs.

Regression I included the dependent variable Diff_ben for service brands. Results showed that Pos_number_SBBA $\left(\beta^{*}=.142, \mathrm{p}<.01\right)$ and Pos_grad_SBBA $\left(\beta^{*}=.322, \mathrm{p}<.01\right)$ were positively related to respondents' perceived differentiation of SBBAs.

Regression J included the dependent variable $F_{-}$Diff_ben. Results showed that Pos_number_SBBA $\left(\beta^{*}=.149, \mathrm{p}<.01\right)$ and Pos_grad_SBBA $\left(\beta^{*}=.294, \mathrm{p}<.01\right)$ were positively related to respondents' evaluation perceived of functional PBBAs.

Regression K included the dependent variable E_Diff_ben. Results showed that Knowledge $\left(\beta^{*}=.246, \mathrm{p}<.01\right)$ was positively related to respondents' perceived differentiation of experiential PBBAs.

Regression L included the dependent variable $S_{-}$Diff_ben. Results showed no significant predictors at a .05 significance level.

## 5. DISCUSSION

This paper aims at answering two research questions. In chapter 2, we presented theory and developed a set of hypotheses for these questions. In chapter 4, the hypotheses were tested. We will now start this chapter by briefly summarizing our results. Secondly, theoretical implications of our results in accordance with the literature from chapter 2 will be discussed. Finally, we will provide managerial implications of our findings.

### 5.1 SUMMARY OF RESULTS

### 5.1.1 Main research

Our research questions are as follows: in which way and to what extent are preferred brands differentiated from acceptable brands? (RQ1) and in which way and to what extent is the differentiation of preferred brands moderated by the type of brand (product brands vs. service brands? (RQ2).

Five hypotheses were developed to answer RQ1 where we investigated four differentiation dimensions for positive SBBAs; the number of positive SBBAs, instrumental-, graded and dichotomous differentiation. Further, we examined whether these effects were moderated by consumers' need for uniqueness. To answer RQ2, we investigated whether the differentiation dimensions were different for product- and service brands. The results are summarized in Table 15.

TABLE 15:
SUMMARY OF RESULTS:
H1-H5 (RQ1) AND PRODUCTS VS. SERVICES (RQ2)

|  | RQ1 | RQ2 |
| :---: | :---: | :---: |
| Hypothesis | $P B$ differentiated from $A B$ | Is the differentiation of preferred brands moderated by the type of brand? |
| H1: Higher number of positive SBBAs | Yes*** | No |
| H2: Higher score on instr. diff. of pos. SBBAs | Yes*** | Yes** (only diff. for services) |
| H3: Higher number of dich. diff pos. SBBAs | No | No |
| H4: Higher score on graded. diff. of pos. SBBAs | Yes*** | Yes*** (only diff. for services) |
| H5: Effects found in H1-H4 remain after controlling for NFU | No moderating effect*** | No moderating effect *** |
| NOTE: ${ }^{* * *}=$ Hypothesis supported on a .01 significance level, ** $=$ Hypothesis supported on a .05 significance level SBBAs: Secondary Brand Benefit Associations PB: Preferred brands, AB: Acceptable brands |  |  |

The results show that preferred brands have a higher number of positive SBBAs than acceptable brands, which applies for both products and services. Secondly, for services, preferred brands have a higher score on both instrumental- and graded differentiation for positive SBBAs than acceptable brands. Thirdly, we find no support for H3 and reject the hypothesis that preferred brands have a higher number of dichotomously differentiated positive SBBAs than acceptable brands. Finally, consumers' need for uniqueness had no moderating effect on either of the results.

Before commencing the theoretical- and managerial implications, we kindly ask the reader to note our discussion about internal validity in chapter 6.2.1. Consequently, we cannot conclude that the differentiation dimensions are the cause for the observed differences between preferred and acceptable brands. Still, they may serve as sufficient proofs for such a causal relationship, and will now be addressed accordingly.

### 5.2 THEORETICAL IMPLICATIONS

Our results provide several implications for theory on brand positioning and differentiation. The aim of the study is to provide new and deeper insight about brand differentiation. We will now in turn address the differentiation dimensions (favorability, instrumental-, dichotomous- and graded differentiation) and consumers' need for uniqueness in light of theory. Differences between products and services will be discussed accordingly. Finally, we will discuss implications of our additional analyses.

### 5.2.1 (H1) Favorability

Support for H1 in our main research show that preferred brands have a higher number of positive SBBAs than acceptable brands. Additionally, our pre-analyses showed that preferred brands have more favorably evaluated PBBAs than acceptable brands. Furthermore, all effects were evident for both product and service brands. These findings provide empirical support to the widely accepted theory of Keller (1993), claiming that having favorable brand associations is important for customer-based brand equity. By finding evidence for favorability on the secondary level, we provide increased credibility to the theory of Supphellen et al. (2014) that the secondary level of associative networks is
important for differentiation. However, these findings do not imply that preferred brands have SBBAs that are more favorably evaluated than acceptable brands, an important implication that should not be misinterpreted. It implies that the number of favorable SBBAs may be a way to differentiate the brand, which provides further support for the findings of Erlandsen (2013).

### 5.2.2 (H2) Instrumental differentiation

By finding support for H 2 in our main research, we have evidence for preferred brands being differentiated from acceptable brands by having positive SBBAs with a higher score on instrumental differentiation. First of all, this finding contradict with the alternative view on differentiation claiming that it is almost impossible to distinguish between brands within the same category (Romaniuk et al., 2007; Sharp, 2010; Bendixen, 2011). Our findings support the opposite; brands within consumers' consideration sets can in fact be differentiated from each other. This is consistent with the research of Professor Magne Supphellen (Supphellen et al., 2014), arguing that differentiation happens in a combination between the primary and secondary level of associative networks. Thus, secondary brand associations serve as specific reasons for why a brand is better than competitors on a primary driver.

Our findings are only present for service brands, and not for product brands. This implies that for service brands, preferred brands have to a larger extent than acceptable brands, associations on the secondary level that consumers perceive as reasons for drivers on the primary level. This may provide implications for theory on differentiation. Until now, theory about instrumental differentiation of SBBAs has not distinguished between products and services. Additionally, our findings also give theoretical implications for the traditional principle of "unique selling propositions". Claiming to be the essence of brand positioning, USP gives consumers a compelling reason for buying that particular brand (Keller, 1993 p . 6). Our research implies that only services have preferred brands with a higher degree of such compelling reasons. Thus, USP may not be a general principle after all.

It is surprising that we did not find support for product brands. From the literature review, we established that services tend to be more intangible, heterogenic and perishable (Zeithaml, 1981; Bateson 1979). In addition, we know from theory about the perceptual
process, that before a stimulus can be stored as a node in consumers' associative networks, it needs to go through the process of exposure, attention and interpretation (Hoyer et al., 2013). As services are more intangible, i.e. the inability to be seen, felt, tasted or touched (Zeithaml, 1981), services may provide fewer stimuli than products to be picked up by consumers' sensory receptors to start the perceptual process. Furthermore, services cannot be stored and have inconsistent performance. It is therefore plausible that certain associations for services will not be repeated and learned to the same degree as for products, which are standardized and homogeneous across time and across different consumers (Zeithaml, 1981). We could expect from theory that consistent, repeated SBBAs from products would in time provide strong evidence for the PBBAs. Thus, one could argue that instrumental differentiation also should be present for product brands, if not only for products.

A possible explanation for our results might be due to the service characteristic of simultaneity. Contrary to products, services are sold and consumed simultaneously, thus making both the service provider and the consumer inseparable from the service (Zeithaml, 1981; Bateson, 1979). Moreover, as claimed by Berry (2000) the actual experiences with a service will always triumph in defining the brand for consumers, either in a favorable or non-favorable way. Consequently, as we only investigate positive SBBAs, it is plausible that the favorable experiences and interactions in services conceptualized as SBBAs, serve as very strong reasons for the PBBAs. Hence, the personal interactions with salespeople and experiences from consuming the service, may explain why preferred brands are differentiated from acceptable brands on this matter. Evidently, the characteristic of simultaneity may counteract those of intangibility, heterogeneity and perishability, thus explaining why we only find support for service brands.

To sum up, our findings imply that preferred service brands can be differentiated from acceptable brands by instrumental differentiation of positive SBBAs. However, as this is only the case for service brands, there may be characteristics of products and services that affect instrumental differentiation.

### 5.2.3 (H3) Dichotomous differentiation

We did not acquire significant results to support that preferred brands have a higher number of dichotomously differentiated positive SBBAs than acceptable brands. Hence, H3 was rejected. As we did not receive significant results in our analysis, one could jump to the conclusion that dichotomous differentiation is not important. One might even argue for the alternative view on differentiation being correct, as they claim in their research that category leaders in general share brand image associations with their rivals (Sharp, 2010). However, the simple fact that dichotomous differentiation is important, may serve as the reason for why we did not find significant differences in our study.

This is evident in traditional theory from Keller, as brands strive to achieve points of differentiation (PODs) in their associative networks. These are associations that consumers do not believe they could find to the same extent with a competing brand (Keller, 2013). Consequently, whenever a brand succeeds in being unique at an important association for the target group, other competitors will design brand associations to negate these PODs and thus create parity, i.e. competitive POPs (Keller, 2013).

Competitors' competitive POPs may therefore be the reason for why we did not find a significant difference for dichotomous differentiation between preferred and acceptable brands. Thus, dichotomous differentiation can still be regarded as an important form for differentiation, because it is valuable for the few brands that succeed to achieve it. (cf. further discussion of this limitation in chapter 6.3, and the findings from our additional research in chapter 4.2).

### 5.2.4 (H4) Graded differentiation

Support for H4 show that preferred brands were differentiated from acceptable brands in terms of having positive SBBAs that to a larger extent were associated with the given brand than competing brands. This finding supports the traditional view on differentiation, as it may imply that uniqueness contributes to a brand being chosen, and that it is not enough to be similar to competitors (Supphellen et al., 2014). However, it is an interesting theoretical implication that we only find support for service brands. As mentioned in the section of instrumental differentiation, there has not yet been a separation between products and
services in the theory of Supphellen. Thus, this separation may be required to truly understand differentiation.

Contrary to our findings for instrumental differentiation, it is not surprising that graded differentiation was more present for service brands. One can argue that our findings are due to the fact that services are heterogeneous, i.e. inconsistent in terms of performance or quality (Zeithaml, 1981). Our results may have occurred because consumers have SBBAs related to their heterogeneous experiences with the service brand, i.e. SBBAs that to a larger extent are uniquely linked to this particular brand than competitors. Products on the other hand tend to be more homogeneous and tangible, hence they may have characteristics that are easier to copy by competitors (Zeithaml, 1981). Thus, product brands may have SBBAs that are more easily shared with competitors, serving as the reason for why we do not find differences between preferred and acceptable brands. Nevertheless, as for instrumental differentiation, our findings imply that there may be characteristics of products and services that have implications for the application of instrumental differentiation.

Even though H4 is only supported for services, our findings may imply that the advocates for the alternative view on differentiation define uniqueness too narrowly. By assessing uniqueness in terms of solely ownerships of associations or brand image (Sharp, 2010; Romaniuk et al., 2007; Gaillard \& Romaniuk, 2007), they dismiss the idea of uniqueness being graded. The authors develop arguments to only one form of uniqueness, namely dichotomous uniqueness. However, our findings imply that uniqueness can be perceived as a graded term, and that in cluttered markets this may be the way to differentiate. This provides further implications to the previous discussion about the rejection of H 3 . Since dichotomous differentiation is graded differentiation in its purest and most desirable form, we can argue that dichotomous differentiation in fact is important for differentiation. It is plausible that SBBAs that have started out as dichotomous (unique) have become graded over time, as competitors design competitive POPs to negate other brands' PODs (Keller, 2013).

Lastly, it is not apparent from theory if the SBBAs need presence of both dichotomous- and graded differentiation, or if it is enough to only obtain one form. By finding support for H 4 and not H 3 , it implies that graded differentiation is the only form of uniqueness in our research that differentiates preferred brands from acceptable brands. This is an important
theoretical contribution, as earlier research has found support for both dichotomous- and graded differentiation in the same study ${ }^{18}$ (Erlandsen, 2013). Consequently, our findings may imply that a graded form of uniqueness can by itself be an important contributor of becoming the preferred brand in the category. Thus, dichotomous differentiation may not be necessarily in addition.

### 5.2.5 (H5) Need for uniqueness

As we recall from the literature review, consumers' need for uniqueness is the consumers pursuit of being different relative to others, that is achieved and expressed through the acquisition, utilization and disposition of consumers goods (Tian et al., 2001, p. 50). As a result, one could expect consumers with a high need for uniqueness to be more attracted towards brands that are differentiated from competitors, i.e. preferred and unique brands in our study. However, as H5 was supported, the differentiation dimensions identified in H 1 to H4, and differences between products and services, remained regardless of consumers' need for uniqueness. Thus, NFU had no moderating effect.

First of all, this may imply that all consumers, regardless of their need for uniqueness, are attracted by brands that have a high number of positives SBBAs. This relates to the common logic of consumers always wanting the better alternative, thus the alternatives that are favorably differentiated. Furthermore, in our regression analyses, NFU as a predictor showed no significant effects on either of the models. This was unexpected according to theory, as our large sample increased the chance of even small effect sizes. As a construct, NFU_index showed an acceptable Cronbach's alpha and high factor loadings in the confirmatory factor analysis (chapter 3.4.3). The construct validity is therefore perceived as solid. Consequently, as NFU as a construct had little impact in our study, it may indicate that the NFU does not apply to our sample, i.e. students at the Norwegian School Economics. As the original study from Tian et al (2001) was based on American respondents, it is possible that the construct does not apply to Norwegian consumers.

[^13]
### 5.2.6 Additional analyses

Our additional analyses were conducted to provide further insight about SBBAs, and their relationship to PBBAs. We will now briefly discuss theoretical implications of the differentiation dimensions' effects on two dimensions of PBBAs, namely consumers' evaluation- and perceived differentiation of PBBAs. We bear in mind that this is explorative research and that we have only touched upon possible implications for differentiation theory. Furthermore, we note that we are only addressing two out of several possible dimensions of PBBAs. Thus, implying that further research needs to be conducted (cf. chapter 6.4, suggestions for future research).

Our findings from the regression analyses of consumers' evaluation of PBBAs revealed that several of the differentiation dimensions had a positive effect on the dependent variable. This supports that the differentiation dimensions in H1-H4 are important to understand in brand positioning, as they have positive effects on primary drivers that are shared across categories. Firstly, the number of positive SBBAs had a positive effect for both product and service brands, and all three types of benefits. This provides increased credibility for the theory of Keller (1993) of favorability of brand associations, and further evidence emphasizing the importance of SBBAs. It implies that favorability is important in general.

Secondly, instrumental differentiation had a positive effect for product brands and functional benefits. This serves as no surprise, as similar products in cluttered markets are dependent on sound evidence for why the specific brand should be chosen. Naturally, this is particularly evident for functional benefits, as the products with the best ability to solve or avoid the consumers' problems, will be chosen. This is in line with theory from (Park et al., 1986) on functional consumer needs. Finally, graded differentiation had a positive effect for service brands and experiential benefits. This provides further support for our discussion in chapter 5.2.4, arguing that consumers have heterogeneous experiences with the service brand, i.e. SBBAs that to a larger extent are uniquely linked to the brand than competitors.

The results from the regression analyses of consumers' perceived differentiation of PBBAs also provided interesting findings. As the reader may recall from our introduction of chapter 2, the theoretical framework, we addressed the importance of an external view on brand positioning (Keller, 2013; Supphellen et al., 2014). Ultimately it is up to the consumer to
judge both the true value of the company's value-proposition, and the perceived differentiation. Since our results show that several of the differentiation dimensions had a positive effect on the dependent variable in the regressions, it implies that the SBBAs contribute to the primary benefit being perceived as differentiated. Evidently, this supports the view of Supphellen et al. (2014) that differentiation happens in a combination between the primary and secondary level.

Firstly, the number of positive SBBAs had a positive effect for both product- and service brands, but only functional benefits. This provides further support for favorability being important. Secondly, dichotomous differentiation had a positive effect for product brands. We confirmed in our pre-tests that perceived differentiation of PBBAs had a positive effect on the evaluation of benefits (chapter 3.4.5). Consequently, dichotomous differentiation has a positive effect on consumers' evaluation of PBBAs through the perceived differentiation of PBBAs (cf. the overview of our analyses in chapter 2.6). This supports dichotomous differentiation being important. Finally, graded differentiation had a positive effect for service brands, and only functional benefits.

To sum up, these additional analyses both show that SBBAs explain some of the variance for two dimensions on PBBAs, at that they have positive effects. This provides further evidence of differentiation of SBBAs being important in brand positioning, and that our differentiation dimensions for SBBAs may in fact help to differentiate brands and become the preferred brand. Additionally, it provides further evidence that differentiation might be more complex than first imagined, as the differentiation dimensions are moderated by both the type of brand (product- and service brands) and type of benefits (functional-, experiential- and symbolic benefits). Thus, differentiation of SBBAs deserves further investigation.

### 5.3 MANAGERIAL IMPLICATIONS

Our study provides interesting implications for marketers regarding brand positioning and differentiation. By examining differentiation dimensions of SBBAs, we provide valuable insight for marketers in how the secondary level in associative networks can be used to differentiate brands. Our findings give valuable information for brands in cluttered markets, as we have investigated differences between preferred and acceptable brands within each consumer's consideration set. We will now in turn provide general-, mutual- and separate implications for service- and product brands respectively.

General implications. As our study is focused on brand benefits, our implications will primarily be applicable for the differentiation of brand benefits. However, this focus on differentiation is acknowledged in the marketing literature, as benefits are more closely related to consumers' evaluations. Thus, making the brand positioning more meaningful and important. Moreover, our findings are less relevant for brands that consumers have little experience with (cf. the limitation in chapter 6.3). Accordingly, our first implication is that it is possible for brands in cluttered markets to differentiate themselves from close competitors, by applying differentiation dimensions of SBBAs. We therefore recommend marketers to have differentiation as an important goal in their brand management. A second implication is that the differentiation dimensions are moderated by both the type of brand (product- and service brands) and type of benefit (functional-, experiential- and symbolic benefits). Consequently, the differentiation of SBBAs is dependent on what type of brand to be managed, and consumer need to be met.

Mutual implications. A first implication on a general level is that the number of positive SBBA can help differentiate both service- and product brands. Thus, marketers should strive for achieving favorable SBBAs connected to their brand, as our study show that preferred brands are differentiated from acceptable brands in having a higher number of positive SBBAs. Additionally, the number of positive SBBAs contributes positively to consumers' evaluation and perceived differentiation of PBBAs, though only for functional benefits for the latter. As both dimensions of PBBAs have a positive effect on the attitude towards the brand, favorability of SBBAs can be regarded as important in order to differentiate brands from close competitors.

A second implication concerns dichotomous differentiation. Although the term had little presence in our research, we recommend that marketers strive for attaching dichotomous SBBAs to their brand. It is the purest form for graded differentiation, thus hard for competitors to copy. However, this form of uniqueness can be hard to obtain in cluttered markets, as competitors may develop competitive POPs to negate these PODs.

Service brands implications. A first implication is that applying instrumental differentiation of positive SBBAs can differentiate service brands. Thus, marketers must help consumers in providing specific evidence or meaning for why their brand is better on the PBBAs than competitors. Our study shows that preferred brands to a larger extent than acceptable brands had such instrumental relationships. This implies that instrumental relationships in the associative networks of brands is important, in order to separate brands from its close competitors. A second implication is that also graded differentiation of positive SBBAs can differentiate service brands. Thereby, marketers should strive for achieving positive SBBAs that to a larger extent are associated with their brand than competitors. Our findings show that when associations are shared among brands within the category, they are to a larger extent uniquely associated with preferred brands than acceptable brands. A third implication concerns the two dimensions of PBBAs. Graded differentiation has a positive effect on consumers' evaluation of experiential PBBAs. If marketers can achieve unique SBBAs for their brands' experiential benefits, they are likely to increase the consumers' evaluation of those benefits. Lastly, graded differentiation has also a positive effect on consumers' perceived differentiation of functional PBBAs, thus following the previous argument.

Product brands implications. In addition to the general effect from the number of positive SBBAs, we only found further managerial implications for products in our additional analyses. Thus, instrumental differentiation has a positive effect on consumers' evaluation of functional PBBAs. This serves as an important implication for marketers, emphasizing the importance of providing specific evidence for why their brand is better on the PBBA than their competitors. Furthermore, dichotomous differentiation has a positive effect on consumer's perceived differentiation of PBBAs, which in turn has a positive effect on evaluation of PBBAs. Thus, dichotomous differentiation can effect evaluation of PBBAs through the perceived differentiation.

## 6. LIMITATIONS AND FUTURE RESEARCH

In this chapter we will start by evaluating the data quality in terms of reliability and validity. Secondly, we will discuss the strengths and limitations of our study. Finally, we will provide some suggestions for future research.

### 6.1 RELIABILITY

In order to evaluate the quality of our experiment and study, it is normal to assess how reliable and valid the experiment is (Ringdal, 2001). In any set of data, there will be some amount of error. As researchers, our objective is to minimize this error so that the data provide a more accurate reflection of the truth (Litwin, 1995). Reliability is an evaluation of the consistency of our study, to what extent our experiment will produce the same results if repeated over time (Gripsrud \& Olsson, 2000). Furthermore, a distinction is made between internal reliability and external reliability. We will now in turn discuss these two categories, and finally address threats to the reliability.

### 6.1.1 Internal reliability

One method to evaluate the data's reliability is a statistically analysis of the measuring consistency (Carmines \& Zeller, 1979; Ringdal, 2001). This is most applicable for the use of composed variables. In order for the items to be internally consistent, it is imperative that the respondents correctly understand that they belong to the same construct (Bryman \& Cramer, 2009). We therefore measured the internal consistency of the constructs that contained more than one item by testing their Cronbach's Alpha values (chapter 3, values are available in Appendix 4.2). We also used confirmatory factor analyses to confirm the constructs (chapter 3.4.3, Appendix 4.1). As they were all acceptable, we consider the internal reliability of our constructs as satisfactory.

### 6.1.2 External reliability

External reliability refers to the degree of consistency of a measure over time (Bryman \& Cramer, 2009). The data's reliability can be evaluated with source criticism (Ringdal, 2001). As reliability is affected by the quality control of our data, we made sure to perform accurate

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data registration, and both search for and correct errors. By using the electronic survey tool Qualtrics in the data collection, we avoided manual measuring-errors in the registration. Furthermore, item non-response occurs when respondents do not complete all items in the questionnaire (Fink, 1995). Including a "force response" -function in Qualtrics for all our questions prevented this type of bias, making it impossible for the respondent to complete the questionnaire without answering all the questions. The trustworthiness of the questionnaire was further strengthened by applying the statistics program SPSS, which helped us conduct automatic calculations.

## Threats to external reliability

According to Saunders et al. (2009) main threats for the external validity can be divided into four categories, namely respondent error, respondent bias, observer error and observer bias. Firstly, it is not beneficial to ask respondents to answer a questionnaire at an inconvenient time. However, our questionnaire was voluntarily and the receivers where free to take the questionnaire whenever they felt like during the nine days it was active. Furthermore, the experiment was launched early in the semester, thereby avoiding the busy exam period or last preparations before Christmas in the workplace. Given our research theme and questions, there is nothing implying that the results should be affected by the time of year, season or other trends. Additionally, we made sure to always promote the questionnaire around lunch-time, when we expected respondents' motivation to be at its highest. As a result, respondent error due to a lack of motivation was hopefully reduced.

Secondly, respondent bias occurs if the respondents answer what they believe we, as researchers, want them to say (Saunders et al. 2009). We therefore informed them the questionnaire was completely anonymous, and made sure to reveal as little as possible about our agenda in both the invitation and introduction. As we never mentioned the objective of our study, it is likely that respondent bias was limited. Finally, observer error involves how we as researcher ask the questions in the experiment, while observer bias is how we interpret the answers (Saunders et al. 2009). Meaning, that respondents can misunderstand our questions, and we as researchers can risk interpreting the answers subjectively and wrongly. Compared to the studies of Erlandsen (2013) and Hem \& Teslo (2012), we let the respondents decide the valence of the SBBAs themselves, thereby avoiding a subjective interpretation that could lead to observer bias. To conclude, we find that our study overall
demonstrates a satisfactory level of both internal and external reliability. Therefore, we find it reasonable that the measures in the study can be used for future research.

### 6.2 VALIDITY

According to Saunders et al., (2009) validity is concerned with examining whether there is a causal relationship between variables. It refers to what extent we measure what we really intend to measure (Ringdal, 2001). We will now in turn discuss the categories of validity that is relevant for our study, namely internal-, construct-, statistical conclusion- and external validity (Gripsrud and Olsson, 2000; Trochim, 2006).

### 6.2.1 Internal validity

According to Gripsrud and Olsson (2000) internal validity is a term that is mostly used in experiments, involving to what extent the researcher has managed to control for other variables that could have an effect on the experiment. Even though a measure has high reliability, it does not necessary imply that the validity is high. Thus, do we succeed in measuring that the elicited SBBAs will cause different effects for the differentiation dimensions (H1-H4) for preferred and acceptable brands?

## Threats to validity

According to Saunders et al. (2009), there are several threats to validity, namely history, testing, instrumentation, mortality, maturation and ambiguity about causal direction. Firstly, our experiment asks the respondents to elicit actual brands from their memory. Thus, these brands will be influenced from previous product exposure, advertisements or other events affecting the brand. Naturally, history effects may threaten our validity.

Secondly, testing threats occur whenever respondents are under the impression that the results may disadvantage them in some way (Saunders et al., 2009). Our questionnaire was anonymous, and mostly asked the respondents to evaluate closed questions and elicit some brands, benefits and associations. We therefore avoided any perceptions concerning the results from the questionnaire. Furthermore, our respondents were not exposed to a pre-test, the experiment was fully randomized, they knew little about our research intentions and
could complete the questionnaire in their own time and selected location. Ultimately, we do not believe that testing is a threat to our validity. Thirdly, instrumentation threats occur when the sample has been subject to external effects in-between testing (Saunders et al., 2009). In our experiment we only test the participants once, hence instrumentation threats are likely to be minimal. However, as the questionnaire was available at Qualtrics over nine days, respondents may have finished the questionnaire over several rounds. Thus, some effects may have occurred.

Fourthly, mortality threats refer to respondents dropping out of our study (Saunders et al., 2009). As mentioned in chapter 3.2.3, 426 out of 1244 respondents did not complete the questionnaire. Our experiment is therefore accompanied by a loss of information because of non-response (Fink, 1995). These non-responses may introduce bias error into our results, because of possible differences between the respondents and others on important factors (Fink, 1995). This could have become a problem if the different groups of the experiment became unevenly divided amongst the respondents. Luckily, we did not experience any significant differences between the groups (cf. descriptive statistics, chapter 3.4.1). Furthermore, as we received an acceptable response rate, and made beneficiary adjustments to our questionnaire after the pre-test, we are confident that the non responses are due to natural causes. Hence, we do not perceive mortality as a big threat to our study.

Furthermore, maturation might occur when respondents perceive the questionnaire to be too time-consuming. This could lead to uncompleted questionnaires or careless responding. However, as our questionnaire explained the importance of the study and estimated completion time, included a "force response" function, and prizes to be won in a lottery, we are confident that the chances for mortality threats are low. Finally, ambiguity about causal direction may represent a potential threat. As our experiment is not conducted to prove causal relationships, and the fact that our pre-test of theory confirmed anticipated relationships between variables, we do not consider this a big threat for our study.

We thereby conclude that there are no major threats to the validity of our experiment. To sum up, our paper tests whether the elicitation of SBBAs will cause different effects for the differentiation dimensions ( $\mathrm{H} 1-\mathrm{H} 4$ ) for preferred and acceptable brands. However, it is important to emphasize that due to our research design, it is not possible to use these results


#### Abstract

to make conclusions about causal relationships. Thus, we cannot conclude that the differentiation dimensions are the cause for the observed differences between preferred and acceptable brands. Still, our findings are necessary-, if not sufficient, proofs for such a causal relationship.


### 6.2.2 Construct validity

Construct validity refers to the extent to which a particular measure relates to other measures consistent with theoretically derived hypotheses concerning the concepts (or constructs) that are being measured (Carmines \& Zeller, 1979, p. 23). This refers to the extent to which our measurement questions actually measure the constructs we intended them to measure (Saunders et al., 2009). We have used existing measuring scales applied in previous research, and their values for internal consistency (Cronbach's Alpha and CFA) were reliable (cf. Appendix 4.1 and 4.2). Our measurements are explained in full in chapter 3. However, it is important to note that our experiment applies some new terms for differentiation (cf. Supphellen et al, (2014), chapter 2.3.2), which still needs additional studies to be confirmed. Furthermore, the process of developing the experiment and measuring questions was a thorough process, in collaboration with our supervisor Magne Supphellen. We therefore believe the construct validity to be satisfactory.

### 6.2.3 Statistical conclusion validity

Trochim (2006) defines (statistical) conclusion validity as the degree to which conclusions we reach about relationships in our data are reasonable. Significance testing can help to rule out the possibility that our results could be due to random variation in our sample (Saunders et al., 2009). Conclusion validity consists of four interrelated components that influence the conclusions from our statistical tests, namely statistical power, sample size ( $N$ ), effect size (ES) and significance level ( $\alpha$ ) (Trochim, 2006). Ultimately, the goal is to achieve the right balance of these components to maximize the statistical power (Trochim, 2006).

According to Cohen (1992) the statistical power is important, as we wish to reject null hypotheses to establish facts about the phenomena in our study. By doing so, we may risk making two kinds of errors about relationships. First of all, we may mistakenly reject the null hypothesis $\left(\mathrm{H}_{0}\right)$ when it is true, i.e. a Type I error whose rate is controlled by the
significance level $\alpha$. On the other hand, a Type II error is mistakenly accepting the $H_{0}$ when it is false, with a probability called $\beta$ (Cohen, 1992). Thus, the statistical power is $1-\beta$, the probability of successfully rejecting the $\mathrm{H}_{0}$, i.e. obtaining a statistically significant result (Cohen, 1992).

Furthermore, selecting an appropriate significance level ( $\alpha$ ) implies specifying the risk of making a Type I error. It is therefore often a trade-off between $\alpha$ and $\beta$ (Ringdal, 2001). The lower the significance level, the higher the chance for type II errors, and opposite. Ultimately, the goal is to achieve the right balance of the components to maximize the statistical power, i.e. the probability to obtain a statistically significant result (Cohen, 1992). In this paper we have chosen a risk set at .05 for all analyses.

Finally, effect size (ES) is a way of quantifying the difference between two groups (Coe, 2002), i.e. measuring the size of an effect in a standardized way (Field, 2009). In our analyses of variance (ANOVA) we test whether two populations' means are equal, where the ES index is, f , the standard deviation of these means divided by the common withinpopulation standard deviation of the observations (Cohen, 1992, p. 99). While for our regression analyses, we are using Pearson's correlation coefficient, r , ranging between 0 (no effect) and 1 (a perfect effect) (Field, 2009). Consequently, effect sizes can help us understand the importance of the observed effects.

## Threats to Statistical conclusion validity

According to Trochim (2006), one of the biggest threats to either of the two conclusion errors is violating the assumptions of the statistical tests. In our study, the assumptions underlying the ANOVAs, ANCOVAs and linear regressions were found satisfactory (cf. chapter 3.4.4). Therefore, we do not consider this a large threat to our validity. A second threat is low statistical power, as it increases the chance of committing a Type II error. By having a large sample size $(\mathrm{N})$ in our experiment, we receive a higher statistical power and more significant results. A final threat is low reliability. This refers to noise or "error" that prevents our ability to see a relationship (Trochim, 2006). As earlier concluded, our study has a satisfactory level of reliability, as we did a thorough job constructing our questionnaire and performed statistical tests for the internal consistency. Consequently, good reliability
helps improving our conclusion validity. To conclude, the conclusions drawn in our study appear to be statistically significant, as our statistical conclusion validity is acceptable.

### 6.2.4 External validity

External validity refers to the extent to which the results from the experiment are generalizable or transferable to other contexts (Johannessen et al., 2011). According to Trochim and Donnely (2007) there are generally three threats to the generalization of results, concerning individuals, place and time (cited in Johannessen et al., 2011).

First of all, there is a threat to the external validity if the individuals that are studied systematically differ from the individuals the results are to be generalized to. As we used a convenience sampling from current and former students from the Norwegian School of Economics (NHH), there is a risk that these individuals differ from those of the whole Norwegian population. According to Gripsrud \& Olsson (2000) compared to a probabilitysample, it is not possible in a non-probability sample to state the size of the random errors than can occur in our experiment. Thus, if we want to estimate effects on the Norwegian population, we will still receive systematic errors regardless of how large the sample size is (Gripsrud \& Olsson, 2000). A quick conclusion is that we cannot generalize our sample to that of Norwegian consumers. Had we used only current students in the sample, our results could have been generalized to populations that resemble the student population at NHH. But as it contains a mixture of both students and workers, our sample cannot be generalized to either population. However, as our sample consists of nearly 40 percent of former NHHstudents that are now currently working, they represent higher income members of the population. Our mixed sample thereby provides richer information, i.e. higher average buying choice. Moreover, our study is of a descriptive and partly exploratory nature, where the main objective is to describe the phenomenon of differentiation of SBBAs. Being a large sample of 818 respondents, ranging from the age of 18 to 70 , our experiment provides interesting results for marketers.

Another threat to external validity emerges from the place that was researched might separate itself from the places we wish to generalize the results to. This is particularly relevant for laboratory studies (Gripsrud \& Olsson, 2000). As the Norwegian School of

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Economics is a well-established institution, our study could be generalized to other Norwegian business schools if our experiment was only conducted on current students. Finally, a third threat to external validity might be due to the time or timing of the experiment. As we collected primary data this autumn, the research is not in the risk of being outdated. Furthermore, no special events were present during the nine days our experiment was active. As a result, we do not regard time as a threat to our external validity.

### 6.3 STRENGTHS AND LIMITATIONS

Our large sample size can be considered as a major strength of the study. The experiment being part of a master thesis consequently has limitations in terms of constraints on both time and resources. Still, we were able to achieve a large simple size ( $\mathrm{N}=818$ ), even compared to general research. Our large sample increases the chance of finding statistically significant results and reduces the margins of errors (Cohen, 1992).

Next, there are both strengths and weaknesses concerning our sample. Our mixed sample of both students and workers increases the validity of the experiment in terms of income. Having around 40 percent of the respondents being workers with higher income, makes our data richer in terms of increased economical choice. This is especially relevant for our car category, as the latter group of respondents is likely to have more experience with car brands and purchase situations. Furthermore, our mixed sample spreads the age-range of the respondents, providing a more generalizable sample. Moreover, another strength of our sample lies in the homogeneity of respondents. As all the respondents attend or have attended the Norwegian School of Economics, we ensured that they would be able to answer our questionnaire sufficiently (the students have much experience with surveys and experiments). Our relatively homogenous sample therefore eliminates some of the variance that might be caused by uncontrolled factors. On the other hand, a weakness of using such a convenience sample from a given subgroup of the population, is that it prevents us from generalizing to the whole Norwegian population.

Another strength for our study, especially for the validity, is letting the respondents evaluate the valence of the SBBAs themselves. We therefore avoid interpreting the data subjectively as done in other studies (cf. Erlandsen, 2013; Hem \& Teslo, 2012). The evaluation of
valence is highly important for our study as we according to theory, only focus on positive SBBAs.

An important limitation of our paper concerns the relevance of our findings. We know from theory that consumers' level of involvement depends on the given category they are considering (Supphellen et al., 2014; Hoyer et. al., 2013). Thus, some of our predefined categories could be considered as low-involvement evaluations, i.e. more shallow decisions. However, over time with repeated purchase, experience and learning, consumers will make conscious evaluations and deliberate purchases regardless if they are buying a car (big decision) or a beer (small decision). As our respondents are asked to elicit a preferred- and acceptable brand in the given category, they will likely pick brands they have much experience with. Thus, an important limitation of our paper is that our findings are less relevant for brands consumers have little experience with.

Furthermore, our four predefined categories for product- and service brands can be considered both a weakness and strength of the study. Compared to the study of Erlandsen (2013), the respondents could have been allowed to name their own chosen category, to ensure both knowledge and relevance. This could increase the reliability of the results. Moreover, our predefined categories might not be generalizable to other product- and service categories. However, because respondents have different motivations for answering a questionnaire, we chose to predefine categories to reduce the risk of misinterpretations. This could have lead to respondents having difficulties at a later stage in the questionnaire, considering the laddering from open questions. By providing general categories, we were able to minimize the mentioned errors, and customize the wording of the different question to match the given category. Thus, increasing the respondents' interpretation and understanding. In these terms, our predefined categories may also be considered as a strength of our study.

A limitation of our study is that we can't find support for dichotomous differentiation, as only 118 out of the 818 respondents reported positive dichotomously differentiated SBBAs. However, it does not imply that dichotomous differentiation is not important. As explained in the previous chapter and in the literature review, the very reason that we not find support for dichotomous differentiation is the fact that it can be hard to obtain. The study by

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Erlandsen (2013) found significant differences, when comparing the brand the respondents preferred the least to the brand they preferred the most and second most. Naturally, comparing a given brand to the brand consumers prefer the least, will increase the chance for significant differences on many dimensions. However, Erlandsen did not find significant differences between the most- and second most preferred brand. Thus, also his study fails to find effects between close competitors.

Further, another limitation of our study is that as it is conducted a cross-sectional study, hence it is not possible to examine longer-term effects for our findings. Consequently, a longitudinal study could have been applied to study change and development (Saunders et al., 2009). This limits our ability to say anything about how the differentiation dimensions will change before and after purchase, as well as after repurchase.

Finally, the elicitation of SBBAs can also be considered a limitation of our study in terms of data collection. In order to investigate relationships in depth, it is normal to apply a qualitative method (Jacobsen, 2000). Even though we let respondents freely elicit brand associations, we may have limited the process by asking the respondents to only name three PBBAs and three SBBAs. Associations could therefore have been left out, as well as associations that are hard to describe with words, demanding a series of different techniques to discover (cf. chapter 3.2.4, Questionnaire design). Therefore, important SBBAs that could influence our results may not have been included in our study.

### 6.4 SUGGESTIONS FOR FUTURE RESEARCH

This study is a part of a larger research project lead by Professor Magne Supphellen, focusing on differentiation of SBBAs. As our paper makes use of new theory, there is still a need for further studies to investigate the topic. The limitations and findings of our study provide implications for future research.

Our cross-sectional study limited our ability to state anything about effects over time, regarding change and development. It is likely that there will be differences in consumers' associative networks before and after a purchase of a brand, as well as after repurchase, as elaboration over time will create stronger links in their associative networks (Hoyer et al., 2013). Future research could therefore utilize a longitudinal study to investigate how differentiation at the secondary level changes over time, and examine what happens when consumers learn to choose brands with differentiated SBBAs. Such research should investigate whether consumers learn from their prior brand-experience to choose differentiated brands, or seek them regardless of earlier choices in the category. Additionally, such research should aim to investigate if brands that are repeatedly chosen receive stronger effects on the differentiation dimensions of SBBAs.

In our questionnaire, we constrained respondents to elicit only three PBBAs and three SBBAs, belonging to the PBBA chosen as most describing for the brand. This choice was made to increase the motivation for respondents to complete the questionnaire. Ultimately, we did not receive deeper and broader insight into their associative networks. Future research could therefore let respondents elicit a higher number of PBBAs and SBBAs in the questionnaire. Alternatively, it could be beneficial to conduct a qualitative data collection with more suitable methods to elicit brand associations. Such a method could provide more support for dichotomous differentiation, by investigating the term more deeply.

Furthermore, even though a single SBBA may not be dichotomous, it is possible that this is true for configurations or combinations of associations. For example, a quality-association may not be considered as unique by itself, but is perceived as dichotomous in the combination of other associations it is related to. Future research should therefore investigate this form of configurative differentiation.

## LIMITATIONS AND FUTURE RESEARCH

When investigating the favorability of SBBAs, our study only examines whether preferred brands have a higher number of positive SBBAs than acceptable brands, and not the degree of favorability. Future research could therefore include questions to examine whether the SBBAs of preferred brands are more positively evaluated than acceptable brands. Furthermore, we have not investigated the coherence of the positive SBBAs either. One would expect that it is beneficial to have consistency among the positive SBBAs, and that they are not widely spread without a meaningful connection between them. Future research could therefore also investigate this consistency between positive SBBAs.

In our study, respondents were constrained to elicit the PBBAs based on three different categories, namely functional-, experiential- and symbolic PBBAs. However, we may have limited our access to important information by restraining respondents to elicit only one benefit per type of PBBAs. As brand associations are highly individual, and some even hard to elicit, it is possible that the study could benefit from providing respondents more freedom in naming important PBBAs. Naturally, further research could dig deeper at this area to see what is most beneficial.

As a final point, we recommend that future research continue to investigate the differences between preferred and acceptable brands, as this provides valuable insight for cluttered markets. As no other research has investigated differentiation of SBBAs in terms of separating between product and service brands, there is still need for studies to continue our work. Both our main research and our additional analyses show that the differentiation dimensions may be moderated by the type of brand (products and services). Thus, our results may have been limited by predefined categories for products and services, in terms of elicitation of PBBAs and SBBAs, as well as the ability to generalize our findings (cf. Limitations, chapter 6.3). Future research could therefore randomize the sample in two, for product- and service categories respectively, and let the respondent choose a category freely.

## 7. CONCLUSION

In this master thesis we have investigated differentiation dimensions of secondary brand benefit associations (SBBAs) by comparing preferred- and acceptable brands, i.e. close alternatives in the consumer's consideration set. Furthermore, we examined whether the same effects apply for products and services. Our aim was to provide new insight to a paradox in the marketing literature; even though differentiation is known as the core of brand positioning, very little research is conducted to understand it.

Our experiment was not designed to make conclusions about causal relationships, and we cannot conclude that the differentiation dimensions are the cause for the observed differences between preferred and acceptable brands. Still, our findings are necessary, if not sufficient, proofs for such a causal relationship. The paper provides empirical support that SBBAs can differentiate brands. More importantly, the effects are different for product- and service brands. Services can be differentiated by the use of both instrumental and graded differentiation of SBBAs, while the number of positive SBBAs applies for both products and services. These are all general effects, i.e. not moderated by the need for uniqueness.

In addition we found proof that the differentiation dimensions of SBBAs affects both the evaluation and perceived differentiation of primary brand benefit associations (PBBAs). The effects were moderated by both the type of brand (products and services) and the type of PBBAs (functional, experiential and symbolic). This provides interesting managerial implications, implying that marketing must be adapted to fit both the type of brand and consumer needs.

We thereby conclude that preferred brands can be differentiated from acceptable brands, and that the differentiation depends on the type of brand. If marketers can understand the true relationship between SBBAs and PBBAs -
it will be possible to separate their zebra from the herd.

## REFERENCES

## 8. REFERENCES

Aaker, D. A. (1996). Building Strong Brands. New York: Free Press.

Aaker, D. (2009, September 30th). Beyond Functional Benefit. Marketing News , pp. 23.

Anderson, J. R. (1983). The architecture of cognition. Cambridge: Harvard University Press.

Andreassen, T. W., Lervik-Olsen, L., \& Calabretta, G. (2014). Deriving Valuable
Innovations: A Trend Spotting Approach. Working paper .

Assael, H. (1985). Marketing Management: Strategy and Action. Belmont, CA: Kent Publishing.

Bagozzi, R. P., Gürhan-Canli, Z., \& Priester, J. R. (2002). The Social Psychology of Consumer Behaviour. Buckingham: Open University Press.

Bateson, J. (1979). "Why We Need Service Marketing", in O.C. Ferrel S.W. Brown \& Lambs (eds.). Conceptual and Theoretical Developments in Marketing , pp. 131-146.

Bendixen, A. B. (2011, September 13th). - Differensier og dø. Retrieved November 29th, 2014, from www.kampanje.com: http://kampanje.com/archive/2011/09/--differensier-og-do/

Berry, L. L. (2000). Cultivating Service Brand Equity. Journal of the Academy of Market Science, 1, pp. 128-137.

Bitner, M. J., \& Booms, B. H. (1981). "Marketing Strategies and Organizational Structures for Service firms", in James H. Donnelly and Willian R. George, eds. Marketing of Services , pp. 47-51.

Blankson, C., \& Kalafatis, S. P. (1999). Issues and challenges in the positioning of service brands: a review. Journal of Product \& Brand Management , 8 (2), pp. 106-118.

Bryman, A., \& Cramer, D. (2009). Quantitative Data Analysis with SPSS 14, 15 \& 16 - $A$ Guide for Social Scientists. New York, United States of America: Routledge .

Calder, B. I., Philips, L. W., \& Tybout, A. M. (1981). Designing research for application. Journal of Consumer Research, 8, pp. 197-207.

Carmines, E. G., \& Zeller, R. A. (1979). Reliability and validity assessment. London, England: Sage Publications.

Coe, R. (2002, September 25th). It's the Effect Size, Stupid - What effect size is and why it is important. Retrieved November 19th, 2014, from Education-Line Database: http://www.leeds.ac.uk/educol/documents/00002182.htm

Cohen, J. (1992). A Power Primer. Psychological Bulletin, 112 (1), pp. 155-159.

Cohen, J. (1992). Statistical Power Analysis. Current Directions in Psychological Science , $l(3)$, pp. 98-101.

Collins, A. M., \& Loftus, E. F. (1975). A Spreading-Activation Theory of Semantic Processing. Psychological Review, 8 (6), pp. 407-428.

Darley, W., \& Smith, R. (1993 October). Advertising claim objectivity: atnecedents and effects. Journal of Marketing , 57, pp. 100-113.
de Chernatony, L., \& Dall'Olmo Riley, F. (1997). The chasm between managers' and consumers' views of brands: the experts' perspectives. Journal of Strategic Marketing , 5 (2), pp. 89-104.

Dillman, D. A. (2007). Mail and Internet Surveys. The Tailored Design Method (Vol. Second edition). Hoboken, New Jersey: John Wiley and Sons, Inc.

Ennew, C., \& Waite, N. (2013). Financial Services Marketing 2e: An International Guide to Principles and Practice (Vol. 2nd Edition). Routledge.

Erlandsen, E. (2013). To perspektiver på merkeposisjonering - Differensiering versus visuelt scerpreg. Høgskolen Sør-Trøndelag Avdeling Handelshøyskolen i Trondheim. Trondheim: Masteroppgave - Master of Science in Business.

Field, A. (2009). Discovering statistics using SPSS (Vol. Third edition). London: SAGE Publications Ltd.

Fink, A. (1995). The Survey Handbook (The Survey Kit 1 ed.). California, Thousand Oaks, USA: SAGE Publications, Inc.

## REFERENCES

Fishbein, M., \& Ajzen, I. (1974). Attitudes towards objects as predictors of single and multiple behavioral criteria. Psychological Review, 81 (No. 1), pp. 59-74.

Fisk, R. P., Brown, S. W., \& Bitner, M. J. (1993, Spring). Tracking the Evolution of the Services Marketing Literature. Journal of Retailing , 69 (1), pp. 61-103.

Fromkin, H. (1970). Effects of experimentally aroused feelings of undistinctiveness upon valuation of scarce and novel experiences. Journal of personality and social psychology, 16 (3), pp. 521-529.

Fuchs, C., \& Diamantopoulos, A. (2010). Evaluating the effectiveness of brand-positioning strategies from rom. European Journal of Marketing , 44 (11/12), pp. 1763-1786.

Graeff, T. R. (1997). Comprehending Product Attributes and Benefits: The Role of Product Knowledge and Means-End Chain Inferences. Psychology \& Marketing , pp. 163-183.

Gripsrud, G., \& Olsson, U. H. (2000). Markedsanalyse (2nd edition ed.). Kristiansand, Norway: Høyskoleforlaget AS.

Haraldsen, G. (1999). Spørreskjemametodikk etter kokebokmetoden. Oslo: Ad Notam.

Hem, A. F., \& Teslo, P. C. (2012). Brand Positioning Strategies. NHH- Norges
Handelshøyskole. Bergen: Master Thesis in Marketing and Brand Management.

Henriksen, H. (2012). Differensier eller dø - Eller differensier og dø? En empirisk studie om effekten av differensiering på sekundcert nivå. NHH - Norges Handelshøyskole, Masterutredning innen hovedprofilen Marketing \& Brand Management, Oslo.

Hoyer, W. D., MacInnis, D. J., \& Pieters, R. (2013). Consumer Behavior (Vol. 6th). US: South-Western, Cengage Learning.

Hu, L.-t., \& Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling: A Multidisciplinary Journal, 6 (1), pp. 1-55.

Hunt, S. D., Sparkman Jr, R. D., \& Wilcox, J. B. (1982). The Pretest in Survey Research: Issues and Preliminary Findings. Journal of Marketing Research , XIX, pp. 269-273.

Jacobsen, D. I. (2000). Hvordan gjennomføre undersøkelser?: Innføring i samfunnsvitenskapelig metode. Kristiansand: Høyskoleforlaget.

Johannessen, A., Tufte, P. A., \& Kristoffersen, L. (2011). Forskningsmetode for økonomiskadministrative fag. Oslo, Norway: Abstrakt forlag.

Kapferer, J.-N. (2008). The New Strategic Brand Management: Creating and Sustaining Brand Equity Long Term. United Kingdom: Kogan Page Publishers.

Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. Journal of Marketing, 57, pp. 1-22.

Keller, K. L. (2013). Strategic Brand Management: Building, Measuring and Managing Brand Equity (Vol. 4). New Jersey: Prentice Hall Inc.

Keller, K. L., Sternthal, B., \& Tybout, A. (2002, 09). Three Questions You Need to Ask About Your Brand. Harvard Business Review , pp. 80-86.

Kotler, P. H. (1991). Marketing Management: Analysis, Planning and Control (Vol. 9th Edition). NJ, Englewood Cliffs: Prentice-Hall, Inc.

Lee , M. (1989). Contingency Approach to Strategies for Service Firms . Journal of Business Research, 19, pp. 293-301.

Lewis, R. C., \& Klein, D. M. (1985). Personal constructs: Their use in the marketing of intangible services. Psychology \& Marketing , 2 (3), pp. 201-216.

Litwin, M. S. (1995). How to measure survey reliability and validity. California, United States of America: Sage Publications.

Matlin, M. W. (2009). Cognitive Psychology (Vol. 7th Edition). New Jersey: Hoboken, NH, John Wiley \& Sons (Asia) Pte Ltd.

McDonald, M., de Chernatony, L., \& Harris, F. (2001). Corporate Marketing and Service Brands: Moving Beyond the Fast-moving Consumer Goods Model. European Journal of Marketing , 35 (3/4), pp. 335-352.

Pallant, J. (2005). SPSS SURVIVAL MANUAL A step by step guide to data analysis using SPSS for Windows (Version 12). Australia: Allen \& Unwin.

## REFERENCES

Park, C. W., Jaworski, B. J., \& MacInnis, D. J. (1986, October). Strategic Brand ConceptImage Management. Jnurnal of Marketing , pp. 135-145.

Pedersen, P. E. (2014, January 23rd). Services, service characteristics and service innovation characteristics. Bergen, Hordaland: MBM 429 Service Innovation (2nd Lecture).

Phan, K. N., \& Ghantous, N. (2013). Managing brand associations to drive customers' trust and loyalty in Vietnamese banking . International Journal of Bank Marketing, 31 (6), pp. 456-480.

Puligadda, S., Ross Jr., W. T., \& Grewal, R. (2012). individual differences in Brand Schematicity. Journal of Marketing Research, XLVIIII, pp. 115-130.

Ringdal, K. (2001). Enhet og Mangfold. Samfunnsvitenskapelig forskning og kvantitativ metode. (1. utgave ed.). Bergen, Hordaland, Norway: Fagbokforlaget.

Romaniuk, J., Sharp, B., \& Ehrenberg, A. (2007). Evidence concerning the importance of perceived brand differentiation. Australasian Marketing Journal , 15 (2), pp. 42-54.

Saunders, M. N., Thornhill, A., \& Lewis, P. (2009). Research Methods for Business Students (Vol. 5th edition). Harlow: Prentice Hall - an imprint of Pearson Education.

Sharp, B. (2010). How Brands Grow: What Marketers Don't Know. Melbourne: Oxford University Press.

Shocker, A. D., Ben-Akiva, M., Boccara, B., \& Nedungadi, P. (1991). Consideration Set Influences on Consumer Decision-Making and Choice: Issues, Models, and Suggestions. Marketing Letters, 2 (3), pp. 181-197.

Snyder, C. R. (1992). Product Scarcity by Need for Uniqueness Interaction: A Consumer Catch-22 Carousel? Basic and applied social psychology, 13 (1), pp. 9-24.

Solomon, M. R. (2013). Consumer Behaviour - buying, having and being (Vol. 10th Edition). Boston: Pearson Education Limited.

Stevens, J. P. (2009). Applied multivariate statistics for the social sciences (Vol. 5th Editon). New York: Routledge, Taylor \& Francis group.

Suh, J.-C. (2009, June). The Role of Consideration Sets in Brand Choice: The Moderating Role of Product Characteristics. Psychology \& Marketing , 26 (6), pp. 534-550.

Supphellen, M. (2011, October 12). - Effektiv differensiering. Retrieved November 30th, 2014, from www.kampanje.com: http://kampanje.com/archive/2011/10/--effektivdifferensiering/

Supphellen, M. (2011, September 27). -Bendixens favorittlitteratur. Retrieved November 30th, 2014, from www.kampanje.com: http://kampanje.com/archive/2011/09/--bendixensfavorittlitteratur/

Supphellen, M. (2011, September 21). -Misvisende påstander om merkevarebygging. Retrieved November 11th, 2014 from www.kampanje.com:
http://kampanje.com/archive/2011/09/--misvisende-pastander-om-merkevarebygging/

Supphellen, M. (2000). Understanding core brand equity: guidelines for in-depth elicitation of brand associations. International Journal of Market Research , 42 (3), pp. 319-338.

Supphellen, M., Thorbjørnsen, H., \& Troye, S. V. (2014). Markedsføring: Verdibasert forventningsledelse. Bergen: Fagbokforlaget.

Teichert, T. A., \& Schöntag, K. (2010, April). Exploring Consumer Knowledge Structures Using Associative Network Analysis. Psychology \& Marketing , pp. 369-398.

Tian, K. T., Bearden, W. O., \& Hunter, G. L. (2001). Consumers' Need for Uniqueness: Scale Development and Validation. Journal of Consumer Research, 28 (1), pp. 50-66.

Trochim, W. M. (2006, October 20). The Research Methods Knowledge Base, 2nd Edition. Retrieved November 19, 2014, from http://www.socialresearchmethods.net/kb/

Trout, J., \& Rivkin, S. (2008). Differentiate or Die: Survival in Our Era of Killer Competition (Vol. 2nd Edition). Hoboken, NJ: Wiley \& Sons.

Vriens, M., \& Hofstede, F. T. (2000). Linking Attributes, Benefits, and Consumer Values: A powerful approach to market segmentation, brand positioning and advertising strategy. Marketing Research , pp. 4-10.

Weinberg, S. L., \& Abramowitz, S. K. (2008). Statistics using SPSS: An integrative approach (Vol. Second edition). Cambridge, NY, USA: Cambridge University Press.

Wyckham, R. G., Fitzroy, T., \& Mandry, G. D. (1975). Marketing of services: an evaluation of the theory. European Journal of Marketing , 9 (1), pp. 59-67.

Zeithaml, V. A. (1981). How consumer evaluation processes differ between goods and services, in J.H Donnely \& W.R George (eds.). Marketing of Services , pp. 186-190.

Zeithaml, V. A., Parasuraman, A., \& Leonard, L. B. (1985, Spring). Problems and Strategies in Services Marketing. Valarie A. Zeithaml, A. Parasuraman, \& Leonard L B, 48, pp. 33-46.

## APPENDIX

## 1. THE QUESTIONNAIRE

### 1.1 QUESTIONNAIRE FLOW

## Introduction

## Experiment questions (Part 1: Related to the chosen brand)



## Experiment questions (Part 2: Questions about brands in general)

| PAGE 15 | Q15 | Brand schematicity (part 1) |
| :--- | :--- | :--- |
| PAGE 16 | Q15 | Brand schematicity (part 2) |
| PAGE 17 | Q16 | Need for uniqueness |
| PAGE 18 | Q17 | Gender |
|  | Q18 | Working or student |
|  | Q19 | Age |

### 1.2 QUESTIONNAIRE LAYOUT IN QUALTRICS

## Example: Page 3 and question 3 about functional PBBAs



### 1.3 INTRODUCTION LETTER

Kjære respondenter,
Denne spørreundersøkelsen er en del av vår masteroppgave ved Norges Handelshøyskole (NHH).
Spørreundersøkelsen handler om merkevarer, og inngår som en del av et større forskningsprosjekt ledet av Professor Magne Supphellen.

Undersøkelsen vil ta ca. 10 minutter å gjennomføre, og er fullstendig anonym.
Vi setter stor pris på om du tar deg god tid til å reflektere over og svare godt på spørsmålene. Det vil bli foretatt kontrollspørsmål underveis.


Ved fullført undersøkelse kan du legge igjen din epostadresse (vil ikke bli koblet til dine svar) og ha muligheten til å vinne en av følgende premier:

## 1 iPad Air

4 VISA-gavekort til en verdi av 500,- NOK

### 1.4 QUESTIONS

In the following are the questions from our questionnaire, with the version for "Cars" and "Preferred brand" as an example. In questions where prior answers from open questions are used in the text, the prior answers are marked in "black" text.

## Page 1: Preferred and Acceptable brand (Q1)

Denne undersøkelsen handler om kategorien BILER.
Nevn det bilmerket du foretrekker mest og et bilmerke du mener er helt ok, men ikke foretrekker mest.
(Du vil få tildelt ett av disse merkene for resten av undersøkelsen, og det er derfor viktig at du tenker godt gjennom svaret ditt. Forsøk å svare så godt du kan til tross for ditt kunnskapsnivå om kategorien.)

1. Bilmerket jeg foretrekker mest:
2. Et bilmerke jeg mener er helt ok, men ikke foretrekker mest:

| Preferred brand |
| :---: |
| Acceptable brand |

## Page 2: Evaluation of the brand (Q2)

## Ta utgangspunkt i bilmerket "Preferred brand"

(Svar i hvilken grad du er enig/uenig i de følgende påstandene)

|  | 1. <br> Helt uenig | 2. <br> Uenig | 3. <br> Delvis uenig | 4. Nøytral | 5. <br> Delvis enig | $\begin{gathered} 6 . \\ \text { Enig } \end{gathered}$ | 7. <br> Helt enig |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Dette er et bilmerke jeg liker svært godt. | $\bigcirc$ | 0 | $\bigcirc$ | 0 | $\bigcirc$ | 0 | 0 |
| 2. Jeg har et nært forhold til dette bilmerket. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3. Jeg har gode følelser for dette bilmerket. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4. Jeg kommer til å kjøpe dette bilmerket neste gang. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. Jeg kan stole på dette bilmerket. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 6. Dette bilmerket holder hva det lover. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 7. Dette bilmerket er annerledes enn andre bilmerker. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8. Dette bilmerket er helt spesielt. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 9. Dette bilmerket står for verdier som jeg deler. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10. Dette bilmerket har en personlighet som ligner min egen. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 11. Jeg kan identifisere meg med dette bilmerket. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## Page 3: Functional benefit (Q3)

## Ta utgangspunkt i bilmerket "Preferred brand

Hvilken praktisk fordel får man ved å bruke dette bilmerket?

- Velg den mest aktuelle i form av et ord eller en setning.
(Eks: Hvis kategorien var "regnjakke", ville eksempler være tørrkledd, holde varmen osv.)
$\square$ Functional benefit


## Page 4: Experiential benefit (Q4)

## Ta utgangspunkt i bilmerket "Preferred brand"

Hvilken sansemessig opplevelse får man ved å bruke dette bilmerket?

- Velg den mest aktuelle i form av et ord eller en setning.
(Eks: Hvis kategorien var "kaffe", ville eksempler være smak, lukt, fin farge, god følelse osv.)
$\square$


## Experiential benefit

## Page 5: Symbolic benefit (Q5)

## Ta utgangspunkt i bilmerket "Preferred brand"

Hvilket sosialt signal uttrykker man ved å bruke dette bilmerket?

- Velg det mest aktuelle i form av et ord eller en setning.
(Eks: Hvis kategorien var "klokker", ville eksempler være popularitet, status, identitet, kompetanse osv.)


## Symbolic benefit

## Page 6: Evaluation of functional benefit (Q6)

Ta utgangspunkt i bilmerket "Preferred brand" og den praktiske egenskapen
"Funksjonell benefit"
(Svar i hvilken grad du er enig/uenig i de følgende påstandene)

|  | 1. Helt uenig | 2. <br> Uenig | 3. <br> Delvis uenig | 4. Nøytral | 5. Delvis enig | 6. Enig | 7. <br> Helt enig |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Bilmerket er meget bra på denne egenskapen. | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | $\bigcirc$ | O |
| 2. Jeg liker veldig godt denne egenskapen ved dette bilmerket. | 0 | $\bigcirc$ | 0 | 0 | $\bigcirc$ | 0 | 0 |
| 3. Denne egenskapen ved dette bilmerket er annerledes enn for andre bilmerker. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4. Dette bilmerket er helt spesiell på denne egenskapen. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## Page 7: Evaluation of experiential benefit (Q7)

## Ta utgangspunkt i bilmerket "Preferred brand" og den sansemessige opplevelsen "Experiential benefit"

(Svar i hvilken grad du er enig/uenig i de følgende påstandene)

|  | 1. <br> Helt uenig | $2 .$ <br> Uenig | 3. Delvis uenig | 4. <br> Nøytral | 5. Delvis enig | 6. Enig | 7. Helt enig |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Bilmerket er meget bra på denne opplevelsen. | O | 0 | O | 0 | O | 0 | O |
| 2. Jeg liker veldig godt denne opplevelsen ved dette bilmerket. | 0 | 0 | 0 | $\bigcirc$ | 0 | 0 | 0 |
| 3. Denne opplevelsen ved dette bilmerket er annerledes enn for andre bilmerker. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 4. Dette bilmerket er helt spesiell på å gi denne opplevelsen. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Page 8: Evaluation of symbolic benefit (Q8)
Ta utgangspunkt i bilmerket "Preferred brand" og det sosiale signalet "Symbolic benefit"

| (Svar i hvilken grad du er enig/uenig i de følgende påstandene) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1. Helt uenig | $2 .$ <br> Uenig | 3. <br> Delvis uenig | 4. Nøytral | 5. <br> Delvis enig | $\begin{gathered} 6 . \\ \text { Enig } \end{gathered}$ | 7. <br> Helt enig |
| 1. Bilmerket er meget bra for å uttrykke dette sosiale signalet. | O | 0 | O | 0 | 0 | 0 | O |
| 2. Jeg liker veldig godt at dette bilmerket lar meg uttrykke dette sosiale signalet. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3. Dette sosiale signalet er annerledes enn de sosiale signalene man får uttrykt med andre bilmerker. | 0 | O | 0 | 0 | 0 | 0 | 0 |
| 4. Dette bilmerket er helt spesiell på å kunne uttrykke dette sosiale signalet. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Page 9: Choose the most describing benefit for the brand (Q9)
Velg den egenskapen du mener best beskriver bilmerket "Preferred brand
O Functional benefit
O Experiential benefit
O Symbolic benefit

Page 10: Name three associations (Q10) and evaluate their valence (Q11)
Når du tenker på "Chosen benefit", hvilke assosiasjoner/tanker/bilder forbinder du med denne egenskapen?

Nevn ett ord/en setning i hver rute - dette kan være hva som helst som du forbinder med merket.

| Assosiasjon 1: | Association 1 |
| :--- | :--- |
| Assosiasjon 2: | Association 2 |
| Assosiasjon 3: | Association 3 |

Anser du dine assosiasjoner som positivt eller negativt ladet?

|  | Negativt | Nøytralt | Positivt |
| :--- | :---: | :---: | :---: |
| Association 1: | 0 | 0 | 0 |
| Association 2: | 0 | 0 | 0 |
| Association 3: | 0 | 0 | 0 |

## Page 11: Graded/dichotomous uniqueness (Q12)

Er assosiasjonen spesiell for akkurat dette bilmerket "Preferred brand" eller har du samme assosiasjon til andre bilmerker?

|  | 1. <br> Kobler assosiasjonen mindre til dette bilmerket enn andre bilmerker | 2. | 3. | 4. <br> Kobler assosiasjonen <br> like mye til dette bilmerket som til andre bilmerker | 5. | 6. | 7. Kobler assosiasjonen kun til dette bilmerket |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Association 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Association 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Association 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Page 12: Degree of instrumentality (Q13)

|  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
| 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| hvilken grad er assosiasjonen "Association 2" grunnen til "Chosen benefit"?

| 1. | 2. | 3. | 4. <br> Middels grad | 5. | 6. | 7. <br> Liten grad |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{0}$ | 0 | 0 | 0 | 0 | 0 | 0 |

I hvilken grad er assosiasjonen "Association 3" grunnen til "Chosen benefit"?

| 1. | 2. | 3. | 4. <br> Middels grad | 5. | 6. | . <br> Liten grad |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{0}$ | $\mathbf{0}$ | $\mathbf{0}$ | $\mathbf{0}$ | 0 | 0 | 0 |

Page 13: Personal knowledge about the brand category (Q14)

| Hvor mye kunnskap har du om kategorien "Bilmerker" i forhold til folk du kjenner? |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. | 2. | 3. | 4. | 5. | 6. | 7. |
| Mye mindre |  |  | Lik kunns |  |  | Langt mer |
| unnskap 0 | 0 | 0 | 0 | 0 | 0 | kunnskap $\mathbf{O}$ |

Page 14: Bridge to the second part of the questionnaire - General questions
Til slutt har vi noen generelle spørsmål om merkevarer.
Disse spørsmålene hører ikke sammen med kategorien du nettopp hadde.

Page 15: "Brand Schematicity" part 1 (Q15)
Svar i hvilken grad du er enig/uenig i de følgende påstandene om merkevarer generelt

|  | 1. <br> Helt uenig | 2. Uenig | 3. <br> Delvis uenig | 4. Nøytral | 5. <br> Delvis enig | $\begin{gathered} 6 . \\ \text { Enig } \end{gathered}$ | 7. Helt enig |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Produkt-egenskaper er viktigere enn merkenavn i mine kjøpsbeslutninger. | O | 0 | O | 0 | O | 0 | 0 |
| 2. Jeg bryr meg ikke om hvilke merker folk rundt meg bruker. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3. Når jeg handler så ser jeg alltid etter merkevarer. | $\bigcirc$ | O | $\bigcirc$ | 0 | 0 | O | 0 |
| 4. Merkevarer er ikke viktig for meg i det hele tatt. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 5. Når jeg vurderer produkter, så er merkevarenavnet viktigere for meg enn all annen informasjon. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Page 16: "Brand Schematicity" part 2 (Q15)
Svar i hvilken grad du er enig/uenig i de følgende påstandene om merkevarer generelt

|  | 1. Helt uenig | $2 .$ <br> Uenig | 3. Delvis uenig | 4. Nøytral | 5. Delvis enig | $\begin{gathered} 6 . \\ \text { Enig } \end{gathered}$ | 7. <br> Helt <br> enig |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 6. Jeg liker å omgi meg selv med gjenkjennelige merkenavn hjemme. | O | O | O | 0 | O | O | O |
| 7. Merkenavn påvirker betydelig mine kjøpsbeslutninger. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 8. Merkevarer er viktig for meg fordi de indikerer sosial status. | 0 | 0 | 0 | 0 | 0 | $\bigcirc$ | 0 |
| 9. Merkevarenavnet er den minst viktige informasjonen for meg når jeg vurderer et produkt. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10. Jeg holder meg oppdatert på hvilke merkevarer menneskene rundt meg bruker. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

## Page 17: Need for Uniqueness (Q16)

Svar i hvilken grad du er enig/uenig i de følgende påstandene om merkevarer generelt

|  | 1. Helt uenig | 2. Uenig | 3. <br> Delvis uenig | 4. Nøytral | 5. <br> Delvis enig | $\begin{gathered} 6 . \\ \text { Enig } \end{gathered}$ | 7. <br> Helt <br> enig |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Jeg unngår ofte produkter og merker som brukes av folk flest. | O | 0 | O | 0 | O | 0 | O |
| 2. Jeg foretrekker ofte produkter og merker som få andre jeg kjenner bruker. | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 3. Jeg synes ofte de produktene og merkene som folk flest kjøper er kjedelige. | $\bigcirc$ | 0 | 0 | 0 | 0 | 0 | 0 |

## Page 18: Gender, Working or student and age (Q17)

Kjønn
O Mann
O Kvinne

Jobber du eller er du student?
O Student
O Jobber

Hvor gammel er du?

## 2. DESCRIPTIVE STATISTICS

### 2.1 ALL VARIABLES

- $F=$ functional,$E=$ experiential, $\mathrm{S}=$ symbolic

|  | N | Minimum | Maximum | Mean | Std. Deviation | Variance | Skewness |  | Kurtosis |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Statistic | Statistic | Statistic | Statistic | Statistic | Statistic | Statistic | Std. Error | Statistic | Std. <br> Error |
| Preferred_Acceptable | 818 | 1.00 | 2.00 | 1.4951 | . 50028 | . 250 | . 020 | . 085 | -2.005 | . 171 |
| Preferred_Acceptable_Products | 409 | 1.00 | 2.00 | 1.4939 | . 50057 | . 251 | . 025 | . 121 | -2.009 | . 241 |
| PreferredÄcceptable_Services | 409 | 1.00 | 2.00 | 1.4963 | . 50060 | . 251 | . 015 | . 121 | -2.010 | . 241 |
| Products_Services | 818 | 1.00 | 2.00 | 1.5000 | . 50031 | . 250 | . 000 | . 085 | -2.005 | . 171 |
| Pos_number_SBBA | 818 | . 00 | 3.00 | 2.3252 | . 91599 | . 839 | -1.128 | . 085 | 140 | . 171 |
| Pos_number_SBBA_2 | 818 | -1.00 | 1.00 | . 6858 | . 44990 | . 202 | -1.428 | . 085 | 1.513 | . 171 |
| Pos_instr_SBBA | 818 | . 00 | 7.00 | 5.0878 | 1.70863 | 2.919 | -1.567 | . 085 | 2.395 | . 171 |
| Pos_instr_SBBA_2 | 818 | . 00 | 7.00 | 4.1895 | 1.89248 | 3.581 | -. 600 | . 085 | -. 437 | . 171 |
| Pos_dich_SBBA | 818 | . 00 | 3.00 | . 1944 | . 53299 | . 284 | 3.206 | . 085 | 11.070 | . 171 |
| Pos_neu_dich_SBBA | 818 | . 00 | 3.00 | . 2274 | . 57456 | . 330 | 2.862 | . 085 | 8.436 | . 171 |
| Pos_grad_SBEBA | 818 | . 00 | 7.00 | 4.7048 | 1.47793 | 2.184 | -1.775 | . 085 | 3.573 | . 171 |
| Pos_grad_SBBA_2 | 818 | . 00 | 7.00 | 3.8676 | 1.68859 | 2.851 | -. 663 | . 085 | -. 271 | . 171 |
| Pos_grad_567_SBBA | 818 | . 00 | 3.00 | 1.5391 | 1.09256 | 1.194 | -. 083 | . 085 | -1.292 | . 171 |
| Pos_grad_67_SBBA | 818 | . 00 | 3.00 | . 7861 | . 91737 | . 842 | . 932 | . 085 | -. 121 | . 171 |
| Gender - - | 818 | . 00 | 1.00 | . 5892 | . 49227 | . 242 | -. 363 | . 085 | -1.872 | . 171 |
| Occupation | 818 | . 00 | 1.00 | . 6039 | . 48938 | . 239 | . 426 | . 085 | -1.823 | . 171 |
| Age | 818 | 18.00 | 70.00 | 27.0672 | 8.36567 | 69.984 | 2.413 | . 085 | 6.423 | . 171 |
| Gender_Products | 409 | . 00 | 1 | . 6357 | . 48182 | . 232 | -. 566 | . 121 | -1.688 | . 241 |
| Occupation_Products | 409 | . 00 | 1 | . 6015 | . 49020 | . 240 | -. 416 | . 121 | -1.836 | . 241 |
| Age_Products | 409 | 18.00 | 70.00 | 27.1491 | 8.69780 | 75.652 | 2.641 | . 121 | 7.873 | . 241 |
| Gender_Services | 409 | . 00 | 1.00 | . 5428 | 49878 | . 249 | -. 172 | . 121 | -1.980 | . 241 |
| Occupation_Services | 409 | . 00 | 1.00 | . 6064 | . 48916 | . 239 | -. 437 | . 121 | -1.818 | . 241 |
| Age_Services | 409 | 18.00 | 63.00 | 26.9853 | 8.02965 | 64.475 | 2.115 | . 121 | 4.348 | . 241 |
| Knowledge | 818 | 1.00 | 7.00 | 4.1418 | 1.40446 | 1.973 | -. 224 | . 085 | -. 295 | . 171 |
| NFU_index | 818 | 1.00 | 7.00 | 3.5685 | 1.20710 | 1.457 | -. 025 | . 085 | -. 617 | . 171 |
| Attitude_index | 818 | 1.00 | 7.00 | 5.0839 | 1.14797 | 1.318 | -. 589 | . 085 | 487 | . 171 |
| Eval_ben | 818 | 1.00 | 7.00 | 6.1253 | . 91526 | . 838 | -1.605 | . 085 | 4.451 | . 171 |
| Diff_ben | 818 | 1.00 | 7.00 | 4.8337 | 1.46893 | 2.158 | -. 704 | . 085 | . 114 | . 171 |
| Int_dich_grad | 818 | . 00 | 21.00 | 1.2017 | 3.45785 | 11.957 | 3.656 | . 085 | 15.017 | . 171 |
| Int_dich_instr | 818 | . 00 | 21.00 | 1.0850 | 3.14259 | 9.876 | 3.581 | . 085 | 14.169 | . 171 |
| Int_grad_instr | 818 | . 00 | 49.00 | 25.4496 | 10.22912 | 104.635 | -. 647 | . 085 | . 595 | . 171 |
| Int_dich_number | 818 | . 00 | 9.00 | . 5220 | 1.50808 | 2.274 | 3.591 | . 085 | 14.252 | . 171 |
| Int_grad_number | 818 | . 00 | 21.00 | 11.6027 | 5.06577 | 25.662 | -. 663 | . 085 | -. 271 | . 171 |
| Int_instr_number | 818 | . 00 | 21.00 | 12.5685 | 5.67745 | 32.233 | -. 600 | . 085 | -. 437 | . 171 |
| Int_dich_NFU | 818 | . 00 | 18.00 | . 6985 | 2.06328 | 4.257 | 3.842 | . 085 | 17.424 | . 171 |
| Int_grad_NFU | 818 | . 00 | 42.00 | 16.7508 | 7.88769 | 62.216 | -. 073 | . 085 | -. 088 | . 171 |
| Int_instr_NFU | 818 | . 00 | 44.33 | 18.1195 | 8.78819 | 77.232 | -. 092 | . 085 | -. 355 | . 171 |
| Int_number_NFU | 818 | . 00 | 21.00 | 8.3040 | 4.48949 | 20.156 | . 131 | . 085 | -. 605 | . 171 |
| F_Preferred_Acceptable | 496 | 1.00 | 2.00 | 1.5181 | . 50018 | . 250 | -. 073 | . 110 | -2.003 | . 219 |
| F_Products_Services | 496 | 1.00 | 2.00 | 1.5524 | . 49775 | . 248 | -. 211 | . 110 | -1.963 | . 219 |
| F_Pos_number_SBBA | 496 | . 00 | 3.00 | 2.3528 | . 90482 | . 819 | -1.149 | . 110 | . 145 | . 219 |
| F_Pos_dich_SBBA | 496 | . 00 | 3.00 | . 1593 | . 47230 | . 223 | 3.586 | . 110 | 14.703 | . 219 |
| F_Pos_grad_SBBA | 496 | . 00 | 7.00 | 4.6942 | 1.41005 | 1.988 | -1.798 | . 110 | 3.913 | . 219 |
| F_Pos_instr_SBBA | 496 | . 00 | 7.00 | 5.1052 | 1.70698 | 2.914 | -1.480 | . 110 | 2.113 | . 219 |
| F_Gender | 496 | . 00 | 1.00 | . 5746 | 49490 | . 245 | -. 303 | . 110 | -1.916 | . 219 |
| F_Knowledge | 496 | 1.00 | 7.00 | 4.1875 | 1.43799 | 2.068 | -. 233 | . 110 | -. 321 | . 219 |
| F_NFU_index | 496 | 1.00 | 6.33 | 3.5222 | 1.19104 | 1.419 | . 035 | . 110 | -. 628 | . 219 |
| F_Attitude_index | 496 | 1.00 | 7.00 | 5.0551 | 1.15998 | 1.346 | -. 551 | . 110 | . 551 | . 219 |
| F_Eval_ben | 496 | 1.00 | 7.00 | 6.2964 | . 80646 | . 650 | -2.381 | . 110 | 10.979 | . 219 |
| F_Diff_ben | 496 | 1.00 | 7.00 | 4.7308 | 1.52575 | 2.328 | -. 687 | . 110 | -. 052 | . 219 |
| E_Preferred_Acceptable | 164 | 1.00 | 2.00 | 1.4146 | . 49417 | . 244 | . 350 | . 190 | -1.901 | . 377 |
| E_Products_Services | 164 | 1.00 | 2.00 | 1.4146 | . 49417 | . 244 | . 350 | . 190 | -1.901 | . 377 |
| E_Pos_number_SBBA | 164 | . 00 | 3.00 | 2.5000 | . 83262 | . 693 | -1.679 | . 190 | 2.006 | . 377 |
| E_Pos_dich_SBBA | 164 | . 00 | 3.00 | . 2256 | . 57904 | . 335 | 3.011 | . 190 | 9.680 | . 377 |
| E_Pos_grad_SBBA | 164 | . 00 | 7.00 | 4.7744 | 1.42714 | 2.037 | -1.892 | . 190 | 4.387 | . 377 |
| E_Pos_instr_SBBA | 164 | . 00 | 7.00 | 5.0925 | 1.57079 | 2.467 | -1.801 | . 190 | 3.663 | . 377 |
| E_Gender | 164 | . 00 | 1.00 | . 6159 | . 48788 | . 238 | -. 481 | . 190 | -1.791 | . 377 |
| E_Knowledge | 164 | 1.00 | 7.00 | 3.9390 | 1.35979 | 1.849 | -. 140 | . 190 | -. 320 | . 377 |
| E_NFU_index | 164 | 1.00 | 7.00 | 3.6098 | 1.24810 | 1.558 | -. 049 | . 190 | -. 595 | . 377 |
| E_Attitude_index | 164 | 1.00 | 7.00 | 5.1301 | 1.11903 | 1.252 | -. 843 | . 190 | . 956 | . 377 |
| E_Eval_ben | 164 | 1.50 | 7.00 | 6.1250 | . 95026 | . 903 | -1.592 | . 190 | 3.513 | . 377 |
| E_Diff_ben | 164 | 1.00 | 7.00 | 5.0671 | 1.42558 | 2.032 | -. 935 | . 190 | . 833 | . 377 |
| S_Preferred_Acceptable | 158 | 1.00 | 2.00 | 1.5063 | . 50155 | . 252 | -. 026 | . 193 | -2.025 | . 384 |
| S_Products_Services | 158 | 1.00 | 2.00 | 1.4241 | 49577 | . 246 | . 310 | . 193 | -1.928 | . 384 |
| S_Pos_number_SBBA | 158 | . 00 | 3.00 | 2.0570 | . 97904 | . 959 | -. 693 | . 193 | -. 616 | . 384 |
| S_Pos_dich_SBBA | 158 | . 00 | 3.00 | . 2722 | . 64491 | . 416 | 2.562 | . 193 | 6.245 | . 384 |
| S_Pos_grad_SBBA | 158 | . 00 | 7.00 | 4.6656 | 1.72524 | 2.976 | -1.611 | . 193 | 2.285 | . 384 |


|  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| S_Pos_instr_SBBA | 158 | .00 | 7.00 | 5.0285 | 1.85451 | 3.439 | -1.620 | .193 | 2.265 | .384 |
| S_Gender | 158 | .00 | 1.00 | .6076 | .48984 | .240 | -.445 | .193 | -1.825 | .384 |
| S_Knowledge | 158 | 1.00 | 7.00 | 4.2089 | 1.33093 | 1.771 | -.325 | .193 | -.074 | .384 |
| S_NFU_index | 158 | 1.00 | 6.33 | 3.6709 | 1.21385 | 1.473 | -.201 | .193 | -.507 | .384 |
| S_Attitude_index | 158 | 1.67 | 7.00 | 5.1266 | 1.14399 | 1.309 | -.470 | .193 | -.065 | .384 |
| S_Eval_ben | 158 | 2.00 | 7.00 | 5.5886 | .99444 | .989 | -.396 | .193 | .073 | .384 |
| S_Diff_ben | 158 | 1.50 | 7.00 | 4.9146 | 1.29697 | 1.682 | -.360 | .193 | -.312 | .384 |
| Valid N (listwise) | 158 |  |  |  |  |  |  |  |  |  |

### 2.2 CROSSTABULATIONS

Preferred_Acceptable * Gender Crosstabulation

|  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: |
|  |  | Gender |  |  |
|  |  | .00 | 1.00 |  |
| Preferred_Acceptable | 1.00 | 168 | 245 | 413 |
|  | 2.00 | 168 | 237 | 405 |
| Total | 336 | 482 | 818 |  |

Preferred_Acceptable * Occupation Crosstabulation

|  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: |
|  |  | Occupation |  |  |
|  |  | .00 | 1.00 | Total |
| Preferred_Acceptable | 1.00 | 157 | 256 |  |
|  | 2.00 | 167 | 238 | 405 |
| Total | 324 | 494 | 818 |  |

Preferred_Acceptable_Products * Gender_Products Crosstabulation
Count

|  |  | Gender_Products |  |  |
| :--- | :--- | ---: | ---: | ---: |
|  |  | .00 | 1.00 |  |
| Preferred_Acceptable_Products | 1.00 | 78 | 129 | 207 |
|  | 2.00 | 71 | 131 | 202 |
| Total |  | 149 | 260 | 409 |

Preferred_Acceptable_Products * Occupation_Products Crosstabulation
Count

|  |  | Occupation Products |  | Total |
| :---: | :---: | :---: | :---: | :---: |
|  |  | . 00 | 1.00 |  |
| Preferred_Acceptable_Products | 1.00 | 79 | 128 | 207 |
|  | 2.00 | 84 | 118 | 202 |
| Total |  | 163 | 246 | 409 |

Count Preferred_Acceptable_Services * Gender_Services Crosstabulation

|  |  | Gender_Services |  |  |
| :--- | :--- | ---: | ---: | ---: |
|  | Total |  |  |  |
| Preferred_Acceptable_Services | 1.00 | .00 | 1.00 | 116 |
|  | 2.00 | 90 | 206 |  |
| Total |  | 187 | 106 | 203 |

Preferred_Acceptable_Services * Occupation_Services Crosstabulation
Count

|  |  | Occupation_Services |  | Total |
| :---: | :---: | :---: | :---: | :---: |
|  |  | . 00 | 1.00 |  |
| Preferred_Acceptable_Services | 1.00 | 78 | 128 | 206 |
|  | 2.00 | 83 | 120 | 203 |
| Total |  | 161 | 248 | 409 |


| Count Ag |  | _Acceptab | sstabula |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Preferred_Acceptable |  | Total |
|  |  | 1 | 2 |  |
| Age | 18 | 6 | 1 | 7 |
|  | 19 | 11 | 16 | 27 |
|  | 20 | 21 | 22 | 43 |
|  | 21 | 35 | 26 | 61 |
|  | 22 | 41 | 29 | 70 |
|  | 23 | 44 | 40 | 84 |
|  | 24 | 56 | 59 | 115 |
|  | 25 | 39 | 49 | 88 |
|  | 26 | 22 | 29 | 51 |
|  | 27 | 26 | 18 | 44 |
|  | 28 | 24 | 24 | 48 |
|  | 29 | 15 | 12 | 27 |
|  | 30 | 6 | 12 | 18 |
|  | 31 | 3 | 7 | 10 |
|  | 32 | 8 | 5 | 13 |
|  | 33 | 2 | 1 | 3 |
|  | 34 | 2 | 2 | 4 |
|  | 35 | 1 | 6 | 7 |
|  | 36 | 3 | 4 | 7 |
|  | 37 | 7 | 4 | 11 |
|  | 38 | 4 | 2 | 6 |
|  | 39 | 2 | 3 | 5 |
|  | 40 | 1 | 6 | 7 |
|  | 41 | 0 | 6 | 6 |
|  | 42 | 1 | 1 | 2 |
|  | 43 | 1 | 1 | 2 |
|  | 44 | 0 | 1 | 1 |
|  | 45 | 3 | 1 | 4 |
|  | 46 | 2 | 0 | 2 |
|  | 47 | 5 | 2 | 7 |
|  | 48 | 3 | 1 | 4 |
|  | 49 | 2 | 2 | 4 |
|  | 50 | 1 | 1 | 2 |
|  | 51 | 2 | 1 | 3 |
|  | 52 | 1 | 0 | 1 |
|  | 53 | 1 | 1 | 2 |
|  | 54 | 1 | 2 | 3 |
|  | 55 | 0 | 1 | 1 |
|  | 56 | 1 | 1 | 2 |
|  | 57 | 2 | 1 | 3 |
|  | 58 | 0 | 2 | 2 |
|  | 59 | 1 | 0 | 1 |
|  | 60 | 0 | 2 | 2 |
|  | 61 | 1 | 0 | 1 |
|  | 63 | 1 | 1 | 2 |
|  | 64 | 1 | 0 | 1 |
|  | 67 | 2 | 0 | 2 |
|  | 70 | 2 | 0 | 2 |
| Total |  | 413 | 405 | 818 |

Age_Products * Preferred_Acceptable_Products Crosstabulation

|  |  | Preferred_Acceptable_Products |  | Total |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 1.00 | 2.00 |  |
| Age_Products | 18.00 | 3 | 0 | 3 |
|  | 19.00 | 6 | 9 | 15 |
|  | 20.00 | 12 | 12 | 24 |
|  | 21.00 | 13 | 11 | 24 |
|  | 22.00 | 23 | 15 | 38 |
|  | 23.00 | 19 | 21 | 40 |
|  | 24.00 | 31 | 28 | 59 |
|  | 25.00 | 17 | 19 | 36 |
|  | 26.00 | 12 | 18 | 30 |
|  | 27.00 | 13 | 9 | 22 |
|  | 28.00 | 14 | 13 | 27 |
|  | 29.00 | 7 | 7 | 14 |
|  | 30.00 | 4 | 5 | 9 |
|  | 31.00 | 2 | 5 | 7 |
|  | 32.00 | 4 | 3 | 7 |
|  | 34.00 | 2 | 1 | 3 |
|  | 35.00 | 1 | 4 | 5 |
|  | 36.00 | 2 | 1 | 3 |
|  | 37.00 | 4 | 2 | 6 |
|  | 38.00 | 3 | 2 | 5 |
|  | 39.00 | 0 | 1 | 1 |
|  | 40.00 | 1 | 2 | 3 |
|  | 41.00 | 0 | 3 | 3 |
|  | 43.00 | 0 | 1 | 1 |
|  | 45.00 | 0 | 1 | 1 |
|  | 47.00 | 3 | 1 | 4 |
|  | 48.00 | 1 | 1 | 2 |
|  | 49.00 | 1 | 1 | 2 |
|  | 51.00 | 0 | 1 | 1 |
|  | 53.00 | 0 | 1 | 1 |
|  | 54.00 | 0 | 1 | 1 |
|  | 57.00 | 2 | 0 | 2 |
|  | 59.00 | 1 | 0 | 1 |
|  | 60.00 | 0 | 2 | 2 |
|  | 61.00 | 1 | 0 | 1 |
|  | 63.00 | 0 | 1 | 1 |
|  | 64.00 | 1 | 0 | 1 |
|  | 67.00 | 2 | 0 | 2 |
|  | 70.00 | 2 | 0 | 2 |
| Total |  | 207 | 202 | 409 |

Age_Services * Preferred_Acceptable_Services Crosstabulation

|  |  | Preferred_Acceptable_Services |  | Total |
| :---: | :---: | :---: | :---: | :---: |
|  |  | 1.00 | 2.00 |  |
| Age_Services | 18.00 | 3 | 1 | 4 |
|  | 19.00 | 5 | 7 | 12 |
|  | 20.00 | 9 | 10 | 19 |
|  | 21.00 | 22 | 15 | 37 |
|  | 22.00 | 18 | 14 | 32 |
|  | 23.00 | 25 | 19 | 44 |
|  | 24.00 | 25 | 31 | 56 |
|  | 25.00 | 22 | 30 | 52 |
|  | 26.00 | 10 | 11 | 21 |
|  | 27.00 | 13 | 9 | 22 |
|  | 28.00 | 10 | 11 | 21 |
|  | 29.00 | 8 | 5 | 13 |
|  | 30.00 | 2 | 7 | 9 |
|  | 31.00 | 1 | 2 | 3 |
|  | 32.00 | 4 | 2 | 6 |
|  | 33.00 | 2 | 1 | 3 |
|  | 34.00 | 0 | 1 | 1 |
|  | 35.00 | 0 | 2 | 2 |
|  | 36.00 | 1 | 3 | 4 |
|  | 37.00 | 3 | 2 | 5 |
|  | 38.00 | 1 | 0 | 1 |
|  | 39.00 | 2 | 2 | 4 |
|  | 40.00 | 0 | 4 | 4 |
|  | 41.00 | 0 | 3 | 3 |
|  | 42.00 | 1 | 1 | 2 |
|  | 43.00 | 1 | 0 | 1 |
|  | 44.00 | 0 | 1 | 1 |
|  | 45.00 | 3 | 0 | 3 |
|  | 46.00 | 2 | 0 | 2 |
|  | 47.00 | 2 | 1 | 3 |
|  | 48.00 | 2 | 0 | 2 |
|  | 49.00 | 1 | 1 | 2 |
|  | 50.00 | 1 | 1 | 2 |
|  | 51.00 | 2 | 0 | 2 |
|  | 52.00 | 1 | 0 | 1 |
|  | 53.00 | 1 | 0 | 1 |
|  | 54.00 | 1 | 1 | 2 |
|  | 55.00 | 0 | 1 | 1 |
|  | 56.00 | 1 | 1 | 2 |
|  | 57.00 | 0 | 1 | 1 |
|  | 58.00 | 0 | 2 | 2 |
|  | 63.00 | 1 | 0 | 1 |
| Total |  | 206 | 203 | 409 |

## 3. CORRELATIONS

Correlations

| Correlations |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { Pos_numb } \\ \text { er_SBBA } \end{gathered}$ | $\begin{aligned} & \text { Pos_inst } \\ & \text { r_SBBBA } \end{aligned}$ | Pos dic h_SBBBA | Pos_gra d_SBBA | Gender | Knowl edge | $\begin{array}{\|c\|} \hline \text { NFU_i } \\ \text { ndex } \end{array}$ | Attitude_ index | $\begin{gathered} \text { Eval_be } \\ \mathrm{n} \end{gathered}$ | Diff_ben |
| $\begin{aligned} & \hline \text { Pos_nu } \\ & \text { mber_S } \\ & \text { BBA } \end{aligned}$ | Pearson Correlation Sig. (2-tailed) N | 1 818 | $\begin{gathered} .472^{\prime *} \\ .000 \\ 818 \\ \hline \end{gathered}$ | $\begin{array}{r} .144^{\prime \prime} \\ .000 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .491^{\prime \prime} \\ .000 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r}-.029 \\ .405 \\ 818 \\ \hline\end{array}$ | $\begin{array}{r}.046 \\ .189 \\ 818 \\ \hline\end{array}$ | $\begin{array}{r} .006 \\ .863 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .307 " \\ .000 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r}.369 \\ \\ .000 \\ 818 \\ \hline\end{array}$ | $.246 "$ <br> .000 <br> 818 |
| Pos_inst r_SBBA | Pearson Correlation Sig. (2-tailed) N | $\begin{array}{r} .472 \\ .000 \\ 818 \\ \hline \end{array}$ | 1 818 | $\begin{array}{r} .106 \text { " } \\ .003 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .600 \times \\ .000 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} -.010 \\ .771 \\ 818 \\ \hline \end{array}$ | $\begin{gathered} .088^{*} \\ .012 \\ 818 \\ \hline \end{gathered}$ | $\begin{array}{r} -.018 \\ .616 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .2233^{* *} \\ .000 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .282 " \\ .000 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .177^{*} \\ .000 \\ 818 \\ \hline \end{array}$ |
| Pos_dic h_SBBA | Pearson Correlation Sig. (2-tailed) N | $\begin{array}{r} .144^{\prime \prime} \\ .000 \\ 818 \\ \hline \end{array}$ | $\begin{gathered} .106 \\ .003 \\ 818 \end{gathered}$ | 1 818 | $\begin{gathered} .3655^{*} \\ .000 \\ 818 \end{gathered}$ | $\begin{array}{r} -.003 \\ .927 \\ 818 \\ \hline \end{array}$ | $\begin{aligned} & .032 \\ & .364 \\ & 818 \\ & \hline \end{aligned}$ | $\begin{aligned} & .008 \\ & .830 \\ & 818 \\ & \hline \end{aligned}$ | $\begin{array}{r} .009 \\ .805 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .035 \\ .313 \\ 818 \\ \hline \end{array}$ | $\begin{gathered} .195^{\prime \prime} \\ .000 \\ 818 \end{gathered}$ |
| Pos_gra d_SBBA | Pearson Correlation Sig. (2-tailed) N | $\begin{array}{r} .491 \\ .000 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .600^{\prime *} \\ .000 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .365^{\prime \prime} \\ .000 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r}1 \\ 818 \\ \hline\end{array}$ | $\begin{array}{r} .037 \\ .295 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .093^{\prime *} \\ .008 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} -.021 \\ .543 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .227 " \\ .000 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .286 \\ .000 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .311^{*} \\ .000 \\ 818 \\ \hline \end{array}$ |
| Gender | Pearson Correlation Sig. (2-tailed) N | $\begin{array}{r} -.029 \\ .405 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} -.010 \\ .771 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} -.003 \\ .927 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .037 \\ .295 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r}1 \\ 818 \\ \hline\end{array}$ | $\begin{aligned} & .038 \\ & .274 \\ & 818 \\ & \hline \end{aligned}$ | $\begin{array}{r} .106 " \\ .002 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} -.034 \\ .328 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} -.070^{\circ} \\ .044 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} -.021 \\ .550 \\ 818 \\ \hline \end{array}$ |
| Knowled ge | Pearson Correlation Sig. (2-tailed) N | $\begin{array}{r} .046 \\ .189 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .088^{*} \\ .012 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .032 \\ .364 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .093^{\prime *} \\ .008 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .038 \\ .274 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} 1 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .061 \\ .079 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .127 " \\ .000 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .080^{\circ} \\ .022 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .108{ }^{\prime \prime} \\ .002 \\ 818 \\ \hline \end{array}$ |
| $\begin{aligned} & \text { NFU_ind } \\ & \text { ex } \end{aligned}$ | Pearson Correlation Sig. (2-tailed) N | $\begin{array}{r} .006 \\ .863 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} -.018 \\ .616 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .008 \\ .830 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} -.021 \\ .543 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .106{ }^{\prime \prime} \\ .002 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .061 \\ .079 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} 1 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} -.018 \\ .602 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r}.002 \\ .965 \\ 818 \\ \hline\end{array}$ | $\begin{array}{r}.038 \\ .280 \\ 818 \\ \hline\end{array}$ |
| Attitude_ index | Pearson Correlation Sig. (2-tailed) N | $\begin{array}{r} .307 \\ .000 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .223^{* *} \\ .000 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .009 \\ .805 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .227 " \\ .000 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} -.034 \\ .328 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .127 " \\ .000 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} -.018 \\ .602 \\ 818 \\ \hline \end{array}$ | 1 818 | $\begin{array}{r} .455^{\prime \prime} \\ .000 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .338^{\prime \prime} \\ .000 \\ 818 \\ \hline \end{array}$ |
| $\begin{aligned} & \hline \text { Eval_be } \\ & \text { n } \end{aligned}$ | Pearson Correlation Sig. (2-tailed) N | $\begin{array}{r} .369 " \\ .000 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .282^{\prime \prime} \\ .000 \\ 818 \\ \hline \end{array}$ | $\begin{aligned} & .035 \\ & .313 \\ & 818 \\ & \hline \end{aligned}$ | $\begin{array}{r} .286 "+ \\ .000 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} -.070^{\circ} \\ .044 \\ 818 \\ \hline \end{array}$ | $\begin{gathered} .080^{\circ} \\ .022 \\ 818 \\ \hline \end{gathered}$ | $\begin{aligned} & .002 \\ & .965 \\ & 818 \\ & \hline \end{aligned}$ | $\begin{array}{r} .455 " \\ .000 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r}1 \\ 818 \\ \hline\end{array}$ | $\begin{array}{r} .342^{\prime \prime} \\ .000 \\ 818 \\ \hline \end{array}$ |
| Diff_ben | Pearson Correlation Sig. (2-tailed) N | $\begin{array}{r} .246 " \\ .000 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .177 \\ .000 \\ 818 \\ \hline \end{array}$ | $\begin{gathered} .195^{\prime \prime} \\ .000 \\ 818 \\ \hline \end{gathered}$ | $\begin{array}{r} .311^{* *} \\ .000 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} -.021 \\ .550 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .108{ }^{\prime *} \\ .002 \\ 818 \\ \hline \end{array}$ | $\begin{aligned} & .038 \\ & .280 \\ & 818 \\ & \hline \end{aligned}$ | $\begin{array}{r} .338{ }^{* *} \\ .000 \\ 818 \\ \hline \end{array}$ | $\begin{array}{r} .342 \\ .000 \\ 818 \\ \hline \end{array}$ | 1 818 |

${ }^{* *}$. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

## 4. RELIABILITY ANALYSIS

### 4.1 CONFIRMATORY FACTOR ANALYSIS (CFA): NFU

Output from SPSS AMOS:


Notes for model:
Computation of degrees of freedom (Default model)
Number of distinct sample moments: 6
Number of distinct parameters to be estimated: 4
Degrees of freedom (6-4):
Result (Default model)
Minimum was achieved
Chi-square $=, 880$
Degrees of freedom = 2
Probability level =,644

## Estimates

Estimates (Group number 1 - Default model)
Scalar Estimates (Group number 1 - Default model)
Maximum Likelihood Estimates
Regression Weights: (Group number 1 - Default model)

|  |  |  | Estimate | S.E. | C.R. | P | Label |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| NFU_3 | $<--$ | NFU | 1,000 |  |  |  |  |
| NFU_2 $<---$ | NFU | 1,000 |  |  |  |  |  |
| NFU_1 $<---$ | NFU | 1,000 |  |  |  |  |  |

Standardized Regression Weights: (Group number 1 - Default model)

|  |  | Estimate |  |
| :--- | :--- | :--- | :--- |
| NFU_3 | <--- | NFU | , 776 |
| NFU_2 | --- | NFU | , 786 |
| NFU_1 $<---$ | NFU | , 798 |  |

Variances: (Group number 1 - Default model)

|  | Estimate | S.E. | C.R. | P | Label |
| :--- | :--- | :--- | :--- | :--- | :--- |
| NFU | 1,208 | , 073 | 16,648 | $* * *$ |  |
| e1 | , 801 | , 054 | 14,745 | $* * *$ |  |
| e2 | , 749 | , 052 | 14,356 | $* * *$ |  |
| e3 | , 690 | , 050 | 13,854 | $* * *$ |  |

Squared Multiple Correlations: (Group number 1 - Default model)

|  | Estimate |
| :--- | :--- |
| NFU_1 | , 636 |
| NFU_2 | , 617 |
| NFU_3 | , 601 |

Matrices (Group number 1 - Default model)
Residual Covariances (Group number 1 - Default model)

|  | NFU_1 | NFU_2 | NFU_3 |
| :--- | :--- | :--- | :--- |
| NFU_1 | , 036 |  |  |
| NFU_2 | , 020 | ,- 011 |  |
| NFU_3 | , 006 | ,- 033 | ,- 030 |

Standardized Residual Covariances (Group number 1 - Default model)

|  | NFU_1 | NFU_2 | NFU_3 |
| :--- | :--- | :--- | :--- |
| NFU_1 | , 381 |  |  |
| NFU_2 | , 256 | ,- 114 |  |
| NFU_3 | , 080 | ,- 410 | ,- 299 |

## Model Fit Summary

CMIN

| Model | NPAR | CMIN | DF | P | CMIN/DF |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Default model | 4 | , 880 | 2 | , 644 | , 440 |
| Saturated model | 6 | , 000 | 0 |  |  |
| Independence model | 3 | 915,905 | 3 | , 000 | 305,302 |

RMR, GFI

| Model | RMR | GFI | AGFI | PGFI |
| :--- | :--- | :--- | :--- | :--- |
| Default model | , 025 | , 999 | , 998 | , 333 |
| Saturated model | , 000 | 1,000 |  |  |
| Independence model | , 853 | , 567 | , 134 | , 284 |

Baseline Comparisons

| Model | NFI <br> Delta1 | RFI <br> rho1 | IFI <br> Delta2 | TLI <br> rho2 | CFI |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Default model | , 999 | , 999 | 1,001 | 1,002 | 1,000 |
| Saturated model | 1,000 |  | 1,000 |  | 1,000 |
| Independence model | , 000 | , 000 | , 000 | , 000 | , 000 |

Parsimony-Adjusted Measures
Parsimony-Adjusted Measures

| Model | PRATIO | PNFI | PCFI |
| :--- | :--- | :--- | :--- |
| Default model | , 667 | , 666 | , 667 |
| Saturated model | , 000 | , 000 | , 000 |
| Independence model | 1,000 | , 000 | , 000 |

NCP
NCP

| Model | NCP | LO 90 | HI 90 |
| :--- | :--- | :--- | :--- |
| Default model | , 000 | , 000 | 4,849 |
| Saturated model | , 000 | , 000 | , 000 |
| Independence model | 912,905 | 817,079 | 1016,114 |

FMIN

| Model | FMIN | F0 | LO 90 | HI 90 |
| :--- | :--- | :--- | :--- | :--- |
| Default model | , 001 | , 000 | , 000 | , 006 |
| Saturated model | , 000 | , 000 | , 000 | , 000 |
| Independence model | 1,121 | 1,117 | 1,000 | 1,244 |

RMSEA

| Model | RMSEA | LO 90 | HI 90 | PCLOSE |
| :--- | :--- | :--- | :--- | :--- |
| Default model | , 000 | , 000 | , 054 | , 932 |
| Independence model | , 610 | , 577 | , 644 | , 000 |

AIC

| Model | AIC | BCC | BIC | CAIC |
| :--- | :--- | :--- | :--- | :--- |
| Default model | 8,880 | 8,919 | 27,708 | 31,708 |
| Saturated model | 12,000 | 12,059 | 40,241 | 46,241 |
| Independence model | 921,905 | 921,934 | 936,025 | 939,025 |

ECV

| Model | ECVI | LO 90 | HI 90 | MECVI |
| :--- | :--- | :--- | :--- | :--- |
| Default model | , 011 | , 012 | , 018 | , 011 |
| Saturated model | , 015 | , 015 | , 015 | , 015 |
| Independence model | 1,128 | 1,011 | 1,255 | 1,128 |

HOELTER

| Model | HOELTER | HOELTER |
| :--- | :--- | :--- |
|  | .05 | .01 |
| Default model | 5562 | 8550 |
| Independence model | 7 | 11 |

## Modification indices

Modification Indices (Group number 1 - Default model)
Covariances: (Group number 1 - Default model)
$\square$
Variances: (Group number 1 - Default model)

|  | M.I. Par Change |
| :--- | :--- |

Regression Weights: (Group number 1 - Default model)

|  | M.I. Par Change |
| :--- | :--- |

### 4.2 CRONBACHS ALPHA

Eval_ben ( $\mathrm{N}=818$ )
Reliability Statistics

| Reliability Statistics |  |
| ---: | :---: |
| Cronbach's Alpha | N of Items |
| .698 |  |

F Eval ben ( $\mathrm{N}=496$ ) Reliability Statistics

| Reliability Statistics |  |
| ---: | ---: |
| .829 | N of Items |

E_Eval_ben (N=164)
Reliability Statistics

| Cronbach's Alpha | N of Items |
| ---: | ---: |
| .597 | 2 |

S_Eval_ben (N=158)
Reliability Statistics

| Cronbach's Alpha | N of Items |
| ---: | ---: |
| .598 |  |

Diff_ben ( $\mathrm{N}=818$ )
Reliability Statistics

| Cronbach's Alpha | N of Items |
| ---: | ---: |
| .855 | 2 |

F_Diff_ben (N=496)

| Reliability Statistics |  |
| ---: | :---: |
| Cronbach's Alpha | N of Items |
| .877 |  |

E_Diff_ben ( $\mathrm{N}=164$ )

| Reliability Statistics |  |
| ---: | ---: |
| Cronbach's Alpha | N of Items |
| .877 |  |

S_Diff_ben ( $\mathrm{N}=158$ )

| Reliability Statistics |  |
| ---: | ---: |
| Cronbach's Alpha | N of Items |
| .817 |  |

## NFU_index ( $\mathrm{N}=818$ )

Reliability Statistics

| Cronbach's Alpha | N of Items |
| ---: | ---: |
| .829 | 3 |

Attitude_index ( $\mathrm{N}=818$ )
Reliability Statistics

| Cronbach's Alpha | N of Items |
| ---: | ---: |
| .807 | 3 |

F_Attitude_index ( $\mathrm{N}=496$ )
Reliability Statistics

| Cronbach's Alpha | N of Items |
| ---: | ---: |
| .806 |  |

E_Attitude_index ( $\mathrm{N}=164$ )
Reliability Statistics

| Cronbach's Alpha | N of Items |
| ---: | ---: |
| .807 | 3 |

S_Attitude_index ( $\mathrm{N}=158$ )

| Reliability Statistics |  |
| ---: | ---: |
| Cronbach's Alpha | N of Items |
| .818 |  |

## 5. ASSUMPTIONS

### 5.1 ASSUMPTIONS FOR ANOVA

### 5.1.1 Levenes test of homogeneity of variances

|  | Levene Statistic | df1 | df2 | Sig. |
| :---: | :---: | :---: | :---: | :---: |
| Age_Products | 1.168 | 1 | 407 | . 280 |
| Gender_Products | 1.124 | 1 | 407 | . 290 |
| Occupation_Products | 1.934 | 1 | 407 | . 165 |
| Age_Services | . 562 | 1 | 407 | . 454 |
| Gender_Services | 2.237 | 1 | 407 | . 136 |
| Occupation_Services | 1.531 | 1 | 407 | . 217 |
| Pos_number_SBBA | 37.082 | 1 | 816 | . 000 |
| Pos_number_SBBA_2 | 69.587 | , | 816 | . 000 |
| Pos_dich_SBBA | . 611 | 1 | 816 | . 435 |
| Pos_neu_dich_SBBA | 1.098 | 1 | 816 | . 295 |
| Pos_grad_SBBA | 25.970 | 1 | 816 | . 000 |
| Pos_grad_SBBA_2 | 24.120 | 1 | 816 | . 000 |
| Pos_grad_567_SBBA | . 003 | 1 | 816 | . 958 |
| Pos_grad_67_SBBA | . 028 | 1 | 816 | . 866 |
| Pos_instr_SBBA | 25.784 | 1 | 816 | . 000 |
| Pos_instr_SBBA_2 | 26.171 | 1 | 816 | . 000 |
| Eval_ben | . 007 | 1 | 816 | . 934 |
| Diff_ben | 6.606 | 1 | 816 | . 010 |
| Attitude_index | 7.290 | 1 | 816 | . 007 |

### 5.2 ASSUMPTIONS FOR ANCOVA

### 5.2.1 Linear relationship between the dependent variable and covariate






### 5.2.2 Homogeneity of regression slopes

## Dependent Variable: Pos_number_SBBA Tests of Between-Subjects Effects

| Dependent Variable: Pos_number_SBBA |
| :--- |
| Source |
| Type III Sum of |
| Corrected Model |
| Squares |

a. R Squared $=.055$ (Adjusted R Squared $=.052$ )

Dependent Variable. Pos Tests of Between-Subjects Effects
Dependent Variable: Pos_instr_SBBA

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Corrected Model | $31.063^{\text {a }}$ | 3 | 10.354 | 3.580 | . 014 |
| Intercept | 2179.766 | 1 | 2179.766 | 753.718 | . 000 |
| Preferred_Acceptable | 8.684 | 1 | 8.684 | 3.003 | . 084 |
| NFU_INDEX | . 148 | 1 | . 148 | . 051 | . 821 |
| Preferred_Acceptable * NFU_INDEX | 1.703 | 1 | 1.703 | . 589 | . 443 |
| Error | 2354.101 | 814 | 2.892 |  |  |
| Total | 23559.806 | 818 |  |  |  |
| Corrected Total | 2385.164 | 817 |  |  |  |

a. R Squared $=.013$ (Adjusted R Squared $=.009$ )

Tests of Between-Subjects Effects

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Corrected Model | $43.676^{\text {a }}$ | 3 | 14.559 | 6.808 | . 000 |
| Intercept | 1874.576 | 1 | 1874.576 | 876.589 | . 000 |
| Preferred_Acceptable | 1.221 | 1 | 1.221 | . 571 | . 450 |
| NFU_INDEX | . 186 | 1 | . 186 | . 087 | . 768 |
| Preferred_Acceptable * NFU_INDEX | 1.032 | 1 | 1.032 | . 483 | . 487 |
| Error | 1740.731 | 814 | 2.138 |  |  |
| Total | 19891.082 | 818 |  |  |  |
| Corrected Total | 1784.407 | 817 |  |  |  |

a. R Squared $=.024$ (Adjusted R Squared $=.021$ )

Dependent Variable: Pos_dich_SBBA Tests of Between-Subjects Effects

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Corrected Model | . $104{ }^{\text {a }}$ | 3 | . 035 | . 121 | . 948 |
| Intercept | 2.672 | 1 | 2.672 | 9.376 | . 002 |
| Preferred_Acceptable | . 045 | 1 | . 045 | . 158 | . 691 |
| NFU_INDEX | . 020 | 1 | . 020 | . 069 | . 793 |
| Preferred_Acceptable * NFU_INDEX | . 018 | 1 | . 018 | . 062 | . 804 |
| Error | 231.990 | 814 | . 285 |  |  |
| Total | 263.000 | 818 |  |  |  |
| Corrected Total | 232.094 | 817 |  |  |  |

a. R Squared $=.000$ (Adjusted R Squared $=-.003$ )

### 5.3 ASSUMPTIONS FOR REGRESSION ANALYSIS

### 5.3.1 Normal distribution of errors and Homoscedasticity

## Simple linear regression

Evaluation of all PBBAs effect on attitude towards the brand




Evaluation of functional PBBAs effect on attitude towards the brand


Evaluation of experiential PBBAs effect on attitude towards the brand



Evaluation of symbolic PBBAs effect on attitude towards the brand


Differentiation of all PBBAs effect on attitude towards the brand


Differentiation of functional PBBAs effect on attitude towards the brand


## ASSUMPTIONS

Differentiation of experiential PBBAs effect on attitude towards the brand


Differentiation of symbolic PBBAs effect on attitude towards the brand


Differentiation of all PBBAs effect on evaluation of PBBAs


Normal P-P Plot of Regression Standardized Residual


Scaterplot


Differentiation of functional PBBAs effect on evaluation of PBBAs


Differentiation of experiential PBBAs effect on evaluation of PBBAs


Differentiation of symbolic PBBAs effect on evaluation of PBBAs


Normal P-P Plot of Regression Standardized Residual


Scatterplot


## Multiple linear regression

## Regression A - Evaluation of all PBBAs (Total)



Regression B - Evaluation of all PBBAs (Products)


Regression C - Evaluation of all PBBAs (Services)


## Regression D - Evaluation of functional PBBAs



## Regression E - Evaluation of experiential PBBAs



Normal P-P Plot of Regression Standardized Residual


Regression F - Evaluation of symbolic PBBAs


Scaterplot


## Regression G - Differentiation of all PBBAs (Total)



Regression H - Differentiation of all PBBAs (Products)


Regression I - Differentiation of all PBBAs (Services)


Regression J - Differentiation of functional PBBAs


Regression K - Differentiation of experiential PBBAs




Regression L - Differentiation of symbolic PBBAs


## 6. TEST OF DISTRIBUTION OF PARTICIPANTS

### 6.1 ONE-WAY ANOVA: PREFERRED VS. ACCEPTABLE

### 6.1.1 Gender, Occupation and Age: Preferred_Acceptable

| Descriptives |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Mean | Std. Deviation | Std. Error | 95\% Confidence Interval for Mean |  | Minimum | Maximum |
|  |  | Lower Bound |  |  |  | Upper Bound |  |  |
| Gender | 1.00 |  | 413 | . 5932 | . 49183 | . 02420 | .5456 | . 6408 | . 00 | 1.00 |
|  | 2.00 | 405 | . 5852 | . 49330 | . 02451 | . 5370 | . 6334 | . 00 | 1.00 |
|  | Total | 818 | . 5892 | . 49227 | . 01721 | . 5555 | . 6230 | . 00 | 1.00 |
| Occupation | 1.00 | 413 | . 6199 | . 48601 | . 02392 | . 5728 | . 6669 | . 00 | 1.00 |
|  | 2.00 | 405 | . 5877 | . 49287 | . 02449 | . 5395 | . 6358 | . 00 | 1.00 |
|  | Total | 818 | . 6039 | . 48938 | . 01711 | . 5703 | . 6375 | . 00 | 1.00 |
| Age | 1.00 | 413 | 27.1477 | 8.94237 | . 44003 | 26.2827 | 28.0127 | 18.00 | 70.00 |
|  | 2.00 | 405 | 26.9852 | 7.74372 | . 38479 | 26.2287 | 27.7416 | 18.00 | 63.00 |
|  | Total | 818 | 27.0672 | 8.36567 | . 29250 | 26.4931 | 27.6414 | 18.00 | 70.00 |

ANOVA

|  |  | Sum of Squares | df | Mean Square | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Gender | Between Groups | . 013 | 1 | . 013 | . 054 | . 816 |
|  | Within Groups | 197.972 | 816 | . 243 |  |  |
|  | Total | 197.985 | 817 |  |  |  |
| Occupation | Between Groups | . 212 | 1 | . 212 | . 885 | . 347 |
|  | Within Groups | 195.455 | 816 | . 240 |  |  |
|  | Total | 195.667 | 817 |  |  |  |
| Age | Between Groups | 5.401 | 1 | $\begin{array}{r} 5.401 \\ 70.064 \end{array}$ | . 077 | . 781 |
|  | Within Groups | 57171.901 | 816 | $70.064$ |  |  |
|  | Total | 57177.302 | 817 |  |  |  |

### 6.1.2 Gender_Products, Occupation_Products and Age_Products: Preferred_Acceptable_Products



| ANOVA |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Sum of Squares | df | Mean Square | F | Sig. |
| Age_Products | Between Groups | 7.738 | 1 | $\begin{array}{r} 7.738 \\ 75.819 \end{array}$ | . 102 | . 750 |
|  | Within Groups | 30858.164 | 407 |  |  |  |
|  | Total | 30865.902 | 408 |  |  |  |
| Gender_Products | Between Groups | . 066 | 1 |  | . 282 | . 596 |
|  | Within Groups | 94.653 | 407 | $233$ |  |  |
|  | Total | 94.719 | 408 |  |  |  |
| Occupation_Products | Between Groups | . 120 | 1 | . 120 | . 497 | . 481 |
|  | Within Groups | 97.920 | 407 | . 241 |  |  |
|  | Total | 98.039 | 408 |  |  |  |

### 6.1.3 Gender_Services, Occupation_Services and Age_Services: Preferred_Acceptable_Services

| Descriptives |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | N | Mean | Std. Deviation | Std. Error | 95\% Confidence Interval forMean |  | Minimum | Maximum |
|  |  | Lower Bound |  |  |  | Upper Bound |  |  |
| Age_Services | 1.00 |  | 206 | 27.0097 | 8.32158 | . 57979 | 25.8666 | 28.1528 | 18.00 | 63.00 |
|  | 2.00 | 203 | 26.9606 | 7.74267 | . 54343 | 25.8891 | 28.0321 | 18.00 | 58.00 |
|  | Total | 409 | 26.9853 | 8.02965 | . 39704 | 26.2048 | 27.7658 | 18.00 | 63.00 |
| Gender_Services | 1.00 | 206 | . 5631 | . 49721 | . 03464 | . 4948 | . 6314 | . 00 | 1.00 |
|  | 2.00 | 203 | . 5222 | . 50074 | . 03515 | . 4529 | . 5915 | . 00 | 1.00 |
|  | Total | 409 | . 5428 | . 49878 | . 02466 | . 4943 | . 5913 | . 00 | 1.00 |
| Occupation_Services | 1.00 | 206 | . 6214 | . 48623 | . 03388 | . 5546 | . 6882 | . 00 | 1.00 |
|  | 2.00 | 203 | . 5911 | . 49284 | . 03459 | . 5229 | . 6593 | . 00 | 1.00 |
|  | Total | 409 | . 6064 | . 48916 | . 02419 | . 5588 | . 6539 | . 00 | 1.00 |

ANOVA

| ANOVA |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Sum of Squares | df | Mean Square | F | Sig. |
| Age_Services | Between Groups <br> Within Groups <br> Total | $\begin{array}{r} .247 \\ 26305.665 \\ 26305.912 \\ \hline \end{array}$ | $\begin{array}{r} 1 \\ 407 \\ 408 \\ \hline \end{array}$ | $\begin{array}{r} \hline .247 \\ 64.633 \end{array}$ | . 004 | . 951 |
| Gender_Services | Between Groups Within Groups Total | $\begin{array}{r} .171 \\ 101.330 \\ 101.501 \\ \hline \end{array}$ | $\begin{array}{r} 1 \\ 407 \\ 408 \\ \hline \end{array}$ | $\begin{aligned} & .171 \\ & .249 \end{aligned}$ | . 688 | . 407 |
| Occupation_Services | Between Groups Within Groups Total | .093 97.530 97.623 | $\begin{array}{r} 1 \\ 407 \\ 408 \\ \hline \end{array}$ | .093 .240 | . 390 | . 533 |

## 7. PRE-TEST OF THEORY

### 7.1 ONE-WAY ANOVA: PREFERRED VS. ACCEPTABLE

### 7.1.1 Evaluation of all PBBAs

Descriptives

|  | N | Mean | Std. Deviation | Std. Error | 95\% Confidence Interval for Mean |  | Minimum | Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Lower Bound | Upper Bound |  |  |
| 1.00 | 413 | 6.3123 | . 87537 | . 04307 | 6.2277 | 6.3970 | 1.00 | 7.00 |
| 2.00 | 405 | 5.9346 | . 91673 | . 04555 | 5.8450 | 6.0241 | 1.00 | 7.00 |
| Total | 818 | 6.1253 | . 91526 | . 03200 | 6.0625 | 6.1881 | 1.00 | 7.00 |

ANOVA
Eval_ben

|  | Sum of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Between Groups | 29.183 | 1 |  | 29.183 |  |
| Within Groups | 655.223 | 816 |  | 36.344 |  |
| Total | 684.406 | 817 |  |  | .000 |

### 7.1.2 Differentiation of all PBBAs

| Descriptives |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 95\% Confidence | rval for Mean |  |  |
|  | N | Mean | Std. Deviation | Std. Error | Lower Bound | Upper Bound | Minimum | Maximum |
| 1.00 | 413 | 5.2131 | 1.36376 | . 06711 | 5.0812 | 5.3450 | 1.00 | 7.00 |
| 2.00 | 405 | 4.4469 | 1.47303 | . 07320 | 4.3030 | 4.5908 | 1.00 | 7.00 |
| Total | 818 | 4.8337 | 1.46893 | . 05136 | 4.7329 | 4.9346 | 1.00 | 7.00 |

ANOVA
Diff_ben

|  | Sum of Squares | df | Mean Square | F | Sig. |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Between Groups | 120.031 | 1 | 120.031 |  | 59.619 |  |
| Within Groups | 1642.858 | 2.013 |  | .000 |  |  |
| Total | 1762.889 | 816 | 817 |  |  |  |

### 7.1.3 Attitude towards the brand

| Descriptives |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 95\% Confidence Interval for Mean |  |  |  |
|  | N | Mean | Std. Deviation | Std. Error | Lower Bound | Upper Bound | Minimum | Maximum |
| 1.00 | 413 | 5.5609 | . 96618 | . 04754 | 5.4675 | 5.6544 | 1.00 | 7.00 |
| 2.00 | 405 | 4.5975 | 1.11502 | . 05541 | 4.4886 | 4.7065 | 1.00 | 7.00 |
| Total | 818 | 5.0839 | 1.14797 | . 04014 | 5.0052 | 5.1627 | 1.00 | 7.00 |

ANOVA
ANOVA

| Attitude_index | Sum of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | 189.788 | 1 | 189.788 | 174.619 |  |
| Between Groups | 886.889 | 816 |  |  |  |
| Within Groups | 1076.677 | 817 |  |  |  |
| Total |  |  |  |  |  |

### 7.2 TWO-WAY ANOVA: PRODUCTS AND SERVICES

### 7.2.1 Evaluation of all PBBAs

| Tests of Between-Subjects Effects |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
| Corrected Model | $29.439^{\text {a }}$ | 3 | 9.813 | 12.196 | . 000 |
| Intercept | 30669.128 | 1 | 30669.128 | 38115.898 | . 000 |
| Preferred_Acceptable | 29.170 | 1 | 29.170 | 36.253 | . 000 |
| Products_Services | . 243 | 1 | . 243 | . 302 | . 583 |
| Preferred_Acceptable * | . 012 | 1 | . 012 | . 015 | . 903 |
| Products_Services Error | 654.967 | 814 | . 805 |  |  |
| Total | 31375.250 | 818 |  |  |  |
| Corrected Total | 684.406 | 817 |  |  |  |

a. R Squared $=.043$ (Adjusted R Squared $=.039)$
3. Preferred_Acceptable * Products_Services
Dependent Variable: Eval_ben

|  |  |  | $95 \%$ Confidence Interval |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Preferred_Acceptable | Products_Services | Mean | Std. Error | Lower Bound | Upper Bound |
| 1.00 | 1.00 | 6.333 |  | 6.211 | 6.456 |
|  | 2.00 | 6.291 | .062 | 6.169 | 6.414 |
| 2.00 | 1.00 | 5.948 | .063 | 5.824 | 6.072 |
|  | 2.00 | 5.921 | .063 | 5.798 | 6.045 |

### 7.2.2 Differentiation of all PBBAs

| Dependent Variable: Diff_ben |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
| Corrected Model | $121.020^{\text {a }}$ | 3 | 40.340 | 20.000 | . 000 |
| Intercept | 19081.413 | 1 | 19081.413 | 9460.117 | . 000 |
| Preferred_Acceptable | 119.984 | 1 | 119.984 | 59.485 | . 000 |
| Products_Services | . 727 | 1 | . 727 | . 360 | . 549 |
| Preferred_Acceptable * | . 271 | 1 | . 271 |  | . 714 |
| Products_Services | . 271 | 1 | . 271 | . 135 | . 714 |
| Error | 1641.869 | 814 | 2.017 |  |  |
| Total | 20875.500 | 818 |  |  |  |
| Corrected Total | 1762.889 | 817 |  |  |  |

a. R Squared $=, 069$ (Adjusted R Squared $=, 065$ )
3. Preferred_Acceptable * Products_Services

| Preferred_Acceptable | Products_Services | Mean | Std. Error | 95\% Confidence Interval |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Lower Bound | Upper Bound |
| 1.00 | 1.00 | 5.225 | . 099 | 5.031 | 5.418 |
|  | 2.00 | 5.201 | . 099 | 5.007 | 5.396 |
| 2.00 | 1.00 | 4.495 | . 100 | 4.299 | 4.691 |
|  | 2.00 | 4.399 | . 100 | 4.203 | 4.595 |

### 7.2.3 Attitude towards the brand

| Tests of Between-Subjects Effects |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
| Corrected Model | $199.603^{\text {a }}$ | 3 | 66.534 | 61.750 | . 000 |
| Intercept | 21101.597 | 1 | 21101.597 | 19584.103 | . 000 |
| Preferred_Acceptable | 189.580 | 1 | 189.580 | 175.946 | . 000 |
| Products_Services | 9.441 | 1 | 9.441 | 8.762 | . 003 |
| Preferred_Acceptable * | . 412 | 1 | . 412 | . 382 | . 537 |
| Error | 877.074 | 814 | 1.077 |  |  |
| Total | 22219.106 | 818 |  |  |  |
| Corrected Total | 1076.677 | 817 |  |  |  |

a. R Squared $=, 185$ (Adjusted R Squared $=, 182$ )
3. Preferred_Acceptable * Products_Services

Dependent Variable: Attitude_index

| Dependent Variable: Attitude_index |
| :--- |
|     $95 \%$ Confidence Interval  <br>     Mean Std. Error |
| 1.00 |

### 7.3 SIMPLE LINEAR REGRESSIONS: ATTITUDE

### 7.3.1 Evaluation of all PBBAs effect on attitude

| Model | Model Summary ${ }^{\text {b }}$ |  |  |  |  |
| :--- | :--- | :--- | :--- | ---: | ---: | ---: | ---: |
| 1 | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |

a. Predictors: (Constant), Eval_ben
b. Dependent Variable: Attitude_index

a. Dependent Variable: Attitude_index
b. Predictors: (Constant), Eval_ben

Coefficients ${ }^{\text {a }}$


[^14]
### 7.3.2 Evaluation of functional PBBAs effect on attitude



### 7.3.3 Evaluation of experiential PBBAs effect on attitude

| Model | Model Summary |  |  |  |  |
| :--- | ---: | :--- | :--- | ---: | ---: | ---: | ---: |
|  |  |  |  |  |  |
| 1 | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| a. Predictors: (Constant), E_Eval_ben |  |  |  |  |  |
| b. Dependent Variable: E_Attitude_index |  |  |  |  |  |


a. Dependent Variable: E_Attitude_index
b. Predictors: (Constant), E_Eval_ben

| Coefficients ${ }^{\text {a }}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Unstandardized Coefficients |  | Standardized Coefficients | t | Sig. | Collinearity Statistics |  |
|  | B | Std. Error | Beta |  |  | Tolerance | VIF |
| 1 (Constant) | . 317 | . 427 |  | . 742 | . 459 |  |  |
| E Eval ben | . 786 | . 069 | . 667 | 11.404 | . 000 | 1.000 | 1.000 |

a. Dependent Variable: E_Attitude_index

### 7.3.4 Evaluation of symbolic PBBAs effect on attitude

| Model | R | Model Summary ${ }^{\text {b }}$ |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | $.334^{\mathrm{a}}$ | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |


| a. Predictors: ( (Constant), S_Eval_ben |
| :--- |
| b. Dependent Variable: S Attitude index |


| Model |  | Sum of Squares | df | Mean Square | F | Sig. |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| 1 | Regression | 22.977 | 1 | 22.977 | 19.642 |  |
|  | Residual | 182.490 | 156 |  | 1.170 |  |
|  | Total | 205.468 | 157 |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |

a. Dependent Variable: S_Attitude_index
b. Predictors: (Constant), S_Eval_b̄en

Coefficients ${ }^{\text {a }}$

a. Dependent Variable: S_Attitude_index

### 7.3.5 Differentiation of all PBBAs effect on attitude



| ANOVA $^{\text {a }}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 123.225 | 1 | 123.225 | 105.460 | . $000{ }^{\text {b }}$ |
|  | Residual | 953.452 | 816 | 1.168 |  |  |
|  | Total | 1076.677 | 817 |  |  |  |

a. Dependent Variable: Attitude_index
b. Predictors: (Constant), Diff_ben

| Coefficients ${ }^{\text {a }}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Unstandardized Coefficients |  | Standardized Coefficients | t | Sig. | Collinearity Statistics |  |
|  | B | Std. Error | Beta |  |  | Tolerance | VIF |
| 1 (Constant) | 3.806 | . 130 |  | 29.264 | . 000 |  |  |
| Diff_ben | . 264 | . 026 | . 338 | 10.269 | . 000 | 1.000 | 1.000 |

[^15]
### 7.3.6 Differentiation of functional PBBAs effect on attitude



### 7.3.7 Differentiation of experiential PBBAs effect on attitude

| Model | Model Summary ${ }^{\text {b }}$ |  |  |  |  |
| :--- | :---: | ---: | ---: | ---: | ---: |
| 1 | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |


| a. Predictors: (Constant), E_Diff_ben |
| :--- |
| b. Dependent Variable: E_Attitude_index |


| Model |  | SNOVA |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| 1 | Regression | Squares | df | Mean Square | F |
|  | Residual | 27.379 | 1 | 27.379 |  |
|  | Total | 176.733 | 162 |  | 1.091 |

b. Predictors: (Constant), E Diff ben

Coefficients ${ }^{\text {a }}$

a. Dependent Variable: E_Attitude_index

### 7.3.8 Differentiation of symbolic PBBAs effect on attitude

| Model | Rodel Summary ${ }^{\text {b }}$ |  |  |  |  |  |  |  |  |  |
| :--- | :---: | ---: | ---: | ---: | ---: | :---: | :---: | :---: | :---: | :---: |
| 1 | R Square |  |  |  |  |  |  | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| a. Predictors: (Constant), S_Diff_ben |  |  |  |  |  |  |  |  |  |  |
| b. Dependent Variable: S_Attitude_index |  |  |  |  |  |  |  |  |  |  |


| Model |  | ANOVA |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| 1 | Regression | Sum of Squares | df | Mean Square | F | Sig. |
|  | Residual | 16.598 | 1 |  | 16.598 |  |
|  | Total | 188.869 | 156 |  | 1.211 |  |
|  | 205.468 | 157 |  |  |  |  |

a. Dependent Variable: S_Attitude_index
b. Predictors: (Constant), S_Diff_ben

Coefficients ${ }^{\text {a }}$

a. Dependent Variable: S_Attitude_index

### 7.4 SIMPLE LINEAR REGRESSIONS: EVALUATION OF PBBAs

### 7.4.1 Differentiation of PBBAs effect on evaluation of PBBAs

| Model Summary ${ }^{\text {b }}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |  |
| 1 | . $342^{\text {a }}$ | 117 | . 116 |  | . 86056 | 2.010 |
| a. Predictors: (Constant), Diff_ben <br> b. Dependent Variable: Eval_ben |  |  |  |  |  |  |
| ANOVA ${ }^{\text {a }}$ |  |  |  |  |  |  |
| Model |  | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 80.107 | - 1 | 80.107 | 108.170 | . $000{ }^{\circ}$ |
|  | Residual | 604.299 | -816 | . 741 |  |  |
|  | Total | 684.406 | - 817 |  |  |  |

a. Dependent Variable: Eval_ben
b. Predictors: (Constant), Diff_ben

| Coefficients ${ }^{\text {a }}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Unstandardized Coefficients |  | Standardized Coefficients | t | Sig. | Collinearity Statistics |  |
|  | B | Std. Error | Beta |  |  | Tolerance | VIF |
| 1 (Constant) | 5.095 | . 104 |  | 49.207 | . 000 |  |  |
| Diff_ben | . 213 | . 020 | . 342 | 10.400 | . 000 | 1.000 | 1.000 |

[^16]
### 7.4.2 Differentiation of functional PBBAs effect on evaluation of PBBAs

| Model | R | Model Summary ${ }^{\text {b }}$ |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | $.339^{\mathrm{a}}$ | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |

a. Predictors: (Constant), F_Diff_ben
b. Dependent Variable: F_Eval_ben

| Model | ANOVA |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| 1 | Regression | Sum of Squares | df | Mean Square | F | Sig. |
|  | Residual | 37.029 | 1 | 37.029 | 64.205 |  |
|  | Total | 284.904 | 494 | .577 |  |  |
|  | 321.933 | 495 |  |  |  |  |

a. Dependent Variable: F_Eval_ben
b. Predictors: (Constant), F Diff ben

a. Dependent Variable: F_Eval_ben

### 7.4.3 Differentiation of experiential PBBAs effect on evaluation of PBBAs

| Model | Model Summary ${ }^{\text {b }}$ |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson | | a. Predictors: (Constant), E_Diff_ben |
| :--- |
| b. Dependent Variable: E_Eval_ben |


| Model |  | Sum of Squares | ANOVA $^{\text {a }}$ |  | Mf | Mean Square |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| 1 | Regression | 19.623 | 1 | 19.623 | 24.920 | Sig. |
|  | Residual | 127.564 | 162 |  | $.000^{b}$ |  |
|  | Total | 147.188 | 163 |  |  |  |

a. Dependent Variable: E_Eval_ben
b. Predictors: (Constant), E_Diff_ben


[^17]
### 7.4.4 Differentiation of symbolic PBBAs effect on evaluation of PBBAs

| Model | Model Summary ${ }^{\text {b }}$ |  |  |  |  |
| :--- | :---: | :---: | :---: | ---: | ---: |
| 1 | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |


| a. Predictors: (Constant), S_Diff_ben |
| :--- |
| b. Dependent Variable: S_Eval_ben |


| Model |  | SNOVA |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| 1 | Regression | Squares | df | Mean Square | F | Sig. |
|  | Residual | 41.109 | 1 | 41.109 |  | 56.181 |
|  | Total | 114.150 | 156 |  | .732 |  |
|  | 155.259 | 157 |  |  |  |  |

a. Dependent Variable: S_Eval_ben
b. Predictors: (Constant), S_Diff_ben

Coefficients ${ }^{\text {a }}$

a. Dependent Variable: S_Eval_ben

## 8. MAIN RESEARCH: TESTS OF H1-H4

### 8.1 ONE-WAY ANOVA: PREFERRED VS. ACCEPTABLE

### 8.1.1 Number of positive SBBAs

Descriptives

|  | N | Mean | Std. Deviation | Std. Error | 95\% Confidence Interval for Mean |  | Minimum | Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Lower Bound | Upper Bound |  |  |
| 1.00 | 413 | 2.5375 | . 77062 | . 03792 | 2.4630 | 2.6121 | . 00 | 3.00 |
| 2.00 | 405 | 2.1086 | . 99903 | . 04964 | 2.0111 | 2.2062 | . 00 | 3.00 |
| Total | 818 | 2.3252 | . 91599 | . 03203 | 2.2623 | 2.3880 | . 00 | 3.00 |

ANOVA
Pos_number_SBBA

|  | Sum of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Between Groups | 37.613 | 1 | 37.613 | 47.373 |  |
| Within Groups | 647.888 | 816 |  | .794 |  |
| Total | 685.501 | 817 |  |  |  |

### 8.1.2 Number of positive SBBAs: Alternative calculation



### 8.1.3 Instrumental differentiation of positive SBBAs

| Descriptives |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pos instr SBBA |  |  |  |  |  |  |  |  |
|  | N | Mean | Std. Deviation | Std. Error | 95\% Confidence Interval for Mean |  | Minimum | Maximum |
|  |  |  |  |  | Lower Bound | Upper Bound |  |  |
| 1.00 | 413 | 5.2748 | 1.42234 | . 06999 | 5.1372 | 5.4124 | . 00 | 7.00 |
| 2.00 | 405 | 4.8971 | 1.94127 | . 09646 | 4.7075 | 5.0868 | . 00 | 7.00 |
| Total | 818 | 5.0878 | 1.70863 | . 05974 | 4.9706 | 5.2051 | . 00 | 7.00 |

Pos_instr_SBBA

|  | ANOVA |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Between Groups | Sum of Squares | df | Mean Square |  |  |
| Within Groups | 29.170 | 1 |  | F | Sig. |
| Total | 2355.994 | 816 | 29.170 | 10.103 |  |

### 8.1.4 Instrumental differentiation of positive SBBAs: Alternative calculation

Descriptives

| Pos instr_SBBA 2 |
| :--- |

ANOVA

| Pos_instr_SBBA 2 | Sum of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
|  | 125.313 | 1 | 125.313 | 36.510 | .000 |
| Between Groups | 2800.761 | 816 |  | 3.432 |  |
| Within Groups | 2926.074 | 817 |  |  |  |
| Total |  |  |  |  |  |

### 8.1.5 Graded differentiation of positive SBBAs

Descriptives

|  | N | Mean | Std. Deviation | Std. Error | 95\% Confidence Interval for Mean |  | Minimum | Maximum |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Lower Bound | Upper Bound |  |  |
| 1.00 | 413 | 4.9305 | 1.20380 | . 05924 | 4.8141 | 5.0469 | . 00 | 7.00 |
| 2.00 | 405 | 4.4747 | 1.68340 | . 08365 | 4.3102 | 4.6391 | . 00 | 7.00 |
| Total | 818 | 4.7048 | 1.47787 | . 05167 | 4.6034 | 4.8062 | . 00 | 7.00 |

ANOVA
Pos_grad_SBBA

|  | Sum of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Between Groups | 42.489 | 1741.917 | 1784.407 | 816 |  |
| Within Groups | 1784.407 | 817 |  | 19.904 | .000 |
| Total |  | 2.135 |  |  |  |

### 8.1.6 Graded differentiation of positive SBBAs: 5,6 and 7

Descriptives


ANOVA
Pos_grad_567_SBBA

|  | Sum of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Between Groups | 44.456 | 1 | 44.456 |  | 38.973 |
| Within Groups | 930.792 | 816 |  | 1.141 |  |
| Total | 975.248 | 817 |  |  |  |

### 8.1.7 Graded differentiation of positive SBBAs: 6 and 7

Descriptives


ANOVA
Pos_grad_67_SBBA

|  | Sum of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Between Groups | 10.060 | 10.060 | 12.117 |  |  |
| Within Groups | 677.501 | 816 |  | .830 |  |
| Total | 687.561 | 817 |  |  |  |

### 8.1.8 Graded differentiation of positive SBBAs: Alternative calculation

| Descriptives |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pos_grad_SBBA_2 |  |  |  |  |  |  |  |  |
|  | N | Mean | Std. Deviation | Std. Error | 95\% Confidence Interval for Mean |  | Minimum | Maximum |
|  |  |  |  |  | Lower Bound | Upper Bound |  |  |
| 1.00 | 413 | 4.2607 | 1.46961 | . 07231 | 4.1185 | 4.4028 | . 00 | 7.00 |
| 2.00 | 405 | 3.4667 | 1.80126 | . 08951 | 3.2907 | 3.6426 | . 00 | 7.00 |
| Total | 818 | 3.8676 | 1.68859 | . 05904 | 3.7517 | 3.9835 | . 00 | 7.00 |

## ANOVA

Pos_grad_SBBA_2

|  | Sum of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Between Groups | 128.921 |  | 1 | 128.921 | 47.804 |
| Within Groups | 2200.621 | 816 |  | 2.697 |  |
| Total | 2329.542 | 817 |  |  |  |

### 8.1.9 Number of dichotomously differentiated positive SBBAs



### 8.1.10 Number of dichotomously differentiated positive and neutral SBBAs

Descriptives


ANOVA

|  | Sum of Squares | df | Mean Square | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Between Groups | ,075 | 1 | ,075 | ,226 | ,634 |
| Within Groups | 269,632 | 816 | ,330 |  |  |
| Total | 269,707 | 817 |  |  |  |

### 8.2 TWO-WAY ANOVA: PRODUCTS AND SERVICES

| Between-Subjects Factors |  |  |
| :--- | :--- | :--- |
|  |  | N |
| Preferred_Acceptable | 1.00 | 413 |
|  | 2.00 | 405 |
| Products_Services | 1.00 | 409 |
|  | 2.00 | 409 |

### 8.2.1 Number of positive SBBAs

Tests of Between-Subjects Effects
Dependent Variable: Pos_number_SBBA

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Corrected Model | $42.418^{\text {a }}$ | 3 | 14.139 | 17.897 | . 000 |
| Intercept | 4414.593 | 1 | 4414.593 | 5587.889 | . 000 |
| Preferred_Acceptable | 37.566 | 1 | 37.566 | 47.551 | . 000 |
| Products_Services | 2.368 | 1 | 2.368 | 2.997 | . 084 |
| Preferred_Acceptable * | 2.484 | 1 | 2.484 | 3.144 | . 077 |
| Products_Services |  |  | 2.484 |  |  |
| Error | 643.083 | 814 | . 790 |  |  |
| Total | 5108.000 | 818 |  |  |  |
| Corrected Total | 685.501 | 817 |  |  |  |

a. $R$ Squared $=.062$ (Adjusted R Squared $=.058$ )

## Estimated Marginal Eeans

3. Preferred_Acceptable * Products_Services

Dependent Variable: Pos_number_SBBA

| Preferred_Acceptable | Products Services | Mean | Std. Error | 95\% Confidence Interval |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Lower Bound | Upper Bound |
| 1.00 | 1.00 | 2.536 | . 062 | 2.415 | 2.657 |
|  | 2.00 | 2.539 | . 062 | 2.417 | 2.660 |
| 2.00 | 1.00 | 2.218 | . 063 | 2.095 | 2.341 |
|  | 2.00 | 2.000 | . 062 | 1.878 | 2.122 |

### 8.2.2 Instrumental differentiation of positive SBBAs

Tests of Between-Subjects Effects

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Corrected Model | $48.946^{\text {a }}$ | 3 | 16.315 | 5.685 | . 001 |
| Intercept | 21160.026 | 1 | 21160.026 | 7372.708 | . 000 |
| Preferred_Acceptable | 29.215 | 1 | 29.215 | 10.179 | . 001 |
| Products_Services | 2.943 | 1 | 2.943 | 1.025 | . 312 |
| Preferred_Acceptable * | 16.693 | 1 | 16.693 | 5.816 | . 016 |
| Products_Services | 16.693 | 1 | 16.693 | 5.816 | . 016 |
| Error | 2336.219 | 814 | 2.870 |  |  |
| Total | 23559.817 | 818 |  |  |  |
| Corrected Total | 2385.165 | 817 |  |  |  |

a. R Squared $=.021$ (Adjusted R Squared $=.017$ )

Estimated Marginal Means
3. Preferred_Acceptable * Products_Services
Dependent Variable: Pos_instr_SBBA

|  |  |  | $95 \%$ Confidence Interval |  |  |
| :--- | :--- | :--- | ---: | ---: | ---: |
| Preferred_Acceptable | Products_Services | Mean | Std. Error | Lower Bound | Upper Bound |
| 1.00 | 1.00 | 5.072 |  | 4.841 | 5.304 |
|  | 2.00 | 5.478 | .118 | 5.246 | 5.710 |
| 2.00 | 1.00 | 4.980 | .119 | 4.746 | 5.214 |
|  | 2.00 | 4.814 | .119 | 4.581 | 5.048 |

### 8.2.3 Instrumental differentiation of positive SBBAs: Alternative calculation

Dependent Variable: Pos_instr_SBBA_2 Tests of Between-Subjects Effects

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Corrected Model | $147.665^{\text {a }}$ | 3 | 49.222 | 14.421 | . 000 |
| Intercept | 14332.332 | 1 | 14332.332 | 4198.984 | . 000 |
| Preferred_Acceptable | 125.227 | 1 | 125.227 | 36.688 | . 000 |
| Products_Services | 2.310 | 1 | 2.310 | . 677 | . 411 |
| Preferred_Acceptable * | 20.173 | 1 | 20.173 | 5.910 | . 015 |
| Products_Services |  |  |  | 5.910 | . 015 |
| Error | 2778.415 | 814 | 3.413 |  |  |
| Total | 17283.456 | 818 |  |  |  |
| Corrected Total | 2926.080 | 817 |  |  |  |

a. R Squared $=.050$ (Adjusted R Squared $=.047$ )

Estimated Marginal Means
3. Preferred_Acceptable * Products_Services

Dependent Variable: Pos_instr_SBBA_2

|  |  |  | 95\% Confidence Interval |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  | Products_Services | Mean | Std. Error | Lower Bound | Upper Bound |
|  | 1.00 | 4.473 |  | 4.221 | 4.725 |
|  | 2.00 | 4.681 | .129 | 4.429 | 4.934 |
| 2.00 | 1.00 | 4.005 | .130 | 3.750 | 4.260 |
|  | 2.00 | 3.585 | .130 | 3.330 | 3.839 |

### 8.2.4 Number of dichotomously differentiated positive SBBAs

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Corrected Model | .105 ${ }^{\text {a }}$ | 3 | . 035 | . 122 | . 947 |
| Intercept | 30.880 | 1 | 30.880 | 108.350 | . 000 |
| Preferred_Acceptable | . 068 | 1 | . 068 | . 238 | . 626 |
| Products_Services | . 001 | 1 | . 001 | . 005 | . 946 |
| Preferred_Acceptable * | . 036 | 1 | . 036 | . 125 | . 724 |
| Products_Services |  |  |  |  |  |
| Error | 231.990 | 814 | . 285 |  |  |
| Total | 263.000 | 818 |  |  |  |
| Corrected Total | 232.094 | 817 |  |  |  |

a. R Squared $=.000$ (Adjusted $R$ Squared $=-.003$ )

Estimated Marginal Means
3. Preferred_Acceptable * Products_Services

| Preferred_Acceptable | Products_Services | Mean | Std. Error | 95\% Confidence Interval |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Lower Bound | Upper Bound |
| 1.00 | 1.00 | . 198 | . 037 | . 125 | . 271 |
|  | 2.00 | . 209 | . 037 | . 136 | . 282 |
| 2.00 | 1.00 | . 193 | . 038 | . 119 | . 267 |
|  | 2.00 | . 177 | . 037 | . 104 | . 251 |

### 8.2.5 Graded differentiation of positive SBBAs


a. R Squared $=.034$ (Adjusted R Squared $=.031$ )
3. Preferred_Acceptable * Products_Services

Dependent Variable: Pos grad SBBA

|  |  |  | $95 \%$ Confidence Interval |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Preferred_Acceptable | Products_Services |  | Mean |  | Std. Error |
| 1.00 | 1.00 | 4.793 | .101 | 4.595 |  |
|  | 2.00 | 5.069 | .101 | 4.870 | 5.268 |
| 2.00 | 1.00 | 4.638 | .102 | 4.437 | 4.839 |
|  | 2.00 | 4.312 | .102 | 4.112 | 4.512 |

### 8.2.6 Graded differentiation of positive SBBAs: Alternative calculation

## Dependent Variable: Pos_grad_SBBA_2

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Corrected Model | $150.693^{\text {a }}$ | 3 | 50.231 | 18.766 | . 000 |
| Intercept | 12212.119 | 1 | 12212.119 | 4562.346 | . 000 |
| Preferred_Acceptable | 128.792 | 1 | 128.792 | 48.116 | . 000 |
| Products_Services | 5.115 | 1 | 5.115 | 1.911 | . 167 |
| Preferred_Acceptable * | 16.837 | 1 | 16.837 | 6.290 | . 012 |
| Products_Services | 16.837 | 1 | 16.837 | 6.290 | . 012 |
| Error | 2178.850 | 814 | 2.677 |  |  |
| Total | 14565.228 | 818 |  |  |  |
| Corrected Total | 2329.542 | 817 |  |  |  |

a. R Squared $=.065$ (Adjusted R Squared $=.061$ )

Estimated Marginal Means
3. Preferred_Acceptable * Products_Services

Dependent Variable: Pos_grad_SBBA_2

| Preferred_Acceptable | Products_Services | Mean | Std. Error | 95\% Confidence Interval |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Lower Bound | Upper Bound |
| 1.00 | 1.00 | 4.196 | . 114 | 3.973 | 4.420 |
|  | 2.00 | 4.325 | . 114 | 4.101 | 4.549 |
| 2.00 | 1.00 | 3.690 | . 115 | 3.464 | 3.916 |
|  | 2.00 | 3.245 | . 115 | 3.019 | 3.470 |

## 9. MAIN RESEARCH: TESTS OF H5

### 9.1 ONE-WAY ANCOVA: PREFERRED VS. ACCEPTABLE

Between-Subjects Factors

|  |  | N |
| :---: | :---: | :---: |
| Preferred_Acceptable | 1.00 | 413 |
|  | 2.00 | 405 |

### 9.1.1 Number of positive SBBAs

Tests of Between-Subjects Effects
Dependent Variable: Pos number SBBA

|  | Type III Sum of <br> Squares |  | df | Mean Square | F |
| :--- | ---: | ---: | ---: | ---: | ---: |

a. $R$ Squared $=.055$ (Adjusted $R$ Squared $=.053$ )

### 9.1.2 Instrumental differentiation of positive SBBAs

Tests of Between-Subjects Effects
Dependent Variable: Pos_instr_SBBA


a. R Squared $=.012$ (Adjusted R Squared $=.010$ )

### 9.1.3 Number of dichotomously differentiated positive SBBAs

Tests of Between-Subjects Effects

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Corrected Model | .086 ${ }^{\text {a }}$ | 2 | . 043 | 151 | . 860 | 000 |
| Intercept | 2.709 | 1 | 2.709 | 9.517 | . 002 | . 012 |
| NFU_INDEX | . 018 | 1 | . 018 | . 064 | . 800 | . 000 |
| Preferred_Acceptable | . 073 | 1 | . 073 | . 256 | . 613 | . 000 |
| Error | 232.008 | 815 | . 285 |  |  |  |
| Total | 263.000 | 818 |  |  |  |  |
| Corrected Total | 232.094 | 817 |  |  |  |  |

a. R Squared $=.000$ (Adjusted R Squared $=-.002$ )

### 9.1.4 Graded differentiation of positive SBBAs

| Tests of Between-Subjects Effects |
| :--- |
| Dependent Variable: Pos_grad_SBBA       <br>  Type III Sum of      <br> Source Squares df Mean Square F Sig. Partial Eta <br> Squared       |
| Corrected Model |
| Intercept |

a. R Squared $=.024$ (Adjusted R Squared $=.022$ )

### 9.2 TWO-WAY ANCOVA: PRODUCTS AND SERVICES

| Between-Subjects Factors |  |  |
| :--- | :--- | :--- |
|  |  | N |
| Preferred_Acceptable | 1.00 | 413 |
| Products_Services | 2.00 | 405 |
|  | 1.00 | 409 |
|  | 2.00 | 409 |

### 9.2.1 Number of positive SBBAs

| Tests of Between-Subjects Effects |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
| Corrected Model | $42.713^{\text {a }}$ | 4 | 10.678 | 13.506 | . 000 |
| Intercept | 421.387 | 1 | 421.387 | 532.972 | . 000 |
| NFU_index | . 296 | 1 | . 296 | . 374 | . 541 |
| Preferred_Acceptable | 37.859 | 1 | 37.859 | 47.884 | . 000 |
| Products_Services | 2.133 | 1 | 2.133 | 2.697 | . 101 |
| Preferred_Acceptable * | 2.570 | 1 | 2.570 | 3.250 | . 072 |
| Products_Services |  |  |  |  |  |
| Error | 642.788 | 813 | . 791 |  |  |
| Total | 5108.000 | 818 |  |  |  |
| Corrected Total | 685.501 | 817 |  |  |  |

a. R Squared $=.062$ (Adjusted R Squared $=.058$ )

Estimated Marginal Means
3. Preferred_Acceptable * Products_Services

Dependent Variable: Pos SBBA

|  |  |  | $95 \%$ Confidence Interval |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Preferred_Acceptable | Products_Services |  |  | Mean |  |
| Std. Error | Lower Bound | Upper Bound |  |  |  |
| 1.00 | 1.00 | $2.534^{\mathrm{a}}$ | .062 | 2.413 | 2.656 |
|  | 2.00 | $2.544^{\mathrm{a}}$ | .062 | 2.421 | 2.666 |
| 2.00 | 1.00 | $2.215^{\mathrm{a}}$ | .063 | 2.092 | 2.338 |
|  | 2.00 | $2.000^{\mathrm{a}}$ | .062 | 1.877 | 2.122 |

a. Covariates appearing in the model are evaluated at the following values: $N F U$ _index $=3.5685$.

### 9.2.2 Instrumental differentiation of positive SBBAs

| Tests of Between-Subjects Effects |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
| Corrected Model | $48.946^{\text {a }}$ | 4 | 12.236 | 4.258 | . 002 |
| Intercept | 2122.573 | 1 | 2122.573 | 738.652 | . 000 |
| NFU_index | $1.254 \mathrm{E}-8$ | 1 | $1.254 \mathrm{E}-8$ | . 000 | 1.000 |
| Preferred_Acceptable | 29.030 | 1 | 29.030 | 10.102 | . 002 |
| Products_Services | 2.899 | 1 | 2.899 | 1.009 | . 316 |
| Preferred_Acceptable * | 16.644 | 1 | 16.644 | 5.792 | . 016 |
| Error | 2336.219 | 813 | 2.874 |  |  |
| Total | 23559.817 | 818 |  |  |  |
| Corrected Total | 2385.165 | 817 |  |  |  |

[^18]Estimated Marginal Means
3. Preferred_Acceptable * Products_Services

Dependent Variable: Pos_instr_SBBA

| Preferred_Acceptable | Products_Services | Mean | Std. Error | 95\% Confidence Interval |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Lower Bound | Upper Bound |
| 1.00 | 1.00 | $5.072^{\text {a }}$ | . 118 | 4.841 | 5.304 |
|  | 2.00 | $5.478{ }^{\text {a }}$ | . 119 | 5.244 | 5.712 |
| 2.00 | 1.00 | $4.980^{\text {a }}$ | . 120 | 4.745 | 5.215 |
|  | 2.00 | $4.814^{\text {a }}$ | . 119 | 4.581 | 5.048 |

a. Covariates appearing in the model are evaluated at the following values: NFU_index $=3.5685$.

### 9.2.3 Number of dichotomously differentiated positive SBBAs

| Tests of Between-Subjects Effects |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
| Corrected Model | .125 ${ }^{\text {a }}$ | 4 | . 031 | . 109 | . 979 |
| Intercept | 2.640 | 1 | 2.640 | 9.253 | . 002 |
| NFU_index | . 020 | 1 | . 020 | . 071 | . 790 |
| Preferred_Acceptable | . 073 | 1 | . 073 | . 257 | . 612 |
| Products_Services | . 000 | 1 | . 000 | . 001 | . 973 |
| Preferred_Acceptable * | . 038 | 1 | . 038 | . 135 | . 714 |
| Error | 231.969 | 813 | . 285 |  |  |
| Total | 263.000 | 818 |  |  |  |
| Corrected Total | 232.094 | 817 |  |  |  |

a. $R$ Squared $=.001$ (Adjusted $R$ Squared $=-.004$ )
3. Preferred_Acceptable * Products_Services

Dependent Variable: Pos_dich_SBBA

| Preferred_Acceptable | Products_Services | Mean | Std. Error | 95\% Confidence Interval |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Lower Bound | Upper Bound |
| 1.00 | 1.00 | . $198{ }^{\text {a }}$ | . 037 | . 125 | . 271 |
|  | 2.00 | . $210^{\text {a }}$ | . 038 | . 136 | . 284 |
| 2.00 | 1.00 | $.192^{\text {a }}$ | . 038 | . 118 | . 266 |
|  | 2.00 | $.177^{\text {a }}$ | . 037 | . 104 | . 251 |

a. Covariates appearing in the model are evaluated at the following values: NFU_index $=3.5685$.

### 9.2.4 Graded differentiation of positive SBBAs

Tests of Between-Subjects Effects

| Source | Type III Sum of Squares | df | Mean Square | F | Sig. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Corrected Model | $61.172^{\text {a }}$ | 4 | 15.293 | 7.214 | . 000 |
| Intercept | 1830.746 | 1 | 1830.746 | 863.645 | . 000 |
| NFU_index | . 040 | 1 | . 040 | . 019 | . 891 |
| Preferred_Acceptable | 42.049 | 1 | 42.049 | 19.837 | . 000 |
| Products_Services | . 144 | 1 | . 144 | . 068 | . 794 |
| Preferred_Acceptable * | 18.349 | 1 | 18.349 | 8.656 | . 003 |
| Products_Services |  |  |  |  |  |
| Error | 1723.388 | 813 | 2.120 |  |  |
| Total | 19890.863 | 818 |  |  |  |
| Corrected Total | 1784.561 | 817 |  |  |  |

a. R Squared $=.034$ (Adjusted R Squared $=.030$ )

## Estimated Marginal Means

3. Preferred_Acceptable * Products_Services

Dependent Variable: Pos_grad_SBBA

|  |  |  | $95 \%$ Confidence Interval |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
|  | Products_Services |  | Mean |  | Std. Error |
|  | 1.00 | $4.794^{\mathrm{a}}$ | .101 | 4.595 |  |
|  | 2.00 | $5.067^{\mathrm{a}}$ | .102 | 4.866 | 5.268 |
| 2.00 | 1.00 | $4.639^{\mathrm{a}}$ | .103 | 4.437 | 4.840 |
|  | 2.00 | $4.312^{\mathrm{a}}$ | .102 | 4.111 | 4.513 |

a. Covariates appearing in the model are evaluated at the following values: NFU _index $=3.5685$.

## 10. ADDITIONAL ANALYSES

### 10.1 MULTIPLE LINEAR REGRESSIONS: EVALUATIONAND PERCEIVED DIFFERENTIATION OF PBBAs

### 10.1.1 Regression A: Evaluation of all PBBAs (Total)

| Model Summary ${ }^{\text {b }}$ |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1 | $.408^{\mathrm{a}}$ | .166 | .159 | .83942 | 1.996 |

a. Predictors: (Constant), NFU_index, Pos_ number_SBBA, Knowledge, Gender, Pos_dich_SBBA, Pos_instr_SBBA, Pos_grad_SBBA b. Dependent Variable: Eval_bēn

| ANOVA ${ }^{\text {a }}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Sum of Squares | df | Mean Square | F | Sig. |
| 1 Regression | 113.665 | 7 | 16.238 | 23.045 | . $000{ }^{\text {b }}$ |
| Residual | 570.741 | 810 | . 705 |  |  |
| Total | 684.406 | 817 |  |  |  |

a. Dependent Variable: Eval_ben
b. Predictors: (Constant), NFU_index, Pos_SBBA, Knowledge, Gender, Pos_dich_SBBA, Pos_instr_SBBA, Pos_grad_SBBA

| Coefficients ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | Unstandardized Coefficients |  | Standardized <br> Coefficients <br> Beta | t | Sig. | Collinearity Statistics |  |
|  |  | B | Std. Error |  |  |  | Tolerance | VIF |
| 1 | (Constant) | 4.841 | . 160 |  | 30.260 | . 000 |  |  |
|  | Pos_number_SBBA | . 275 | . 038 | . 275 | 7.212 | . 000 | . 708 | 1.413 |
|  | Pos_instr_SBBA | . 043 | . 022 | . 079 | 1.890 | . 059 | . 584 | 1.712 |
|  | Pos_dich_SBBA | -. 102 | . 060 | -. 059 | -1.705 | . 089 | . 846 | 1.182 |
|  | Pos_grad_SBBA | . 076 | . 028 | . 123 | 2.720 | . 007 | . 503 | 1.989 |
|  | Gender | -. 129 | . 060 | -. 069 | -2.136 | . 033 | . 982 | 1.018 |
|  | Knowledge | . 035 | . 021 | . 053 | 1.639 | . 102 | . 985 | 1.015 |
|  | NFU index | . 006 | . 025 | . 008 | . 260 | . 795 | . 984 | 1.017 |

a. Dependent Variable: Eval_ben

### 10.1.2 Regression B: Evaluation of all PBBAs (Products)


a. Predictors: (Constant), NFU_index, Pos_grad_SBBA, Gender, Knowledge, Pos_dich_SBBA, Pos_number_SBBA, Pos_instr_SBBA
b. Unless noted otherwise, statistics are based only on cases for which Products_Services $=1,00$.
c. Dependent Variable: Eval_ben

a. Dependent Variable: Eval_ben
b. Selecting only cases for which Products Services $=1,00$
c. Predictors: (Constant), NFU_index, Pos_grad_SBBA, Gender, Knowledge, Pos_dich_SBBA, Pos_SBBA, Pos_instr_SBBA

| Model |  | Unstandardized Coefficients |  | Standardized <br> Coefficients <br> Beta | t | Sig. | Collinearity Statistics |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | B | Std. Error |  |  |  | Tolerance | VIF |
| 1 | (Constant) | 4.684 | . 219 |  | 21.431 | . 000 |  |  |
|  | Pos_number_SBBA | . 314 | . 056 | . 303 | 5.629 | . 000 | . 674 | 1.483 |
|  | Pos_instr_SBBA | . 070 | . 033 | . 127 | 2.117 | . 035 | . 545 | 1.835 |
|  | Pos_dich_SBBA | -. 084 | . 088 | -. 047 | -. 954 | . 341 | . 818 | 1.223 |
|  | Pos_grad_SBBA | . 064 | . 041 | . 100 | 1.571 | . 117 | . 485 | 2.061 |
|  | Gender | -. 166 | . 086 | -. 087 | -1.933 | . 054 | . 962 | 1.040 |
|  | Knowledge | . 058 | . 028 | . 094 | 2.055 | . 040 | . 946 | 1.057 |
|  | NFU_index | -. 012 | . 035 | -. 016 | -. 359 | . 720 | . 977 | 1.024 |

a. Dependent Variable: Eval ben
b. Selecting only cases for which Products_Services = 1,00

### 10.1.3 Regression C: Evaluation of all PBBAs (Services)

| Model Summary ${ }^{\text {b,c }}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | R |  | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson Statistic |  |
| Model | Products Services $=2,00$ (Selected) | Products_Services $\sim=\overline{2}, 00$ (Unselected) |  |  |  | Products Services $=2,00$ (Selected) | $\begin{gathered} \text { Products_Services } \\ \sim=\overline{2}, 00 \\ \text { (Unselected) } \\ \hline \end{gathered}$ |
| 1 | . $361{ }^{\text {a }}$ | . 454 | . 130 | . 115 | . 86175 | 1.999 | 1.960 |

a. Predictors: (Constant), NFU_index, Pos_instr_SBBA, Gender, Pos_dich_SBBA, Knowledge, Pos_number_SBBA, Pos_grad_SBBA
b. Unless noted otherwise, statistics are based only on cases for which Products_Services $=2,00$.
c. Dependent Variable: Eval_ben

a. Dependent Variable: Eval ben
b. Selecting only cases for which Products_Services $=2,00$
c. Predictors: (Constant), NFU_index, Pos_instr_SBBA, Gender, Pos_dich_SBBA, Knowledge, Pos_number_SBBA, Pos_grad_SBBA

a. Dependent Variable: Eval ben
b. Selecting only cases for which Products_Services $=2,00$

### 10.1.4 Regression D: Evaluation of functional PBBAs

| Model Summary ${ }^{\text {b }}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1 | . $377^{\text {a }}$ | . 142 | . 129 | 75243 | 1.866 |
| a. Pre F_Pos_ <br> b. Depe | stant), <br> F_Eval_be | index, F_P | BBA, F_Knowledge, | _Gender, F_Pos_dich_ | F_Pos_instr_SBBA, |



Coefficients ${ }^{\text {a }}$

| Model |  | Unstandardized Coefficients |  | Standardized <br> Coefficients <br> Beta | t | Sig. | Collinearity Statistics |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | B | Std. Error |  |  |  | Tolerance | VIF |
| 1 | (Constant) | 5.154 | . 189 |  | 27.338 | . 000 |  |  |
|  | F_Pos_number_SBBA | . 182 | . 043 | . 204 | 4.202 | . 000 | . 746 | 1.340 |
|  | F_Pos_instr_SBBA | . 063 | . 025 | . 134 | 2.565 | . 011 | . 642 | 1.557 |
|  | F_Pos_dich_SBBA | -. 075 | . 077 | -. 044 | -. 974 | . 331 | . 867 | 1.153 |
|  | F_Pos_grad_SBBA | . 050 | . 032 | . 087 | 1.575 | . 116 | . 579 | 1.727 |
|  | F_Gender | -. 190 | . 069 | -. 117 | -2.765 | . 006 | . 989 | 1.011 |
|  | F_Knowledge | . 039 | . 024 | . 070 | 1.660 | . 097 | . 985 | 1.015 |
|  | F_NFU_index | . 033 | . 029 | . 048 | 1.136 | 256 | . 985 | 1.015 |

a. Dependent Variable: F_Eval_ben

### 10.1.5 Regression E: Evaluation of experiential PBBAs

| Model Summary ${ }^{\text {b }}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1 | . $522^{\text {a }}$ | 272 | . 239 | . 82878 | 1.793 |
| a. Pr E_Pos b. Depe | tant), E Eval b | index, E_P | ich_SBBA, E_Gender, | E_Pos_SBBA, E_Knowl | E_Pos_instr_SBBA, |


| Model | ANOVA $^{\text {a }}$ |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| 1 | Regression | Sum of Squares | df | Mean Square | F | Sig. |
|  | Residual | 40.036 | 7 | 5.719 |  | 8.327 |
|  | Total | 107.152 | 156 | .687 |  | $.000^{5}$ |
|  | 147.188 | 163 |  |  |  |  |

a. Dependent Variable: E_Eval_ben
b. Predictors: (Constant), E_NFU_index, E_Pos_dich_SBBA, E_Gender, E_Pos_SBBA, E_Knowledge, E_Pos_instr_SBBA,

E_Pos_grad_SBBA

| Coefficients ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | Unstandardized Coefficients |  | Standardized <br> Coefficients <br> Beta | t | Sig. | Collinearity Statistics |  |
|  |  | B | Std. Error |  |  |  | Tolerance | VIF |
| 1 | (Constant) | 4.421 | . 346 |  | 12.778 | . 000 |  |  |
|  | E_Pos_SBBA | . 386 | . 099 | . 338 | 3.875 | . 000 | . 614 | 1.628 |
|  | E_Pos_instr_SBBA | . 017 | . 056 | . 028 | . 304 | . 762 | . 549 | 1.823 |
|  | E_Pos_dich_SBBA | -. 179 | . 126 | -. 109 | -1.418 | . 158 | . 789 | 1.267 |
|  | E_Pos_grad_SBBA | . 160 | . 070 | . 241 | 2.285 | . 024 | . 421 | 2.375 |
|  | E_Gender | -. 094 | . 139 | -. 048 | -. 680 | . 498 | . 922 | 1.084 |
|  | E_Knowledge | . 036 | . 050 | . 052 | . 722 | . 471 | . 895 | 1.117 |
|  | E NFU index | -. 043 | . 053 | -. 057 | -. 808 | 421 | . 950 | 1.053 |

a. Dependent Variable: E_Eval_ben
10.1.6 Regression F: Evaluation of symbolic PBBAs

| Model | Model Summary |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| a. Predictors: (Constant), S_NFU_index, S_Pos_grad_SBBA, S_Knowledge, S_Gender, S_Pos_dich_SBBA, S_Pos_number_SBBA, |  |  |  |  |  |
| S_Pos_instr_SBBA |  |  |  |  |  |
| b. Dependent Variable: S_Eval_ben |  |  |  |  |  |


| ANOVA $^{\text {a }}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Sum of Squares | df | Mean Square | F | Sig. |
| 1 Regression | 25.056 | 7 | 3.579 | 4.124 | . $000{ }^{\text {b }}$ |
| Residual | 130.204 | 150 | . 868 |  |  |
| Total | 155.259 | 157 |  |  |  |

a. Dependent Variable: S_Eval_ben
b. Predictors: (Constant), S_NFU_index, S_Pos_grad_SBBA, S_Knowledge, S_Gender, S_Pos_dich_SBBA, S_Pos_number_SBBA, S_Pos_instr_SBBA

| Coefficients ${ }^{\text {a }}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Unstandardized Coefficients |  | Standardized Coefficients | t | Sig. | Collinearity Statistics |  |
|  | B | Std. Error | Beta |  |  | Tolerance | VIF |
| 1 (Constant) | 4.484 | . 408 |  | 10.990 | . 000 |  |  |
| S_Pos_number_SBBA | . 285 | . 096 | . 281 | 2.979 | . 003 | . 631 | 1.586 |
| S_Pos_instr_SBBA | . 002 | . 063 | . 004 | . 035 | . 972 | . 404 | 2.476 |
| S_Pos_dich_SBBA | . 039 | . 128 | . 025 | . 307 | . 759 | . 814 | 1.228 |
| S_Pos_grad_SBBA | . 089 | . 073 | . 155 | 1.215 | . 226 | . 345 | 2.897 |
| S_Gender | . 047 | . 158 | . 023 | . 297 | . 767 | . 921 | 1.086 |
| S_Knowledge | . 008 | . 056 | . 011 | . 141 | . 888 | . 993 | 1.007 |
| S_NFU_index | . 005 | . 064 | . 006 | . 082 | . 935 | . 921 | 1.086 |

a. Dependent Variable: S_Eval_ben
10.1.7 Regression G: Differentiation of all PBBAs (Total)

| Model Summary ${ }^{\text {b }}$ |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1 | $.355^{\circ}$ | .126 | .119 | 1.37902 | 1.800 |

a. Predictors: (Constant), NFU_index, Pos_number_SBBA, Knowledge, Gender, Pos_dich_SBBA, Pos_instr_SBBA, Pos_grad_SBBA b. Dependent Variable: Diff_ben

| ANOVA $^{\text {a }}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 222.512 | 7 | 31.787 | 16.715 | . $000{ }^{\text {b }}$ |
|  | Residual | 1540.376 | 810 | 1.902 |  |  |
|  | Total | 1762.889 | 817 |  |  |  |

a. Dependent Variable: Diff_ben
b. Predictors: (Constant), NFU_index, Pos_number_SBBA, Knowledge, Gender, Pos_dich_SBBA, Pos_instr_SBBA, Pos_grad_SBBA


[^19]
### 10.1.8 Regression H: Differentiation of all PBBAs (Products)

| Model Summary ${ }^{\text {b,c }}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | R |  | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson Statistic |  |
| Model | Products Services $=1,00 \text { (S̄elected) }$ | $\begin{gathered} \text { Products_Services } \\ \sim=1,00 \\ \text { (Unselected) } \\ \hline \end{gathered}$ |  |  |  | Products Services $=1,00$ (Selected) | $\begin{gathered} \text { Products_Services } \\ \sim=1,00 \\ \text { (Unselected) } \\ \hline \end{gathered}$ |
| 1 | . $332{ }^{\text {a }}$ | . 339 | . 110 | . 095 | 1.41956 | 1.756 | 1.805 |

a. Predictors: (Constant), NFU_index, Pos_grad_SBBA, Gender, Knowledge, Pos_dich_SBBA, Pos_number_SBBA, Pos_instr_SBBA
b. Unless noted otherwise, statistics are based only on cases for which Products Services $=1,00$.
c. Dependent Variable: Diff_ben

a. Dependent Variable: Diff_ben
b. Selecting only cases for which Products_Services $=1,00$
c. Predictors: (Constant), NFU_index, Pos_grad_SBBA, Gender, Knowledge, Pos_dich_SBBA, Pos_number_SBBA, Pos_instr_SBBA

Coefficients ${ }^{\text {a,b }}$

| Model |  | Unstandardized Coefficients |  | Standardized Coefficients | t | Sig. | Collinearity Statistics |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | B | Std. Error |  |  |  | Tolerance | VIF |
| 1 | (Constant) | 3.159 | . 379 |  | 8.333 | . 000 |  |  |
|  | Pos_number_SBBA | . 224 | . 097 | . 133 | 2.315 | . 021 | . 674 | 1.483 |
|  | Pos_instr_SBBA | -. 018 | . 057 | -. 020 | -. 321 | . 748 | . 545 | 1.835 |
|  | Pos_dich_SBBA | . 431 | . 152 | . 148 | 2.831 | . 005 | . 818 | 1.223 |
|  | Pos_grad_SBBA | . 121 | . 071 | . 115 | 1.705 | . 089 | . 485 | 2.061 |
|  | Gender | -. 214 | . 149 | -. 069 | -1.438 | . 151 | . 962 | 1.040 |
|  | Knowledge | . 175 | . 049 | . 172 | 3.560 | . 000 | . 946 | 1.057 |
|  | NFU_index | . 019 | . 060 | . 015 | . 325 | . 746 | . 977 | 1.024 |

a. Dependent Variable: Diff_ben
b. Selecting only cases for which Products_Services $=1,00$
10.1.9 Regression I: Differentiation of all PBBAs (Services)

| Model Summary ${ }^{\text {b,c }}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | R |  | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson Statistic |  |
| Model | Products Services $=2,00$ (Selected) | Products_Services $\sim=\overline{2}, 00$ <br> (Unselected) |  |  |  | Products Services = 2,00 (Selected) | Products_Services $\sim=\overline{2}, 00$ <br> (Unselected) |
| 1 | .414 ${ }^{\text {a }}$ | . 268 | . 171 | 157 | 1.32865 | 1.808 | 1.830 |

a. Predictors: (Constant), NFU_index, Pos_instr_SBBA, Gender, Pos_dich_SBBA, Knowledge, Pos_number_SBBA, Pos_grad_SBBA
b. Unless noted otherwise, statistics are based only on cases for which Products_Services = 2,00.
c. Dependent Variable: Diff_ben

| Model | ANOVA |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| a,b |  |  |  |  |  |  |
| 1 | Regression | Sum of Squares | df | Mean Square | F | Sig. |
|  | Residual | 146.013 | 7 | 20.859 | 11.816 |  |
|  | Total | 707.893 | 401 |  | 1.765 |  |
|  | 853.906 | 408 |  |  |  |  |

a. Dependent Variable: Diff_ben
b. Selecting only cases for which Products_Services $=2,00$
c. Predictors: (Constant), NFU_index, Pos_instr_SBBA, Gender, Pos_dich_SBBA, Knowledge, Pos_number_SBBA, Pos_grad_SBBA

| Coefficients ${ }^{\text {a,b }}$ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | Unstandardized Coefficients |  | Standardized <br> Coefficients <br> Beta | t | Sig. | Collinearity Statistics |  |
|  |  | B | Std. Error |  |  |  | Tolerance | VIF |
| 1 | (Constant) | 2.822 | . 371 |  | 7.606 | . 000 |  |  |
|  | Pos_number_SBBA | . 217 | . 082 | . 142 | 2.658 | . 008 | . 723 | 1.383 |
|  | Pos_instr_SBBA | -. 033 | . 048 | -. 040 | -. 681 | . 496 | . 600 | 1.665 |
|  | Pos_dich_SBBA | . 154 | . 129 | . 059 | 1.192 | . 234 | . 845 | 1.183 |
|  | Pos_grad_SBBA | . 304 | . 060 | . 322 | 5.048 | . 000 | . 509 | 1.963 |
|  | Gender | -. 031 | . 133 | -. 011 | -. 233 | . 816 | . 978 | 1.022 |
|  | Knowledge | -. 002 | . 053 | -. 001 | -. 031 | . 975 | . 958 | 1.044 |
|  | NFU_index | . 066 | . 055 | . 055 | 1.196 | . 232 | . 980 | 1.020 |

a. Dependent Variable: Diff_ben
b. Selecting only cases for which Products_Services $=2,00$

### 10.1.10 Regression J: Differentiation of functional PBBAs

| Model Summary ${ }^{\text {b }}$ |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| 1 | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| $1.4011^{\text {a }}$ | .161 | .149 | 1.40781 | 1.873 |  |

a. Predictors: (Constant), F_NFU_index, F_Pos_number_SBBA, F_Knowledge, F_Gender, F_Pos_dich_SBBA, F_Pos_instr_SBBA, F_Pos_grad_SBBA
b. Dependent Variable: F_Diff_ben

| Model | Sum of Squares | df | Mean Square | F | Sig. |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| 1 | Regression | 185.137 | 7 | 26.448 | 13.345 |  |
|  | Residual | 967.181 | 488 |  | 1.982 |  |
|  | Total | 1152.318 | 495 |  |  |  |
|  |  |  |  |  |  |  |

a. Dependent Variable: F_Diff_ben
b. Predictors: (Constant), $\bar{F} \_N F U \_i n d e x, ~ F \_P o s \_n u m b e r \_S B B A, ~ F \_K n o w l e d g e, ~ F \_G e n d e r, ~ F \_P o s \_d i c h \_S B B A, ~ F \_P o s \_i n s t r \_S B B A, ~$

F_Pos_grad_SBBA

| Coefficients ${ }^{\text {a }}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unstandardized Coefficients |  | Standardized <br> Coefficients <br> Beta | t | Sig. | Collinearity Statistics |  |
| Model | B | Std. Error |  |  |  | Tolerance | VIF |
| 1 (Constant) | 2.437 | . 353 |  | 6.910 | . 000 |  |  |
| F_Pos_number_SBBA | . 251 | . 081 | . 149 | 3.097 | . 002 | . 746 | 1.340 |
| F_Pos_instr_SBBA | -. 046 | . 046 | -. 052 | -1.003 | . 316 | . 642 | 1.557 |
| F_Pos_dich_SBBA | . 206 | . 144 | . 064 | 1.432 | . 153 | . 867 | 1.153 |
| F_Pos_grad_SBBA | . 318 | . 059 | . 294 | 5.394 | . 000 | . 579 | 1.727 |
| F_Gender | -. 172 | . 129 | -. 056 | -1.336 | . 182 | . 989 | 1.011 |
| F_Knowledge | . 078 | . 044 | . 074 | 1.761 | . 079 | . 985 | 1.015 |
| F_NFU_index | . 053 | . 054 | . 041 | . 988 | . 324 | . 985 | 1.015 |

a. Dependent Variable: F_Diff_ben

### 10.1.11 Regression K: Differentiation of experiential PBBAs

| Model | Model Summary ${ }^{\text {b }}$ |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| a. Predictors: (Constant), E_NFU_index, E_Pos_dich_SBBA, E_Gender, E_Pos_number_SBBA, E_Knowledge, E_Pos_instr_SBBA, |  |  |  |  |  |
| E_Pos_grad_SBBA |  |  |  |  |  |
| b. Dependent Variable: E_Diff_ben |  |  |  |  |  |


| Model | SNOVA |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| 1 | Regression | Sum of Squares | df | Mean Square | F | Sig. |
|  | Residual | 40.955 | 7 | 5.851 |  | 3.144 |
|  | Total | 290.307 | 156 | 1.861 |  | $.004^{0}$ |
|  | 331.262 | 163 |  |  |  |  |

a. Dependent Variable: E_Diff_ben
b. Predictors: (Constant), E_NFU_index, E_Pos_dich_SBBA, E_Gender, E_Pos_number_SBBA, E_Knowledge, E_Pos_instr_SBBA, E_Pos_grad_SBBA

| Coefficients ${ }^{\text {a }}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unstandardized Coefficients |  | Standardized Coefficients | t | Sig. | Collinearity Statistics |  |
| Model | B | Std. Error | Beta |  |  | Tolerance | VIF |
| 1 (Constant) | 3.408 | . 569 |  | 5.985 | . 000 |  |  |
| E_Pos_number_SBBA | . 185 | . 164 | . 108 | 1.132 | . 259 | . 614 | 1.628 |
| E_Pos_instr_SBBA | . 021 | . 092 | . 023 | . 232 | . 817 | . 549 | 1.823 |
| E_Pos_dich_SBBA | . 362 | . 208 | . 147 | 1.743 | . 083 | . 789 | 1.267 |
| E_Pos_grad_SBBA | . 053 | . 115 | . 053 | . 462 | . 644 | . 421 | 2.375 |
| E_Gender | -. 221 | . 228 | -. 076 | -. 967 | . 335 | . 922 | 1.084 |
| E_Knowledge | . 258 | . 083 | . 246 | 3.102 | . 002 | . 895 | 1.117 |
| E_NFU_index | -. 036 | . 088 | -. 031 | -. 406 | . 686 | . 950 | 1.053 |

a. Dependent Variable: E_Diff_ben

### 10.1.12 Regression L: Differentiation of symbolic PBBAs

| Model | R | Model Summary ${ }^{\text {b }}$ |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| 1 | $.339^{\text {a }}$ | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1.115 | .074 | 1.24834 | 1.752 |  |  |

a. Predictors: (Constant), S_NFU_index, S_Pos_grad_SBBA, S_Knowledge, S_Gender, S_Pos_dich_SBBA, S_Pos_number_SBBA, S_Pos_instr_SBBA
b. Dependent Variable: S_Diff_ben

| Model |  | ANOVA |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| 1 | Regression | Sum of Squares | df | Mean Square | F |
|  | Residual | 30.344 | 7 | 4.335 |  |
|  | Total | 233.753 | 150 | 2.782 |  |
|  | 264.097 | 157 |  | 1.558 |  |

a. Dependent Variable: S_Diff_ben
b. Predictors: (Constant), S__NFU_index, S_Pos_grad_SBBA, S_Knowledge, S_Gender, S_Pos_dich_SBBA, S_Pos_number_SBBA, S_Pos_instr_SBBA

a. Dependent Variable: S_Diff_ben

### 10.2 INTERACTION VARIABLES

### 10.2.1 Evaluation of all PBBAs - Interaction dich_number

| Model Summary ${ }^{\text {b }}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1 | $.408{ }^{\text {a }}$ | . 166 | . 158 | . 83992 | 1.996 |

a. Predictors: (Constant), Int_dich_number, Gender, Knowledge, NFU_index, Pos_instr_SBBA, Pos_number_SBBA, Pos_grad_SBBA, Pos_dich_SBBA
b. Dependent Variable: Eval_ben

a. Dependent Variable: Eval_ben
b. Predictors: (Constant), Int_dich_number, Gender, Knowledge, NFU_index, Pos_instr_SBBA, Pos_number_SBBA, Pos_grad_SBBA, Pos_dich_SBBA

| Coefficients ${ }^{\text {a }}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Unstandardized Coefficients |  | Standardized Coefficients | t | Sig. | Collinearity Statistics |  |
| Model | B | Std. Error | Beta |  |  | Tolerance | VIF |
| 1 (Constant) | 4.840 | . 160 |  | 30.180 | . 000 |  |  |
| Pos_number_SBBA | . 276 | . 040 | . 277 | 6.940 | . 000 | . 649 | 1.541 |
| Pos_instr_SBBA | . 043 | . 023 | . 080 | 1.894 | . 059 | . 582 | 1.717 |
| Pos_dich_SBBA | -. 058 | . 330 | -. 034 | -. 175 | . 861 | . 028 | 35.846 |
| Pos_grad_SBBA | . 075 | . 029 | . 121 | 2.597 | . 010 | . 471 | 2.123 |
| Gender | -. 128 | . 060 | -. 069 | -2.127 | . 034 | . 980 | 1.020 |
| Knowledge | . 035 | . 021 | . 053 | 1.642 | . 101 | . 983 | 1.018 |
| NFU_index | . 006 | . 025 | . 009 | . 263 | . 792 | . 983 | 1.017 |
| Int_dich_number | -. 016 | . 115 | -. 026 | -. 137 | . 891 | . 029 | 34.935 |

### 10.2.2 Evaluation of all PBBAs - Interaction dich_grad

| Model | Model Summary $^{\text {b }}$ |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: | :---: |
| 1 | R |  | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |  |  |

a. Predictors: (Constant), Int_dich_grad, Gender, Knowledge, NFU_index, Pos_instr_SBBA, Pos_number_SBBA, Pos_grad_SBBA,

Pos dich SBBA
b. Dependent Variable: Eval_ben

| ANOVA $^{\text {a }}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 114.723 | 8 | 14.340 | 20.364 | . $000{ }^{\text {b }}$ |
|  | Residual | 569.684 | 809 | . 704 |  |  |
|  | Total | 684.406 | 817 |  |  |  |

a. Dependent Variable: Eval_ben
b. Predictors: (Constant), Int_dich_grad, Gender, Knowledge, NFU_index, Pos_instr_SBBA, Pos_number_SBBA, Pos_grad_SBBA, Pos_dich_SBBA

Coefficients ${ }^{\text {a }}$

| Model |  | Unstandardized Coefficients |  | Standardized Coefficients <br> Beta | t | Sig. | Collinearity Statistics |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | B | Std. Error |  |  |  | Tolerance | VIF |
| 1 | (Constant) | 4.835 | . 160 |  | 30.220 | . 000 |  |  |
|  | Pos_number_SBBA | . 269 | . 038 | . 269 | 7.000 | . 000 | . 696 | 1.436 |
|  | Pos_instr_SBBA | . 042 | . 022 | . 079 | 1.876 | . 061 | . 584 | 1.712 |
|  | Pos_dich_SBBA | . 513 | . 505 | . 298 | 1.015 | . 311 | . 012 | 84.093 |
|  | Pos_grad_SBBA | . 079 | . 028 | . 128 | 2.823 | . 005 | . 498 | 2.006 |
|  | Gender | -. 127 | . 060 | -. 068 | -2.115 | . 035 | . 982 | 1.019 |
|  | Knowledge | . 034 | . 021 | . 052 | 1.616 | . 106 | . 984 | 1.016 |
|  | NFU_index | . 007 | . 025 | . 009 | . 293 | . 769 | . 983 | 1.017 |
|  | Int_dich_grad | -. 096 | . 078 | -. 361 | -1.226 | . 221 | . 012 | 84.366 |

a. Dependent Variable: Eval_ben

### 10.2.3 Evaluation of all PBBAs - interaction dich_instr

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| :--- | :--- | :--- | ---: | ---: | ---: |
| 1 | $.408^{\mathrm{a}}$ | .167 | .159 | .83956 | 1.992 |

a. Predictors: (Constant), Int_dich_instr, Gender, Knowledge, NFU_index, Pos_number_SBBA, Pos_instr_SBBA, Pos_grad_SBBA, Pos dich SBBA
b. Dependent Variable: Eval_ben

| ANOVA $^{\text {a }}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 114.173 | 8 | 14.272 | 20.247 | . $000{ }^{\text {b }}$ |
|  | Residual | 570.233 | 809 | . 705 |  |  |
|  | Total | 684.406 | 817 |  |  |  |

a. Dependent Variable: Eval_ben
b. Predictors: (Constant), Int_dich_instr, Gender, Knowledge, NFU_index, Pos_number_SBBA, Pos_instr_SBBA, Pos_grad_SBBA, Pos_dich_SBBA

| Coefficients ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | Unstandardized Coefficients |  | Standardized Coefficients | t | Sig. | Collinearity Statistics |  |
|  |  | B | Std. Error |  |  |  | Tolerance | VIF |
| 1 | (Constant) | 4.853 | . 161 |  | 30.215 | . 000 |  |  |
|  | Pos_number_SBBA | . 277 | . 038 | . 277 | 7.249 | . 000 | . 705 | 1.418 |
|  | Pos_instr_SBBA | . 035 | . 024 | . 065 | 1.435 | . 152 | . 502 | 1.991 |
|  | Pos_dich_SBBA | -. 318 | . 262 | -. 185 | -1.217 | . 224 | . 044 | 22.547 |
|  | Pos_grad_SBBA | . 082 | . 029 | . 132 | 2.843 | . 005 | . 476 | 2.103 |
|  | Gender | -. 132 | . 060 | -. 071 | -2.181 | . 029 | . 979 | 1.022 |
|  | Knowledge | . 035 | . 021 | . 053 | 1.651 | . 099 | . 985 | 1.016 |
|  | NFU_index | . 006 | . 025 | . 008 | . 242 | . 809 | . 983 | 1.017 |
|  | Int_dich_instr | . 037 | . 044 | . 127 | . 849 | . 396 | . 046 | 21.814 |

a. Dependent Variable: Eval ben

### 10.2.4 Evaluation of all PBBAs - Interaction grad_number

| Model Summary ${ }^{\text {b }}$ |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Model | R |  | R Square | Adjusted R Square | Std. Error of the Estimate |

a. Predictors: (Constant), Int_grad_number, NFU_index, Gender, Knowledge, Pos_dich_SBBA, Pos_instr_SBBA, Pos_grad_SBBA, Pos_number_SBBA
b. Dependent Variable: Eval_ben

| ANOVA $^{\text {a }}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Sum of Squares | df | Mean Square | F | Sig. |
| 1 Regression | 114.161 | 8 | 14.270 | 20.245 | . $000{ }^{\text {b }}$ |
| Residual | 570.245 | 809 | . 705 |  |  |
| Total | 684.406 | 817 |  |  |  |

a. Dependent Variable: Eval_ben
b. Predictors: (Constant), Int_grad_number, NFU_index, Gender, Knowledge, Pos_dich_SBBA, Pos_instr_SBBA, Pos_grad_SBBA, Pos_number_SBBA

Coefficients ${ }^{\text {a }}$

| Model |  | Unstandardized Coefficients |  | Standardized <br> Coefficients <br> Beta | t | Sig. | Collinearity Statistics |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | B | Std. Error |  |  |  | Tolerance | VIF |
| 1 | (Constant) | 4.890 | . 170 |  | 28.733 | . 000 |  |  |
|  | Pos_number_SBBA | . 198 | . 099 | . 198 | 1.994 | . 046 | . 104 | 9.582 |
|  | Pos_instr_SBBA | . 050 | . 024 | . 093 | 2.065 | . 039 | . 509 | 1.963 |
|  | Pos_dich_SBBA | -. 124 | . 065 | -. 072 | -1.898 | . 058 | . 709 | 1.411 |
|  | Pos_grad_SBBA | . 055 | . 038 | . 088 | 1.437 | . 151 | . 273 | 3.664 |
|  | Gender | -. 130 | . 060 | -. 070 | -2.162 | . 031 | . 981 | 1.020 |
|  | Knowledge | . 032 | . 021 | . 049 | 1.511 | . 131 | . 967 | 1.034 |
|  | NFU_index | . 007 | . 025 | . 009 | . 274 | . 784 | . 983 | 1.017 |
|  | Int_grad_number | . 018 | . 021 | . 100 | . 839 | 402 | . 073 | 13.694 |

a. Dependent Variable: Eval_ben

### 10.2.5 Evaluation of all PBBAs - Interaction grad_instr

| Model | R | Model Summary ${ }^{\mathrm{b}}$ |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | $.409^{\mathrm{a}}$ | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |

a. Predictors: (Constant), Int_grad_instr, NFU_index, Gender, Knowledge, Pos_dich_SBBA, Pos_number_SBBA, Pos_grad_SBBA, Pos instr_SBBA
b. Dependent Variable: Eval_ben

| Model | Sum of Squares | df | Mean Square | F | Sig. |
| :--- | ---: | ---: | ---: | ---: | ---: |
| 1 | Regression | 114.558 | 8 | 14.320 | 20.329 |
|  | Residual | 569.849 | 809 | .704 |  |
|  | Total | 684.406 | 817 |  |  |

a. Dependent Variable: Eval_ben
b. Predictors: (Constant), Int_grad_instr, NFU_index, Gender, Knowledge, Pos_dich_SBBA, Pos_number_SBBA, Pos_grad_SBBA, Pos_instr_SBBA

| Model | Unstandardized Coefficients |  | Standardized <br> Coefficients <br> Beta | t | Sig. | Collinearity Statistics |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | B | Std. Error |  |  |  | Tolerance | VIF |
| 1 (Constant) | 4.907 | . 170 |  | 28.805 | . 000 |  |  |
| Pos_number_SBBA | . 290 | . 040 | . 290 | 7.169 | . 000 | . 627 | 1.595 |
| Pos_instr_SBBA | . 002 | . 042 | . 005 | . 059 | . 953 | . 167 | 5.992 |
| Pos_dich_SBBA | -. 125 | . 063 | -. 073 | -1.977 | . 048 | . 758 | 1.319 |
| Pos_grad_SBBA | . 045 | . 040 | . 072 | 1.121 | . 263 | . 250 | 3.998 |
| Gender | -. 132 | . 060 | -. 071 | -2.195 | . 028 | . 979 | 1.022 |
| Knowledge | . 033 | . 021 | . 050 | 1.541 | . 124 | . 978 | 1.022 |
| NFU_index | . 007 | . 025 | . 009 | . 286 | . 775 | . 983 | 1.017 |
| Int_grad_instr | . 010 | . 009 | . 116 | 1.126 | . 261 | . 097 | 10.265 |

a. Dependent Variable: Eval_ben

### 10.2.6 Evaluation of all PBBAs - Interacton instr_number

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | $.409^{\text {a }}$ | .167 | .159 | .83934 | 1.998 |

a. Predictors: (Constant), Int_instr_number, NFU_index, Knowledge, Gender, Pos_dich_SBBA, Pos_grad_SBBA, Pos_instr_SBBA, Pos_number_SBBA
b. Dependent Variable: Eval_ben

| Model | Sum of Squares | df | Mean Square | F | Sig. |  |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| 1 | Regression | 114.467 | 8 | 14.308 | 20.310 |  |
|  | Residual | 569.940 | 809 |  | $.000^{b}$ |  |
|  | Total | 684.406 | 817 |  |  |  |
|  |  |  |  |  |  |  |

a. Dependent Variable: Eval_ben
b. Predictors: (Constant), Int_instr_number, NFU_index, Knowledge, Gender, Pos_dich_SBBA, Pos_grad_SBBA, Pos_instr_SBBA, Pos_number_SBBA

| Coefficients ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | Unstandardized Coefficients |  | Standardized <br> Coefficients <br> Beta | t | Sig. | Collinearity Statistics |  |
|  |  | B | Std. Error |  |  |  | Tolerance | VIF |
| 1 | (Constant) | 4.888 | . 166 |  | 29.449 | . 000 |  |  |
|  | Pos_number_SBBA | . 186 | . 092 | . 186 | 2.021 | . 044 | . 122 | 8.213 |
|  | Pos_instr_SBBA | . 011 | . 037 | . 020 | . 290 | . 772 | . 213 | 4.702 |
|  | Pos_dich_SBBA | -. 121 | . 062 | -. 070 | -1.935 | . 053 | . 780 | 1.283 |
|  | Pos_grad_SBBA | . 094 | . 033 | . 152 | 2.884 | . 004 | . 372 | 2.691 |
|  | Gender | -. 128 | . 060 | -. 069 | -2.132 | . 033 | . 982 | 1.018 |
|  | Knowledge | . 034 | . 021 | . 052 | 1.592 | . 112 | . 983 | 1.017 |
|  | NFU_index | . 007 | . 025 | . 010 | . 300 | . 764 | . 982 | 1.018 |
|  | Int_instr_number | . 019 | . 018 | . 119 | 1.067 | . 286 | . 082 | 12.150 |

a. Dependent Variable: Eval_ben

### 10.2.7 Evaluation of all PBBAs - Interaction dich_NFU

| Model | R | Model Summary ${ }^{\text {b }}$ |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | $.410^{\mathrm{a}}$ | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |

a. Predictors: (Constant), Int_dich_NFU, Gender, Knowledge, Pos_instr_SBBA, NFU_index, Pos_number_SBBA, Pos_grad_SBBA, Pos_dich_SBBA
b. Dependent Variable: Eval_ben

a. Dependent Variable: Eval_ben
b. Predictors: (Constant), Int_dich_NFU, Gender, Knowledge, Pos_instr_SBBA, NFU_index, Pos_number_SBBA, Pos_grad_SBBA, Pos_dich_SBBA

Coefficients ${ }^{\text {a }}$

| Model |  | Unstandardized Coefficients |  | $\begin{gathered} \hline \begin{array}{c} \text { Standardized } \\ \text { Coefficients } \end{array} \\ \hline \text { Beta } \\ \hline \end{gathered}$ | t | Sig. | Collinearity Statistics |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | B | Std. Error |  |  |  | Tolerance | VIF |
| 1 | (Constant) | 4.883 | . 163 |  | 29.907 | . 000 |  |  |
|  | Pos_number_SBBA | . 274 | . 038 | . 275 | 7.201 | . 000 | . 708 | 1.413 |
|  | Pos_instr_SBBA | . 042 | . 022 | . 078 | 1.859 | . 063 | . 584 | 1.713 |
|  | Pos_dich_SBBA | -. 337 | . 194 | -. 196 | -1.735 | . 083 | . 081 | 12.418 |
|  | Pos_grad_SBBA | . 077 | . 028 | . 125 | 2.755 | . 006 | . 502 | 1.990 |
|  | Gender | -. 127 | . 060 | -. 068 | -2.115 | . 035 | . 982 | 1.019 |
|  | Knowledge | . 034 | . 021 | . 052 | 1.624 | . 105 | . 985 | 1.016 |
|  | NFU_index | -. 005 | . 026 | -. 006 | -. 182 | . 855 | . 872 | 1.146 |
|  | Int_dich_NFU | . 063 | . 050 | . 143 | 1.271 | . 204 | . 081 | 12.330 |

a. Dependent Variable: Eval_ben

### 10.2.8 Evaluation of all benefits - Interaction grad_NFU

| Model | R | Model Summary ${ }^{\text {b }}$ |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | $.411^{\text {a }}$ | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |

a. Predictors: (Constant), Int_grad_NFU, Knowledge, Gender, Pos_dich_SBBA, Pos_number_SBBA, Pos_instr_SBBA, Pos_grad_SBBA, NFU_index
b. Dependent Variable: Eval_ben

| ANOVA ${ }^{\text {a }}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Sum of Squares | df | Mean Square | F | Sig. |
| 1 Regression | 115.597 | 8 | 14.450 | 20.551 | . $000{ }^{\text {b }}$ |
| Residual | 568.809 | 809 | . 703 |  |  |
| Total | 684.406 | 817 |  |  |  |

a. Dependent Variable: Eval_ben
b. Predictors: (Constant), Int_grad_NFU, Knowledge, Gender, Pos_dich_SBBA, Pos_number_SBBA, Pos_instr_SBBA, Pos_grad_SBBA, NFU_index

a. Dependent Variable: Eval_ben

### 10.2.9 Evaluation of all PBBAs - Interaction Instr_NFU

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | $.411^{\text {a }}$ | .169 | .161 | .83850 | 1.992 |

a. Predictors: (Constant), Int_instr_NFU, Gender, Pos_dich_SBBA, Knowledge, Pos_number_SBBA, Pos_grad_SBBA, NFU_index, Pos instr SBBA
b. Dependent Variable: Eval_ben

a. Dependent Variable: Eval_ben
b. Predictors: (Constant), Int_instr_NFU, Gender, Pos_dich_SBBA, Knowledge, Pos_number_SBBA, Pos_grad_SBBA, NFU_index, Pos_instr_SBBA

Coefficients ${ }^{\text {a }}$

| Model |  | Unstandardized Coefficients |  | Standardized <br> Coefficients <br> Beta | t | Sig. | Collinearity Statistics |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | B | Std. Error |  |  |  | Tolerance | VIF |
| 1 | (Constant) | 5.253 | . 295 |  | 17.815 | . 000 |  |  |
|  | Pos_number_SBBA | . 276 | . 038 | . 276 | 7.238 | . 000 | . 708 | 1.413 |
|  | Pos_instr_SBBA | -. 040 | . 054 | -. 074 | -. 733 | . 464 | . 100 | 10.037 |
|  | Pos_dich_SBBA | -. 104 | . 060 | -. 061 | -1.737 | . 083 | . 846 | 1.183 |
|  | Pos_grad_SBBA | 075 | . 028 | . 121 | 2.683 | . 007 | . 502 | 1.990 |
|  | Gender | -. 128 | . 060 | -. 069 | -2.128 | . 034 | . 982 | 1.018 |
|  | Knowledge | 037 | . 021 | . 056 | 1.735 | . 083 | . 981 | 1.019 |
|  | NFU_index | -. 111 | . 075 | -. 146 | -1.485 | . 138 | . 106 | 9.441 |
|  | Int_instr_NFU | . 023 | . 014 | . 223 | 1.663 | . 097 | . 057 | 17.493 |

a. Dependent Variable: Eval ben

### 10.2.10 Evaluation of all PBBAs - Interaction number_NFU

| Model Summary ${ }^{\text {b }}$ |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1 | $.408^{\mathrm{a}}$ | .166 | .158 | .83993 |  |

a. Predictors: (Constant), Int_number_NFU, Gender, Knowledge, Pos_dich_SBBA, Pos_instr_SBBA, Pos_grad_SBBA, NFU_index,

Pos_number_SBBA
b. Dependent Variable: Eval_ben

a. Dependent Variable: Eval_ben
b. Predictors: (Constant), Int_number_NFU, Gender, Knowledge, Pos_dich_SBBA, Pos_instr_SBBA, Pos_grad_SBBA, NFU_index, Pos_number_SBBA

| Coefficients ${ }^{\text {a }}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Unstandardized Coefficients |  | Standardized Coefficients <br> Beta | t | Sig. | Collinearity Statistics |  |
|  | B | Std. Error |  |  |  | Tolerance | VIF |
| 1 (Constant) | 4.823 | . 280 |  | 17.229 | . 000 |  |  |
| Pos_number_SBBA | . 282 | . 103 | . 283 | 2.747 | . 006 | . 097 | 10.278 |
| Pos_instr_SBBA | . 042 | . 023 | . 079 | 1.886 | . 060 | . 584 | 1.713 |
| Pos_dich_SBBA | -. 102 | . 060 | -. 059 | -1.703 | . 089 | . 846 | 1.182 |
| Pos_grad_SBBA | . 076 | . 028 | . 123 | 2.720 | . 007 | . 502 | 1.991 |
| Gender | -. 128 | . 060 | -. 069 | -2.120 | . 034 | . 975 | 1.026 |
| Knowledge | . 035 | . 021 | . 053 | 1.639 | . 102 | . 985 | 1.016 |
| NFU_index | . 011 | . 068 | . 015 | . 169 | . 866 | . 130 | 7.690 |
| Int_number_NFU | -. 002 | . 027 | -. 011 | -. 080 | . 936 | . 060 | 16.724 |

a. Dependent Variable: Eval_ben

### 10.2.11 Differentitation of all PBBAs - Interaction dich_grad

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | $.357^{\mathrm{a}}$ | .128 | .119 | 1.37873 | 1.808 |

a. Predictors: (Constant), Int_dich_grad, Gender, Knowledge, NFU_index, Pos_instr_SBBA, Pos_number_SBBA, Pos_grad_SBBA, Pos dich SBBA
b. Dependent Variable: Eval_diff

| ANOVA $^{\text {a }}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Sum of Squares | df | Mean Square | F | Sig. |
| 1 Regression | 225.072 | 8 | 28.134 | 14.800 | . $000{ }^{\text {b }}$ |
| Residual | 1537.817 | 809 | 1.901 |  |  |
| Total | 1762.889 | 817 |  |  |  |

a. Dependent Variable: Eval_diff
b. Predictors: (Constant), Int_dich_grad, Gender, Knowledge, NFU_index, Pos_instr_SBBA, Pos_number_SBBA, Pos_grad_SBBA, Pos dich SBBA

| Coefficients ${ }^{\text {a }}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Unstandardized Coefficients |  | Standardized Coefficients | t | Sig. | Collinearity Statistics |  |
|  | B | Std. Error |  |  |  | Tolerance | VIF |
| 1 (Constant) | 2.920 | . 263 |  | 11.106 | . 000 |  |  |
| Pos_number_SBBA | . 206 | . 063 | . 128 | 3.261 | . 001 | . 696 | 1.436 |
| Pos_instr_SBBA | -. 036 | . 037 | -. 042 | -. 966 | . 334 | . 584 | 1.712 |
| Pos_dich_SBBA | 1.214 | . 830 | . 440 | 1.463 | . 144 | . 012 | 84.093 |
| Pos_grad_SBBA | . 233 | . 046 | . 235 | 5.049 | . 000 | . 498 | 2.006 |
| Gender | -. 096 | . 099 | -. 032 | -. 969 | . 333 | . 982 | 1.019 |
| Knowledge | . 083 | . 035 | . 079 | 2.401 | . 017 | . 984 | 1.016 |
| NFU_index | . 049 | . 040 | . 040 | 1.210 | . 227 | . 983 | 1.017 |
| Int_dich_grad | -. 149 | . 128 | -. 350 | -1.160 | . 246 | . 012 | 84.366 |

a. Dependent Variable: Eval diff

### 10.2.12 Differentitation of all PBBAs - Interaction dich_instr

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $.359^{\text {a }}$ | . 129 | . 120 | 1.37769 | 1.792 |

a. Predictors: (Constant), Int_dich_instr, Gender, Knowledge, NFU_index, Pos_number_SBBA, Pos_instr_SBBA, Pos_grad_SBBA,

Pos_dich_SBBA
b. Dependent Variable: Eval_diff

a. Dependent Variable: Eval_diff
b. Predictors: (Constant), Int_dich_instr, Gender, Knowledge, NFU_index, Pos_number_SBBA, Pos_instr_SBBA, Pos_grad_SBBA, Pos_dich_SBBA

| Coefficients ${ }^{\text {a }}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Unstandardized Coefficients |  | Standardized Coefficients | t | Sig. | Collinearity Statistics |  |
|  | B | Std. Error | Beta |  |  | Tolerance | VIF |
| 1 (Constant) | 2.965 | . 264 |  | 11.250 | . 000 |  |  |
| Pos_number_SBBA | . 221 | . 063 | . 138 | 3.531 | . 000 | . 705 | 1.418 |
| Pos_instr_SBBA | -. 059 | . 040 | -. 069 | -1.484 | . 138 | . 502 | 1.991 |
| Pos_dich_SBBA | -. 412 | . 429 | -. 149 | -. 959 | . 338 | . 044 | 22.547 |
| Pos_grad_SBBA | . 246 | . 047 | . 248 | 5.203 | . 000 | . 476 | 2.103 |
| Gender | -. 107 | . 099 | -. 036 | -1.082 | . 280 | . 979 | 1.022 |
| Knowledge | . 085 | . 035 | . 081 | 2.449 | . 015 | . 985 | 1.016 |
| NFU_index | . 046 | . 040 | . 038 | 1.147 | . 252 | . 983 | 1.017 |
| Int_dich_instr | . 115 | . 072 | . 246 | 1.602 | . 110 | . 046 | 21.814 |

[^20]
### 10.2.13 Differentitation of all PBBAs - Interaction grad_instr

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | $.396^{\mathrm{a}}$ | .157 | .148 | 1.35549 | 1.812 |

a. Predictors: (Constant), Int_grad_instr, NFU_index, Gender, Knowledge, Pos_dich_SBBA, Pos_number_SBBA, Pos_grad_SBBA, Pos instr SBBA
b. Dependent Variable: Eval_diff

a. Dependent Variable: Eval_diff
b. Predictors: (Constant), Int_grad_instr, NFU_index, Gender, Knowledge, Pos_dich_SBBA, Pos_number_SBBA, Pos_grad_SBBA, Pos_instr_SBBA

Coefficients ${ }^{\text {a }}$

| Model | Unstandardized Coefficients |  | Standardized <br> Coefficients <br> Beta | t | Sig. | Collinearity Statistics |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | B | Std. Error |  |  |  | Tolerance | VIF |
| 1 (Constant) | 3.442 | . 275 |  | 12.509 | . 000 |  |  |
| Pos_number_SBBA | . 335 | . 065 | . 209 | 5.120 | . 000 | . 627 | 1.595 |
| Pos_instr_SBBA | -. 346 | . 068 | -. 403 | -5.098 | . 000 | . 167 | 5.992 |
| Pos_dich_SBBA | . 080 | . 102 | . 029 | . 781 | . 435 | . 758 | 1.319 |
| Pos_grad_SBBA | -. 018 | . 064 | -. 018 | -. 281 | . 779 | . 250 | 3.998 |
| Gender | -. 127 | . 097 | -. 042 | -1.302 | . 193 | . 979 | 1.022 |
| Knowledge | . 069 | . 034 | . 066 | 2.009 | . 045 | . 978 | 1.022 |
| NFU_index | . 053 | . 040 | . 043 | 1.326 | . 185 | . 983 | 1.017 |
| Int_grad_instr | . 080 | . 015 | . 561 | 5.420 | . 000 | . 097 | 10.265 |

a. Dependent Variable: Eval diff

### 10.2.14 Differentitation of all PBBAs - Interaction dich_number

| Model Summary ${ }^{\text {b }}$ |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1 | $.356^{\text {a }}$ | .127 | .118 | 1.37942 |  |

a. Predictors: (Constant), Int_dich_number, Gender, Knowledge, NFU_index, Pos_instr_SBBA, Pos_number_SBBA, Pos_grad_SBBA, Pos_dich_SBBA
b. Dependent Variable: Eval_diff

a. Dependent Variable: Eval_diff
b. Predictors: (Constant), Int_dich_number, Gender, Knowledge, NFU_index, Pos_instr_SBBA, Pos_number_SBBA, Pos_grad_SBBA, Pos_dich_SBBA

a. Dependent Variable: Eval_diff

### 10.2.15 Differentitation of all PBBAs - Interaction grad_number

| Model | R | R Square Summary ${ }^{\text {b }}$ |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| 1 | $.381^{\text {a }}$ | .145 | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |

a. Predictors: (Constant), Int_grad_number, NFU_index, Gender, Knowledge, Pos_dich_SBBA, Pos_instr_SBBA, Pos_grad_SBBA, Pos number SBBA
b. Dependent Variable: Eval_diff

| ANOVA $^{\text {a }}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 255.854 | 8 | 31.982 | 17.168 | . $000{ }^{\text {b }}$ |
|  | Residual | 1507.035 | 809 | 1.863 |  |  |
|  | Total | 1762.889 | 817 |  |  |  |

a. Dependent Variable: Eval_diff
b. Predictors: (Constant), Int_grad_number, NFU_index, Gender, Knowledge, Pos_dich_SBBA, Pos_instr_SBBA, Pos_grad_SBBA, Pos_number_SBBA

| Coefficients ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | Unstandardized Coefficients |  | Standardized Coefficients | t | Sig. | Collinearity Statistics |  |
|  |  | B | Std. Error |  |  |  | Tolerance | VIF |
| 1 | (Constant) | 3.327 | . 277 |  | 12.026 | . 000 |  |  |
|  | Pos_number_SBBA | -. 415 | . 161 | -. 259 | -2.574 | . 010 | . 104 | 9.582 |
|  | Pos_instr_SBBA | . 024 | . 039 | . 028 | . 614 | . 539 | . 509 | 1.963 |
|  | Pos_dich_SBBA | . 077 | . 106 | . 028 | . 720 | . 472 | . 709 | 1.411 |
|  | Pos_grad_SBBA | . 052 | . 062 | . 052 | . 834 | . 405 | . 273 | 3.664 |
|  | Gender | -. 111 | . 098 | -. 037 | -1.138 | . 255 | . 981 | 1.020 |
|  | Knowledge | . 064 | . 035 | . 061 | 1.858 | . 064 | . 967 | 1.034 |
|  | NFU_index | . 050 | . 040 | . 041 | 1.264 | . 207 | . 983 | 1.017 |
|  | Int_grad_number | . 148 | . 035 | . 509 | 4.231 | . 000 | . 073 | 13.694 |

a. Dependent Variable: Eval diff

### 10.2.16 Differentitation of all PBBAs - Interaction instr_number

| Model Summary ${ }^{\text {b }}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1 | . $371{ }^{\text {a }}$ | . 138 | . 129 | 1.37084 | 1.799 |
| a. Pred Pos_nu b. Depe | ant), Int_in <br> Eval_diff | umber, NFU | Knowledge, Gender, | Pos_dich_SBBA, Pos_grad | A, Pos_instr_SBBA, |


| ANOVA $^{\text {a }}$ |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | Sum of Squares | df | Mean Square | F | Sig. |
| 1 | Regression | 242.614 | 8 | 30.327 | 16.138 | . $000{ }^{\text {b }}$ |
|  | Residual | 1520.275 | 809 | 1.879 |  |  |
|  | Total | 1762.889 | 817 |  |  |  |

a. Dependent Variable: Eval_diff
b. Predictors: (Constant), Int_instr_number, NFU_index, Knowledge, Gender, Pos_dich_SBBA, Pos_grad_SBBA, Pos_instr_SBBA, Pos number SBBA

| Coefficients ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model |  | Unstandardized Coefficients |  | Standardized Coefficients | t | Sig. | Collinearity Statistics |  |
|  |  | B | Std. Error |  |  |  | Tolerance | VIF |
| 1 | (Constant) | 3.165 | . 271 |  | 11.676 | . 000 |  |  |
|  | Pos_number_SBBA | -. 232 | . 150 | -. 144 | -1.543 | . 123 | . 122 | 8.213 |
|  | Pos_instr_SBBA | -. 194 | . 061 | -. 226 | -3.186 | . 001 | . 213 | 4.702 |
|  | Pos_dich_SBBA | . 165 | . 102 | . 060 | 1.614 | . 107 | . 780 | 1.283 |
|  | Pos_grad_SBBA | . 317 | . 053 | . 319 | 5.962 | . 000 | . 372 | 2.691 |
|  | Gender | -. 097 | . 098 | -. 032 | -. 983 | . 326 | . 982 | 1.018 |
|  | Knowledge | . 079 | . 034 | . 076 | 2.296 | . 022 | . 983 | 1.017 |
|  | NFU_index | . 052 | . 040 | . 043 | 1.308 | . 191 | . 982 | 1.018 |
|  | Int_instr_number | . 096 | . 029 | . 372 | 3.271 | . 001 | . 082 | 12.150 |

a. Dependent Variable: Eval_diff

### 10.2.17 Differentitation of all PBBAs - Interaction dich_NFU

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $.355^{\text {a }}$ | .126 |  |  |  |  |  |  |  | .118 | 1.37986 | 1.800 |

a. Predictors: (Constant), Int_dich_NFU, Gender, Knowledge, Pos_instr_SBBA, NFU_index, Pos_number_SBBA, Pos_grad_SBBA, Pos_dich_SBBA
b. Dependent Variable: Eval_diff

| Model |  | Sum of Squares | df | Mean Square | F | Sig. |
| :--- | :--- | ---: | ---: | ---: | ---: | ---: |
| 1 | Regression | 222.539 | 8 | 27.817 | 14.610 |  |
|  | Residual | 1540.350 | 809 |  | 1.904 |  |
|  | Total | 1762.889 | 817 |  |  |  |
|  |  |  |  |  |  |  |

a. Dependent Variable: Eval_diff
b. Predictors: (Constant), Int_dich_NFU, Gender, Knowledge, Pos_instr_SBBA, NFU_index, Pos_number_SBBA, Pos_grad_SBBA, Pos_dich_SBBA

Coefficients ${ }^{\text {a }}$

| Model |  | Unstandardized Coefficients |  | Standardized <br> Coefficients <br> Beta | t | Sig. | Collinearity Statistics |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | B | Std. Error |  |  |  | Tolerance | VIF |
| 1 | (Constant) | 2.922 | . 268 |  | 10.884 | . 000 |  |  |
|  | Pos_number_SBBA | . 215 | . 063 | . 134 | 3.434 | . 001 | 708 | 1.413 |
|  | Pos_instr_SBBA | -. 035 | . 037 | -. 041 | -. 949 | . 343 | . 584 | 1.713 |
|  | Pos_dich_SBBA | . 293 | . 319 | . 106 | . 919 | . 358 | . 081 | 12.418 |
|  | Pos_grad_SBBA | . 228 | . 046 | . 230 | 4.954 | . 000 | . 502 | 1.990 |
|  | Gender | -. 098 | . 099 | -. 033 | -. 990 | . 323 | . 982 | 1.019 |
|  | Knowledge | . 084 | . 035 | . 080 | 2.422 | . 016 | . 985 | 1.016 |
|  | NFU_index | . 049 | . 043 | . 040 | 1.149 | . 251 | . 872 | 1.146 |
|  | Int_dich_NFU | -. 010 | . 082 | -. 014 | -. 117 | . 907 | . 081 | 12.330 |

a. Dependent Variable: Eval_diff

### 10.2.18 Differentitation of all PBBAs - Interaction grad_NFU

| Model Summary ${ }^{\text {b }}$ |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1 | $.358^{\text {a }}$ | .128 | .120 | 1.37835 |  |

a. Predictors: (Constant), Int_grad_NFU, Knowledge, Gender, Pos_dich_SBBA, Pos_number_SBBA, Pos_instr_SBBA, Pos_grad_SBBA, NFU_index
b. Dependent Variable: Eval_diff

| ANOVA $^{\text {a }}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Sum of Squares | df | Mean Square | F | Sig. |
| 1 Regression | 225.903 | 8 | 28.238 | 14.863 | . $000{ }^{\text {b }}$ |
| Residual | 1536.986 | 809 | 1.900 |  |  |
| Total | 1762.889 | 817 |  |  |  |

a. Dependent Variable: Eval_diff
b. Predictors: (Constant), Int_grad_NFU, Knowledge, Gender, Pos_dich_SBBA, Pos_number_SBBA, Pos_instr_SBBA, Pos_grad_SBBA, NFU_index

| Coefficients ${ }^{\text {a }}$ |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Unstandardized Coefficients |  | Standardized Coefficients | t | Sig. | Collinearity Statistics |  |
|  | B | Std. Error |  |  |  | Tolerance | VIF |
| 1 (Constant) | 2.320 | . 526 |  | 4.411 | . 000 |  |  |
| Pos_number_SBBA | . 217 | . 063 | . 136 | 3.473 | . 001 | . 707 | 1.414 |
| Pos_instr_SBBA | -. 034 | . 037 | -. 040 | -. 930 | . 352 | . 584 | 1.713 |
| Pos_dich_SBBA | . 262 | . 098 | . 095 | 2.660 | . 008 | . 845 | 1.183 |
| Pos_grad_SBBA | . 356 | . 106 | . 359 | 3.354 | . 001 | . 094 | 10.613 |
| Gender | -. 095 | . 099 | -. 032 | -. 964 | . 335 | . 982 | 1.019 |
| Knowledge | . 082 | . 035 | . 078 | 2.369 | . 018 | . 983 | 1.017 |
| NFU_index | . 218 | . 134 | . 179 | 1.629 | . 104 | . 089 | 11.249 |
| Int_grad_NFU | -. 036 | . 027 | -. 195 | -1.336 | . 182 | . 051 | 19.688 |

a. Dependent Variable: Eval_diff

### 10.2.19 Differentiation of all PBBAs - Interaction instr_NFU

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| :--- | ---: | ---: | ---: | ---: | ---: |
| 1 | $.375^{\mathrm{a}}$ | .140 | .132 | 1.36856 | 1.811 |

a. Predictors: (Constant), Int_instr_NFU, Gender, Pos_dich_SBBA, Knowledge, Pos_number_SBBA, Pos_grad_SBBA, NFU_index, Pos instr SBBA
b. Dependent Variable: Eval_diff

a. Dependent Variable: Eval_diff
b. Predictors: (Constant), Int_instr_NFU, Gender, Pos_dich_SBBA, Knowledge, Pos_number_SBBA, Pos_grad_SBBA, NFU_index, Pos_instr_SBBA

a. Dependent Variable: Eval diff

### 10.2.20 Differentiation of all PBBAs - Interaction number_NFU

| Model Summary ${ }^{\text {b }}$ |  |  |  |  |  |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | Durbin-Watson |
| 1 | $.367^{\text {a }}$ | .134 | .126 | 1.37340 |  |

a. Predictors: (Constant), Int_number_NFU, Gender, Knowledge, Pos_dich_SBBA, Pos_instr_SBBA, Pos_grad_SBBA, NFU_index, Pos_number_SBBA
b. Dependent Variable: Eval_diff

| ANOVA $^{\text {a }}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Model | Sum of Squares | df | Mean Square | F | Sig. |
| 1 Regression | 236.929 | 8 | 29.616 | 15.701 | . $000{ }^{\text {b }}$ |
| Residual | 1525.960 | 809 | 1.886 |  |  |
| Total | 1762.889 | 817 |  |  |  |

a. Dependent Variable: Eval_diff
b. Predictors: (Constant), Int_number_NFU, Gender, Knowledge, Pos_dich_SBBA, Pos_instr_SBBA, Pos_grad_SBBA, NFU_index, Pos_number_SBBA

Coefficients ${ }^{\text {a }}$

| Model |  | Unstandardized Coefficients |  | Standardized Coefficients Beta | t | Sig. | Collinearity Statistics |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | B | Std. Error |  |  |  | Tolerance | VIF |
| 1 | (Constant) | 1.891 | . 458 |  | 4.130 | . 000 |  |  |
|  | Pos_number_SBBA | . 647 | . 168 | . 403 | 3.846 | . 000 | . 097 | 10.278 |
|  | Pos_instr_SBBA | -. 038 | . 037 | -. 044 | -1.022 | . 307 | . 584 | 1.713 |
|  | Pos_dich_SBBA | . 261 | . 098 | . 095 | 2.660 | . 008 | . 846 | 1.182 |
|  | Pos_grad_SBBA | . 232 | . 046 | . 234 | 5.063 | . 000 | . 502 | 1.991 |
|  | Gender | -. 075 | . 099 | -. 025 | -. 759 | . 448 | . 975 | 1.026 |
|  | Knowledge | . 085 | . 034 | . 081 | 2.467 | . 014 | . 985 | 1.016 |
|  | NFU_index | . 332 | . 110 | . 273 | 3.006 | . 003 | . 130 | 7.690 |
|  | Int number NFU | -. 121 | . 044 | -. 370 | -2.765 | . 006 | . 060 | 16.724 |

a. Dependent Variable: Eval_diff


[^0]:    ${ }^{1}$ Supphellen et al., 2014 defines connotative differentiation as associations that provide drivers with a unique and relevant meaning. In this paper we consider connotative differentiation as an "absence of instrumentality", and have therefore not included the term in our research.

[^1]:    ${ }^{2}$ In line with Keller's (1993) theory on favorability and the traditional view on differentiation, we are only investigating SBBAs with positive valence. Consequently, throughout the paper and in all hypotheses, we will refer to positive SBBAs.

[^2]:    ${ }^{3}$ MLR: Multple Linear regression, SLR: Simple Linear Regression

[^3]:    ${ }^{4} \mathrm{cf}$. chapter 6.2 .1 for a richer discussion about the implications of our findings and internal validity.

[^4]:    ${ }^{5}$ Brand Schematicity as a variable was based on items from the research of Puligadda et al., (2012). The construct was tested with a confirmatory factor analysis (CFA) in SPSS Amos. Most of the items had loadings around .5. P-value associated with the chi-square $=.00, \mathrm{CMIN} / \mathrm{df}=9.875, \mathrm{RMSEA}=.104, \mathrm{NFI}=.883, \mathrm{GFI}=.918$ and $\mathrm{CFI}=.893$ were all indicating a poor fit according to $\mathrm{Hu} \&$ Benter (1999). Even after removing negative loadings and including covariance, we still received a bad model fit. The construct was therefore not included our study.

[^5]:    ${ }^{6}$ The eight remaining items in question 2: $4=$ Purchase intention, 5 and $6=$ Trustworthiness, 7 and $8=$ General differentiation on brand level, and 9, 10 and $11=$ Brand attachment.

[^6]:    ${ }^{7}$ We note that the Cronbach's alpha values for Eval_ben $=.698$, E_Eval_ben $=.597$ and S_Eval_ben $=.598$ are below our threshold of .7 , but will according to Kline's (1999) argument in our discussion about internal consistency (cf. chapter 3.4.3) consider the values as acceptable.

[^7]:    ${ }^{8}$ Example weighted average: Respondent A has three positive $\operatorname{SBBAs}$ that scored $(6,6,6)$ on graded differentiation, thus receiving the score $(6+6+6) /(3$ positive SBBAs$)=6$.
    Respondent B has one positive- and two negative SBBAs that scored $(6,6,6)$ on graded differentiation, thus receiving the score $(6+0+0) /(1$ positive $S B B A)=6$. Consequently, in this particular instance both respondents score 6 .
    ${ }^{9}$ Example alternative calculation: Respondent A has three positive SBBAs that scored (6, 6, 6) on graded differentiation, thus receiving the score $(6+6+6) /(3 \mathrm{SBBAs})=6$.
    Respondent $B$ has one positive- and two negative SBBAs that scored $(6,6,6)$ on graded differentiation, thus receiving the score $(6+0+0) /(3 \mathrm{SBBAs})=2$. Consequently, respondent A scores 6 and respondent B scores 2 .

[^8]:    ${ }^{10}$ Requirements for fit indices: According to Hu \& Bentler (1999) RMSEA values of 6 or lower are considered good fit. For NFI, GFI, CFI and TLI, values over .9 are considered acceptable and values over .95 are considered a good fit.

[^9]:    ${ }^{11}$ Alternative calculation (H1): Preferred brands (.7934) had a statistically significantly higher mean than acceptable brands (.5761). Thus, providing additional support for H1 (cf. Appendix 8.1.2).
    ${ }^{12}$ Alternative calculation (H2): Preferred brands (4.5771) had a statistically significantly higher mean than acceptable brands (3.7942). Thus, providing additional support for H2 (cf. Appendix 8.1.4).

[^10]:    ${ }^{13}$ Alternative calculation instrumental differentiation for products and services: The interaction-effect was significant ( $\mathrm{p}=.015$ and $\mathrm{F}=5.910$ ). Confidence intervals were overlapping for products (4.221-4.725 and 3.750-4.260), but not for services (4.429-4.934 and 3.330-3.839). Hence, there was a significant difference between preferred and acceptable brands for services, providing further support (cf. Appendix 8.2.3).

[^11]:    ${ }^{14}$ Alternative calculation (Pos_neu_dich_SBBA): Preferred brands (.2179) did not have a statistically significantly higher mean than acceptable brands (.2370). Not supporting H3 (cf. Appendix 8.1.10).
    ${ }^{15}$ Alternative calculation (H4): Preferred brands (4.2607) had a statistically significantly higher mean than acceptable brands (3.4667). Supporting H4 (cf. Appendix 8.1.8).
    ${ }^{16}$ Top scores of " 5,6 and 7 ", and "6 and 7 " (H4): Preferred brands had a statistically significantly higher mean than acceptable brands for both calculations ( $1.7700>1.3037$ and $.8959>.6741$ ). Supporting H4 (cf. Appendix 8.1.6-8.1.7).

[^12]:    ${ }^{17}$ Alternative calculation graded differentiation for products and services: The interaction-effect was significant ( $\mathrm{p}=.012$ and $\mathrm{F}=6.290$ ). Confidence intervals were not overlapping for both products (4.221-4.725 and 3.750-4.260) and services (4.429-4.934 and 3.330-3.839). Hence, there was a significant difference between preferred and acceptable brands for both products and services. However, this is something that we could expect considering that the alternative calculation is a less strict test. We thereby only use this finding as support for our stricter test. (cf. Appendix 8.2.6).

[^13]:    ${ }^{18}$ Cf. Chapter 6.3 for a further description of the findings on dichotomous differentiation in the study of Erlandsen (2013).

[^14]:    a. Dependent Variable: Attitude_index

[^15]:    a. Dependent Variable: Attitude_index

[^16]:    a. Dependent Variable: Eval_ben

[^17]:    a. Dependent Variable: E_Eval_ben

[^18]:    a. $R$ Squared $=.021$ (Adjusted $R$ Squared $=.016$ )

[^19]:    a. Dependent Variable: Diff_ben

[^20]:    a. Dependent Variable: Eval_diff

