The Role Brands play in the Purchase Behavior and Decision-making of Compulsive buyers, in regard to Brands of the Compulsive versus Non-compulsive Product Category

In terms of the perceived importance of functional, emotional and social brand benefits, brand trust, brand attachment, brand loyalty and willingness to switch within a category.

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“It is always shoe o’clock somewhere.”

- a shopaholic

Abstract

This study investigates the role of brands in the purchase behavior and decision-making of compulsive buyers, in regard to the compulsive versus non-compulsive product category. It also investigated how this role is different for compulsive buyers, compared to non-compulsive buyers. It gives a complete overview of the brand-related behavior and attitudes of consumers with a high and low compulsive buying tendency, and also in regard to product categories that they do (compulsive product category) and do not necessarily like to purchase (non-compulsive product category).

A large-scale survey-based method was used to collect the data for this study. Three databases were combined. This way it could be examined if the brand-related behavior and attitudes of consumers, also depend of which product category they purchase branded products from. Furthermore, an AN(C)OVA analysis was used to find differences between the two consumer groups and the two product categories. The covariate gender was included in the ANCOVA analysis. However, gender only had an effect on the perceived importance of functional benefits. In the non-compulsive product category, males find functional benefits of branded products significantly more important than females.

The main finding of this study is that the brand-related behavior and attitudes often do depend on which of product category (compulsive or non-compulsive product category) they purchase from. The variable product category effects the relationship between compulsive buying tendency and the independent variable considerably. Consumers with a high compulsive buying tendency find functional benefits the most important benefit, emotional the second most and social benefits the least important brand benefits in regard to branded products of the NCP-category. Product category does not have a direct effect on brand trust, but together with the variable compulsive buying tendency, it has an disordinal crossover interaction effect on the level of brand trust. Consumers with a high compulsive buying tendency develop a higher level of brand trust for branded products of the NCP-category, compared to consumers with a low compulsive buying tendency. Furthermore, consumers with a high compulsive buying tendency, have a lower level of willingness to switch and a higher level of repurchase intention in regard to products of the NCP-category, compared to the CP-category. Therefore, the inclusion of the independent variable product category in the model was

very relevant. Also the explanatory power of the research models improved after including the variable product category. The level of brand attachment, willingness to pay more and word of mouth of consumers with a high compulsive buying tendency, is not affected by the type of product category.

Although this research has many interesting findings, also this research has some limitations. First of all, there are a lot of young and high educated respondents and students in the sample. Secondly, the study was done in the Netherlands, and therefore the findings only hold for the Dutch population. Finally, the normality assumption of the AN(C)OVA analysis was not met.

The study also contains managerial implication how organisations can reconsider and adjust marketing and brand strategies in regard to compulsive buyers. However, it is emphasized in this study that organisations should not try to stimulate compulsive buying behavior. First of all, this has a negative effect on the wellbeing of this vulnerable consumer group. Secondly, when consumers think an organization is exploiting these consumers, it could lead to brand image damage. It is more ethically if organisations try to cooperate in a social responsible way, by helping this consumer group or try to stimulate healty consumer buying behavior with marketing campaigns. This can have a positive effect on the brands' image and brand loyalty of consumers.

The study also indicates some interesting topics for future research. First of all, the effect of culture on the relationships could be examined. Secondly, with a qualitative research it could be analysed why consumers with a high compulsive buying tendency, find social benefits surprisingly much less important than functional and emotional brand benefits. Thirdly, the disordinal crossover interaction effect of compulsive buying tendency and product category on brand trust could be examined. Fourthly, examining the effect of a positive user experience and the experience of buying the products for a good price, on the brand-related behavior and attitudes of compulsive buyers in regard to the non-compulsive product category. Finally, it would be interesting to analyse the interrelationships of the dependent variables in this study, and the role of compulsive buying tendency and product category on these relationships.

Keywords - Compulsive buyers, compulsive buying tendency, role of brands, role of product categories, brand decisions, social responsibility of organisations

Preface

From November 2016 to June 2017, I was focused on researching what role brands play in the purchase behavior and decision-making of compulsive buyers, in regard to branded products of the compulsive versus non-compulsive product category. For me this was an interesting topic because I am very interested in branding, psychology and the social responsibility of organizations. The study provides knowledge about the brand-related behavior and attitudes of compulsive buyers in regard to the compulsive and non-compulsive product category.

I am grateful to all those people that were involved in this study. First of all, I would like to thank Dr. Horváth for her help and feedback during the whole research process. I would also like to thank Dr. Van Birgelen, the co-reader of my thesis, for his additional feedback in regard to my research proposal. Moreover, I would like to thank my friends Helena and Tessa, my sister and my parents for reading my thesis to check it for mistakes. Finally, I would especially like to thank my parents, my sister, and my friends Laura and Sandra for their moral support.

I hope you will enjoy reading my thesis.

Nijmegen, June 2016

Sanne van Lohuizen

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1. Introduction

Compulsive buyers are consumers "who engage in chronic, repetitive purchasing that becomes a primary response to negative events or feelings" (O'Guinn & Faber, 1989). These consumers have difficulties with controlling overpowering buying impulses (O'Guinn & Faber, 1989). When they purchase something they experience short-term benefits, which reinforces this extreme buying behavior. For instance, it can lead to a lower level of anxiety (Salzman, 1981), a higher level of self-esteem, and it can give them positive emotional feelings (O'Guinn & Faber, 1988). However, their extreme buying behavior can also lead to severe consequences for the individual and their family (O'Guinn & Faber, 1989), such as economic (e.g. heavy debts) and emotional problems (e.g. stress and depression).

Horváth and Van Birgelen (2015) indicate that compulsive buyers show different brand-related behavior and attitudes, compared to non-compulsive buyers. For instance, they prefer to buy more and cheaper products because they like to have variety in their purchases. Furthermore, compared to non-compulsive buyers, compulsive buyers develop less brand trust and brand loyalty. On the other hand, they have a higher degree of brand attachment (Horváth & Van Birgelen, 2017). Finally, compulsive buyers seek different benefits from brands, compared to non-compulsive buyers. For compulsive buyers emotional benefits (e.g. experiencing positive feelings) of branded products are the most important brand benefits, whereas functional benefits (e.g. product quality) are the most important brand benefits for non-compulsive buyers (Horváth & Van Birgelen, 2017).

The brand-related behavior and attitudes of compulsive buyers was studied by only questioning respondents about their favorite brand in their favorite product category (Horváth & Van Birgelen, 2015 & 2017). This was done because compulsive buyers mainly shop compulsively when they really like a certain product category or brand, and also because they needed brands and product categories that are comparable between compulsive and non-compulsive buyers (Horváth & Van Birgelen, 2017). Consequently, there is knowledge about the brand-related behavior and attitudes of compulsive buyers in regard to brands of product categories that they really like to purchase, but not in regard to brands of product categories that they need to buy but for which they do not enjoy the shopping experience (e.g. detergent). It remains unclear if and how the buying behavior of compulsive buyers are different

in regard to the products that they do not really like to purchase, and if it is different from the buying behavior of non-compulsive buyers.

1.1 Relevance of the problem

Theoretical relevance

Because compulsive buying has become more common and because it can lead to severe negative consequences for the individual, a significant amount of research has been conducted on compulsive buying behavior (Neuner et al., 2005; Koran et al., 2006; Ridgway et al., 2008). It is also important to study compulsive buying behavior in relation to brands and marketing. This because marketing and brand managers can play a significant role in compulsive buyers buying behavior. For instance, they can either knowingly or unknowingly encourage compulsive buyers to purchase and thus increase their consumption (Workman & Paper, 2010). To better understand the role of brands in compulsive buying behavior, researchers have studied this extensive buying behavior in regard to branded products (Lee & Workman, 2015; Horváth & Van Birgelen, 2016; Japutra et al., 2016). However, as mentioned before, it remains unclear if and how the buying behavior of compulsive buyers are different in regard to the branded products that they do not really like to purchase, compared to the branded products they do like to purchase. Furthermore, if their behavior is different in this product category, compared to non-compulsive buyers. This study fills this gap in the literature by studying the brand-related behavior and attitudes of compulsive buyers in regard to these two types of products. This knowledge extends and addresses the generalizability of the current knowledge about the role brands play in the buying behavior of compulsive buyers. Furthermore, their brand-related behavior and attitudes are compared with the brand-related behavior and attitudes of non-compulsive buyers. This gives an overview to what extend the buying behavior of compulsive buyers is actually different from the buying behavior of non-compulsive buyers, in both product categories.

Managerial relevance

The findings of this study informs marketing and brand managers whether the brand-related behavior and attitudes of compulsive buyers are different for branded products that consumers do not really like

to purchase, compared to branded products that they enjoy purchasing. Furthermore, to what extend this is different for compulsive buyers, compared to non-compulsive buyers. With this knowledge, marketing and brand managers can form more accurate expectations of the buying behavior compulsive buyers in regard to branded products from both product categories. This will make it easier to recognize compulsive buyers. Furthermore, it can be used to reconsider and adjust organisations marketing and branding strategies in regard to compulsive buyers. Marketing and brand managers need to be careful. When consumers expect that brands are exploiting compulsive buyers, it could lead to a negative brand image. More ethically, brands can cooperate in a socially responsible way, by helping compulsive buyers and the society to deal with compulsive buying. Besides helping this vulnerable consumer segments and the society, these efforts can also have a positive effect on a brand's performance. First of all, they can avoid brand equity damage. For instance, the brand equity of brands may be hurt by the way compulsive buyers react to brands (Horváth & Van Birgelen, 2015). Secondly, it can increase customer satisfaction, loyalty and boost the public image of the brand as a responsible organization that cares for societal wellbeing (Horváth & Van Birgelen, 2015).

1.2 Research objective and research question

The aim of this study was to address if and how compulsive buyers behave differently in regard to the two types of products categories. This was examined by studying the brand-related behavior and attitudes of compulsive buyers in relation to product categories for which they do not really care for, and comparing it with their brand-related behavior and attitudes in regard to product categories that they do like to purchase. This provides more generalizable knowledge about the buying behavior of compulsive buyers. Furthermore, the aim was to make recommendations for marketing and brand managers in how they can reconsider and adjust the organisations' marketing and branding strategies in regard to compulsive buyers. Furthermore, how they can have a positive impact on this problematic consumer behavior, by cooperating in a socially responsible way.

The product categories from which consumers like to purchase products, and from which they also experience positive emotions, will be referred in this study as product categories of the "compulsive product category" (CP-category), since it is expected that compulsive buyers engage in

more compulsive behavior in regard to these product categories. The product categories that they do not really care for and from which they only buy products because they think that they are necessary to buy, are referred in this study as product categories of the "non-compulsive product category" (NCP-category). The research question of this study is:

What role do brands play in the purchase behavior and decision-making of compulsive buyers in regard to brands of the NCP-category? Is this role of brands different from the role in the CP-category?

1.3 Outline of the thesis

Section 2 is a literature review. This review describes relevant theories and perspectives that was used for the study. The third section gives a description of the research methodology and the sample that was used. The fourth section describes the results of the (quantitative) research. The results will lead to a conclusion and discussion in section 5, where the results are interpreted. Section 6 describes the literature and managerial implications. The final section gives an overview of the research limitations and topics for future research (Section 7).

2. Literature review

This section gives an overview of the relevant literature that was used for this study. First, the consumer behavior compulsive buying is described. Secondly, the impact of brands and marketing on compulsive buying behavior. Thirdly, the CP-category and NCP-category, related to the expected sought values of consumers, are described. Fourthly, a description is given of the brand-related behavior of consumers in terms of perceived importance of brand benefits, brand trust, brand attachment, brand loyalty and willingness to switch within a category. Furthermore, the brand-related behavior of compulsive buyers are described in regard to the CP-category. Finally, hypotheses of this study in regard to the NCP-category are formulated.

2.1 Compulsive buying

Compulsive buying is stimulated by an uncontrollable drive or desire to buy products (O'Guinn & Faber, 1989). Compulsive buying behavior is recognized as a psychological and psychiatric problem (Faber & O'Guinn, 1992). It can be seen as a form of abuse because compulsive buyers are not able to control their buying behavior and they experience a "high" when they are browsing and buying products (Black, 1996).

Compulsive buyers do not have a strong desire to possess things, but instead they are trying to attain interpersonal and self-esteem goals (Faber & O'Guinn, 1992). According to Faber (1992) there is an interplay of several biological, psychological, and sociologic factors that triggers compulsive buying behavior. More specific factors that are described in the literature are a shortage of the neurochemical serotonin (McElroy, Satlin, Pope, Keck, & Hudson, 1991), high levels of materialism (Dittmar, 2000), low levels of self-esteem (O'Guinn & Faber, 1989), the need to escape from a negative feeling (O'Guinn & Faber, 1989) or emotional affliction (Salzman, 1981), and the social acceptance of the use of buying to improve one's mood (Faber, 1992; Peele, 1985). According to the Social Learning theory of Becker (1953, 1969), compulsive buyers can also copy the buying behaviors from other compulsive buyers. Besides this, other individuals can reinforce their behavior if they receive positive feedback for their behavior (Workman & Paper, 2010).

Because of the "high" and the short-term benefits of compulsive consumption (e.g. positive feelings, ability to escape from a negative feeling), this extreme buying behavior is reinforced (O'Guinn & Faber, 1988). Furthermore, this buying behavior continues because the forcing drive remains unresolved (Workman & Paper, 2010). This is because the internal drive is not satisfied after the consumption, since it comes from a deeper issue within (e.g. extreme anxiety).

At first compulsive buyers feel happy after a compulsive consumption, but it is almost always followed by a set of negative feelings (Faber & Christenson, 1996). After a purchase the compulsive buyer often experiences feelings of guilt (O'Guinn & Faber, 1988), unhappiness, shame or embarrassment (Yurchisin & Johnson, 2004). Furthermore, on the long-term this buying behavior can have severe negative economic, social, and psychological consequences for the individual and others (O'Guinn & Faber, 1988). For example, it can lead to heavy debts and additional anxiety and frustration for the individual (O'Guinn & Faber, 1989). Consequently, this can have negative effects on their relationships with others who might try to stop or moderate it.

Personality traits described in the literature of compulsive buyers are that they tend to have a lower self-esteem (d'Astous, 1990; O'Guinn and Faber, 1989; Workman and Paper, 2010), be materialistic individuals (Dittmar, 2005; O'Guinn & Faber, 1989) and to perceive social status as highly associated with consumption (d'Astous, 1990). Furthermore they behave compulsively, have a lower impulse control, seek arousal (excitement) and have higher rates of fantasizing (Workman & Paper, 2010). Additionally, they often feel lonelier, have a higher level of negative affect (e.g. depression) and have stronger affect responses (Workman & Paper, 2010) in comparison to non-compulsive buyers. Finally, compulsive buying is significantly related with gender (more females), age (decrease with age) and education (inversely relationship) (Ridgway et al., 2008).

2.2 Impact of brands and marketing on compulsive buying behavior

Lee and Workman (2015) state that consumer decision-making is not only affected by internal factors (e.g. positive or negative emotional states), but also by external factors such as brand names. A brand is "a name, term, sign, symbol, or design, or combination of them which is intended to identify the goods and services of one seller or group of sellers and to differentiate them from those of competitors"

(Kotler, 1991). With brands companies can enjoy greater brand loyalty, usage and affinity (Yoo et al., 2000). For customers, brands can create simplification and risk reduction (Mudambi, 2002; Escalas & Bettman, 2003). For example, when a consumer has had a positive experience with a brand, they know what level of product or service quality they can expect from a brand (risk reduction), and they don't have go through a complex brand decision-making process every time they want to purchase the product or service (simplification). Brands also provide certain benefits for compulsive buyers. For instance, compulsive buyers can communicate and enhance aspects of their identity by using the associations from the brand (Kukar-Kinney et al., 2012; Strizhakova et al., 2008). Furthermore, they try to move closer to an "ideal self, express themselves and improve their social image by their purchases" (Kukar-Kinney et al., 2012). Additionally, according to Rose and Orr (2007) and Kukar-Kinney et al. (2012), status and prestige, are positively and significantly related to compulsive buying. When the brands are higher priced or well-known, it can enhance the self-esteem boost (Horváth & Van Birgelen, 2015).

Furthermore, marketing can stimulate compulsive buying by promoting materialism ("shop till you drop") and generating urges to purchases with pervasive messages (Lee & Workman, 2015). These activities can have a significant effect on the buying behavior of compulsive buyers, since they have stronger affect responses to product-related and marketing communication than non-compulsive buyers (Workman & Paper, 2010). According to the Sociocultural Theory (Workman & Paper, 2010), compulsive buying is a sociocultural phenomenon that is facilitated by marketing strategies. De Graaf, Wann and Naylor (2005) describe this cultural consumerism as the "Affluenza" disease: "a painful, contagious, socially transmitted condition of overload, debt, anxiety, and waste resulting from the dogged pursuit of more".

2.3 Compulsive and non-compulsive product categories

The two types of product categories (CP-category and NCP-category), which are expected to influence the role that brands play in the buying behavior of compulsive buyers, will be described based on the values that consumers intend to gain (expected in this study) when they purchase products of these product categories. Babin, Darden and Griffin (1994) describe that consumers can obtain two types of

values during their shopping experience. A value includes "all factors, both qualitative and quantitative, subjective and objective, that make up the complete shopping experience" (Schechter, 1984). The first type of shopping value is the utilitarian value. When consumers purchase products to gain this type of value, the purchases decisions are made consciously and are made for an intended consequence (Babin et al,. 1994). Furthermore, this type of purchases is described as task-related, and rational (Batra & ahtola, 1991; Engel et al., 1993; Sherry, 1990b).

The second shopping value it the hedonic value. This value is more a result of fun and playfulness (Holbrook & Hirschman, 1982). For instance, the consumer experiences entertainment and emotional worth (Bellenger, Steinberg & Stanton 1976). Summing up, when someone strives for a utilitarian outcome they purchase a product "to get something", whereas when they strive for a hedonic outcome they purchase a product because "you love it" (Triandis, 1977).

The two types of product categories that are studied in this research (CP-category and NCP-category) are linked to these values because they have similar product preferences. Just like the CP-category, the items that are high on hedonic value are linked to affective preferences ("wants") (Dhar & Wertenbroch, 2000). Furthermore, just like the NCP-category, the items that are high on utilitarian value are linked to reasoned preferences ("shoulds") (Dhar & Wertenbroch, 2000). Moreover, Bloch et al. (1986) describe that perceived enjoyment provided through purchasing is an important hedonic benefit. Likewise, compulsive buyers gain these intrinsic values through purchasing products of the CP-category (Faber & O'Guinn, 1989). Furthermore, just as the compulsive purchases of compulsive buyers, hedonic outcomes can work in a therapeutic way. For example, it can reward a consumer through self-gratification, which improves an individual's mood (Cialdini, Darby & Vincent, 1973). Hedonic value can also be perceived by consumers through perceptions of bargains (Babin et al,. 1994). This may also explain why compulsive buyers like to buy more and cheaper products. Bargains can create increased consumer sensory involvement and excitement (Babin et al,. 1994).

2.4 Brand-related behavior and attitudes

First an introduction is given of the measured brand-related behavior and attitudes. After this, the brand-related behavior and attitudes of compulsive buyers is described in regard to the CP-category.

These are described based on findings of existing research. Finally, hypotheses are formulated for the brand-related behavior and attitudes of compulsive buyers in regard to branded products of the NCP-category. These hypotheses are also based on findings of exisiting research or on the expected sought value, the utilitarian value.

Brand benefits

Keller (1993) defines benefits as "the personal value consumers attach to the product or service attributes—that is, what consumers think the product or service can do for them". Benefits can be related to three underlying motivators, namely: functional benefits, experiential benefits and symbolic benefits (Park, Jaworski, and MacInnis 1986). Functional benefits are defined as "benefits that are the more intrinsic advantages of product or service consumption and usually correspond to the product-related attributes" (Keller, 1993). These benefits are sought to remove or avoid a problem (Fennel, 1978; Rossiter & Percy, 1987) and are linked to basic motivation such as physiological and safety needs (Maslow, 1970). Experiential benefits are "benefits that relate to what it feels like to use the product or service and also usually correspond to the product-related attributes" (Keller, 1993). Keller (1993) describes that these benefits meet experiential needs of consumers. For instance, the need for sensory pleasure, variety and cognitive stimulation. Symbolic benefits are described as "more extrinsic advantages of product or service consumption" (Keller, 1993). These benefits are more related to needs for social approval or personal expression and outer directed self-esteem.

Horváth and Van Birgelen (2017) referred to benefits as functional, emotional and social benefits in their study. They analysed sough brand benefits in regard with the CP-category. In line with other exisiting research, the results of their study showed that compulsive buyers mostly seek emotional benefits from branded products and non-compulsive buyers mostly seek functional benefits from branded products. Furthermore, they found that compulsive buyers find functional benefits more important than social benefits. This finding contradicts with other theories that compulsive buyers use brands to seek prestige and approval from others (Horváth & Van Birgelen, 2017). This because you would expect compulsive buyers to find social benefits more important if the care how other people perceive them.

When consumers purchase products of the NCP-category, it is expected in this study that the utilitarian value is the preferred gained value of the purchase. They purchase products to remove or avoid a problem. When consumers seek the utilitarian value, the purchase is task related, and the decision-making more rational (Batra & ahtola, 1991; Engel et al., 1993; Sherry, 1990b). This could indicate that compulsive buyers find functional benefits most important in this product category, since consumers seek functional benefits when they need to solve a problem (Fennel, 1978; Rossiter & Percy, 1987). Furthermore, emotional benefits could be expected to be the second most important brand benefits for compulsive buyers. This because compulsive buyers could experience positive emotions when they accomplish to purchase these products for a lower price (Babin et al,. 1994).

Hypothesis 1: Consumers with a high compulsive buying tendency find (a) functional brand benefits the most, (b) emotional benefits the second most and (c) social benefits the least important brand benefits of products of the NCP-category.

Brand trust

Brand trust can be defined as "the willingness of the average consumer to rely on the ability of the brand to perform its stated function" (Chaudhuri & Holbrook, 2001). Albert et al. (2001) describe it as the consumers' expectation about the brand's reliability in risky situations. According to the results of the research of Horváth and Van Birgelen (2017), compulsive buyers develop a lower level of brand trust than non-compulsive buyers for brands of the CP-category. An explanation that they give for this is that compulsive buyers base their brand choice on emotions rather than functional benefits of brands. This could lead to choices of brand of lower reliability and quality. Furthermore, brand trust can be seen as a calculative process (Doney & Cannon, 1997). There is less opportunity to develop brand trust when consumers switch between different brands (Horváth & Van Birgelen, 2015).

When consumers seek utilitarian values, the purchases are described as rational (Batra & ahtola, 1991; Engel et al., 1993; Sherry, 1990b). Therefore it is expected in this study that compulsive buyers think more rationally and that their brand decisions are less based on emotions in regard to products of the NCP-category. Because they think more rationally it is more likely that they will make better brand

choices (choosing reliable and high quality brands) in the NCP-category. This could lead to better experiences with the brand and therefore lead to more trust in regard to a brand. Furthermore, they could develop more brand trust in this product category because they could be less inclined to switch between brands (this is also referred as a calculative process). This is because they would normally like to find other brands that give them more positive emotional feelings. But since they are not seeking emotional benefits from branded products in this category, they might be less inclined seek other brands that might give them more positive emotions.

Hypothesis 2: Consumers with a high compulsive buying tendency have a higher level of brand trust for branded products of the NCP-category than for branded products of the CP-category.

Brand attachment

Attachment can be defined as "an emotion-laden target-specific bond between a person and a specific object" (Thompson et al., 2005). According to Park et al. (2010) brand attachment involves cognitive and emotional connection between a brand and a person. The experienced feelings have three dimensions: affection, passion and connection (Thomson et al., 2005). Malär et al. (2011) argue that consumers who buy products that are highly congruent with their ideal-self, tend to develop a higher brand emotional connection (Japutra et al., 2016). Furthermore, when consumers have a positive experience with a brand they tend to get more attached (Kessous et al., 2010). Furthermore, when a brand is perceived as means for self-expansion they will be attached and feel close to a brand (Whan Park et al., 2013).

Different researchers studied brand attachment of compulsive buyers in regard to the CP-category. Compulsive buyers have stronger brand relationships (Lee & Workman, 2015) and more brand attachment (Horváth & Van Birgelen, 2016) than non-compulsive buyers. Also Japutra (2016) research displays that brand attachment is positively related to compulsive buying behavior. Consumers are more likely to conduct compulsive buying behavior, when they have an emotional attachment with a brand.

In regard to the NCP-category, it is expected that consumers seek utilitarian values and

therefore experience a lower degree of positive emotions when they buy products of this product category, compared to the CP-category. If they experience a lower level of positive emotions when they purchase a product, they will most likely also develop a lower level of emotional connection with a brand. Consequently, a weaker emotional connection between a consumer and a brand could indicate a lower degree of brand attachment.

Hypothesis 3: Consumers with a high compulsive buying tendency develop a lower degree of brand attachment to branded products of the NCP-category, than for branded products of the CP-category.

Brand loyalty and willingness to switch in a category

Brand loyalty is "the tendency to be loyal to a focal brand, which is demonstrated by the intention to buy the brand as a primary choice" (Yoo & Donthu, 2001). It is frequently measured with the dimensions repurchase intention, willingness to pay more and word of mouth (Zhang & Bloemer, 2008). A strong emotional brand attachment is a strong predictor of brand loyalty (Thomson et al., 2005). Lee and Workman (2015) describe that brand loyal customers who purchase more merchandise, tend to ignore competitors' advertising, are willing to pay higher prices, spread positive word-of mouth, and recommends the brand to other potential customers (Knox & Walker, 2001; Krishnamurthi & Raj, 1991; Kumar, Luthra, & Datta, 2006; Reichheld & Sasser, 1990). According to Horváth and Van Birgelen (2017), compulsive buyers develop a lower degree of brand loyalty than non-compulsive buyers. They tend to switch more between brands, have higher brand experimentation tendencies, and indicate more variety seeking. Furthermore, they have lower repeat purchase intentions than non-compulsive buyers. An explanation from Horváth and Van Birgelen (2016) for this is that although they have a higher degree of brand attachment they still seek emotional benefits from other brands. Since willingness to switch is closely related to the brand loyalty of customers, also the hypothesis in regard to willingness to switch in a category is formulated in this part.

Willingness to switch

Consumers switch between brands, primarily for change or variety. Compulsive buyers can be more

willing to switch because they are more price consciousness (Kukar-Kinney et al. 2012) and therefore choose products that have lower prices. They might also switch more because they want to try other brands from which they might experience more positive emotions. However, because consumers are expected to gain utilitarian value in the NCP-category, they could be searching less for more positive experiences elsewhere and stick with the same brand. Furthermore, because they are expected to be more satisfied and have higher levels of brand trust for brands in NCP-categories (because they make better brand choices), they could have less motivation to switch between brands because they know what they can expect of the brand (risk reduction).

Hypothesis 4: Consumers with a high compulsive buying tendency have a lower degree of willingness to switch between brands in regard to branded products of the NCP-category, compared to branded products of the CP-category.

Repurchase intention

Consumers have more intention to repurchase a product when they are satisfied with a product. As mentioned, in this study it is expected that compulsive buyers will be more satisfied with a brand of the NCP-category because they are expected to make better brand decisions. This could indicate that when the branded product of the NCP-category "does the job right", they would have more intention to repurchase the products brand.

Hypothesis 5: Consumers with a high compulsive buying tendency have a higher degree of repurchase intention in regard to branded products of the NCP-category, compared to branded products of the CP-category.

Willingness to pay more

When consumers are very fond of a brand they could be willing to pay more for it. Compulsive buyers however, are price conscious (Kukar-Kinney et al., 2012) and they are not willing to pay extra for their favorite products (Horváth & Van Birgelen, 2015). Since they are not even willing to pay more for

their favorite product, it is not very likely they will be willing to pay more for products that they do not enjoy purchasing and buy because of perceived necessity.

Hypothesis 6: Consumers with a high compulsive buying tendency are not willing to pay more for brands from both NCP-categories as CP-categories.

Word of mouth

Word of mouth can also be a consequence of satisfaction (Brown et al., 2005; Lam et al., 2004). Because in this study compulsive buyers are expected to make better brand decisions in the NCP-category, it could lead to a higher degree of brand satisfaction. Consequently, because word of mouth can be a consequence of satisfaction, it could mean that compulsive have a higher degree of word of mouth in this product category. However, because of the utilitarian value that they could gain from brands of the NCP-category, it can be expected that they are less excited about the purchase, compared to the CP-category. Therefore, they might not be stimulated to share their purchase experience.

Hypothesis 7: Consumers with a high compulsive buying tendency have a lower degree of word of mouth for brands in regard to brands of the NCP-category and CP-category.

3. Methodology

This section gives a describtion of the methodoly that was used in this study. First, it is described how the used data was collected. Secondly, the operationalization of the study is described. Thirdly, there is a description of the data anlysis procedure. Finally, the research ethics of this study are given.

3.1 Data collection

A large-scale quantitative research method (survey) was used to gather information about the brand-related behavior and attitudes of compulsive buyers in regard to the two product categories. The collected quantitative data was used to test the hypotheses of this study, and to determine the relationships between the variables compulsive buying, product category, brand benefits, brand trust, brand attachment, brand loyalty and willingness to switch within a category. An advantage of a quantitative research is that the respondents answer in the same way and thus it makes it easier to address differences between groups. Furthermore, with quantitative data statistical tests can be used to analyse relationships between variables (Burns & Bush, 2006). The survey was an online self-administered survey. This is a survey that a respondent will fill in independently (Burns & Bush, 2006). An advantage of this type of survey is that the respondent can fill in on his own pace, but most important they will have less fear for judgement by the researcher (Burns & Bush, 2006).

In order to measure the brand-related attitudes and buying behavior of the consumers in regard to products of the CP-category, databases from two other studies were used. The first study from which data is used (212 respondents), measured the perceived importance of brand benefits of compulsive buyers (Bakker, 2016). The second study measured the degree of brand trust, brand attachment, brand loyalty and willingness to switch within a category (224 respondents) of compulsive buyers (Schutte, 2014). Data in regard to the NCP-category was gathered with a survey that consists of the same questions as the surveys used by Bakker (2016) and Schutte (2014), to ensure that the answers in regard to the CP-category and the NCP-category are comparable with each other. 237 respondents filled in this survey. Therefore, the perceived importance of brand benefits is analysed based on the responses of 449 respondents, and the level of brand trust, brand attachment, brand loyalty and willingness to

switch within a category is analysed based on the responses of 461 respondents. The survey was shared online through social media and email. Furthermore, people were asked to share the survey with relatives (snowball sampling). Schutte also asked people to fill in the survey offline. This did not have an effect on her results.

This study used these different databases to ensure a large amount of respondents. A large sample size is beneficial because this has a positive effect on the representativeness of the sample for the whole population (external validity). This is important because the representativeness of the sample is needed to make statements about a target group (Field, 2013). Besides this, the length of the survey would be very extensive if the survey consisted questions about both product categories. An extensive survey could increase the risk of respondents ending the survey before they have completed the entire survey.

Valid measurement scales were used in the survey for internal validity. These scales are originally in English, and therefore it needed to be translated to Dutch. A 'back translation method' was used to ensure translation equivalence (Brislin, 1986). The survey questions were translated to Dutch and then back to English by another bilingual person. This survey and the original survey were compared with each other to ensure that there were no discrepancies. Furthermore, the survey was pretested. The respondents were questioned whether any questions are unclear and if they have any suggestions. This lead to only small adjustments to the survey.

3.2 Operationalization

The survey that contained question about all brand-related behavior and attitudes (to collect data for the NCP-category), consists of four parts. An overview can be found in Table 1. The first part of the survey consist of questions about compulsive buying behavior. The scale of Edward (1993) was used to measure the level of compulsive buying tendency. This scale measures "only those dimensions of behavior that are specifically representative of the compulsive spending construct" (Edwards, 1993). This scale has thirteen items and has a five-point Likert scale. Furthermore, this scale measures the factors tendency to spend, compulsion/drive to spend, feelings about shopping and spending, dysfunctional spending and post-purchase guilt.

The aim of the second part of the survey was to get the respondent focused on the NCP-category. Here the respondents were asked to choose a product category that they do purchase out of necessity but do not enjoy purchasing. In regard to the CP-category, Bakker (2016) and Schutte (2014) asked the respondents to fill in their favorite product category. Next, the survey consist of questions about the importance of functional, emotional and social brand benefits. The perceived importance of the brand benefits was measured with the scale from Sweeney et al. (1999), which is slightly adapted. This scale has a seven-point Likert scale.

The third part of the survey is brand-specific. The respondents were first asked to name a favorite brand from the chosen NCP-category. In the survey for the CP-category respondents were asked to name their favorite brand of the chosen CP-category. This "triggers more pronounced and stronger attitudes, resulting in precise, comparable and less vague answers than questions about brand preferences in general" (Horváth & Van Birgelen, 2015). Next they were questioned about their brand trust, brand attachment, brand loyalty and willingness to switch within a category in regard to this brand. First, brand trust was measured with the scale from Larzelere and Huston (1980). This scale also uses a seven-point Likert-scale. Secondly, brand attachment was measured with the scale from Park et al. (2010). This scale measures two factors, namely brand-self connection and brand prominence. For consistency a seven-point Likert scale was used. However, originally this scale uses an eleven-point Likert scale. Brand loyalty consist of three dimensions. The first dimension repurchase intention was measured with a scale developed by Noltes (2011) and Thomson et al. (2005). The second dimension willingness to pay more was measured with the scale from Srinivasan et al. (2002). A slightly adapted scale from Zeithaml et al. (1996), and Bush et al. (2004) was used to measure the last dimension, word of mouth. Also these dimensions was measured on a seven-point Likert scale. Finally, willingness to switch was measured with the items from Zeithaml et al. (1996) and Bush et al. (2004). On the next page, table 1 gives an overview of the measurement scales and the number of items.

The last part of the survey measured some background information from the respondents. They were asked about their gender, age, current employment status and education level. The survey can be found in Appendix 1.

Item	Variable	Source	Number of items
Part 1			
1-13	Compulsive buying tendency	Edwards (1993)	13
Part 2			
14	Favorite product category		1
15-29	Brand benefits	Sweeney, Soutar and Johnson (1999)	14
Part 3			
30-35	Favorite brand of the NCP-category		
36-39	Brand trust	Larzelere and Huston (1980)	4
40-43	Brand attachment	Park et al., (2010)	4
44-46	Willingness to switch	Raju (1980)	3
47-49	Repurchase intention	Noltes (2011), Thomson et al. (2005)	3
50-51	Willingness to pay more	Srinivasan et al. (2002)	2
52-54	Word of mouth	Zeithaml et al. (1996), Bush et al. (2004)	3
Part 4			
55-58	Gender, Age, Employment status, Education		All 1

Table1: Measurement scales and number of items (NCP-category)

3.3 Data analysis procedure

First, the two data sets of the CP-category and the NCP-category were combined. Then the reversed items were recoded. Variable age was recoded into age categories, since Bakker (2016) used age categories. Furthermore, the variable income was taken out of the analysis because Bakker (2016) asked respondent to fill in the income of the household and Schutte (2014) asked respondents to fill in their own income. After this, the data was checked on different assumptions, such as missing data (maximum 10% per variable), sample size, normality, homogeneity of variance and the independent scores.

After conducting an exploratory and confirmatory factor analysis, the hypotheses were tested with a 2-way AN(C)OVA. This method is used because this method is suitable when you are

examining differences between groups. To determine if there is a moderating effect from the product category, an interaction effect is included. Also a covariates was added (gender) to analyse if this has an effect on the dependent variables (brand benefits, brand trust, brand attachment, brand loyalty and willingness to switch within a category.

3.4 Research ethics

Research ethics was very important for this study since it is focused on serious problematic consumer behavior. First of all, the data of this study was collected anonymously. This was also described in the introduction of the survey to stimulate honest answers and to minimize socially desirable answers. The respondents could also send the researcher an e-mail if they had any questions, so their answers remained anonymous. Secondly, the expected duration of the survey was described in the introduction (10 minutes). Thirdly, participation was completely voluntary, without any consequences or incentives. Fourthly, it was possible for the respondent to end the survey at any moment. Fifthly, the respondents were informed in the introduction of the survey, about for what the research results will be used for. And that is that it will only be used for academic research. Finally, this study emphasizes that organisations should not use the knowledge profided with this study to stimulate compulsive buying behavior. It should be used to have a positive impact on this problematic consumer behavior. This will also most likely have a positive impact on the brand image and consumer loyalty.

4. Results

This section describes the results of the quantitative analysis. It will give an overview of the brand-related behavior and attitudes of compulsive and non-compulsive buyers in regard to the two product categories. More specifically, it will give an indication if the level of compulsive buying tendency influences the brand related behavior and attitudes of consumers, and if they depend on the type of product category the consumers are purchasing from. Based on these results the hypotheses of this study are tested. Before testing the hypotheses, the data was analysed by analysing the missing data, the univariate statistics and the descriptive statistics. After this, an exploratory factor analysis was performed to analyse the reliability and validity of the measurement model. Then a confirmatory factor analysis was performed to test the model fit. After this, the hypotheses were tested with a 2-way AN(C)OVA. Furthermore, with the ANCOVA analysis, the effect of gender was analysed. Finally, some additional analyses were performed. First of all, if the extreme group method might have affected the results. Secondly, the added value of including the independent variable product category was analysed. Finally, some results of the qualitative data are described.

4.1 Missing data and univariate statistics

First a missing value analysis was performed to determine if the amount missing values was not too large (Appendix II, table 1). The percentage of missing data was very low for each database (below 0,4%). To test if the missing data was at complete random, a Little's MCAR test was performed (Appendix II, table 2). Database 1 did not have any missing data, and therefore a Little's MCAR test could not be performed. The results of the test of the other databases was non-significant, which means that the missing data was at complete random (significance of 1 and 0,52).

Next, the univariate statistics were analysed (Appendix III, table 1). Almost all items had a sufficient skewness and kurtosis value (between -3 and 3). Only the items Functional benefits 4 and 5, and emotional benefit 2 had high levels of kurtosis. The first two items are the two reversed coded items of Functional Benefits: "I am looking for products that have poor workmanship" and "I am looking for products that will not last a long time". These items could provoke extreme values because

consumers will probably not look for poor workmanship and products that will not last a long time at all. The mean of these items are also higher, compared to the other items of the latent variable functional benefits. The last item is from the scale Emotional benefits: “I am looking for products that will make me want to use them”. This item could also provoke extreme answers since consumers might interpreted this question differently. The mean of this items are also higher, compared to the other items of the latent variable emotional benefits. Furthermore, the second and third item of the latent variable compulsive buying tendency have a higher mean, compared to the other items of this variable.

After removing responses with non-random missing values, the number of completed responses was 672. To measure the relationships in regard to the variables functional, emotional and social brand benefits, there is a number of completed responses of 449 (database 1 and 3) and for the variables brand trust, brand attachment, brand loyalty and willingness to switch, there is a number of completed responses of 461 (database 1 and 2).

4.2 Descriptive statistics

Next a descriptive statistics analysis was performed (Appendix IV, tables 1 and 2). Almost 34 % of the sample is male and 66% of the sample is female (Appendix IV, table 2). The largest age category is 18-25 years old (51,1 %). Most respondents have a higher education (HBO and VWO 55%). Comparing the three used databases there are no extreme differences in regard to the variables gender and education (Appendix IV, table 3 and 4). However, the amount of students is much higher in database 3 (70%), compared to the other two databases (database 1 29%; database 2 41%). Database 3 also has a lot more young respondents of 18-25 years (76%), compared to the other two databases (database 1 37%; database 2 45%). Also the income is lower of the respondents of the third database (67% 0-500 euro), compared to database 1 (20% 0-500) and database 2 (25% 0-500). To conclude, the samples of databases 1 and 2 are most similar. The sample of database 3 consists of more students, most likely a result of convenience sampling. This should be taken into account when taking conclusions from the findings in regard to the variable brand benefits in the CP-category.

The mean of compulsive buying behavior is 2,84 (Appendix IV, table 5), on a scale of 1 to 7. There are no extreme levels of skewness or kurtosis (.430 and -.133). The means varies moderately

across the three databases (Appendix IV, table 6). Sample of database 3 has the highest mean of compulsive buying (M = 3,2) and database 2 the lowest mean (M = 2,6). Database 1 has a mean of 2,8. According to measurement scale of Edwards (1993) 7% of the respondents are compulsive or addicted shoppers. In this study however consumers with a high compulsive buying tendency are compared with consumers with a low compulsive buying tendency. The respondents who score the highest on the compulsive buying scale (highest ± 33%) have a mean of 3,2 or higher and the respondents with a low compulsive buying tendency (lowest ± 33%) have a mean of 2,33 or lower. The standard deviation is .899 and the range is 5. Database 3 consisted of the most respondents in the category "high compulsive buying tendency". Respondents with a high compulsive buying tendency are more females, are younger, have a higher education and are more often students (Appendix IV, table 7).

To check if the respondents of the NCP-category (database 1) really do not like to purchase the products that they are questioned about in the survey, an additional question was included in this survey: "To what extend do you enjoy purchasing products from this product category?". 75% of the respondents do not enjoy purchasing the products and 13% only enjoy it a little bit.

4.3 Reliability and validity

Exploratory factor analysis

To address the reliability and the validity of the measurement model, first an exploratory factor analysis was performed. The principal components extraction method was used to summarize the questionnaire items to a minimum set of factors, with the largest explanatory power (Hair et al., 2014). First a factor analysis was performed with the oblimin rotation, to address which type of rotation should be used. The component correlation matrix consisted of high correlations and therefore the oblimin rotation was used for the exploratory factor analysis. This rotation allows for correlations among categories (Zeithaml et al., 2014). It was justifiable to continue with the analysis since the KMO-value was greater than .5 (.843) and the Bartlett's Test of Sphericity was significant (p = .000). All communalities were above .30, so no items were deleted (Appendix X, tables 1 up to 3). Thereafter, another factor analysis was conducted. Small coefficients (below .30) were suppressed. One by one, items with cross loadings were deleted. First item "EB2"was deleted and secondly "RI2". After this a reliability analysis was

conducted for the 13 factors (Appendix X, tables 4 up to 17). A factor with the items “FB4” and “FB5” had a low reliability (Cronbach’s Alpha .615). These were also two items with a high kurtosis, and are expected to lead to extreme results. Therefore, these were removed. After this “CB6” and “FB3” had cross loadings. First “FB3”was deleted because it had a lower communality value. After checking the reliability analysis “CB13” was removed because it would improve the reliability of the scale dramatically. After this deletion there were no cross loadings. Only repurchase intention and willingness to switch loaded on the same factor (in opposite direction). This seems somewhat logical because if you are willing to switch more, you probably have a lower repurchase intention. However, to test the hypotheses these two constructs will be identified as two separate factors. The construct compulsive buying resulted into 4 factors. These factors are very similar to the original findings of Edwards (1993). Although compulsion/drive to spend and dysfunctional spending items load on the same factor. Also one item from tendency to spend loads on this factor. The KMO result was .844 for the final factor analysis and the Bartlett’s Test of Sphericity was significant (Appendix X, table 18 up to 20). The final factors are shown in table 1.

Latent variable	Factor	Variables:	Item(s):
Compulsive buying	1	Compulsion/Drive to Spend Dysfunctional spending Tendency to spend	1 8 & 10 12
	2	Feeling about shopping	2 & 3
	3	Tendency to spend	4, 5 & 7
	4	Post-purchase guilt	9 & 11
Brand benefits	5	Functional benefits	1, 2 & 6
	6	Emotional benefits	1, 3 t/m 5
	7	Social benefits	1 t/m 4
Brand trust	8		1 t/m 4
Brand attachment	9		1 t/m 4
Willingness to switch	10		1 t/m 3
Brand loyalty	11 12 13	Repurchase intention Willingness to pay more Word of mouth	1 & 3 1 & 2 1 t/m 3

Table 1: Outcom factor analysis

Almost all scales had a reliability of above .7. Only the scale of repurchase intention is almost sufficient (α = .666). Table two gives an overview of the Cronbach's alpha per factor.

	Cronbach's alpha
Compulsive buying	.818
Factor 1	.763
Factor 2	.884
Factor 3	.736
Factor 4	.706
Brand benefits	
Functional benefits	.795
Emotional benefits	.865
Social benefits	.921
Brand trust	.887
Brand attachment	.884
Willingness to switch	.781
Brand loyalty	
Repurchase intention	.666
Willingness to pay more	.735
Word of mouth	.904

Table 2: Reliability analysis

Confirmatory factor analysis

The Maximum Likelihood method was used to do a confirmatory factor analysis (Appendix XI, figure 1 and 2 and table 1). The exploratory factor analyses showed 4 factors for compulsive buying. However, because compulsive buying behavior is needed as one factor for this research, a variable "compulsive buying tendency" was included instead of 4 different factors (α = .818). The three factors of brand loyalty are kept separately since in this study hypotheses are tested in regard to the three dimensions of brand loyalty. The model was tested with a bootstrap. With a bootstrap you can measure the difference between the correlation matrix implied and the empirical correlation matrix. This should be non-significant (P > .05). The bootstrap was significant, which is probably due to the big sample size. Therefore, the SRMR value was calculated, which should be smaller than .08. The SRMR of the model was .063, and therefore sufficient. Furthermore, the CFI value was above .90, which indicates a good fit (CFI = .923). The RMSEA value was also sufficient (RMSEA = .043). The factor loadings

where almost all significant (P > .5), except for “CB2” and “CB3”. These items had a factor loading of below .3. However, it is chosen to keep these items in the analysis because they are the only items that measure the construct “feelings about shopping” of compulsive buying behavior.

Next the reliability and validity of the model was tested (Appendix X, table 2). First of all, the internal consistency reliability was tested by analysing the composite reliability. The composite reliability of almost all the variables are sufficient (>.7), except for the variable repurchase intention, which is almost sufficient (.693). The convergent validity was analysed with the AVE value (Average Variance Explained), which should be above .5 for each variable. Almost all variables have a sufficient value. Only the variable compulsive buying tendency has a value of .325. This is probably due to the low loadings of the items “CB2” and “CB3”. The discriminant validity was tested by calculating the MSE value of each variable (average factor loading^2), this value should be lower than the AVE value. All MSE values were lower than the AVE value, which means that there is discriminant validity.

4.4 Testing hypotheses

Because the hypotheses are focused on differences between groups, a 2-way AN(C)OVA analyses was conducted. With this analyses it could be measured in what way the independent variables (compulsive buying tendency and product category) influence the dependent variables (brand benefits, brand trust, brand attachment, willingness to switch within a category and the dimensions of brand loyalty). In other words, if consumers with a high compulsive buying tendency have different brand-related behavior and attitudes, compared to consumers with a low compulsive buying tendency. Furthermore, if the brand-related behavior and attitudes of consumers depend on which product category they purchase branded products from. Per respondent a mean value was calculated, per factor (determined with the factor analysis). This mean was used for the 2-way AN(C)OVA analysis. All standard deviations were below 1,67. Furthermore, an extreme group approach was applied for the independent variable compulsive buying tendency. The data was split up into three equal groups based on their mean value on the compulsive buying tendency (factor compulsive buying tendency). The consumer group with the lowest compulsive buying means had a mean up to 2,33 (N = 228), and the consumer group with the highest compulsive buying means had a mean of 3,17 or higher (N = 238).

With an ANCOVA analysis it was analysed if the covariate gender effects the relationships between the independent and dependent variables measured before (Appendix XII, table 1). Gender was used as covariate because according to research gender is related to compulsive buying behavior (Ridgway et al., 2008), and may be used as covariate because it is a dichotomous variable. When controlling for gender only the model fit improved in regard to the variables functional benefits and word of mouth. For the variable word of mouth the model fit only improved a little bit (Adj. R^2 +.004) and the impact of gender on word of mouth was non-significant. Therefore, controlling for gender is not relevant in regard to word of mouth. The model fit in regard to the variable functional benefits also has a small improvement (Adj. R^2 +.012). The effect of gender, however, is only significant for consumers with high compulsive buying tendency ($F(1, 184) = 7.670$, $p = .006$, $\eta^2 = 0.040$). Females with a high compulsive buying tendency find functional brand benefits less important than males with a high compulsive buying tendency (MD = -.428, p = .023). Because it improves the explanatory power of the model, the covariate gender is included in the 2-way ANCOVA analysis of functional benefits.

Before conducting the analysis, the assumptions of the analysis were checked (Appendix XII). First of all, the independent variables should be of a nominal measurement level, and the dependent variables should be of an interval or ratio measurement level. The first independent variable, compulsive buying tendency, is a categorical variable which contains two categories. The first category consists of consumers with a low compulsive buying tendency and the second category consists of consumers with a high compulsive buying tendency. The second independent variable product category, also consist of 2 categories. These are the CP-category and the NCP-category. The dependent variables are measured with a 7-point likert scale, and therefore sufficient for the ANOVA analysis. Secondly, the sample size should be at least 30 per category. This assumption was met for all variables. Thirdly, the assumption of homogeneity was analysed with the Levene's test of Homogeneity (Appendix XII, tables 1 and 2). The outcome of this test should be non-significant. For most variables this assumption was met. However, if this assumption was not met, the Welch's statistics were used instead to distribute the F-statistic. This statistic was not significant for the variable willingness to pay more. Finally, the normality of the dependent variables were analysed. This assumption was not met for all variables. The violations of the assumptions must be taken into account when reading the results.

Hypothesis 1: Brand benefits

First of all, it was measured how important functional, emotional and social benefits are for consumers when they purchase branded products. Overall, the respondents find functional and emotional brand benefits the most important brand benefits of branded products (table 3). The mean of functional benefits (M = 5,52) and the mean of emotional benefits (M = 5,49) is considerably higher than the mean of social benefits (3,84). However, the mean of social benefits is considerably higher for consumers with a high compulsive buying tendency (M = 3,94), compared to the mean of consumers with a low compulsive buying tendency (M = 3,02).

	NCP			**CP**			**Together**		
	FB	EB	SB	FB	EB	SB	FB	EB	SB
Low CBT	5,74	4,77	2,81	5,80	5,57	3,49	5,76	5,01	3,02
High CBT	5,47	5,20	3,69	5,14	5,64	4,10	5,27	5,46	3,94
Together	5,60	5,33	3,61	5,43	5,68	4,12	5,52	5,49	3,84

Table 3: Means brand benefits

Also some interesting results are found when the means of the brand benefits are compared in regard to the NCP-category and CP-category. As hypothesized, consumer with a high compulsive buying tendency find functional benefits the most (M = 5,47), emotional benefits the second most (M = 5,20) and social benefits (M = 3,69) the least important brand benefits of products of the NCP-category. On the contrary, when consumers with a high compulsive buying tendency buy products of a CP-category, they find emotional benefits the most (M = 5,65), functional benefits the second most (M = 5,14) and social benefits (M = 4,10) the least important brand benefits. Furthermore, the mean difference for consumers with a high compulsive buying tendency between functional benefits and emotional brand benefits in NCP-category (MD = .97) is much higher compared to consumers with a low compulsive buying tendency (MD = .27), and also compared to branded products from CP-category (MD = .23). Also their mean of social benefits is very low in regard to the NCP-category (M = 2,81), compared to consumers with a high compulsive buying tendency (M = 3,69) and the means of CP-category (M = 3,49).

This indicates that social brand benefits are the least important brand benefits for both

consumer groups and also within each product category. It is, however, in both product categories more important for consumers with a high compulsive buying tendency than for consumers with a low compulsive buying tendency. For consumers with a low compulsive buying tendency functional benefits are always the most important brand benefits. However, for consumers with a high compulsive buying tendency, it is only more important for products of the NCP-category.

How the independent variables (compulsive buying tendency and product category) affect the perceived importance of the brand benefits for consumers, will be further described by focusing on each brand benefit separately.

Functional brand benefits

To examine if the independent variables (compulsive buying tendency and product category) influence the perceived importance of the brand benefits, a 2-way ANCOVA was performed (Appendix, table 1 to 5). This way it can be analysed if consumers with a high compulsive buying tendency find functional brand benefits more or less important when purchasing branded products, compared to consumers with a low compulsive buying tendency. Furthermore, if the level of perceived importance of functional benefits, depend on from which product category the branded product is (CP-category or NCP-category). As described at the beginning of this section, also the covariate gender is included in this analysis.

This analysis showed that the independent variable compulsive buying tendency has a small significant effect on the perceived importance of functional benefits ($F (1, 310) = 7.091$, $p = .008$, $\eta^2 2 = .033$). There is no direct effect of product category on the perceived importance of functional benefits ($F (1, 310) = 1.836$, $p = .176$, $\eta^2 = .006$). There is also no interaction effect of the independent variables on the perceived importance of functional benefits ($F (1, 310) = 2.363$, $p = .125$, $\eta^2 = .008$). This means that only the level of compulsive buying tendency affects the mean of perceived

importance of functional benefits. In this case a higher level of compulsive buying tendency leads to a lower mean of perceived importance of functional benefits (figure 1).

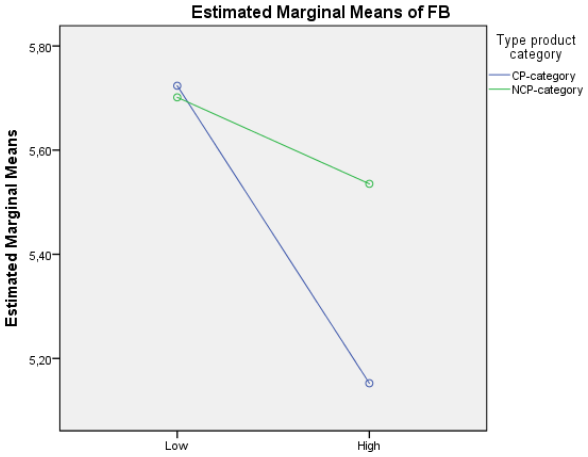

Figure 1: Means plot functional benefits

Only for consumers with a high compulsive buying tendency there is a significant mean difference between the CP-category and the NCP-category (F (1, 125) = 7.588, MD = .419, p = .012, η^2 = .034). For consumers with a low compulsive buying tendency there is no significant mean difference of perceived importance of functional benefits between the CP-category and NCP-category (MD = .049, p = .815). This means that there is only a significant difference in means of perceived importance of functional benefits when consumers have a high compulsive buying tendency. When consumers have a high compulsive buying tendency they find functional benefits more important when they are buying products of the NCP-category than of the CP-category.

When comparing the two product categories, there is only a significant mean difference between consumers with a high and low compulsive buying tendency in the CP-category (F (1, 147) = 7.484, MD = .532, p = .007, η^2 = .048). There is no significant mean difference between consumers with a high and low compulsive buying tendency in the NCP-category (MD = .214, P = .267). This means that there is only a significant difference in means in the CP-category between consumers with a high and low compulsive buying tendency. Consumers with a low compulsive buying tendency find the functional benefits significantly more important than consumers with a high compulsive buying tendency. Table 4 gives an overview of these findings.

		Mean difference	**P-value**	**Partial Eta Squared**
CBT	Low (CP/NCP)	.049	.815	.000
	High	-.419*	.012	.034
CP	CP (low/high)	.532*	.007	.048
	NCP	.214	.267	.008

Table 4: Mean difference and effect size functional benefits

This indicates that consumers with a low compulsive buying tendency find functional benefits important when they purchase branded products of both product categories. Whereas consumers with a high compulsive buying tendency find functional benefits much more important when they purchase branded products of the NCP-category. Furthermore, consumers with a high compulsive buying tendency find functional benefits of branded products much less important in regard to products of the CP-category, compared to consumers with a low compulsive buying tendency. Whereas the importance of functional benefits is very similar for the two consumer groups in regard to branded products of the NCP-category.

Emotional benefits

Also the effects of the independent variables on the importance of emotional benefits were examined with the 2-way ANOVA (Appendix XIII, tables 6 to 10). This way it can be analysed if consumers with a high compulsive buying tendency find emotional brand benefits more or less important when they purchase branded products, compared to consumers with a low compulsive buying tendency. And if the importance of emotional benefits depends on from which product category the branded product is.

The independent variable compulsive buying tendency has a small significant effect on the perceived importance of emotional brand benefits ($F (1, 311) = 4.07$, $p = .045$, $\eta^2 = 0.013$). The independent variable product category has a moderate significant effect on the perceived importance of emotional brand benefits ($F (1, 311) = 25.61$, $p = .000$, $\eta^2 = 0.076$). There is no interaction effect ($F (1, 311) = 12{,}28$, $p = .001$, $\eta^2 = 0.038$). This means that both independent variables influence the mean of the perceived importance of emotional benefits. In this case a higher level of compulsive buying tendency and products of the CP-category stimulate a higher level of perceived importance of emotional brand benefits (figure 2).

There is a significant mean difference for consumers with a low (MD = .803, p = .001) and high (MD = .446, p = .001) compulsive buying tendency. The effect size is higher for consumers with

a low compulsive buying tendency (F (1, 126) = 12,436, p = .001, η^2 = 0.090), than for consumers with a high compulsive buying tendency (F (1, 185) = 11.580 p = .001, η^2 = 0.059). This means that consumers with a low and high compulsive buying tendency, find emotional brand benefits significantly more important when they purchase products of the CP-category. However, the mean difference between the two product categories is smaller for consumers with a high compulsive buying tendency (figure 2).

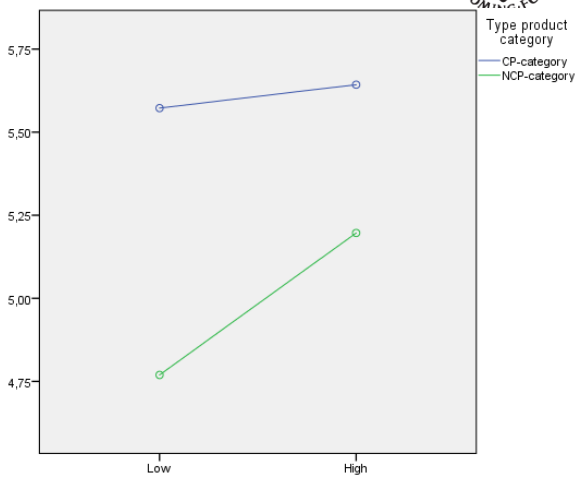

Figure 2: Means plot emotional benefits

When comparing the two product categories, there is only a significant mean difference between consumers with a high and low compulsive buying tendency in the NCP-product category (F (1, 163) = 5.279, MD = .427, p = .023, η^2 = .031). This means that there is only a significant mean difference in means in the NCP-category between consumers with a high and low compulsive buying tendency. Consumers with a higher compulsive buying tendency find emotional benefits significantly more important than consumers with a low compulsive buying tendency. Table 5 gives an overview of these findings.

		Mean difference	**P-value**	**Partial Eta Squared**
CBT	Low (CP/NCP)	.803*	.001	.090
	High	.446*	.001	.059
CP	CP (low/high)	-.070	.625	.002
	NCP	-.427*	.023	.031

Table 5: Mean difference and effect size emotional benefits

This indicates that both consumer groups find emotional benefits more important when they purchase products of the CP-category. In this product category the level of perceived importance is very similar for the two consumer groups. However, when they purchase products of the NCP-category, the emotional benefits are much less important for consumers with a low compulsive buying tendency, compared to consumers with a high compulsive buying tendency. For consumers with a high compulsive buying tendency, the perceived importance of emotional benefits is very similar in regard

to both product categories.

Social benefits

Also the 2-way ANOVA was performed to examine if the independent variables have an effect on the perceived importance of social brand benefits of branded products (Appendix XII, table 11 to 15). This way it can be analysed if consumers with a high compulsive buying tendency find social brand benefits more or less important, compared to consumers with a low compulsive buying tendency. Furthermore, if the perceived importance of social benefits depends on from which product category the branded product is.

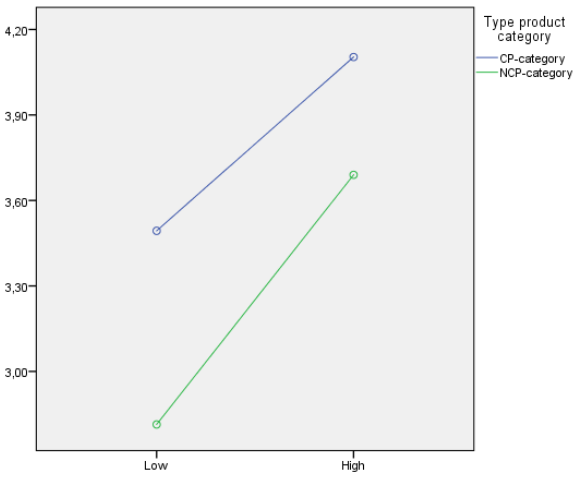

Figure 3: Means plot social benefits

There is a small significant effect of compulsive buying tendency on the perceived importance of social benefits ($F(1, 311) = 16.495$, $p = .000$, $\eta^2 = 0.050$). Also product category has a small significant effect on the perceived importance of emotional benefits ($F(1, 311) = 8.922$, $p = .003$, $\eta^2 = 0.028$). There is no interaction effect ($F(1, 311) = .529$, $p = .468$, $\eta^2 = 0.002$). This means that the level of compulsive buying tendency and product category both influence the perceived importance of social benefits. In this case a higher level of compulsive buying tendency and products of the CP-category lead to a higher level of perceived importance of social brand benefits (figure 3).

As can be seen in table 6, there is only a significant mean difference for consumers with a low compulsive buying tendency between the CP-category and the NCP-category ($F(1, 126) = 5.210$, $MD = .680$, $p = .024$, $\eta^2 = .040$). This means that only consumers with a low compulsive buying tendency have a large mean difference of perceived importance of functional benefits between the two product categories.

When comparing the two product categories, there is a significant mean difference between consumers with a high and low compulsive buying tendency in the CP-category ($MD = -.610$, $p = .021$) and in the NCP-category ($MD = .876$, $p = .001$). There is a considerably higher effect in the

NCP-category (F (1, 163) = 12,459, p = .001, η^2= 0.071), compared to the CP-category (F (1, 148) = 5.448, p = .021, η^2= 0.036). This means that social brand benefits are more important for consumers with a high compulsive buying tendency in both product categories. However, the difference is larger in the NCP-category. Table 6 gives an overview of these findings.

		Mean difference	**P-value**	**Partial Eta Squared**
CBT	Low (CP/NCP)	.680*	.024	.040
	High	.413	.061	.019
CP	CP (low/high)	-.610*	.021	.036
	NCP	-.876*	.001	.071

Table 6: Mean difference and effect size social benefits

This indicates that social benefits are more important in both categories for consumers with a high compulsive buying tendency, compared to consumers with a lower compulsive buying tendency. In other words, consumers with a high compulsive buying tendency find social benefits overall more important. There are only big mean differences between product categories for consumers with a low compulsive buying tendency. The low mean of consumers with a low compulsive buying tendency leads to a large mean difference with consumers with a high compulsive buying tendency in the NCP-category.

Hypothesis 2: brand trust

To examine the effect of the independent variables on the level of brand trust a 2-way ANOVA analysis was performed (Appendix XIII, table 16 to 20). This way it can be analysed if consumers with a high compulsive buying tendency develop a higher or lower level of brand trust, compared to consumers with a low compulsive buying tendency. And if the level of brand trust depends on from which product category the branded product is.

Both independent variables, compulsive buying tendency (F (1, 312) = .002, p = .962, η^2= 0.000) and product category (F (1, 312) = .550, p = .459, η^2= 0.002), do not have a significant effect on brand trust. However, there is an interaction effect of compulsive buying tendency and product category (F (1, 311) = 13.742, p = .000, η^2 = 0.042) on brand trust. This means that compulsive

buying tendency and the product category do not individually affect the level of brand trust, but together they do affect the level of brand trust.

As can be seen in table 7, consumers with a low compulsive buying tendency have a higher level of brand trust for branded products of the CP-category. Whereas consumers with a high level of compulsive buying tendency have a higher level of brand trust for branded products of the NCP-category.

	Category	Mean
Low CBT	CP-category	5,18
	NCP-category	4,83
High CBT	CP-category	4,75
	NCP-category	5,27
Together	CP-category	5,15
	NCP-category	5,11

Table 7: Mean brand trust

The mean difference between the two product categories is significant for both consumers with a high (MD = .344, p = .018) and a low (MD = .517), p = .005) compulsive buying tendency. However, the effect size of consumers with a high compulsive buying tendency (F (1, 124) = 8.068, p = .005, η^2 = .061) is higher than the effect size of consumers with a low compulsive buying tendency (F (1, 188) = 5,652, p = .018, η^2 = .029). This means that the interaction effect of the independent variables have a higher effect on the mean of brand trust for consumers with a high compulsive buying tendency, compared to consumers with a low compulsive buying tendency. As can be seen in the means plot (figure 4), the brand trust means of consumers with a high compulsive buying tendency are further apart from each other, compared to the means of consumers with a low compulsive buying tendency.

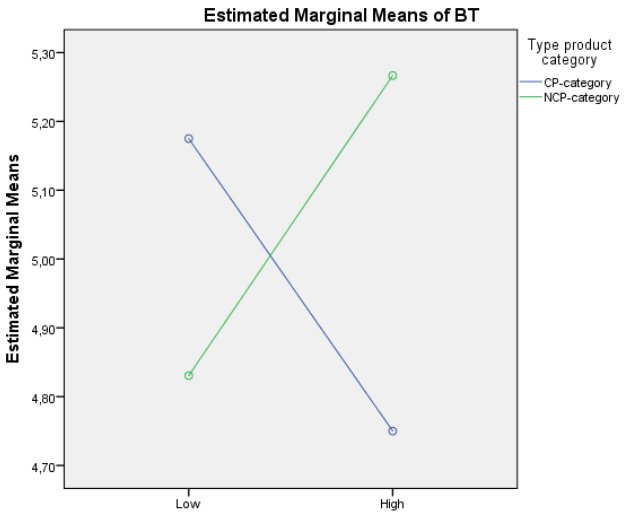

Figure 4: Means plot brand trust

When comparing the two product categories, there is

a significant mean difference between consumers with a high and low compulsive buying tendency in both product categories. As hypothesized in hypothesis 2, consumers with a high compulsive buying tendency have a significant higher level of brand trust for branded products of the NCP-category (MD = .463, p = .007) and a lower level of brand trust for branded products of the NCP-category (MD = .425, p = .013), compared to consumers with a low compulsive buying tendency. Whereas consumers with a low compulsive buying tendency develop more brand trust for branded products of the CP-category. The effect size is very similar in the two product categories. Table 8 gives an overview of these findings.

		Mean difference	P-value	Partial Eta Squared
CBT	Low (CP/NCP)	.344*	.018	.029
	High	-.517*	.005	.061
PC	CP (low/high)	.425*	.013	.041
	NCP	-.436*	.007	.044

Table 8: Mean difference and effect size brand trust

This indicates that there is a disordinal crossover interaction effect of compulsive buying tendency and product category on brand trust.

Hypothesis 3: Brand attachment

To examine the effect of the independent variables on the level of brand attachment of consumers, a 2-way ANOVA analysis was performed (Appendix XIII, table 21 to 25). This way it can be analysed if consumers with a high compulsive buying tendency have a higher or lower level of brand attachment, compared to consumers with a low compulsive buying tendency. And if the level of brand attachment depends on from which product category the branded product is. Both independent variables, compulsive buying tendency ($F (1, 312) = .8.346$, $p = .004$, $\eta^2 = 0.026$) and product category ($F (1, 312) = 9.795$, $p = .002$, $\eta^2 = 0.030$), have a small significant effect on brand attachment. There is no interaction effect of compulsive buying tendency and product category ($F (1, 312) = 1.006$, $p = .317$, $\eta^2 = 0.003$). This means that the level of compulsive buying tendency and the type of product category influence the level of brand attachment. In this case a higher level of compulsive buying

tendency and branded products of the CP-category lead to a higher mean of brand attachment.

As can be seen in table 9, overall consumers develop more brand attachment to products of the CP-category. As hypothesized in hypothesis 3, consumers with a high level of compulsive buying tendency have a lower brand attachment to branded products of the NCP-category (M = 4,14), than for branded products of the CP-category (M = 3,8). Also consumers with a low compulsive buying tendency develop more brand attachment to branded products of the CP-category (M = 3,84), compared to branded products of the NCP-category (M = 3,18).

		Mean
Low CBT	CP-category	3,84
	NCP-category	3,18
High CBT	CP-category	4,14
	NCP-category	3,80
Together	CP-category	4,03
	NCP-category	3,50

Table 9: Means brand attachment

However, this difference of mean for consumers with a high compulsive buying tendency is non-significant (MD = .339, p = .176, η^2 = 0.015). For consumers with a low compulsive buying tendency there is a significant difference (MD = .658, P = .001, η^2 = 0.055). This means that brand attachment of consumers with a high compulsive buying tendency differ less between the two product categories, compared to consumers with a low compulsive buying tendency.

When comparing the two product categories, there is only a significant mean difference between consumers with a high and low compulsive buying tendency in the NCP-category (MD = .620, p = .006, η^2 = 0.117). This means that when consumers with a high compulsive buying tendency have significantly higher level of brand attachment for products of the NCP-category, compared to consumers with a low compulsive buying tendency. Whereas the mean difference between the two consumer groups is more similar.

		Mean difference	P-value	Partial Eta Squared
CBT	Low (CP/NCP)	.658*	.001	.055
	High	.339	.176	.015
PC	CP (low/high)	-.300	.180	.012
	NCP	-.620*	.006	.045

Table 10: Mean difference and effect size brand attachment

This indicates that consumers with a low compulsive buying tendency develop a higher level of brand attachment to branded products of the CP-category, compared to branded products of the NCP-category. Whereas the mean difference between the two categories is much smaller for consumers with a high compulsive buying tendency. Furthermore, consumers develop a much higher level of brand attachment for products of the NCP-category when they have a high compulsive buying tendency, in comparison to consumers with a low compulsive buying tendency (figure 5).

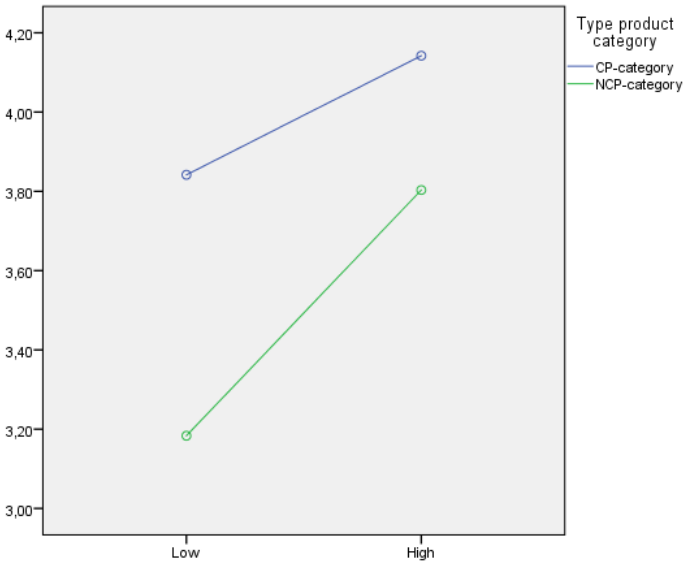

Figure 5: Means plot brand attachment

Hypothesis 4: Willingness to switch in a category

To examine the effect of the independent variables on the level of willingness to switch between different brands in a category, a 2-way ANOVA analysis was performed (Appendix XIII, table 26 to 30). This way it can be analysed if consumers with a high compulsive buying tendency have a higher or lower level of willingness to switch between branded products, compared to consumers with a low compulsive buying tendency. Furthermore, if the level of willingness to switch depends on which product category the branded product is from. Only the independent variable product category has a significant effect on willingness to switch ($F (1, 312) = 38.897$, $p = .000$, $\eta^2 = 0.111$). Compulsive buying tendency does not have a significant effect on willingness to switch ($F (1, 312) = 2.184$,

p = .140, η^2 = 0.007). There is also no interaction effect of compulsive buying tendency and product category (F (1, 312) = .003, p = .960, η^2 = 0.000). This means that only the type of product category influences the mean of willingness to switch.

Overall, consumers have a higher willingness to switch brand in regard to branded products of the CP-category (table 11). As hypothesized in hypothesis 4, consumers with a high compulsive buying tendency have a lower level of willingness to switch between branded products of the NCP-category (M = 3,20), compared to branded products of the CP-category (M = 4,20). However also consumers with a low compulsive buying tendency have a lower level of willingness to switch for branded products of the NCP-category (M = 3,00), compared to branded products of the CP-category (M = 3,96).

	Category	Mean
Low CBT	CP-category	3,96
	NCP-category	3,00
High CBT	CP-category	4,20
	NCP-category	3,20
Together	CP-category	4,16
	NCP-category	3,31

Table 11: Means willingness to switch

The mean difference between the two product categories is significant for both consumers groups (table 12). This means that for both consumer groups there is a big mean difference between the CP-category and the NCP-category.

When comparing the two product categories, the difference between consumers with a high compulsive buying tendency and a low compulsive tendency are not significant. This means that the mean difference of brand attachment is not much different between the two consumer groups. This can also be seen in means plot 6, as the product category lines are not very steep.

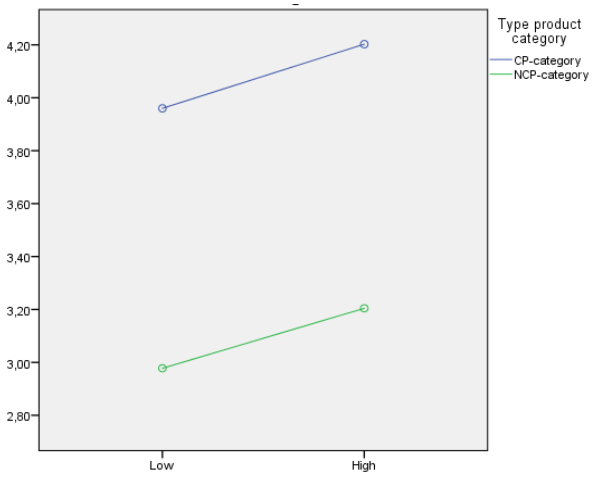

Figure 6: Means plot willingness to switch

		Mean difference	P-value	Partial Eta Squared
CBT	Low (CP/NCP)	.982*	.000	.106
	High	.998*	.000	.134
PC	CP (low/high)	-.243	.296	.007
	NCP	-.227	.296	.007

Table 12: Mean difference and effect size willingness to switch

This indicates that overall consumers are less willing to switch between brands within a category in regard to the NCP-category, compared to branded products of the CP-category. The level of compulsive buying tendency does not have a significant effect on the level of willingness to switch within a category.

Hypothesis 5: Repurchase intention

To examine the effect of the independent variables on the level of repurchase intention of consumers, a 2-way ANOVA analysis was performed (Appendix XIII, table 31 to 35). This way it can be analysed if consumers with a high compulsive buying tendency have a higher or lower level of repurchase intention in regard to branded products, compared to consumers with a low compulsive buying tendency. And if the level of repurchase intention depends on which product category the branded product is from. Only the independent variable product category has a significant effect on repurchase intention ($F (1, 312) = 38.768$, $p = .000$, $\eta^2 = 0.111$). Compulsive buying tendency does not have a significant effect on repurchase intention ($F (1, 312) = .001$, $p = .979$, $\eta^2 = 0.000$). There is no interaction effect of compulsive buying tendency and product category ($F (1, 312) = .003$, $p = .960$, $\eta^2 = 0.000$). This means that the level of repurchase intention is only dependent on the type of product category. In this case the repurchase intention of consumers is always higher for branded products of the NCP-category (table 13).

		Mean
Low CBT	CP-category	3,88
	NCP-category	4,76
High CBT	CP-category	3,76
	NCP-category	4,88
Together	CP-category	3,74
	NCP-category	4,52

Table 13: Means repurchase intention

As hypothesized in hypothesis 5, consumers with a high compulsive buying tendency have a significant higher level of repurchase intention for branded products of the NCP-category (M = 4,88), compared to branded products of the CP-category (M = 3,76). Also consumers with a low compulsive buying tendency have a higher level of repurchase intention for branded products of the NCP-category (M = 3,88), compared to branded products of the CP-category (M = 3,88) (table 14). However, the effect size is much higher for consumers with a high compulsive buying tendency (F (1, 124) = .23.400, p = .000, η^2 = .159), than for consumers with a low compulsive buying tendency (F (1, 124) = .17.644, p = .000, η^2 = .086). This means that the type of product category has a bigger impact on the repurchase intention of consumers with a high compulsive buying tendency than for consumers with a low compulsive buying tendency.

When comparing the two types of product categories, there is no significant mean differences between consumers with a high compulsive buying tendency and a low compulsive buying tendency. This means that the mean of repurchase intention of the two consumer groups are similar in regard to both product groups.

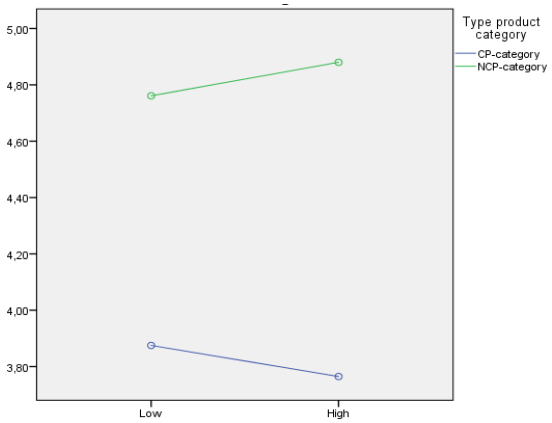

Figure 7: Means plot repurchase intention

		Mean difference	P-value	Partial Eta Squared
CBT	Low (CP/NCP)	-.886*	.000	.086
	High	-1.115*	.000	.159
PC	CP (low/high)	.110	.613	.002
	NCP	-.119	.608	.002

Table 14: Mean difference and effect size repurchase intention

This indicates that there are no big differences between consumers with a high and low compulsive buying tendency. Both consumer groups have a higher repurchase intention for branded products of the NCP-category, but the effect size is bigger for consumers with a high compulsive buying tendency.

Hypothesis 6: Willingness to pay more

To examine the effect of the independent variables on the level of willingness to pay of consumers, a 2-way ANOVA analysis was performed (Appendix XII, table 36 to 40). This way it can be analysed if consumers with a high compulsive buying tendency have a higher or lower level of willingness to pay more for branded products, compared to consumers with a low compulsive buying tendency. Furthermore, if the level of willingness to pay more depends on which product category the branded product is from.

Both the independent variables compulsive buying tendency ($F (1, 312) = .090$, $p = .764$, $\eta^2 = 0.000$) as product category ($F (1, 312) = 1.811$, $p = .179$, $\eta^2 = 0.006$) have no significant effect on willingness to pay more. There is also no interaction effect of compulsive buying tendency and product category ($F (1, 312) = .003$, $p = .960$, $\eta^2 = 0.000$). This means that a consumers' willingness to pay more is not influenced by their level of compulsive buying tendency or which product category the branded product is from. This can also be seen in table 15 and figure 8. All means are very similar.

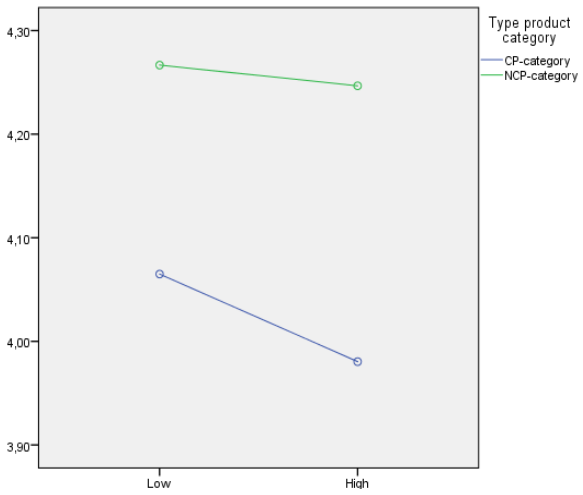

Figure 8: Means plot willingness to pay more

		Mean
Low CBT	CP-category	4,27
	NCP-category	4,16
High CBT	CP-category	3,98
	NCP-category	4,25
Together	CP-category	4,27
	NCP-category	4,14

Table 15: Means willingness to pay more

As hypothesized in hypothesis 6, consumers with a high compulsive buying tendency are not significantly willing to pay more for branded products of the NCP-category and the CP-category (table 16). This is also the case for non-compulsive buyers. Also within the two product type categories there are no significant differences between consumers with a high and low compulsive buying tendency.

		Mean difference	P-value	Partial Eta Squared
CBT	Low (CP/NCP)	-.202	.375	.004
	High	-.266	.294	.009
PC	CP (low/high)	.085	.721	.001
	NCP	.020	.936	.000

Table16: Means difference and effect size willingness to pay more

This indicates that the consumers' willingness to pay more is not affected by the level of compulsive buying tendency or the type of product category. However, since the assumption of homogeneity of variances was not met for this variable, the p-values might have been affected.

Hypothesis 7: Word of mouth

To examine the effect of the independent variables on the level of word of mouth of consumers, a 2-way ANOVA analysis was performed (Appendix XIII, table 41 to 45). This way it can be analysed if consumers with a high compulsive buying tendency have a higher or lower level of word of mouth for branded products, compared to consumers with a low compulsive buying tendency. Furthermore, if the level of word of mouth depends on which product category the branded product is from.

The independent variables compulsive buying tendency (F (1, 312) = 10.660, p = .001, $\eta^2 = 0.033$) and product category (F (1, 312) = 6.643, p = .010, $\eta^2 = 0.21$) both have a significant effect on word of mouth. There is also an interaction effect of compulsive buying tendency and product category on word of mouth (F (1, 312) = 12.162, p = .001, $\eta^2 = 0.038$). This means that the level of compulsive buying tendency and the product category both influence the level of word of mouth of consumers. Also the level of word of mouth depends on the interaction of the two independent variables.

As can be seen in table 17, the word of mouth means of consumers with a low compulsive buying tendency are very similar in both product categories (M = 4,01 and 4,18). Consumers with a high compulsive buying tendency have a higher mean of word of mouth for branded products of the CP-category (M = 4,05), compared to the NCP-category (M = 2,96).

		Mean
Low CBT	CP-category	4,01
	NCP-category	4,18
High CBT	CP-category	4,05
	NCP-category	2,96
Together	CP-category	4,16
	NCP-category	3,80

Table 17: Means word of mouth

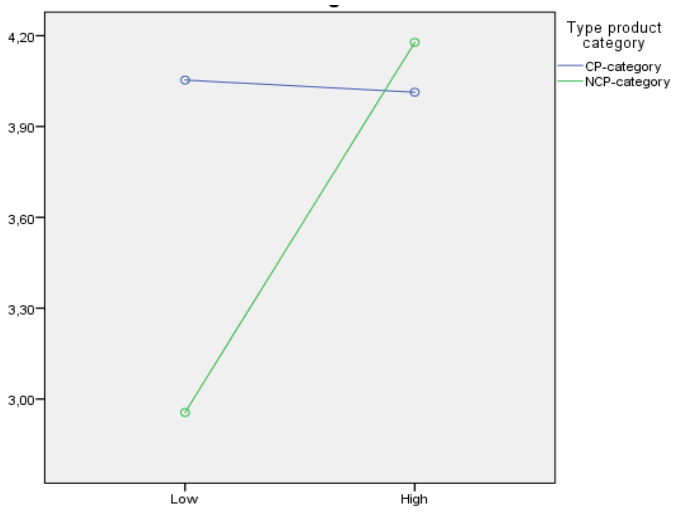

Table 12: Means plot word of mouth

As hypothesized in hypothesis 7, for consumers with a high compulsive buying tendency there is no significant mean difference between the two product categories (MD = -.165, p = .557). For consumers with a low compulsive buying tendency, there is a significant mean difference between the two product categories (MD = 1.098, p = .000). This means that the amount of word of mouth of consumers with a high compulsive buying tendency, is very similar in regard to the two

product categories. For consumers with a low compulsive buying tendency these means are much different. As can be seen in table 18 and the means plot (figure 12) these consumers have a much lower mean word of mouth for branded products of the NCP- category ($F (1, 188) = 23.208$, $p = .000$, $\eta^2 = 0.10$).

When comparing the two product categories, the mean difference between consumers with a high compulsive buying tendency and a low compulsive buying tendency is only significant in regard to the NCP-category, whereas consumers with a high compulsive buying tendency have a significantly higher mean of word of mouth ($F (1, 163) = 24.354$, $p = .000$, $\eta^2 = 0.130$).

		Mean difference	P-value	Partial Eta Squared
CBT	Low (CP/NCP)	1.098*	.000	.110
	High	-.165	.557	.003
PC	CP (low/high)	.040	.878	.000
	NCP	-1.222*	.000	.130

Table 18: Mean difference word of mouth

This indicates that consumers with a high compulsive buying tendency, have a more similar level of word of mouth in regard to two product categories. Whereas, consumers with a low compulsive buying tendency have a similar level of word of mouth in regard to brands of the CP-category, compared to the mean of consumers with a high compulsive buying tendency. Their mean word of mouth in regard to products of NCP-category is much lower, compared to consumers with a high compulsive buying tendency. These findings contradict with the hypotheses since consumers with a high compulsive buying tendency do not have a significant lower level of word of mouth in both product categories. They actually have a higher mean of word of mouth for branded products of the CP-category.

Summary hypotheses

Table 19 gives a summary of the results of the tested hypotheses. Most hypotheses were supported according to the results of this study. Two hypotheses were not supported. The first hypothesis that was not supported was that consumers with a high compulsive buying tendency have a lower brand attachment for branded products of the NCP-category. The mean of brand attachment of the two

product categories was actually not much different from each other. The second hypothesis that was not supported was that consumers have a low degree of word of mouth for branded products in regard to both product categories. However, the results indicate that consumers with a low compulsive buying tendency have a lower level of word of mouth branded products of the NCP-category, compared to consumers with a high compulsive buying tendency.

Hypotheses	Coefficient	Conclusion
H1: Consumers with a high compulsive buying tendency (HCBT) find most important: 1. functional benefits, 2. emotional benefits, 3.social benefits.	FB mean = 5,47 EB mean = 5,20 SB mean = 3,69	Supported
H2: Consumers with a HCBT have a higher level of brand trust for NCP-category than for CP-category.	MD = .517* p = .005	Supported
H3: Consumers with HCBT have a lower degree of brand attachment to NCP-category, than for CP-category.	MD = -.339 p = .176	Not supported
H4: Consumers with a HCBT have a lower degree of willingness to switch between brands in regard to NCP-category, compared to CP-category.	MD = -.998* p = .000	Supported
H5: Consumers with a HCBT have a higher degree of repurchase intention in regard to NCP-category, compared to CP-category.	MD = 1.115* p = .000	Supported
H6: Consumers with a HCBT are not willing to pay more for brands from both NCP-categories as CP-categories.	MD = .266 p = .294	Supported
H7: Consumers with a HCBT have a low degree of word of mouth for brands in regard to brands from both NCP-categories as CP-categories.	CP: MD = -.040, p = .878 NCP: MD = 1.222* (mean is higher), p = .000	Not supported

Table 19: Summary tested hypotheses

Table 20 gives an overview of the all the findings of the ANOVA analysis. The second and third column indicate which consumer group has the highest mean of the dependent variable. For example, in regard to the CP-category, consumers with a low compulsive buying tendency find functional benefits of brands more important than consumers with a high compulsive buying tendency do. The mean difference with consumers with a high compulsive buying tendency is .532. Furthermore it is significant because it has a "*". The fourth and fifth column indicate for which product category the

consumer group scores a higher mean. For example, consumers with a high compulsive buying tendency find functional benefits more important when they purchase products of the NCP-category.

	CP-category	NCP-category	High CBT	Low CBT
Functional benefits	Low (MD = .532)*	Low (MD = .214)	NCP (MD = .419)*	CP (MD = .049)
Emotional benefits	High (MD = .070)	High (MD = .427)*	CP (MD = .446)*	CP (MD = .803)*
Social benefits	High (MD =.610)*	High (MD = .876)*	CP (MD = .413)	CP (MD = .680)*
Brand trust	Low (MD = .425)*	High (MD = .436)*	NCP (MD = .517)*	CP (MD = .344)*
Brand attachment	High (MD = .300)	High (MD = .620)*	CP (MD = .339)	CP (MD = .658)*
Willingness to switch	High (MD = . 243)	High (MD = .227)	CP (MD = .998)*	CP (MD = .992)*
Repurchase intention	Low (MD = .110)	High (MD = .110)	NCP (MD = 1.115)*	NCP (MD = .886)*
Willingness to pay more	Low (MD = .085)	Low (MD = .020)	NCP (MD = .266)	NCP (MD = .202)
Word of mouth	Loq (MD = .040)	High (MD = 1.222)*	CP (MD = .165	NCP (MD = 1.098)*

Table 20: Overview results

4.5 Additional analyses

Effect extreme group methods

To examine if the extreme group methods (comparing the consumers with a high and low compulsive buying tendency) might have affected the results of this study, the results of the AN(C)OVA analysis were compared with the results of a correlation analysis (Appendix XIIII, table 1). The correlation analysis shows if the dependent variables correlate with the independent variable compulsive buying tendency. For this analysis the unsplitted variable compulsive buying tendency was included (without the high and low compulsive buying tendency categories). The outcomes of the AN(C)OVA analysis and the correlation analysis were similar. The independent variables that are affected by the independent variable compulsive buying tendency, according to the 2-way AN(C)OVA, were also significantly correlated to the (unsplitted) variable compulsive buying tendency. The variables that were not affected by compulsive buying tendency according to the 2-way AN(C)OVA, were not correlated to the (unsplitted) variable compulsive buying tendency. This means that the results of this study are not affected by the extreme group method.

Added value variable product category

To examine if the independent variable product category provides more accurate information about the brand-related behavior and attitudes of consumers with a high compulsive buying tendency, the Adjusted Eta Squared of the 2-way AN(C)OVA analyses were analysed. Hereby, the Adjusted Eta Squared of the 2-way AN(C)OVA analyses without the variable product category, was compared with the Adjusted Eta Squared of the models *with* the variable product category (Appendix XIIII, table 2). All the Adjusted Eta Squares improved when the variable product category was added to the analysis considerably. Only the Adjusted Eta Squared in regard to willingness to pay more had a very small improvement (.001). This is because both independent variables compulsive buying tendency and product category do not affect willingness to pay more. This means that with inclusion of the variable product category, the explanatory power of the model improved in regard to most dependent variables.

Qualitative analysis

Chosen product category

For the CP-category respondents were asked to choose their favorite product category. Males with a low compulsive buying tendency chose mostly for electronics and multimedia. Males with a high compulsive buying tendency also chose a lot for electronics, but clothes and shoes were chosen much more, compared to males with a low compulsive buying tendency. For females the chosen product categories are very similar for females with a high and low compulsive buying tendency. They mostly chose for clothes and shoes. For the NCP-category respondents were asked to choose a product category that they need to buy but do not necessary like to purchase. Male often chose for shaving equipment and drinks like soda. Female chose most often for beauty products like shampoo, and clothes washing liquid.

Reasons chosen brand

In regard to the CP-category, most respondents with a low compulsive buying tendency indicated that

they chose this brand in the survey (their favorite brand in their favorite product category) because it is of good quality, good price/quality ratio and that it is comfy. Respondents with a high compulsive buying tendency also indicate this, however, they also often indicate pretty and low prices. In regard to the NCP-category, respondents with a low compulsive buying tendency describe that they chose this brand because of good and consistent quality and a positive experience with the brand. This is also the case for consumers with a high compulsive buying tendency. They also often indicate that the products of this brand have a good (low) price.

5. Conclusion and discussion

The aim of this study was to investigate the role of brands in the purchase behavior and decision-making of compulsive buyers in regard to the NCP-category. Furthermore, if this role of brands is different from the role in the CP-category. The findings of this research contribute to the current knowledge about the buying behavior of compulsive buyers. This by providing knowledge about their brand-related behavior and attitudes regarding to branded products they like to purchase (CP-category) and to branded products that they do not enjoy purchasing (NCP-category). The findings give a complete overview of the brand-related behavior and attitudes of consumers with a high and a low compulsive buying tendency, and in regard to branded products of the CP-category and the NCP-category.

The findings of this research confirm the findings of existing research (Horváth and Van Birgelen, 2017) that consumers with a high compulsive buying tendency find emotional benefits the most important brand benefits of branded products in regard to the CP-category. The second most important brand benefit are functional benefits. Social benefits are the least important brand benefits for consumers with a high compulsive buying tendency. This also confirms the surprising finding of existing research (Horváth and Van Birgelen, 2017) that consumers with a high compulsive buying tendency find social benefits the least important benefits of branded products. As hypothesised, in regard to branded products of the NCP-category, consumers with a high compulsive buying tendency also find social benefits the least important brand benefits. Furthermore, in regard to this product category, they find functional benefits the most important brand benefits. This indicates that they are searching less for positive emotional feelings, compared to branded products of the CP-category, and more for branded products that really work well. This is in line with the expectation of this study that they are searching more for utilitarian value from branded products of the NCP-category, and more for hedonic value from products of the CP-category. Furthermore, consumers with a high compulsive buying tendency find functional benefits of branded products of the NCP-category just as important as consumers with a low compulsive buying tendency. This is in line with the expectation of existing research (Horváth and Van Birgelen, 2017) that consumers behave more differently in regard to

branded products that they like to purchase (CP-category). However, the results also show that in regard to emotional benefits and social benefits the perceived importance in regard to products from the NCP-category, are different between consumers with a high and low compulsive buying tendency. Even though the consumers do not really like to purchase the branded product of the NCP-category, they find emotional and social brand benefits much more important than consumers with a low compulsive buying tendency.

Also a very interesting result is the disordinal crossover interaction effect for brand trust. In line with existing research (Horváth and Van Birgelen, 2017), consumers with a high compulsive buying tendency develop a lower level of brand trust for branded products of the CP-category. But a more interesting finding is that for branded products of the NCP-category it is the other way around. Here consumers with a high compulsive buying tendency have a higher level of brand trust, compared to consumers with a low compulsive buying tendency. That consumers with a high compulsive buying tendency develop a higher level of brand trust for branded products of the NCP-category than for the CP-category, could be explained by that they have a more positive user experience when they purchase products of the NCP-category. Babin et al. (1994), describe that consumers purchase choices are more rational when consumers are shopping to gain utilitarian value (NCP-category). Because their brand decisions are less emotionally driven and are more rational, it is more likely that they will make better brand decisions in regard to branded products of the NCP-category. Moreover, because they make better brand decisions, it is likely that they will have a more positive user experience. Consequently, a positive user experience could lead to a higher level of brand trust. This can be substantiated with the results of the additional qualitative analysis. Namely, respondents with a high compulsive buying tendency indicate that one of the reasons why they chose their favorite brand was because they have had a positive experiences with the brand. Furthermore, a higher level of brand trust could be explained by that the consumers with a high compulsive buying tendency switch less between branded products (calculative process). When consumers switch less between branded products they are more able to develop brand trust (Doney & Cannon, 1997). However this does not explain why consumers with a high compulsive buying tendency develop more brand trust for branded products of the NCP-category, compared to consumers with a low compulsive buying tendency. This might be the case because on

the one hand consumers with a high compulsive buying tendency do not feel the need to search positive emotions elsewhere in regard to products of the NCP-category, and are therefore very happy when they find a product that gets the job done (risk reduction). This because they purchase products of the NCP-category for utilitarian value (task driven) and not for hedonic values (enjoyment). On the other hand, when consumers with a high compulsive buying tendency are satisfied with branded products of an NCP-category, it might have more impact on the consumer. This because brands of the CP-category may disappoint them more often because they may make less good brand decisions when they purchase branded products of the CP-category. In regard to the CP-category the consumers are looking for hedonic outcomes, like enjoyment (Bloch et al., 1986). Especially for compulsive buyers for whom it can work in a therapeutic way, and improve their mood (Cialdini, Darby & Vincent, 1973). When consumers with a high compulsive buying tendency are satisfied with the performance of a branded product, and this is expected to be more often in regard to branded products of the NCP-category (due to better brand decisions), the level of brand trust might increase significantly. This may have a smaller impact on consumers with a low compulsive buying tendency because they are expected to make better purchase decisions overall. Furthermore, consumers with a high compulsive buying tendency have a stronger affect response (Workman & Paper, 2010), in comparison to non-compulsive buyers, which could explain a bigger impact. This is an interesting topic for future research.

Confirming the results of existing research (Horváth and Van Birgelen, 2017), consumers with a high compulsive buying tendency develop a higher level of brand attachment for branded products of the CP-category, compared to consumers with a low compulsive buying tendency. Consumers with a high compulsive buying tendency also have a higher level of brand attachment to branded products of the NCP-category. So overall compulsive buyers develop a higher level of brand attachment to branded products, than consumers with a low compulsive buying tendency. As hypothesized, consumers with a high compulsive buying tendency develop a lower level of brand attachment for branded products of the NCP-category, compared to the CP-category. However, the mean difference was not significant and therefore this hypothesis was not supported. This might be related to the fact that they develop more brand trust for branded products of this product category. Brand trust could

positively affect one of the three dimensions of brand attachment, namely, affection. Because of this positive impact on the consumers' affection for the brand, it leads to a higher level of brand attachment. Furthermore, they could develop a higher level of brand attachment for the branded product because they have a positive user experience (more satisfied because of a better brand choice). When consumers have a positive experience with a brand, they tend to get more attached (Kessous et al., 2010). Consumers with a high compulsive buying tendency might not experience the same kind of positive emotions when they purchase branded products of the NCP-category, like when they purchase branded products of the CP-category. But they might experience a different kind of positive emotions, namely, positive emotions derived from satisfaction because they have a positive user experience. Furthermore, they could experience positive emotions because they buy it for a good price. Hedonic value can also be perceived by consumers through perceptions of bargains (Babin et al,. 1994). This is also an interesting topic for future research.

As hypothesized, consumers with a high compulsive buying tendency are less inclined to switch between brands in regard to branded products of the NCP-category, compared to the CP-category. However, surprisingly this is not because of the level of compulsive buying tendency. Consumers with a high and a low compulsive buying tendency more often switch between brands in the CP-category, compared to the NCP-category. Furthermore, their level of willingness to switch is not much different from each other. This is also the case for repurchase intention. The hypotheses in regard to repurchase intention was supported. Consumers with a high compulsive buying tendency have a significant higher level of repurchase intention for branded products of the NCP-category, compared to branded products of the CP-category. However, this was also the case for consumers with a low compulsive buying tendency. The different level of repurchase intention is explained by the product category, and not by the level of compulsive buying tendency. The findings for willingness to switch and repurchase intention are not in line with existing research that state that compulsive buyers are more inclined to switch between branded products and have a lower level of repurchase intention, compared to non-compulsive buyers (Horváth and Van Birgelen, 2017). This might be because consumers with a low compulsive buying tendency develop a lower level of brand attachment. Therefore, they might be less inclined to stick with the same brand, and have the same level of

willingness to switch and repurchase intention as consumers with a high compulsive buying tendency.

The hypothesis in regard to willingness to pay more, was supported. Consumers with a high compulsive buying tendency are not significantly willing to pay more for branded products of the NCP-category or the CP-category. However, this was also the case for consumers with a low compulsive buying tendency. This means that the level of willingness to pay more is not related to the product category. Additionally, the level of willingness to switch is not related to the level of compulsive buying tendency. This finding contradicts with existing research that found that compulsive buyers are more price conscious than non-compulsive buyers (Kukar-Kinney et al., 2012). This because you would expect that if consumers with a higher compulsive buying tendency are more price conscious, there would be a significant difference of willingness to pay more between the two consumer groups. However, for this variable the assumption of variance of homogeneity was not met. This could have affected the findings for this variable.

Finally, it was hypothesized that consumers with a high compulsive buying tendency have a low degree of word of mouth for brands in regard to branded products of the NCP-category and the CP-categories. This hypothesis was not supported. Consumers with a high compulsive buying tendency have similar levels of word of mouth for branded products of both product categories. However, consumers with a high level of compulsive buying tendency, have a much higher level of word of mouth for branded products of the NCP-category, compared to consumers with a low compulsive buying tendency. This is surprising because it was expected that they would be less excited about these purchases and therefore would have a lower level of word of mouth than consumers with a low compulsive buying tendency. However word of mouth can also be a consequence of satisfaction (Brown et al., 2005; Lam et al., 2004). This could explain why the level of word of mouth for consumers with a high compulsive buying tendency for branded products of the NCP-category is not much different, compared to the level of word of mouth for branded products of the CP-category. When a product of the NCP-category performs well and they are satisfied, they might want to share this with others. Consumers with a low compulsive buying tendency might get less excited when a product of this product category performs good and therefore don’t feel to urge to tell others about

their experience with the brand.

In regard to the chosen product categories in the survey, males mostly chose electronics and multimedia when they were asked to choose their favorite product category (CP-category). Females mostly chose for clothes and shoes. This is in line with existing research (Horváth & Van Birgelen, 2017). However, an interesting finding is that males with a higher compulsive buying tendency chose clothes and shoes more often. This could be explained by males with a high compulsive buying tendency find their appearance more important, compared to males with a low compulsive buying tendency. This can be substantiated by the fact that they also find social brand benefits more important. However, this difference between males with a high and low compulsive buying tendency was not significant. In regard to the NCP-category, males often chose for shaving equipment and drinks like soda. Female chose most often for beauty products like shampoo, and clothes washing liquid.

To conclude, the role of brands in the purchase behavior and decision-making of consumers with a high compulsive buying tendency is often different in regard to branded products of the NCP-category, compared to branded products of the CP-category. The variable product category effects the relationship between compulsive buying tendency and the independent variable considerably. Consumers with a high compulsive buying tendency find functional benefits more important and emotional and social benefits less important in regard to branded products of the NCP-category, compared to the CP-category. Product category does not have a direct effect on brand trust, but together with the variable compulsive buying tendency, it has an interaction effect on the level of brand trust. Consumers with a high compulsive buying tendency develop a higher level of brand trust for branded products of the NCP-category, compared to consumers with a low compulsive buying tendency. Furthermore, consumers with a high compulsive buying tendency, have a lower level of willingness to switch and a higher level of repurchase intention in regard to products of the NCP-category. Therefore, the inclusion of the independent variable product category in the model was very relevant. Also the explanatory power of the research models improved after including the variable product category. This was not the case for the variables willingness to pay more and word of mouth. The level of brand attachment, willingness to pay more and word of mouth of consumers with a high compulsive buying tendency, is not affected by the type of product category.

6. Theoretical and managerial implications

6.1 Theoretical implications

The results of this study contribute to the marketing literature, by providing more generalizable knowledge about the role of brands in the purchase behavior and decision-making of consumers with a high compulsive buying tendency. This study investigated the differences between the brand-related behavior and attitudes of consumers with a high and low compulsive buying tendency. Additionally, it gives a complete overview of their brand-related behavior and attitudes in regard to products that they do and do not like to purchase (CP-category & NCP-category). This is a contribution to the marketing literature since existing research only researched the brand-related behavior and attitudes in regard to branded products of the product categories that consumers like to purchase (CP-category). The findings indicate that the role of brands in the purchase behavior and decision-making does differ in regard to the type of product category. The buying behavior and attitudes are often affected by the type of product category, and therefore the findings of this study is a good contribution to the marketing literature.

6.2 Managerial implications

If Marketers and brand managers can use the knowledge profided by this study to reconcider and adjust marketing and brand strategegies related to compulsive buyers. Even though this is a small consumer group, organizations can benefit from the fact that they have a higher level of brand attachment and word of mouth. The findings of this study indicate that consumers with a high compulsive buying tendency have a different brand-related buying behavior and attitudes, in regard to the two product categories (CP-category and NCP-category). Therefore, the marketing and branding strategy should depend on what type of product or service the organisation sells.

Organisations that sell products of the NCP-category should focus on improving the functional and emotional benefits, and also communicating these benefits. First of all, the functional benefits are very important because consumers with a high compulsive buying tendency find functional benefits the most important brand benefits in this category. Brands should ensure that the product performs

well and according to the expectations of the consumers. These functional benefits should also be communicated clearly, so the consumers develop these intended associations with the brand, and they therefore are more inclined to choose this brand over other brands. Furthermore, an advantage of this product category, is that consumers with high compulsive buying tendency can develop a high level of brand trust for branded products. Therefore, it is very important that the product performs well and that the consumers are satisfied with the product. This way organisations can really benefit of the high level of brand trust of these consumers for their product. If the product performs well and the consumers have a high level of brand trust, this will most likely decrease the willingness to switch and increase the repurchase intention of the consumers. Secondly, it is also advised to focus on emotional benefits in this category. This because emotional benefits are also important for consumers with a high compulsive buying tendency in this product category. Some emotional benefits could differentiate the branded product from other branded products. Furthermore, it could increase the brand attachment because they feel more emotionally connected with the brand. For instance, the washing liquid of the brand Robijn is a product of the NCP-category. But because they created the associations of an amazing smell, and a cute soft teddy bear with the brand, they also created some emotional brand benefits. This washing liquid makes washing clothes a more enjoyable task for consumers, because when the washing is done they can enjoy the softness and the great smell of their clean wash.

Organizations that sell products of the CP-category should also focus on both emotional as functional benefits. First of all, these organisation should focus on emotional benefits because these are the most important brand benefits in this product category. Organisations should implement this in their branding and communication strategy, by creating an atmosphere around the brand that could boost the consumer's mood and make them feel good. For instance, a clothes brand that gives consumers a confidence boost. Consumers need to have the idea that buying and using the product will make them feel good. However, functional benefits are also important brand benefits for consumers with high compulsive buying tendency in this product category. The quality of the product can not entirely be replaced with emotional benefits and therefore it is important that the branded products have a sufficient level of functional benefits. Also according to the additional qualitative analysis, consumers describe that the chosen brand in the survey is their favorite brand because it is of good

quality. Furthermore, since it is expected that the brand choices of consumers with a high compulsive buying tendency are more emotionally driven, and therefore do not always make good brand choices in this product category, organisations need to be transparent and clear what consumers can expect of the branded products. By providing products of sufficient quality, and an adequate expectation, the chance is higher that they will be satisfied with the product. This is very important in this product category, because the brand trust is much lower, compared to consumers with a low compulsive buying tendency. By selling this consumer groups products that meet their expectations, this will most likely increase the level of brand trust for the brand. A high level of emotional brand benefits, a sufficient level of functional benefits and brand trust will most likely decrease the willingness to switch and increase the repurchase intention and brand attachment.

Furthermore, organisations can benefit from this consumer group, since consumers with a high compulsive buying tendency have a higher level of word of mouth, compared to consumers with a low compulsive buying tendency. Therefore, this type of consumers can be great brand ambassadors. Organisations could stimulate these consumers, or create platforms for these consumers, to share their experiences with a product with other consumers. The high level of word of mouth of consumers with a high level of compulsive buying tendency, also comes with a risk, since they could also share negative word of mouth. Again, this emphasizes the importance of functional benefits and creating accurate expectations.

However, it is important for organisations to keep the wellbeing of this consumer group in mind. It is not ethical to try to stimulate compulsive buying behavior. Exploiting this consumer group could also do real damage to the image of the brand. It is more ethical and beneficial for brands to use the knowledge provided by this study, to help consumers with compulsive buying tendencies. With a social responsible strategy, organisations can stimulate healthy consumer buying behavior. Just like Heineken stimulates consumers to drink responsible. Besides that this helps compulsive buyers with their problematic buying behavior, it can improve a brand's image and develop a positive brand perception. Consequently, this can improve consumers brand loyalty and long term consumer relationships. This strategy could also have a positive impact on the brand loyalty of consumers who do not have a high compulsive buying tendency, since they could also develop sympathy for the brand.

As described in the introduction of this study, not only consumers with compulsive buying behavior are affected by this problematic buying behavior, also the people they are in contact with are negatively affected by this behavior.

7. Research limitations and future research

Although new insights have been gathered with this research, there are some limitations. First of all, the sample is not completely in accordance with the Dutch population. There were many young respondents in the sample, a lot of respondents have a higher education and have "student" as profession. This is most likely because of convenience sampling. Furthermore, there are a lot more females than males in the sample. This might not be a problem for the generalizability of the results. This because according to the ANCOVA analysis gender only affected the perceived importance of functional benefits of branded products. Furthermore, gender was taken into account when examining the perceived importance of functional benefits for consumers. The percentage respondents with compulsive buying behavior is 7% in this study. This is slightly lower than the 19 percent Kukar-Kinney et al. (2008) measured in the United States. This might be due to culture differences between the United States and the Netherlands. Furthermore, according to the Sociocultural Theory (Workman & Paper, 2010), compulsive buying is a sociocultural phenomenon that is facilitated by marketing strategies. Therefore, if countries have different marketing strategies, the level of stimulated compulsive buying behavior could vary per country. However, in this study an extreme group analysis was used. Consumers with a high compulsive buying tendency were compared with consumers with a low compulsive buying tendency. This measurement method did not affect the results according to the additional correlation analysis.

Secondly, the great benefit of this study, that a large sample size was used, also comes with a research limitation. This is that the characteristics of the samples of the three databases are not entirely equal. The characteristics of the respondents of database 1 and 2 were most similar. Database 3 had a lot more students. However, the results in regard to the brand benefits and the CP-category (measured with database 3) were very similar to the findings of existing research.

Thirdly, the study is only conducted in the Netherlands. Therefore, the findings may only be accurate for the Dutch population. The influence of culture could be a topic for future research, as it would be interesting to see if the findings of this research holds for consumers from other countries with different cultures.

Fourthly, to measure the level of compulsive buying tendency, a self-identified measurement

scale was used. Consumers might be in denial or unaware of their compulsive buying behavior, which could lead to a lower level of compulsive buying tendency, when they actually have a higher level of compulsive buying tendency. The measurement scale of the variables of brand benefits could also have affected the result in regard to these variables. According to different theories social benefits would be expected to be the most important brand benefits for consumers with a high compulsive buying tendeny. For instance, according to d'Astous (1990) compulsive buyers perceive social status as highly associated with consumption. However, according to existing research (Horváth and Van Birgelen) and this study, this is not the case. This could be due to the measurement method that is used for these studies to examine the perceived importance of brand benefits for consumers. Consumers might be unaware that they find social benefits of branded products very important. With a different research method, such as qualitative research, it could be researched if consumers with a high level of compulsive buying tendency, actually find social benefits more important than these two studies measured.

Finally, the assumption of normal distribution was not met for the variables. Despite of this it was chosen to interpreted the results of the AN(C)OVA anlysis.

Furthermore, there are some additional interesting topics for future research. First of all, the disordinal crossover interaction effect of compulsive buying tendency and product category on brand trust was a very interesting result. With further research it can be analysed why consumers with a low compulsive buying tendency have a higher level of brand trust in regard to branded products of the CP-category. Furthermore, why consumers with a high compulsive buying tendency have a higher level of brand trust for branded products of the CP-category.

Secondly, the findings of this study give the idea that consumers with a high compulsive buying tendency might experience a different kind of positive emotions (positive user experience) when they use branded products of the NCP-category. This because they develop a lot of brand trust for these branded products, and also because the level of brand attachment and word of mouth is similar in regard to branded products of the CP-category. It would be interesting to find out if consumers with a high compulsive buying tendency do or do not experience positive emotions due to a positive user experience and how this affects the brand-related behavior and attitudes of consumers with a high

compulsive buying tendency. Additionally, if they experience positive emotions when they can purchase branded products of this category for a good price, and how this affacts the brand-related behavior and attitudes of compulsive buyers.

Finally, it would be interesting to measure the relationships between the dependent variables. More specifically, in what what way do they have an affect on each other. Furthermore, are these relationships the same for consumers with a high and low compulsive buying behavior. And does this depend on of which product category the branded product is from.

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Appendices

Appendix I: Survey (NCP-category)

The items were measured on a seven-point Likert scale, ranging from 1 = strongly disagree to 7 = strongly agree.

Introduction

Dear respondent,

This survey is part of my master thesis for the master Marketing at the Radboud University of Nijmegen. Thank you for agreeing to take part in this survey. The survey is about consuming behavior in relation to brands. Be assured that all your answers will be kept in the strictest confidentially. Furthermore, the answers will only be used for scientific purposes. Please try to answer the questions as honest as possible. There are no right or wrong answers. I am interested in your personal opinion. The survey will take about 10 minutes of your time.

If you are interested in a summary of the results of this survey, or if you have any questions or comments, you can send an email to svlohuizen@gmail.com.

Thank you for your effort and time!

Kind regards,
Sanne van Lohuizen

Part 1: General consuming behavior

The following questions are about your consuming behavior in general. Please indicate to what extent you agree with the following statements:

1. I feel driven to shop and spend, even when I don’t have the time or the money.
2. I get little or no pleasure from shopping (reverse-coded).
3. I hate to go shopping (reverse-coded).
4. I go on buying binges.
5. I feel "high" when I go on a buying spree.
6. I buy things even when I don't need anything.
7. I go on a buying binge when I'm upset, disappointed, depressed, or angry.
8. I worry about my spending habits but still go out and shop and spend money.
9. I feel anxious after I go on a buying binge.
10. I buy things even though I cannot afford them.
11. I feel guilty or ashamed after I go on a buying binge.
12. I buy things I don't need or won't use.
13. I sometimes feel compelled to go shopping

14. **From which product categories do you purchase products because of necessity and not necessarily because you like to purchase them?** *(half of the respondents just get an open question, half of the respondents get the following product categories)*

    - Razerblade
    - Clothes washing liquid
    - Hair shampoo
    - Lip care
    - Deodorant
    - Soda
    - Toothpaste

- Milk
- Sauces
- Other, namely:

Please indicate to what extent you agree with the following statements, with regard to the previous chosen product category

15. I am looking for products with consistent quality.
16. I am looking for products that are well made.
17. I am looking for products that offer good quality.
18. I am looking for products that will last long time.
19. I am looking for products that will perform consistently.
20. I am looking for products that offer value for money.
21. I am looking for good products for their price.
22. I am looking for products that help me to feel acceptable.
23. I am looking for products that improve the way I am perceived.
24. I am looking for products that make a good impression on other people.
25. I am looking for products that give me social approval.
26. I am looking for products that I would enjoy.
27. I am looking for products that make me feel relaxed.
28. I am looking for products that make me feel good.
29. I am looking for products that give me pleasure.

30. **What are the brands you usually purchase from in this product category?**

Please, fill in at least one brand. (Possibility to make a list with a maximum of seven brands)

33. What is your favourite brand within this category?

Pick one most favourite if you have more than one favourite brand. (Open-ended question)

34. **How many percent of the purchases in this category comes from your favourite brand?** (Scale: 0-20% - 21-40% - 41-60% - 61-80% - 81-100%)
35. **What would be the main reason(s) for having this brand as your favourite?**
    Please, fill in at least one reason. (Open-ended question, 4 possibilities to fill in reasons)

The following questions will refer to the favourite brand and product category you have just mentioned. Please indicate to what extent you agree with the following statements.

36. I feel that I can trust this brand completely.
37. This brand is truly sincere in its promises.
38. This brand is perfectly honest and truthful with me.
39. This brand treats me fairly and justly.
40. This brand is part of me and who I am.
41. I feel personally connected with this brand.
42. My thoughts and feelings towards with this brand are often automatic, coming to mind seemingly on their own.
43. My thoughts and feelings towards this brand come to me naturally and instantly.
44. Within this product category, I usually buy the same brand (reverse-coded).
45. Within this product category, I am very cautious in trying different brands (reverse-coded).
46. Within this product category, I switch very easily to other brands
47. I will buy this brand the next time I buy a product in this product category.
48. I intend to keep purchasing this brand.
49. Within this product category I will limit my purchases to this brand.
50. I will continue to buy this brand, even if its prices increase somewhat.
51. I will pay a higher price for this brand relative to the competition for the same benefit.
52. I regularly say positive things about this brand to other people.
53. I often recommend this brand to someone who seeks my advice.
54. I often encourage friends or relatives to buy products of this brand.

You are now in the final part of the questionnaire. These questions are about your background, so I can determine whether the results are representative of the Dutch population.

55. **What is your gender?** (Scale: male – female)
56. **What is your age in years?** (Open-ended question)
57. **What is your current employment status?** If more answers apply to you, choose your main activity. (Scale: employed for wages – self-employed – unemployed but looking for work – unemployed and not currently looking for work – student – retired)
58. **What is your highest, completed education?** (Scale: wo – hbo – vwo – havo – mbo/vmbo/lbo – basisonderwijs [Dutch education types])

Once again, thank you for the time and effort you spent to this questionnaire!

Appendix II: Missing data analysis

Table 1: Missing data analysis per database

Univariate Statistics								
Database		N	Mean	Std. Deviation	Missing		No. of Extremes[a]	
					Count	Percent	Low	High
Database 1	CB1	237	2,70	1,735	0	,0	0	0
	CB2R	237	4,93	1,769	0	,0	0	0
	CB3R	237	5,2954	1,70657	0	,0	0	0
	CB4	237	3,48	1,961	0	,0	0	0
	CB5	237	2,39	1,563	0	,0	0	0
	CB6	237	3,21	1,876	0	,0	0	0
	CB7	237	2,27	1,643	0	,0	0	13
	CB8	237	1,90	1,248	0	,0	0	30
	CB9	237	1,70	1,097	0	,0	0	23
	CB10	237	1,81	1,188	0	,0	0	24
	CB11	237	2,23	1,505	0	,0	0	7
	CB12	237	2,59	1,575	0	,0	0	0
	CB13	237	1,98	1,384	0	,0	0	34
	FB1	237	5,57	1,282	0	,0	14	0
	FB2	237	5,56	1,363	0	,0	18	0
	FB3	237	5,57	1,325	0	,0	18	0
	FB4R	237	6,41	1,015	0	,0	13	0
	FB5R	237	6,05	1,336	0	,0	34	0
	FB6	237	5,70	1,186	0	,0	8	0
	EB1	237	4,93	1,580	0	,0	14	0
	EB2	237	5,98	1,085	0	,0	19	0
	EB3	237	4,45	1,549	0	,0	32	19
	EB4	237	4,94	1,628	0	,0	16	0

	EB5	237	4,84	1,590	0	,0	14	0
	SB1	237	3,39	1,835	0	,0	0	0
	SB2	237	3,40	1,796	0	,0	0	0
	SB3	237	3,31	1,847	0	,0	0	0
	SB4	237	3,23	1,764	0	,0	0	0
	BT1	237	5,58	1,135	0	,0	9	0
	BT2	237	5,14	1,178	0	,0	4	0
	BT3	237	4,80	1,239	0	,0	5	0
	BT4	237	4,70	1,255	0	,0	5	0
	BA1	237	3,27	1,713	0	,0	0	6
	BA2	237	3,19	1,706	0	,0	0	7
	BA3	237	3,64	1,708	0	,0	0	0
	BA4	237	3,80	1,605	0	,0	0	0
	WTS 1R	237	2,49	1,434	0	,0	0	27
	WTS 2R	237	3,61	1,855	0	,0	0	0
	WTS 3	237	3,36	1,835	0	,0	0	0
	RI1	237	5,43	1,426	0	,0	18	0
	RI2	237	5,67	1,201	0	,0	12	0
	RI3	237	4,03	1,827	0	,0	0	0
	WPM 1	237	4,56	1,695	0	,0	0	0
	WPM 2	237	3,88	1,793	0	,0	0	0
	WO M1	237	3,53	1,774	0	,0	0	0
	WO M2	237	4,04	1,867	0	,0	0	0

	WOM3	237	3,23	1,782	0	,0	0	10
Database 2	CB1	223	2,32	1,569	1	,4	0	12
	CB2R	224	5,01	1,646	0	,0	5	0
	CB3R	224	5,5000	1,57047	0	,0	12	0
	CB4	224	2,96	1,885	0	,0	0	0
	CB5	224	1,88	1,169	0	,0	0	27
	CB6	224	2,69	1,710	0	,0	0	0
	CB7	224	1,96	1,364	0	,0	0	32
	CB8	224	1,79	1,215	0	,0	0	23
	CB9	224	1,50	,883	0	,0	0	11
	CB10	223	1,70	1,157	1	,4	0	20
	CB11	224	1,86	1,146	0	,0	0	30
	CB12	224	2,36	1,410	0	,0	0	5
	CB13	224	1,91	1,307	0	,0	0	25
	BT1	224	5,31	1,133	0	,0	15	0
	BT2	224	5,16	1,075	0	,0	0	0
	BT3	224	4,90	1,116	0	,0	1	0
	BT4	224	4,92	1,131	0	,0	1	0
	BA1	223	4,12	1,592	1	,4	0	0
	BA2	224	3,82	1,580	0	,0	0	0
	BA3	224	3,89	1,559	0	,0	0	0
	BA4	224	4,06	1,507	0	,0	0	0
	WTS1R	224	3,40	1,601	0	,0	0	0
	WTS2R	224	4,42	1,571	0	,0	0	0
	WTS3	224	4,41	1,621	0	,0	0	0
	RI1	224	4,42	1,396	0	,0	5	0
	RI2	223	5,30	1,187	1	,4	14	0

	RI3	224	3,19	1,569	0	,0	0	2
	WPM 1	224	4,52	1,408	0	,0	10	0
	WPM 2	224	3,70	1,625	0	,0	0	0
	WO M1	224	4,23	1,656	0	,0	0	0
	WO M2	224	4,32	1,600	0	,0	16	0
	WO M3	224	3,68	1,619	0	,0	0	0
Database 3	CB1	211	3,44	1,805	0	,0	0	0
	CB2R	211	5,35	1,477	0	,0	32	0
	CB3R	211	5,9336	1,34354	0	,0	34	0
	CB4	211	4,00	1,731	0	,0	0	0
	CB5	211	2,56	1,521	0	,0	0	0
	CB6	211	3,84	1,603	0	,0	0	0
	CB7	211	2,64	1,646	0	,0	0	0
	CB8	211	2,44	1,509	0	,0	0	11
	CB9	211	1,98	1,207	0	,0	0	31
	CB10	210	2,18	1,364	1	,5	0	3
	CB11	210	2,30	1,390	1	,5	0	4
	CB12	211	3,14	1,572	0	,0	0	0
	CB13	211	2,42	1,485	0	,0	0	8
	FB1	211	5,36	1,173	0	,0	18	0
	FB2	210	5,45	1,214	1	,5	17	0
	FB3	211	5,39	1,033	0	,0	11	0
	FB4R	211	6,41	,784	0	,0	7	0
	FB5R	210	6,24	1,085	1	,5	15	0
	FB6	211	5,21	1,177	0	,0	15	0
	EB1	211	5,74	,971	0	,0	3	0

	EB2	211	6,02	,831	0	,0	8	0
	EB3	211	5,07	1,244	0	,0	2	0
	EB4	210	5,72	,943	1	,5	5	0
	EB5	210	5,80	,892	1	,5	2	0
	SB1	209	3,84	1,662	2	,9	0	0
	SB2	210	3,97	1,589	1	,5	0	0
	SB3	211	4,29	1,555	0	,0	0	0
	SB4	210	3,89	1,546	1	,5	0	0

Table 2: Little's MCAR test

EM Means[a,b]							
	CB1	CB2R	CB3R	CB4	CB5	CB6	CB7
Database 2	2,32	5,01	5,5000	2,96	1,88	2,69	1,96
Database 3	3,44	5,35	5,9336	4,00	2,56	3,84	2,64
	CB8	CB9	CB10	CB11	CB12	CB13	FB1
Database 2	1,79	1,50	1,70	1,86	2,36	1,91	,00
Database 3	2,44	1,98	2,18	2,29	3,14	2,42	5,36
	FB2	FB3	FB4R	FB5R	FB6	EB1	EB2
Database 2	,00	,00	,00	,00	,00	,00	,00
Database 3	5,45	5,39	6,41	6,24	5,21	5,74	6,02
	EB3	EB4	EB5	SB1	SB2	SB3	SB4
Database 2	,00	,00	,00	,00	,00	,00	,00
Database 3	5,07	5,73	5,79	3,84	3,98	4,29	3,89
	BT1	BT2	BT3	BT4	BA1	BA2	BA3
Database 2	5,31	5,16	4,90	4,92	4,12	3,82	3,89
Database 3	,00	,00	,00	,00	,00	,00	,00
	BA4	WTS1R	WTS2R	WTS3	RI1	RI2	RI3
Database 2	4,06	3,40	4,42	4,41	4,42	5,30	3,19
Database 3	,00	,00	,00	,00	,00	,00	,00
	WPM1	WPM2	WOM1	WOM2	WOM3		
Database 2	4,52	3,70	4,23	4,32	3,68		
Database 3	,00	,00	,00	,00	,00		

a. For Database = Database 2, Little's MCAR test: Chi-Square = 76,426, DF = 124, Sig. = 1,000

b. For Database = Database 3, Little's MCAR test: Chi-Square = 248,682, DF = 214, Sig. = ,052

Appendix III: Univariate statistics

Table 1: Univariate analysis

Statistics							
		CB1	CB2R	CB3R	CB4	CB5	CB6
N	Valid	671	672	672	672	672	672
	Missing	1	0	0	0	0	0
Mean		2,80	5,09	5,5640	3,47	2,28	3,23
Mode		1	6	7,00	5	1	5
Std. Deviation		1,763	1,648	1,57441	1,910	1,456	1,798
Variance		3,107	2,716	2,479	3,647	2,119	3,231
Skewness		,684	-,808	-1,114	,059	1,057	,189
Std. Error of Skewness		,094	,094	,094	,094	,094	,094
Kurtosis		-,891	-,409	,306	-1,443	,045	-1,423
Std. Error of Kurtosis		,188	,188	,188	,188	,188	,188
Range		6	6	6	6	6	6
		CB7	CB8	CB9	CB10	CB11	CB12
N	Valid	672	672	672	670	671	672
	Missing	0	0	0	2	1	0
Mean		2,28	2,03	1,72	1,89	2,13	2,68
Mode		1	1	1	1	1	2
Std. Deviation		1,578	1,352	1,085	1,251	1,369	1,552
Variance		2,490	1,828	1,177	1,566	1,873	2,410
Skewness		1,191	1,468	1,756	1,648	1,222	,600
Std. Error of Skewness		,094	,094	,094	,094	,094	,094
Kurtosis		,297	1,537	2,786	2,101	,658	-,888

Std. Error of Kurtosis		,188	,188	,188	,189	,188	,188
Range		6	6	6	6	6	6
		CB13	CB14	CB15	FB1	FB2	FB3
N	Valid	672	672	671	448	447	448
	Missing	0	0	1	224	225	224
Mean		2,09	1,85	1,88	5,48	5,51	5,48
Mode		1	1	1	6	6	6
Std. Deviation		1,407	1,320	1,212	1,235	1,295	1,198
Variance		1,981	1,742	1,470	1,525	1,676	1,436
Skewness		1,467	1,754	1,650	-1,379	-1,429	-1,372
Std. Error of Skewness		,094	,094	,094	,115	,115	,115
Kurtosis		1,401	2,275	2,394	2,260	2,194	2,422
Std. Error of Kurtosis		,188	,188	,188	,230	,230	,230
Range		6	6	6	6	6	6
		FB4R	FB5R	FB6	EB1	EB2	EB3
N	Valid	448	447	448	448	448	448
	Missing	224	225	224	224	224	224
Mean		6,41	6,14	5,47	5,31	6,00	4,74
Mode		7	7	6	6	6	5
Std. Deviation		,913	1,227	1,205	1,388	,973	1,446
Variance		,833	1,505	1,453	1,925	,946	2,090
Skewness		-2,637	-2,000	-1,239	-1,152	-1,909	-,746
Std. Error of Skewness		,115	,115	,115	,115	,115	,115
Kurtosis		10,028	4,188	2,108	1,502	6,454	,317
Std. Error of Kurtosis		,230	,230	,230	,230	,230	,230
Range		6	6	6	6	6	6

		EB4	EB5	SB1	SB2	SB3	SB4
N	Valid	447	447	446	447	448	447
	Missing	225	225	226	225	224	225
Mean		5,31	5,29	3,60	3,67	3,77	3,54
Mode		6	6	4	5	5	4[a]
Std. Deviation		1,404	1,393	1,768	1,724	1,782	1,695
Variance		1,972	1,940	3,126	2,971	3,177	2,872
Skewness		-1,308	-1,212	,064	-,089	-,157	-,036
Std. Error of Skewness		,115	,115	,116	,115	,115	,115
Kurtosis		1,743	1,458	-1,097	-1,116	-1,160	-1,136
Std. Error of Kurtosis		,230	,230	,231	,230	,230	,230
Range		6	6	6	6	6	6
		BT1	BT2	BT3	BT4	BA1	BA2
N	Valid	461	461	461	461	460	461
	Missing	211	211	211	211	212	211
Mean		5,45	5,15	4,85	4,80	3,68	3,50
Mode		6	6	4	4	4	4
Std. Deviation		1,140	1,128	1,181	1,200	1,708	1,674
Variance		1,300	1,272	1,394	1,440	2,916	2,803
Skewness		-1,076	-,608	-,388	-,370	-,042	,095
Std. Error of Skewness		,114	,114	,114	,114	,114	,114
Kurtosis		1,265	,503	,326	,191	-1,018	-,997
Std. Error of Kurtosis		,227	,227	,227	,227	,227	,227
Range		6	6	6	6	6	6
		BA3	BA4	WTS1R	WTS2R	WTS3	RI1
N	Valid	461	461	461	461	461	461
	Missing	211	211	211	211	211	211

Mean		3,76	3,92	2,93	4,00	3,87	4,94
Mode		4	4	2	6	2	6
Std. Deviation		1,640	1,562	1,584	1,769	1,810	1,497
Variance		2,691	2,440	2,508	3,130	3,277	2,242
Skewness		-,198	-,393	,962	-,037	,004	-,688
Std. Error of Skewness		,114	,114	,114	,114	,114	,114
Kurtosis		-,862	-,639	,068	-1,204	-1,239	-,075
Std. Error of Kurtosis		,227	,227	,227	,227	,227	,227
Range		6	6	6	6	6	6
		RI2	RI3	WPM1	WPM2	WOM1	WOM2
N	Valid	460	461	461	461	461	461
	Missing	212	211	211	211	211	211
Mean		5,49	3,62	4,54	3,79	3,87	4,18
Mode		6	2	5	2	5	5
Std. Deviation		1,207	1,755	1,561	1,714	1,751	1,746
Variance		1,457	3,079	2,436	2,938	3,066	3,049
Skewness		-1,418	,220	-,622	,047	-,227	-,448
Std. Error of Skewness		,114	,114	,114	,114	,114	,114
Kurtosis		2,588	-1,005	-,372	-1,069	-1,048	-,830
Std. Error of Kurtosis		,227	,227	,227	,227	,227	,227
Range		6	6	6	7	6	6
		WOM3					
N	Valid	461					
	Missing	211					
Mean		3,45					
Mode		4					
Std. Deviation		1,718					

Variance	2,952
Skewness	,100
Std. Error of Skewness	,114
Kurtosis	-1,001
Std. Error of Kurtosis	,227
Range	6

Appendix IV: Descriptive statistics

		CB	Gender	Age category	Employment	Education
N	Valid	672	671	667	672	672
	Missing	0	1	5	0	0
Mean		2,8365	1,66	3,25	3,31	5,29
Median		2,7500	2,00	2,00	5,00	6,00
Mode		2,42	2	2	5	7
Std. Deviation		,89924	,473	1,674	1,981	1,588
Variance		,809	,224	2,804	3,925	2,522
Skewness		,420	-,685	,979	-,166	-,572
Std. Error of Skewness		,094	,094	,095	,094	,094
Kurtosis		-,133	-1,535	-,488	-1,828	-,864
Std. Error of Kurtosis		,188	,188	,189	,188	,188
Range		5,00	1	6	5	7
Minimum		1,00	1	1	1	1
Maximum		6,00	2	7	6	8

Table 1: Descriptive statistics all

Table 2: Table 3: Frequencies per variable

Gender					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	227	33,8	33,8	33,8
	Female	444	66,1	66,2	100,0
	Total	671	99,9	100,0	
Missing	99	1	,1		
Total		672	100,0		

Age category					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Younger than 18	8	1,2	1,2	1,2
	18-25	343	51,0	51,4	52,6
	26-35	111	16,5	16,6	69,3
	36-45	30	4,5	4,5	73,8
	46-55	66	9,8	9,9	83,7
	56-65	72	10,7	10,8	94,5
	Older than 65	37	5,5	5,5	100,0
	Total	667	99,3	100,0	
Missing	System	5	,7		
Total		672	100,0		

Employment					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Employed for wages	252	37,5	37,5	37,5
	Self-employed	47	7,0	7,0	44,5
	Unemployed but looking for work	11	1,6	1,6	46,1

	Unemployed but not currently looking for work	8	1,2	1,2	47,3
	Student	310	46,1	46,1	93,5
	Retired	44	6,5	6,5	100,0
	Total	672	100,0	100,0	

Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Primary school	3	,4	,4	,4
	VMBO	29	4,3	4,3	4,8
	HAVO	97	14,4	14,4	19,2
	VWO	81	12,1	12,1	31,3
	MBO	94	14,0	14,0	45,2
	HBO	169	25,1	25,1	70,4
	WO	198	29,5	29,5	99,9
	Total	672	100,0	100,0	

Table 3: Descriptive statistics per database

Database			CB	Gender	Age category	Employment	Education
Database 1	N	Valid	237	237	232	237	237
		Missing	0	0	5	0	0
	Mean		2,7729	1,66	3,55	2,64	5,36
	Median		2,7500	2,00	3,00	1,00	6,00
	Mode		2,00[a]	2	2	1	7
	Std. Deviation		,93773	,474	1,643	1,958	1,542
	Variance		,879	,225	2,699	3,834	2,376
	Skewness		,416	-,691	,632	,528	-,590
	Std. Error of Skewness		,158	,158	,160	,158	,158
	Kurtosis		-,259	-1,535	-,951	-1,565	-,875
	Std. Error of Kurtosis		,315	,315	,318	,315	,315
	Range		5,00	1	6	5	6
	Minimum		1,00	1	1	1	1
	Maximum		6,00	2	7	6	7
	Sum		657,17	394	824	625	1271
Database 2	N	Valid	224	223	224	224	224
		Missing	0	1	0	0	0
	Mean		2,5622	1,71	3,68	3,34	4,96
	Median		2,5000	2,00	3,00	5,00	5,00
	Mode		2,00	2	2	5	6
	Std. Deviation		,76346	,455	1,886	2,029	1,634
	Variance		,583	,207	3,555	4,118	2,671
	Skewness		,506	-,924	,574	-,112	-,394
	Std. Error of Skewness		,163	,163	,163	,163	,163
	Kurtosis		,015	-1,157	-1,296	-1,825	-1,069

	Std. Error of Kurtosis		,324	,324	,324	,324	,324
	Range		4,00	1	6	5	6
	Minimum		1,00	1	1	1	1
	Maximum		5,00	2	7	6	7
	Sum		573,93	381	824	748	1110
Database 3	N	Valid	211	211	211	211	211
		Missing	0	0	0	0	0
	Mean		3,1993	1,61	2,46	4,04	5,56
	Median		3,1667	2,00	2,00	5,00	6,00
	Mode		3,17	2	2	5	7
	Std. Deviation		,87153	,489	1,109	1,679	1,534
	Variance		,760	,239	1,231	2,818	2,352
	Skewness		,303	-,460	2,340	-1,152	-,764
	Std. Error of Skewness		,167	,167	,167	,167	,167
	Kurtosis		-,050	-1,805	5,019	-,538	-,518
	Std. Error of Kurtosis		,333	,333	,333	,333	,333
	Range		4,67	1	6	5	7
	Minimum		1,17	1	1	1	1
	Maximum		5,83	2	7	6	8
	Sum		675,05	340	520	852	1173

a. Multiple modes exist. The smallest value is shown

Table 4: Frequencies per database and per variable

Gender						
Database			Frequency	Percent	Valid Percent	Cumulative Percent
Database 1	Valid	Male	80	33,8	33,8	33,8
		Female	157	66,2	66,2	100,0
		Total	237	100,0	100,0	
Database 2	Valid	Male	65	29,0	29,1	29,1
		Female	158	70,5	70,9	100,0
		Total	223	99,6	100,0	
	Missing	99	1	,4		
	Total		224	100,0		
Database 3	Valid	Male	82	38,9	38,9	38,9
		Female	129	61,1	61,1	100,0
		Total	211	100,0	100,0	

Age category						
Database			Frequency	Percent	Valid Percent	Cumulative Percent
Database 1	Valid	Younger than 18	3	1,3	1,3	1,3
		18-25	82	34,6	35,3	36,6
		26-35	59	24,9	25,4	62,1
		36-45	13	5,5	5,6	67,7
		46-55	33	13,9	14,2	81,9
		56-65	31	13,1	13,4	95,3
		Older than 65	11	4,6	4,7	100,0
		Total	232	97,9	100,0	
	Missing	System	5	2,1		
	Total		237	100,0		

Database 2	Valid	Younger than 18	1	,4	,4	,4
		18-25	100	44,6	44,6	45,1
		26-35	32	14,3	14,3	59,4
		36-45	11	4,9	4,9	64,3
		46-55	20	8,9	8,9	73,2
		56-65	37	16,5	16,5	89,7
		Older than 65	23	10,3	10,3	100,0
		Total	224	100,0	100,0	
Database 3	Valid	Younger than 18	4	1,9	1,9	1,9
		18-25	161	76,3	76,3	78,2
		26-35	20	9,5	9,5	87,7
		36-45	6	2,8	2,8	90,5
		46-55	13	6,2	6,2	96,7
		56-65	4	1,9	1,9	98,6
		Older than 65	3	1,4	1,4	100,0
		Total	211	100,0	100,0	

Employment

Database			Cumulative Percent
Database 1	Valid	Employed for wages	53,2
		Self-employed	61,2
		Unemployed but looking for work	63,7
		Unemployed but not currently looking for work	64,6
		Student	93,7
		Retired	100,0
		Total	
Database 2	Valid	Employed for wages	36,6
		Self-employed	46,0
		Unemployed but looking for work	46,9

		Unemployed but not currently looking for work	47,8
		Student	88,8
		Retired	100,0
		Total	
Database 3	Valid	Employed for wages	20,9
		Self-employed	24,2
		Unemployed but looking for work	25,6
		Unemployed but not currently looking for work	27,5
		Student	98,1
		Retired	100,0
		Total	

Education

Database			Frequency	Percent	Valid Percent	Cumulative Percent
Database 1	Valid	Primary school	1	,4	,4	,4
		VMBO	6	2,5	2,5	3,0
		HAVO	33	13,9	13,9	16,9
		VWO	36	15,2	15,2	32,1
		MBO	23	9,7	9,7	41,8
		HBO	66	27,8	27,8	69,6
		WO	72	30,4	30,4	100,0
		Total	237	100,0	100,0	
Database 2	Valid	Primary school	1	,4	,4	,4
		VMBO	17	7,6	7,6	8,0
		HAVO	43	19,2	19,2	27,2
		VWO	16	7,1	7,1	34,4
		MBO	46	20,5	20,5	54,9
		HBO	55	24,6	24,6	79,5
		WO	46	20,5	20,5	100,0

		Total	224	100,0	100,0	
Database 3	Valid	Primary school	1	,5	,5	,5
		VMBO	6	2,8	2,8	3,3
		HAVO	21	10,0	10,0	13,3
		VWO	29	13,7	13,7	27,0
		MBO	25	11,8	11,8	38,9
		HBO	48	22,7	22,7	61,6
		WO	80	37,9	37,9	99,5
		8	1	,5	,5	100,0
		Total	211	100,0	100,0	

Statistics		
CB		
N	Valid	672
	Missing	0
Mean		2,8365
Median		2,7500
Mode		2,42
Std. Deviation		,89924
Variance		,809
Skewness		,420
Std. Error of Skewness		,094
Kurtosis		-,133
Std. Error of Kurtosis		,188
Range		5,00
Minimum		1,00
Maximum		6,00
Sum		1906,15
Percentiles	33,333	2,3333
	66,666	3,1667

Table 5: Frequency table compulsive buying tendencies

Table 6: Frequency table compulsive buying tendencies per database

Statistics			
CB			
Database 1	N	Valid	237
		Missing	0
	Mean		2,7729
	Mode		2,00[a]
	Std. Deviation		,93773
	Variance		,879
	Skewness		,416
	Std. Error of Skewness		,158
	Kurtosis		-,259
	Std. Error of Kurtosis		,315
	Range		5,00
	Minimum		1,00
	Maximum		6,00
Database 2	N	Valid	224
		Missing	0
	Mean		2,5622
	Mode		2,00
	Std. Deviation		,76346
	Variance		,583
	Skewness		,506
	Std. Error of Skewness		,163
	Kurtosis		,015
	Std. Error of Kurtosis		,324
	Range		4,00
	Minimum		1,00
	Maximum		5,00
Database 3	N	Valid	211
		Missing	0

	Mean	3,1993
	Mode	3,17
	Std. Deviation	,87153
	Variance	,760
	Skewness	,303
	Std. Error of Skewness	,167
	Kurtosis	-,050
	Std. Error of Kurtosis	,333
	Range	4,67
	Minimum	1,17
	Maximum	5,83
a. Multiple modes exist. The smallest value is shown		

Table 7: Frequency tables high and low compulsive buying tendency

Gender						
CBT_HL			Frequency	Percent	Valid Percent	Cumulative Percent
Low	Valid	Male	99	43,4	43,6	43,6
		Female	128	56,1	56,4	100,0
		Total	227	99,6	100,0	
	Missing	99	1	,4		
	Total		228	100,0		
High	Valid	Male	57	23,9	23,9	23,9
		Female	181	76,1	76,1	100,0
		Total	238	100,0	100,0	

Age category						
CBT_HL			Frequency	Percent	Valid Percent	Cumulative Percent
.	Valid	18-25	110	53,4	54,7	54,7
		26-35	36	17,5	17,9	72,6
		36-45	10	4,9	5,0	77,6

		46-55	16	7,8	8,0	85,6
		56-65	19	9,2	9,5	95,0
		Older than 65	10	4,9	5,0	100,0
		Total	201	97,6	100,0	
	Missing	System	5	2,4		
	Total		206	100,0		
Low	Valid	Younger than 18	3	1,3	1,3	1,3
		18-25	67	29,4	29,4	30,7
		26-35	34	14,9	14,9	45,6
		36-45	15	6,6	6,6	52,2
		46-55	42	18,4	18,4	70,6
		56-65	43	18,9	18,9	89,5
		Older than 65	24	10,5	10,5	100,0
		Total	228	100,0	100,0	
High	Valid	Younger than 18	5	2,1	2,1	2,1
		18-25	166	69,7	69,7	71,8
		26-35	41	17,2	17,2	89,1
		36-45	5	2,1	2,1	91,2
		46-55	8	3,4	3,4	94,5
		56-65	10	4,2	4,2	98,7
		Older than 65	3	1,3	1,3	100,0
		Total	238	100,0	100,0	

Employment

CBT_HL			Frequency	Percent	Valid Percent	Cumulative Percent
Low	Valid	Employed for wages	115	50,4	50,4	50,4
		Self-employed	25	11,0	11,0	61,4
		Unemployed but looking for work	4	1,8	1,8	63,2
		Unemployed but not currently looking for work	2	,9	,9	64,0
		Student	53	23,2	23,2	87,3
		Retired	29	12,7	12,7	100,0
		Total	228	100,0	100,0	

High	Valid	Employed for wages	63	26,5	26,5	26,5
		Self-employed	7	2,9	2,9	29,4
		Unemployed but looking for work	4	1,7	1,7	31,1
		Unemployed but not currently looking for work	4	1,7	1,7	32,8
		Student	157	66,0	66,0	98,7
		Retired	3	1,3	1,3	100,0
		Total	238	100,0	100,0	

Education

CBT_HL			Frequency	Percent	Valid Percent	Cumulative Percent
Low	Valid	VMBO	18	7,9	7,9	7,9
		HAVO	42	18,4	18,4	26,3
		VWO	20	8,8	8,8	35,1
		MBO	19	8,3	8,3	43,4
		HBO	70	30,7	30,7	74,1
		WO	59	25,9	25,9	100,0
		Total	228	100,0	100,0	
High	Valid	Primary school	2	,8	,8	,8
		VMBO	3	1,3	1,3	2,1
		HAVO	24	10,1	10,1	12,2
		VWO	33	13,9	13,9	26,1
		MBO	42	17,6	17,6	43,7
		HBO	49	20,6	20,6	64,3
		WO	84	35,3	35,3	99,6
		Total	238	100,0	100,0	

Appendix X: Exploratory factor analysis

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,843
Bartlett's Test of Sphericity	Approx. Chi-Square	6207,206
	df	1081
	Sig.	,000

Table 1: KMO and Bartlett's Test

Table 2: Communalities

Communalities			
	Extraction		Extraction
CB1	,536	SB1	,769
CB2R	,859	SB2	,839
CB3R	,838	SB3	,787
CB4	,597	SB4	,855
CB5	,452	BT1	,715
CB6	,702	BT2	,832
CB7	,471	BT3	,833
CB8	,575	BT4	,742
CB9	,731	BA1	,796
CB10	,539	BA2	,783
CB11	,672	BA3	,828
CB12	,574	BA4	,788
CB13	,416	WTS1R	,694
FB1	,702	WTS2R	,648
FB2	,717	WTS3	,750
FB3	,586	RI1	,771

FB4R	,720	RI2	,702
FB5R	,739	RI3	,473
FB6	,619	WPM1	,706
EB1	,711	WPM2	,669
EB2	,531	WOM1	,826
EB3	,674	WOM2	,827
EB4	,720	WOM3	,802
EB5	,786		

Table 3: Pattern Matrix

Pattern Matrix[a]												
	Component											
	1	2	3	4	5	6	7	8	9	10	11	12
CB1	,007	,634	,016	-,143	-,124	,119	,060	,053	,021	-,099	,070	,050
CB2R	-,016	,091	,030	-,036	-,015	,897	,043	,057	-,021	,006	-,035	,062
CB3R	,046	,084	-,014	-,056	-,027	,884	,014	,040	-,041	-,034	-,053	,004
CB4	,006	,771	,012	,002	-,071	,088	-,061	-,026	-,046	-,002	,051	-,128
CB5	,009	,543	,043	-,008	,076	,160	,004	-,072	,030	,006	,066	,179
CB6	,035	,839	-,020	,075	,003	,029	-,011	,011	-,088	,017	-,109	-,064
CB7	,031	,588	-,010	-,044	,000	,089	-,026	-,031	,049	,021	,057	,143
CB8	,021	,571	,042	-,072	-,060	-,073	-,013	-,030	,066	,021	,130	,286
CB9	-,087	,068	-,188	-,079	,098	,003	-,068	-,012	-,101	,154	-,112	,744
CB10	,053	,517	,030	-,015	-,130	-,118	,109	-,043	,112	,046	,063	,296
CB11	-,048	,218	,012	,005	,013	,084	,033	-,018	,004	,017	,032	,719
CB12	,067	,671	-,007	,029	,066	-,068	-,043	,062	-,121	,071	-,181	,094
CB13	,017	,222	-,004	-,085	-,069	-,275	,054	,000	-,135	,070	-,066	,381
FB1	,139	-,155	-,064	,015	,715	-,055	-,012	,017	-,008	-,180	,085	,142
FB2	,084	-,135	,020	,025	,767	,044	-,016	-,116	-,021	-,117	,116	,116
FB3	-,161	,127	-,007	,006	,707	,020	,075	-,106	-,047	,128	-,149	-,098

FB4R	-,197	-,034	-,090	,092	,076	,058	,033	-,141	-,064	-,752	-,095	-,107
FB5R	,017	,090	,041	-,007	,041	-,008	,037	,079	-,009	-,856	,083	,002
FB6	,102	-,028	,001	-,073	,729	-,077	,070	,187	,022	-,030	,056	-,034
EB1	,005	,007	,034	,029	,079	,011	,001	-,055	-,797	-,072	,052	,154
EB2	-,253	-,018	-,010	,014	,046	-,039	,148	,029	-,493	,035	,418	-,088
EB3	,148	-,020	,108	-,073	,022	,001	-,047	-,082	-,734	,034	,013	,034
EB4	,070	,104	-,097	-,205	-,024	,024	,052	,073	-,743	-,014	-,070	-,084
EB5	,144	-,018	-,069	-,034	-,051	,070	,028	-,077	-,809	-,029	-,110	,020
SB1	-,077	-,029	,004	-,855	,007	-,012	,027	-,059	-,027	,052	,020	,003
SB2	,003	-,067	,018	-,927	-,009	-,019	,033	,024	-,013	,026	,012	-,042
SB3	-,011	,031	,026	-,862	,014	,069	-,073	-,004	-,072	-,061	,010	,007
SB4	,044	-,019	,004	-,904	,023	,037	-,004	-,064	,026	,021	-,013	,007
BT1	-,058	,026	-,144	-,004	,097	-,086	,796	,090	,096	-,039	,022	-,029
BT2	,117	,001	,015	,022	,036	,015	,887	,017	,034	-,029	,002	,009
BT3	,091	-,110	,030	-,015	-,040	,071	,877	-,068	-,048	,004	-,064	,050
BT4	,016	-,012	,061	-,003	-,049	,051	,807	-,136	-,092	-,007	-,033	-,011
BA1	,080	-,183	,072	,041	-,101	,094	,066	-,779	-,113	,054	,169	,103
BA2	,127	-,149	,028	-,027	-,101	,029	,049	-,784	-,061	,000	,118	,091
BA3	,010	,156	-,101	-,137	,111	-,114	,019	-,819	,022	-,038	-,093	-,068
BA4	-,020	,173	-,062	-,126	,094	-,119	,072	-,796	,019	-,023	-,107	-,099
WTS1R	,109	-,049	,765	-,041	-,043	-,020	-,099	,047	,067	-,095	-,018	,076
WTS2R	-,073	,015	,728	-,048	-,042	,090	-,027	-,011	,064	,009	-,060	-,075
WTS3	-,128	,101	,874	,012	,117	,012	,074	-,003	-,051	,213	,094	-,071
RI1	,002	,091	-,705	,052	,118	,002	,059	-,043	-,061	,063	,203	-,098
RI2	-,042	,211	-,375	,036	,157	,167	,131	-,104	,016	,095	,421	-,206
RI3	-,018	-,084	-,532	-,056	,036	,022	,095	-,006	,130	,143	,146	,171
WPM1	,090	-,006	-,195	-,003	,071	,025	-,036	-,106	,010	,043	,708	-,027

WPM 2	,192	,049	-,111	-,097	,033	-,177	,037	-,004	,010	-,100	,666	,007
WOM 1	,791	-,019	-,002	,035	,045	,007	,138	-,091	-,134	,003	,048	,009
WOM 2	,787	,110	-,109	-,008	,044	,008	,151	-,007	-,115	,027	,007	-,083
WOM 3	,816	,094	-,013	-,037	,067	,010	,026	-,094	-,035	,130	,065	-,096

Extraction Method: Principal Component Analysis.
Rotation Method: Oblimin with Kaiser Normalization.[a]

a. Rotation converged in 12 iterations.

Reliability

Table 4: Reliability analysis CBT 1

Reliability Statistics	
Cronbach's Alpha	N of Items
,763	4

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
CB1	6,60	11,340	,540	,732
CB8	7,37	12,972	,621	,681
CB10	7,52	13,553	,622	,687
CB12	6,72	12,751	,512	,735

Table 5: Reliability analysis CBT 2

Reliability Statistics	
Cronbach's Alpha	N of Items
,884	2

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
CB2R	5,5640	2,479	,793	.
CB3R	5,0893	2,716	,793	.

Table 6: Reliability analysis CBT 3

Reliability Statistics	
Cronbach's Alpha	N of Items
,706	2

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
CB9	2,13	1,873	,560	.
CB11	1,72	1,178	,560	.

Table 7: Reliability analysis CBT 4

Reliability Statistics	
Cronbach's Alpha	N of Items
,736	3

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
CB4	4,56	6,604	,608	,604
CB5	5,76	9,225	,551	,669
CB7	5,75	8,648	,548	,666

Table 8: Reliability analysis CBT Total

Reliability Statistics	
Cronbach's Alpha	N of Items
,818	10

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
CB1	26,4448	67,147	,586	,791
CB2R	24,1612	73,642	,382	,815
CB3R	23,6851	75,125	,351	,817
CB4	25,7791	65,533	,582	,793
CB5	26,9672	71,084	,569	,794
CB7	26,9627	69,471	,579	,793
CB8	27,2119	71,991	,582	,794

CB9	27,5269	78,250	,403	,811
CB10	27,3597	74,838	,498	,803
CB11	27,1179	73,390	,508	,801

Table 9: Reliability analysis functional benefits

Reliability Statistics	
Cronbach's Alpha	N of Items
,795	3

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
FB1	10,98	4,627	,706	,646
FB2	10,94	4,492	,682	,672
FB6	10,99	5,453	,533	,825

Table 10: Reliability analysis emotional benefits

Reliability Statistics	
Cronbach's Alpha	N of Items
,865	4

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
EB1	15,33	13,710	,676	,843
EB3	15,91	13,300	,684	,840
EB4	15,33	13,329	,712	,829
EB5	15,36	12,793	,788	,797

Table 11: Reliability analysis social benefits

Reliability Statistics	
Cronbach's Alpha	N of Items
,921	4

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
SB1	10,97	22,868	,784	,909
SB2	10,91	22,650	,834	,892
SB3	10,80	22,674	,791	,907
SB4	11,03	22,474	,864	,882

Table 12: Reliability analysis brand trust

Reliability Statistics	
Cronbach's Alpha	N of Items
,887	4

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
BT1	14,80	10,214	,637	,897
BT2	15,10	9,218	,827	,827
BT3	15,40	8,953	,822	,828
BT4	15,44	9,334	,734	,863

Table 13: Reliability analysis brand attachment

Reliability Statistics	
Cronbach's Alpha	N of Items
,884	4

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
BA1	11,18	18,613	,728	,860
BA2	11,36	18,470	,762	,846
BA3	11,10	18,576	,777	,841
BA4	10,93	19,717	,728	,860

Table 14: Reliability analysis willingness to switch

Reliability Statistics	
Cronbach's Alpha	N of Items
,781	3

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
WTS1R	7,88	10,061	,600	,726
WTS2R	6,80	8,641	,656	,661
WTS3	6,93	8,813	,606	,720

Table 15: Reliability analysis repurchase intention

Reliability Statistics	
Cronbach's Alpha	N of Items
,666	2

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
RI1	3,62	3,079	,506	.
RI3	4,94	2,242	,506	.

Table 16: Reliability analysis willingness to pay more

Reliability Statistics	
Cronbach's Alpha	N of Items
,735	2

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
WPM1	3,79	2,938	,584	.
WPM2	4,54	2,436	,584	.

Table 17: Reliability analysis word of mouth

Reliability Statistics	
Cronbach's Alpha	N of Items
,904	3

Item-Total Statistics				
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
WOM1	7,62	10,465	,822	,853
WOM2	7,32	10,483	,823	,852
WOM3	8,05	10,957	,785	,884

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		,844
Bartlett's Test of Sphericity	Approx. Chi-Square	5402,606
	df	780
	Sig.	,000

Table 18: Final KMO and Barlett's Test

Table 19: Final Communalities

Communalities			
	Extraction		Extraction
CB1	,582	BT1	,705
CB2R	,884	BT2	,837
CB3R	,880	BT3	,841
CB4	,752	BT4	,757
CB5	,670	BA1	,809
CB7	,591	BA2	,792
CB8	,678	BA3	,838
CB9	,763	BA4	,819
CB10	,776	WTS1R	,705
CB11	,750	WTS2R	,652
CB12	,535	WTS3	,664
FB1	,779	RI1	,745
FB2	,771	RI3	,498
FB6	,647	WPM1	,726
EB1	,721	WPM2	,782
EB3	,693	WOM1	,853
EB4	,736	WOM2	,863
EB5	,808	WOM3	,827
SB1	,784		
SB2	,843		
SB3	,783		
SB4	,855		

Extraction Method: Principal Component Analysis.

Table 20: Final Pattern Matrix

Pattern Matrix[a]										
	Component									
	1	2	3	4	5	6	7	8	9	10
BA3	,836									
BA4	,826									
BA2	,753									
BA1	,744									
CB10		,879								
CB8		,728								
CB12		,582								
CB1		,550								
WTS3			-,820							
WTS1R			-,800							
RI1			,719							
WTS2R			-,704							
RI3			,479							
SB2				-,925						
SB4				-,899						
SB1				-,865						
SB3				-,844						
EB5					,847					
EB1					,828					
EB3					,765					

EB4					,764					
CB3R						,935				
CB2R						,929				
BT2							,875			
BT3							,872			
BT4							,809			
BT1							,780			
WOM3								-,883		
WOM2								-,865		
WOM1								-,858		
FB2									,847	
FB1									,847	
FB6									,753	
WPM2										,791
WPM1										,751
CB9										
CB11										
CB4										
CB5										
CB7										

Pattern Matrix[a]

	Component	
	11	12
CB9	,730	
CB11	,719	
CB4		,827
CB5		,786

CB7		,678

Extraction Method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization.[a]
a. Rotation converged in 17 iterations.

Appendix XI: Confirmatory factor analysis (AMOS)

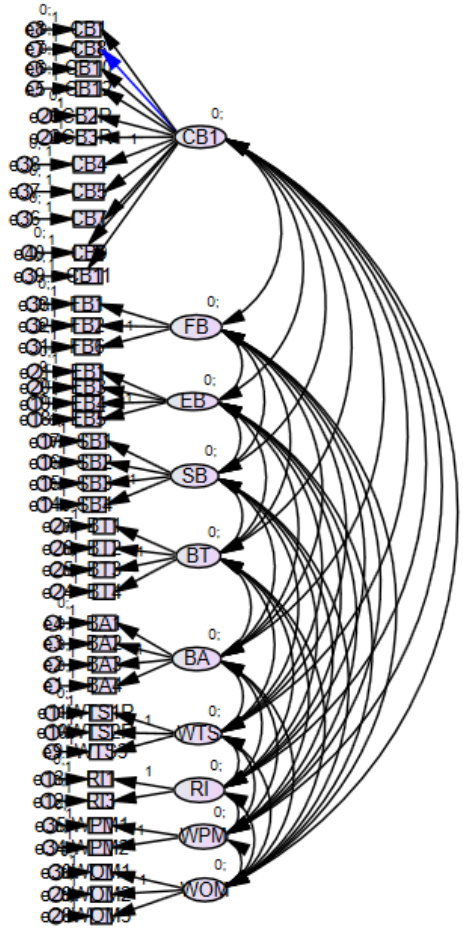


Figure 1: Confirmatory factor analysis

Model Fit Summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	198	1496,618	662	,000	2,261
Saturated model	860	,000	0		
Independence model	40	11679,060	820	,000	14,243

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	,872	,841	,924	,905	,923
Saturated model	1,000		1,000		1,000
Independence model	,000	,000	,000	,000	,000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	,807	,704	,745
Saturated model	,000	,000	,000
Independence model	1,000	,000	,000

NCP

Model	NCP	LO 90	HI 90
Default model	834,618	726,122	950,816
Saturated model	,000	,000	,000
Independence model	10859,060	10513,064	11211,490

FMIN

Model	FMIN	F0	LO 90	HI 90
Default model	2,230	1,244	1,082	1,417
Saturated model	,000	,000	,000	,000
Independence model	17,405	16,183	15,668	16,709

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	,043	,040	,046	1,000
Independence model	,140	,138	,143	,000

AIC

Model	AIC	BCC	BIC	CAIC
Default model	1892,618	1918,389		
Saturated model	1720,000	1831,937		
Independence model	11759,060	11764,267		

Figure 2: Model Fit Summary

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

			Estimate
BA4	<---	F1	,848
BA3	<---	F1	,887
BA2	<---	F1	,753
BA1	<---	F1	,725
CB12	<---	F4	,609
CB10	<---	F4	,639
CB8	<---	F4	,707
WTS3	<---	F2	,684
WTS2R	<---	F2	,763
WTS1R	<---	F2	,761
RI3	<---	F3	,584
RI1	<---	F3	,861
SB4	<---	F5	,915
SB3	<---	F5	,844
SB2	<---	F5	,864
SB1	<---	F5	,819
EB5	<---	F6	,874
EB4	<---	F6	,784
EB3	<---	F6	,737
EB1	<---	F6	,742
BT4	<---	F8	,806
BT3	<---	F8	,900
BT2	<---	F8	,877
BT1	<---	F8	,677
WOM3	<---	F9	,828
WOM2	<---	F9	,890
WOM1	<---	F9	,887
FB6	<---	F10	,591
FB2	<---	F10	,818
FB1	<---	F10	,858
WPM2	<---	F11	,738
WPM1	<---	F11	,788
CB2R	<---	F4	,289
CB3R	<---	F4	,256
CB4	<---	F4	,635
CB5	<---	F4	,601
CB7	<---	F4	,635
CB9	<---	F4	,531
CB11	<---	F4	,619
CB1	<---	F4	,642

Table 1: Standardized Regression Weights

Variable	Composite reliability	AVE (convergent validity)	MSE
Compulsive buying tendency	0,829	0,325	0,298
Functional benefits	0,805	0,584	0,571
Emotional benefits	0,869	0,625	0,622
Social benefits	0,920	0,741	0,740
Brand trust	0,887	0,664	0,657
Brand attachment	0,871	0,633	0,621
Willingness to switch	0,762	0,519	0,517
Willingness to pay more	0,732	0,579	0,578
Repurchase intention	0,689	0,537	0,513
Word of mouth	0,907	0,765	0,764

Table 2: Reliability and validity

Appendix XII: Assumptions 2-way a(c)nova analysis

	Adj. R^2 Before	Adj. R^2 After	
FB	.05	.062	High CBT: Adj. R^2 +.034
EB	.108	.105	No improvement
SB	.100	.097	No improvement
BT	.033	.030	No improvement
BA	.050	.047	No improvement
WTS	.108	.105	No improvement
RI	.105	.105	No improvement
WPM	.004	.003	No improvement
WOM	.090	.094	Small improvement, Lavene's test sign. Gender not sign.

Table 1: Inclusion of covariate gender

Assumption of homogeneity of variances

Test of Homogeneity of Variances				
	Levene Statistic	df1	df2	Sig.
FB	,004	1	446	,949
EB	29,174	1	446	,000
SB	7,738	1	446	,006
BT	,242	1	459	,623
BA	4,433	1	459	,036
WTS	1,416	1	459	,235
RI	1,418	1	459	,234
WPM	7,656	1	459	,006
WOM	8,940	1	459	,003

Table 2:Levene's test of Homogeneity of Variances

Robust Tests of Equality of Means					
		Statistic[a]	df1	df2	Sig.
FB	Welch	7,564	1	445,100	,006
EB	Welch	39,730	1	405,242	,000
SB	Welch	21,489	1	445,343	,000
BT	Welch	,040	1	458,724	,842
BA	Welch	14,604	1	458,882	,000
WTS	Welch	53,487	1	458,994	,000
RI	Welch	54,807	1	458,696	,000
WPM	Welch	,660	1	454,226	,417
WOM	Welch	10,663	1	457,557	,001
a. Asymptotically F distributed.					

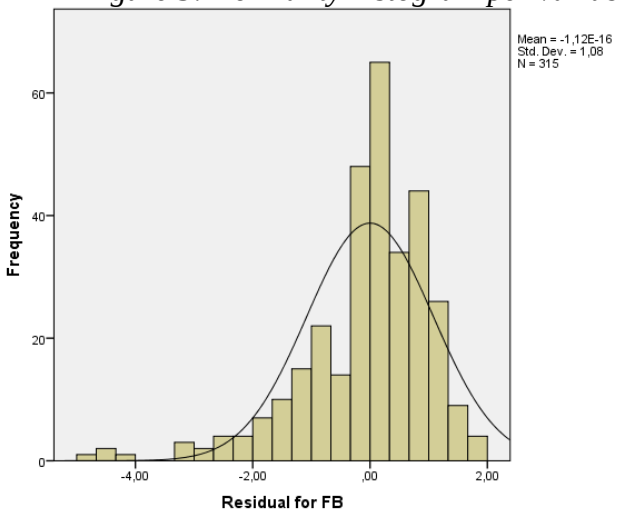
Table 3: Welch's test of Homogeneity of Variances

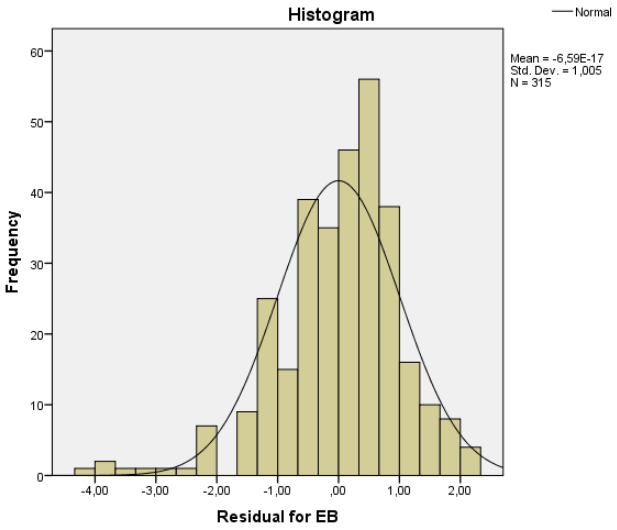
Assumption normality

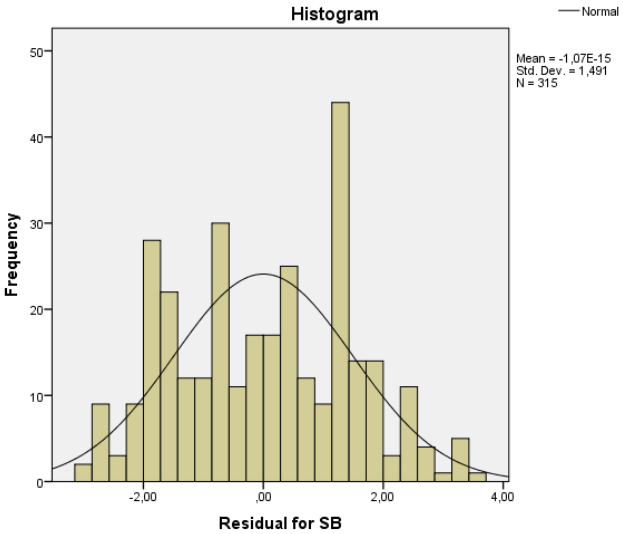
Tests of Normality						
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Residual for FB	,179	315	,000	,903	315	,000
Residual for EB	,086	315	,000	,955	315	,000
Residual for SB	,087	315	,000	,977	315	,000
Residual for BT	,077	316	,000	,970	316	,000
Residual for BA	,065	316	,003	,985	316	,002
Residual for WTS	,066	316	,002	,976	316	,000
Residual for RI	,089	316	,000	,978	316	,000
Residual for WPM	,097	461	,000	,972	461	,000
Residual for WOM	,086	461	,000	,974	461	,000
a. Lilliefors Significance Correction						

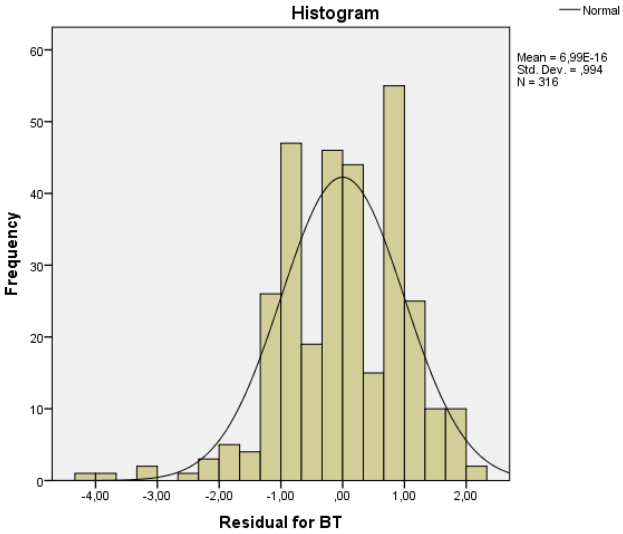
Table 4: Normality assumption

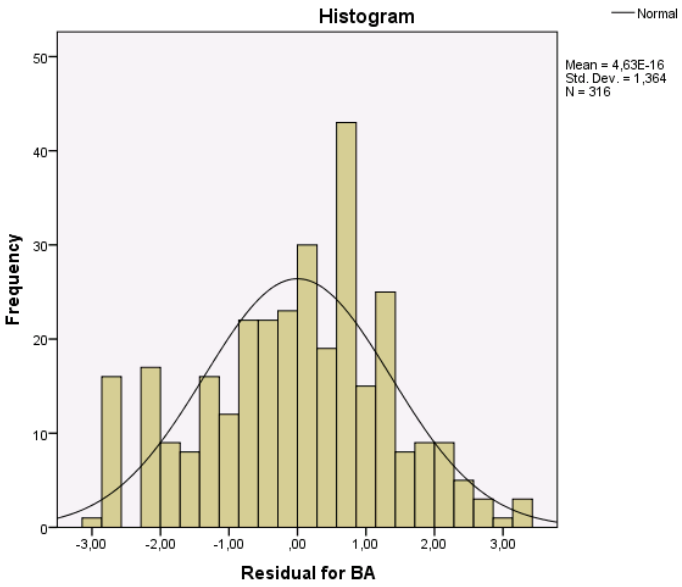
Figure 3: Normality histogram per variable







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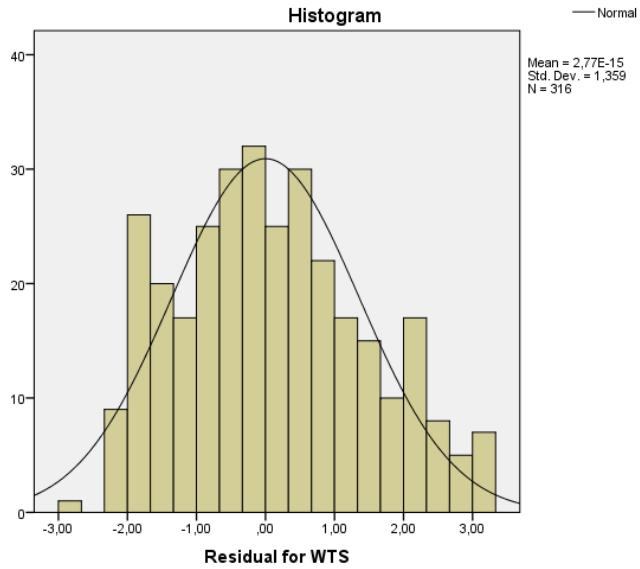
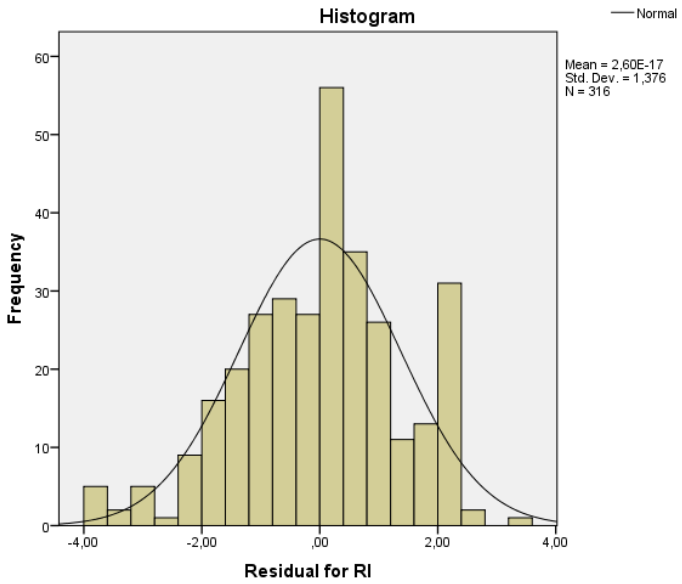
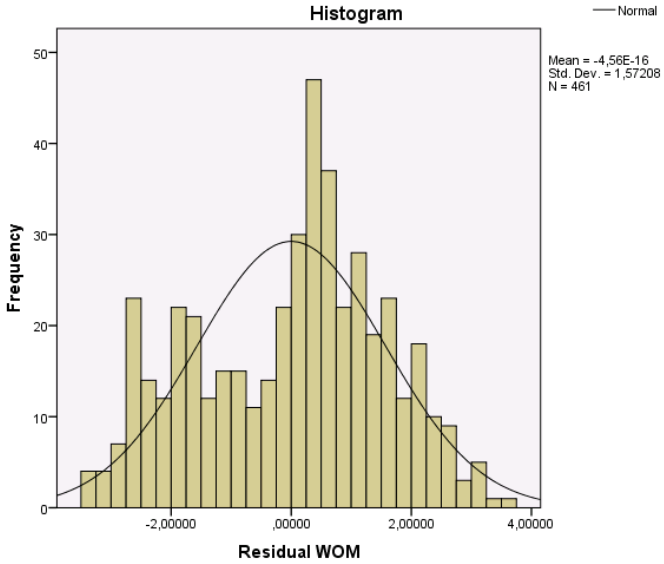
Std. Dev. = 1,364
N = 316
Frequency
Residual for BA


Histogram
Normal
Mean = 2,77E-15
Std. Dev. = 1,359
N = 316
Residual for WTS


Histogram
Normal
Mean = 2,60E-17
Std. Dev. = 1,376
N = 316
Frequency
Residual for RI


Histogram
Normal
Mean = -4,56E-16
Std. Dev. = 1,57208
N = 461
Frequency
Residual WOM

Appendix XIII: 2-way AN(C)OVA

Functional benefits

Tests of Between-Subjects Effects

Dependent Variable: FB

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	28,969[a]	4	7,242	6,227	,000	,074
Intercept	831,079	1	831,079	714,525	,000	,697
Gender	5,962	1	5,962	5,126	,024	,016
CBT_HL	8,248	1	8,248	7,091	,008	,022
Prod_cat	2,136	1	2,136	1,836	,176	,006
CBT_HL * Prod_cat	2,749	1	2,749	2,363	,125	,008
Error	360,567	310	1,163			
Total	9812,250	315				
Corrected Total	389,537	314				

a. R Squared = ,074 (Adjusted R Squared = ,062)

Table 1: ANCOVA FB

CBT_HL	(I) Type product category	(J) Type product category	Mean Difference (I-J)	Std. Error	Sig.[a]
Low	CP-category	NCP-category	,049	,208	,815
	NCP-category	CP-category	-,049	,208	,815
High	CP-category	NCP-category	-,419*	,164	,012
	NCP-category	CP-category	,419*	,164	,012

Table 2: Mean difference FB, comparison CBT

Univariate Tests

Dependent Variable: FB

CBT_HL		Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Low	Contrast	,063	1	,063	,055	,815	,000
	Error	142,558	125	1,140			
High	Contrast	7,588	1	7,588	6,499	,012	,034
	Error	214,837	184	1,168			

The F tests the effect of Type product category. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

Table 3: Contrast functional brand benefits, comparison CBT

Pairwise Comparisons

Dependent Variable: FB

Type product category	(I) CBT_HL	(J) CBT_HL	Mean Difference (I-J)	Std. Error	Sig. [b]	95% Confidence Interval for Difference[b]	
						Lower Bound	Upper Bound
CP-category	Low	High	,532*	,195	,007	,146	,918
	High	Low	-,532*	,195	,007	-,918	-,146
NCP-category	Low	High	,214	,192	,267	-,165	,592
	High	Low	-,214	,192	,267	-,592	,165

Based on estimated marginal means

*. The mean difference is significant at the ,05 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table 4: Mean difference FB, comparison PC

Univariate Tests

Dependent Variable: FB

Type product category		Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
CP-category	Contrast	7,484	1	7,484	7,432	,007	,048
	Error	148,024	147	1,007			
NCP-category	Contrast	1,622	1	1,622	1,243	,267	,008
	Error	211,337	162	1,305			

The F tests the effect of CBT_HL. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

Table 5: Contrast FB, comparison PC

Emotional benfits

Tests of Between-Subjects Effects

Dependent Variable: EB

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	41,975[a]	3	13,992	13,710	,000	,117
Intercept	7516,468	1	7516,468	7365,072	,000	,959
CBT_HL	4,150	1	4,150	4,067	,045	,013
Prod_cat	26,140	1	26,140	25,614	,000	,076
CBT_HL * Prod_cat	2,132	1	2,132	2,089	,149	,007
Error	317,393	311	1,021			
Total	9136,313	315				
Corrected Total	359,368	314				

a. R Squared = ,117 (Adjusted R Squared = ,108)

Table 6: ANOVA analysis EB

Pairwise Comparisons

Dependent Variable: EB

CBT_HL	(I) Type product category	(J) Type product category	Mean Difference (I-J)	Std. Error	Sig. [b]	95% Confidence Interval for Difference[b] Lower Bound	Upper Bound
Low	CP-category	NCP-category	,803*	,228	,001	,352	1,253
	NCP-category	CP-category	-,803*	,228	,001	-1,253	-,352
High	CP-category	NCP-category	,446*	,131	,001	,188	,705
	NCP-category	CP-category	-,446*	,131	,001	-,705	-,188

Based on estimated marginal means

*. The mean difference is significant at the ,05 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table 1: Mean difference EB, comparison CBY

CBT_HL		Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter
Low	Contrast	17,225	1	17,225	12,436	,001	,090	12,436
	Error	174,517	126	1,385				
High	Contrast	8,943	1	8,943	11,580	,001	,059	11,580
	Error	142,876	185	,772				

Table 8: Contrast EB, comparison CBT

Pairwise Comparisons

Dependent Variable: EB

Type product category	(I) CBT_HL	(J) CBT_HL	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a] Lower Bound	Upper Bound
CP-category	Low	High	-,070	,144	,625	-,355	,214
	High	Low	,070	,144	,625	-,214	,355
NCP-category	Low	High	-,427*	,186	,023	-,794	-,060
	High	Low	,427*	,186	,023	,060	,794

Based on estimated marginal means

*. The mean difference is significant at the ,05 level.

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table 9: Mean difference EB, comparison PC

Univariate Tests

Dependent Variable: EB

Type product category		Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
CP-category	Contrast	,141	1	,141	,240	,625	,002
	Error	86,828	148	,587			
NCP-category	Contrast	7,467	1	7,467	5,279	,023	,031
	Error	230,565	163	1,415			

The F tests the effect of CBT_HL. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

Table 2: Contrast EB, comparison PC

Social benefits

Tests of Between-Subjects Effects

Dependent Variable: SB

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Non Para
Corrected Model	84,609[a]	3	28,203	12,573	,000	,108	
Intercept	3331,121	1	3331,121	1485,001	,000	,827	1
CBT_HL	37,001	1	37,001	16,495	,000	,050	
Prod_cat	20,013	1	20,013	8,922	,003	,028	
CBT_HL * Prod_cat	1,186	1	1,186	,529	,468	,002	
Error	697,628	311	2,243				
Total	4781,069	315					
Corrected Total	782,237	314					

a. R Squared = ,108 (Adjusted R Squared = ,100)

b. Computed using alpha = ,05

Table 3: ANOVA analysis SB

Pairwise Comparisons

Dependent Variable: SB

CBT_HL	(I) Type product category	(J) Type product category	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b] Lower Bound	Upper Bound
Low	CP-category	NCP-category	,680*	,298	,024	,090	1,269
	NCP-category	CP-category	-,680*	,298	,024	-1,269	-,090
High	CP-category	NCP-category	,413	,219	,061	-,019	,846
	NCP-category	CP-category	-,413	,219	,061	-,846	,019

Based on estimated marginal means

*. The mean difference is significant at the ,05 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table 12: Mean difference SB, comparison CBT

CBT_HL		Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Low	Contrast	12,338	1	12,338	5,210	,024	,040
	Error	298,381	126	2,368			
High	Contrast	7,678	1	7,678	3,558	,061	,019
	Error	399,247	185	2,158			

Table 43: Contrast SB, comparison CBT

Pairwise Comparisons

Dependent Variable: SB

Type product category	(I) CBT_HL	(J) CBT_HL	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
						Lower Bound	Upper Bound
CP-category	Low	High	-,610*	,261	,021	-1,126	-,094
	High	Low	,610*	,261	,021	,094	1,126
NCP-category	Low	High	-,876*	,248	,001	-1,366	-,386
	High	Low	,876*	,248	,001	,386	1,366

Based on estimated marginal means

*. The mean difference is significant at the ,05 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table 14: Mean difference SB, comparison PC

Univariate Tests

Dependent Variable: SB

Type product category		Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
CP-category	Contrast	10,558	1	10,558	5,448	,021	,036
	Error	286,828	148	1,938			
NCP-category	Contrast	31,401	1	31,401	12,459	,001	,071
	Error	410,800	163	2,520			

The F tests the effect of CBT_HL. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

Table15: Contrast SB, comparison PC

Brand trust

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	13,882[a]	3	4,627	4,635	,003	,043
Intercept	7416,696	1	7416,696	7429,611	,000	,960
CBT_HL	,002	1	,002	,002	,962	,000
Prod_cat	,549	1	,549	,550	,459	,002
CBT_HL * Prod_cat	13,718	1	13,718	13,742	,000	,042
Error	311,458	312	,998			
Total	8320,625	316				
Corrected Total	325,339	315				

Table 16: ANOVA analysis brand trust

Pairwise Comparisons

Dependent Variable: BT

CBT_HL	(I) Type product category	(J) Type product category	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b] Lower Bound	Upper Bound
Low	CP-category	NCP-category	,344*	,145	,018	,059	,630
	NCP-category	CP-category	-,344*	,145	,018	-,630	-,059
High	CP-category	NCP-category	-,517*	,182	,005	-,877	-,157
	NCP-category	CP-category	,517*	,182	,005	,157	,877

Based on estimated marginal means

*. The mean difference is significant at the ,05 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table 17: Mean difference brand trust, comparisson CBT

CBT_HL		Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Low	Contrast	5,620	1	5,620	5,652	,018	,029
	Error	186,916	188	,994			
High	Contrast	8,104	1	8,104	8,068	,005	,061
	Error	124,542	124	1,004			

Table 18: Contrast brand trust, comparison CBT

Pairwise Comparisons

Dependent Variable: BT

Type product category	(I) CBT_HL	(J) CBT_HL	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
						Lower Bound	Upper Bound
CP-category	Low	High	,425*	,168	,013	,092	,758
	High	Low	-,425*	,168	,013	-,758	-,092
NCP-category	Low	High	-,436*	,159	,007	-,750	-,122
	High	Low	,436*	,159	,007	,122	,750

Based on estimated marginal means

*. The mean difference is significant at the ,05 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table 19: Mean difference brand trust, comparison PC

Univariate Tests

Dependent Variable: BT

Type product category		Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
CP-category	Contrast	6,101	1	6,101	6,376	,013	,041
	Error	142,563	149	,957			
NCP-category	Contrast	7,781	1	7,781	7,509	,007	,044
	Error	168,895	163	1,036			

The F tests the effect of CBT_HL. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

Table 20: Contrast brand trust, comparison PC

Brand attachment

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	36,790[a]	3	12,263	6,530	,000	,059
Intercept	4146,274	1	4146,274	2207,644	,000	,876
CBT_HL	15,676	1	15,676	8,346	,004	,026
Prod_cat	18,396	1	18,396	9,795	,002	,030
CBT_HL * Prod_cat	1,889	1	1,889	1,006	,317	,003
Error	585,981	312	1,878			
Total	4933,778	316				
Corrected Total	622,771	315				

Table 21: ANOVA analysis brand attachment

Pairwise Comparisons

Dependent Variable: BA

CBT_HL	(I) Type product category	(J) Type product category	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
						Lower Bound	Upper Bound
Low	CP-category	NCP-category	,658*	,199	,001	,266	1,051
	NCP-category	CP-category	-,658*	,199	,001	-1,051	-,266
High	CP-category	NCP-category	,339	,249	,176	-,154	,832
	NCP-category	CP-category	-,339	,249	,176	-,832	,154

Based on estimated marginal means

*. The mean difference is significant at the ,05 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table 22: Mean difference brand attachment, comparison CBT

CBT_HL		Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Low	Contrast	20,530	1	20,530	10,948	,001	,055
	Error	352,537	188	1,875			
High	Contrast	3,485	1	3,485	1,851	,176	,015
	Error	233,444	124	1,883			

Table 23: Contrast brand attachment, comparison CBT

Pairwise Comparisons

Dependent Variable: BA

Type product category	(I) CBT_HL	(J) CBT_HL	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
						Lower Bound	Upper Bound
CP-category	Low	High	-,300	,223	,180	-,741	,140
	High	Low	,300	,223	,180	-,140	,741
NCP-category	Low	High	-,620*	,224	,006	-1,063	-,177
	High	Low	,620*	,224	,006	,177	1,063

Based on estimated marginal means

*. The mean difference is significant at the ,05 level.

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table 24: Mean difference brand attachment, comparison PC

Type product category		Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
CP-category	Contrast	3,050	1	3,050	1,815	,180	,012
	Error	250,344	149	1,680			
NCP-category	Contrast	15,725	1	15,725	7,637	,006	,045
	Error	335,637	163	2,059			

Table 5: Contrast brand attachment, comparison PC

Willingness to switch

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	76,925[a]	3	25,642	13,746	,000	,117
Intercept	3806,950	1	3806,950	2040,799	,000	,867
CBT_HL	4,074	1	4,074	2,184	,140	,007
Prod_cat	72,559	1	72,559	38,897	,000	,111
CBT_HL * Prod_cat	,005	1	,005	,003	,960	,000
Error	582,012	312	1,865			
Total	4619,111	316				
Corrected Total	658,937	315				

Table 26: ANOVA analysis willingness to switch

Pairwise Comparisons

Dependent Variable: WTS

CBT_HL	(I) Type product category	(J) Type product category	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
						Lower Bound	Upper Bound
Low	CP-category	NCP-category	,982*	,208	,000	,571	1,394
	NCP-category	CP-category	-,982*	,208	,000	-1,394	-,571
High	CP-category	NCP-category	,998*	,228	,000	,548	1,449
	NCP-category	CP-category	-,998*	,228	,000	-1,449	-,548

Based on estimated marginal means

*. The mean difference is significant at the ,05 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table 27: Mean difference willingness to switch, comparison CBT

CBT_HL		Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Low	Contrast	45,699	1	45,699	22,193	,000	,106
	Error	387,129	188	2,059			
High	Contrast	30,246	1	30,246	19,245	,000	,134
	Error	194,883	124	1,572			

Table 28: Contrast willingness to switch, comparison CBT

Pairwise Comparisons

Dependent Variable: WTS

Type product category	(I) CBT_HL	(J) CBT_HL	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
						Lower Bound	Upper Bound
CP-category	Low	High	-,243	,232	,296	-,700	,215
	High	Low	,243	,232	,296	-,215	,700
NCP-category	Low	High	-,227	,216	,296	-,654	,201
	High	Low	,227	,216	,296	-,201	,654

Based on estimated marginal means

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table29: Mean difference willingness to switch, comparison PC

Univariate Tests

Dependent Variable: WTS

Type product category		Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
CP-category	Contrast	1,988	1	1,988	1,098	,296	,007
	Error	269,857	149	1,811			
NCP-category	Contrast	2,102	1	2,102	1,098	,296	,007
	Error	312,154	163	1,915			

The F tests the effect of CBT_HL. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

Table 6: Contrast willingness to switch, comparison PC

Repurchase intention

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	76,311[a]	3	25,437	13,307	,000	,113
Intercept	5524,773	1	5524,773	2890,234	,000	,903
CBT_HL	,001	1	,001	,001	,979	,000
Prod_cat	74,106	1	74,106	38,768	,000	,111
CBT_HL * Prod_cat	,972	1	,972	,508	,476	,002
Error	596,398	312	1,912			
Total	6647,000	316				
Corrected Total	672,709	315				

Table 7: ANOVA analysis repurchase intention

Pairwise Comparisons

Dependent Variable: RI

CBT_HL	(I) Type product category	(J) Type product category	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
						Lower Bound	Upper Bound
Low	CP-category	NCP-category	-,886*	,211	,000	-1,302	-,470
	NCP-category	CP-category	,886*	,211	,000	,470	1,302
High	CP-category	NCP-category	-1,115*	,231	,000	-1,572	-,659
	NCP-category	CP-category	1,115*	,231	,000	,659	1,572

Based on estimated marginal means

*. The mean difference is significant at the ,05 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table 32: Mean difference repurchase intention, comparison CBT

CBT_HL		Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Low	Contrast	37,193	1	37,193	17,644	,000	,086
	Error	396,301	188	2,108			
High	Contrast	37,761	1	37,761	23,400	,000	,159
	Error	200,096	124	1,614			

Table 33: Contrast repurchase intention, comparison CBT

Pairwise Comparisons

Dependent Variable: RI

Type product category	(I) CBT_HL	(J) CBT_HL	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
						Lower Bound	Upper Bound
CP-category	Low	High	,110	,218	,613	-,320	,541
	High	Low	-,110	,218	,613	-,541	,320
NCP-category	Low	High	-,119	,232	,608	-,576	,338
	High	Low	,119	,232	,608	-,338	,576

Based on estimated marginal means

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table 34: Mean difference repurchase intention, comparison PC

Univariate Tests

Dependent Variable: RI

Type product category		Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
CP-category	Contrast	,411	1	,411	,256	,613	,002
	Error	238,864	149	1,603			
NCP-category	Contrast	,578	1	,578	,264	,608	,002
	Error	357,534	163	2,193			

The F tests the effect of CBT_HL. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

Table 8: Contrast repurchase intention, comparison PC

Willingness to pay more

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	4,114[a]	3	1,371	,613	,607	,006
Intercept	5072,706	1	5072,706	2267,149	,000	,879
CBT_HL	,202	1	,202	,090	,764	,000
Prod_cat	4,051	1	4,051	1,811	,179	,006
CBT_HL * Prod_cat	,077	1	,077	,035	,853	,000
Error	698,095	312	2,237			
Total	6149,500	316				
Corrected Total	702,209	315				

Table 36: ANOVA analysis willingness to pay more

Pairwise Comparisons

Dependent Variable: WPM

CBT_HL	(I) Type product category	(J) Type product category	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
						Lower Bound	Upper Bound
Low	CP-category	NCP-category	-,202	,227	,375	-,649	,245
	NCP-category	CP-category	,202	,227	,375	-,245	,649
High	CP-category	NCP-category	-,266	,253	,294	-,767	,234
	NCP-category	CP-category	,266	,253	,294	-,234	,767

Based on estimated marginal means

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table 37: Mean difference willingness to pay more, comparison CBT

Univariate Tests

Dependent Variable: WPM

CBT_HL		Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Low	Contrast	1,926	1	1,926	,792	,375	,004
	Error	457,427	188	2,433			
High	Contrast	2,152	1	2,152	1,109	,294	,009
	Error	240,667	124	1,941			

The F tests the effect of Type product category. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

Table 38: Contrast willingness to pay more, comparison CBT

Pairwise Comparisons

Dependent Variable: WPM

Type product category	(I) CBT_HL	(J) CBT_HL	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
						Lower Bound	Upper Bound
CP-category	Low	High	,085	,237	,721	-,383	,553
	High	Low	-,085	,237	,721	-,553	,383
NCP-category	Low	High	,020	,250	,936	-,473	,513
	High	Low	-,020	,250	,936	-,513	,473

Based on estimated marginal means

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table 39: Mean difference willingness to pay more, comparison PC

Type product category		Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
CP-category	Contrast	,242	1	,242	,128	,721	,001
	Error	282,308	149	1,895			
NCP-category	Contrast	,016	1	,016	,006	,936	,000
	Error	415,787	163	2,551			

Table 40: Contrast willingness to pay more, comparison PC

Word of mouth

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	83,199[a]	3	27,733	11,438	,000	,099
Intercept	4274,233	1	4274,233	1762,822	,000	,850
CBT_HL	25,846	1	25,846	10,660	,001	,033
Prod_cat	16,107	1	16,107	6,643	,010	,021
CBT_HL * Prod_cat	29,487	1	29,487	12,162	,001	,038
Error	756,492	312	2,425			
Total	5316,000	316				
Corrected Total	839,691	315				

Table 41: ANOVA analysis word of mouth

Pairwise Comparisons

Dependent Variable: WOM

CBT_HL	(I) Type product category	(J) Type product category	Mean Difference (I-J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
						Lower Bound	Upper Bound
Low	CP-category	NCP-category	1,098*	,228	,000	,648	1,547
	NCP-category	CP-category	-1,098*	,228	,000	-1,547	-,648
High	CP-category	NCP-category	-,165	,279	,557	-,718	,389
	NCP-category	CP-category	,165	,279	,557	-,389	,718

Based on estimated marginal means

*. The mean difference is significant at the ,05 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table 42: Mean difference word of mouth, comparison CBT

CBT_HL		Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Low	Contrast	57,084	1	57,084	23,208	,000	,110
	Error	462,427	188	2,460			
High	Contrast	,824	1	,824	,347	,557	,003
	Error	294,065	124	2,371			

Table 43: Contrast word of mouth, comparison CBT

Pairwise Comparisons

Dependent Variable: WOM

Type product category	(I) CBT_HL	(J) CBT_HL	Mean Difference (I-J)	Std. Error	Sig.[a]	95% Confidence Interval for Difference[a]	
						Lower Bound	Upper Bound
CP-category	Low	High	,040	,263	,878	-,479	,560
	High	Low	-,040	,263	,878	-,560	,479
NCP-category	Low	High	-1,222*	,248	,000	-1,711	-,733
	High	Low	1,222*	,248	,000	,733	1,711

Based on estimated marginal means

*. The mean difference is significant at the ,05 level.

a. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Table 9: Mean difference word of mouth, comparison PC

Type product category		Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
CP-category	Contrast	,055	1	,055	,023	,878	,000
	Error	347,485	149	2,332			
NCP-category	Contrast	61,111	1	61,111	24,354	,000	,130
	Error	409,007	163	2,509			

Table 45: Contrast word of mouth, comparison PC

Appendix XIIII: Additional analysis

		CB
PC	Pearson Correlation	-,052
	Sig. (2-tailed)	,176
	N	672
CB	Pearson Correlation	1
	Sig. (2-tailed)	
	N	672
FB	Pearson Correlation	-,198**
	Sig. (2-tailed)	,000
	N	448
EB	Pearson Correlation	,186**
	Sig. (2-tailed)	,000
	N	448
SB	Pearson Correlation	,273**
	Sig. (2-tailed)	,000
	N	448
BT	Pearson Correlation	,042
	Sig. (2-tailed)	,373
	N	461
BA	Pearson Correlation	,108*
	Sig. (2-tailed)	,021
	N	461
WTS	Pearson Correlation	,028
	Sig. (2-tailed)	,551
	N	461

RI	Pearson Correlation	,038
	Sig. (2-tailed)	,419
	N	461
WPM	Pearson Correlation	,003
	Sig. (2-tailed)	,943
	N	461
WOM	Pearson Correlation	,161**
	Sig. (2-tailed)	,001
	N	461

	Adj. R^2 Without PC	Adj. R^2 With PC	
FB	.052	.062	Improvement
EB	.041	.108	Improvement
SB	.080	.100	Improvement
BT	.003	.033	Improvement
BA	.017	.050	Improvement
WTS	.002	.108	Improvement
RI	.001	.105	Improvement
WPM	.003	.004	Improvement
WOM	.027	.090	Improvement

Table 2: Adjusted Eta Squared with and without variable product category