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This is for the Lovers: Motivations and self-congruity as antecedents of anthropomorphism & brand love.

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“The origin of our *desire to love* lies in our profound *need* to *value*, to find things in the world which we can *care* about, can feel *excited* and *inspired* by. It is our values that *tie* us to the world and that *motivate* us to go on *living*. Every *action* is taken for the purpose of *gaining* or *protecting* something we believe will *benefit* our life or *enhance* our *experience*.”

-Branden, 1980

Abstract

Many consumers claim to love their favorite brands. The study at hand contributes to the understanding of why consumers seem to form emotional relationships with non-human entities like brands by linking the concept of brand love to the concept of brand anthropomorphism (humanization of a non-human brand). By exploring the relationship between sociality motivation, effectance motivation, self-congruity and brand love and the mediating force of anthropomorphism, this research aims at understanding why consumers tend to humanize their favorite brands and finally fall for them like for a human being.

A total of 250, mainly German, participants answered an online survey. Results revealed that anthropomorphism has the power to enhance brand love. Moreover, this effect is strengthened when the identity of the favorite brand matches the self-concept of the participant.

Analyses showed, that only self-congruity significantly influenced anthropomorphism, whereas sociality and effectance motivations had no significant effect. However, it was detected, that self-congruity, chronic loneliness (sociality motivation) and need for closure (effectance motivation) had a direct, positive influence on brand love.

Additional analyses indicated that participants rather anthropomorphize technological brands than FMCG brands and verified purchase intention as being a direct, valuable outcome of brand love.

Findings imply that marketing practice should definitely pursue a humanization of their brands and tailor them to the self-image of the particular target group. Furthermore, advertising should actively appeal to the deeply rooted human sociality and effectance needs.

1. Introduction

Overtired people, camping in front of stores in the freezing cold, only to be first to buy a new edition of a small, white mobile phone or a pair of sneakers, designed by a Hip-Hop superstar - Masses of teenagers, wearing simple pullovers depicting a seagull and the bold name of a California based lifestyle and fashion brand – Innumerable families spending their Saturdays in ‘little indoor Sweden’, eating meatballs and ending up buying more candles and bedclothes than initially planned – The world is full of them: Brand Lovers.

Over the years many consumer-brand relationship constructs like brand loyalty (e.g., Carroll & Ahuvia, 2006), brand satisfaction (e.g., Jamal & Goode, 2001) and brand love (e.g., Ahuvia, 1997; Shimp & Madden, 1988) were developed and tested, in order to understand their nature, outcomes and thus advantages for marketers, whereas brand love got the least academic attention so far (Ahuvia, 2005; Albert et al., 2008). Although the concept of “love” has actually always been reserved for interpersonal, social relationships between animate beings, academic research started to explore its relevance within the consumption and marketing context and identified it as a promising construct, worth further exploration (Aaker, 1997; Batra, Ahuvia & Bagozzi, 2012; Fournier, 1998).

Since Susan Fourier (1998) started elaborating on the various relationships consumers form with brands, research in this field steadily increased. Scholars contributing to consumer-brand relationship research are of the opinion that consumers form social relationships with brands, just the way they form relationships with other human beings in their social environment (Aggarwal, 2014; Fournier, 1998; Keller & Lehmann, 2006). Although outcomes of consumer brand relationships got great academic attention lately (e.g., Albert et al., 2008, Batra et al., 2012; Rauschnabel, 2015), the question why consumers tend to develop relationships with non-human entities like brands is still quite unexplored.

Endeavored to identify an antecedent of consumer-brand relationships and on the basis of Fournier’s (1998) elaborations about this topic, Puzakova, Kwak & Rocereto (2009) conclude that consumers, before they are able to start engaging in a brand-relationship, may humanize these brands in the first place, in order to turn a non-human entity into an appropriate, valuable, human-like relationship partner.

This proposition inevitably leads to the concept of brand anthropomorphism and is the starting point for the study at hand. Therefore, this study aims at finding evidence for anthropomorphism being a reason why we “love” our favorite brands and, more specifically, answering the question which psychological mechanisms are operating in the background of our minds that drive us to attribute our

own human features to non-human, in case of brands, not even physical entities and consequently humanize them.

Building on Epley, Waytz and Cacioppo's (2007) three-factor theory of anthropomorphism and Puzakova, Kwak & Rocereto's (2009) theoretical assumptions about brand relationships being grounded in anthropomorphism and the possibly favorable outcomes of this interplay (e.g., brand love), this thesis should contribute to the discussion, if marketing efforts to create humanized brands is as fruitful and promising in terms of stronger brand performance and finally more economic success, as academic literature suggests (Aggarwal & McGills, 2007).

2. Theoretical Framework

Brands

The study at hand aims at shedding light on the question why consumers tend to form emotional relationships with brands. For the course of this thesis the term “brand” should be comprehended as conceptualized by Batra, Ahuvia & Bagozzi (2012), namely as:

“The totality of perceptions and feelings that consumers have about any item identified by a brand name, including its identity (e.g., its packaging and logos), quality and performance, familiarity, trust, perceptions about the emotions and values the brand symbolizes, and user imagery.” (p. 1)

Brand Love

The relationships consumers form with brands are various and diverse, ranging from concepts and outcomes like brand commitment (e.g., Samuelsen & Sandvik, 1998), to brand loyalty (e.g., Carroll & Ahuvia, 2006; Fournier, 1998), brand trust (e.g., Hess & 1995) brand satisfaction (e.g., Jamal & Goode, 2001), brand attachment (e.g., Thomson et al., 2005) and brand love (Shimp & Madden, 1988), whereas brand love still needs further academic exploration (Ahuvia, 2005; Albert et al., 2008).

Although the concept of “love” was actually always reserved for interpersonal, social relationships between animate beings to date, Shimp & Madden argued in 1988 that “consumers form relations with consumption objects (products, brands, stores, etc.), which range from feeling of antipathy, to slight fondness, all the way up to what would, in person-person relations, amount to love.” However they claimed that, in this context, the term “love” should be understood rather metaphorically, as relationships between humans and human-object relationships could not be equalized, solely considering bi-directionality (Shim & Madden, 1988).

Anyway, consumer research and social psychology scholars eagerly started to explore love’s relevance within the consumption and marketing context and identified it as promising, absolutely worth further exploration (e.g., Aaker, 1997; Batra, Ahuvia & Bagozzi, 2012; Fournier, 1998).

Although the emotions consumers perceive in consumer-brand relationships might be different from emotions directed towards other humans, brand love research shows that feelings towards a brand definitely can exceed a level of simple affection (Ahuvia, 2006; Langer et al., 2015).

According to Ahuvia (2005) brand love is “the degree of passionate emotional attachment a satisfied consumer has for a particular trade name” and includes (1) passion for a brand, (2) brand

attachment, (3) positive attitude towards a brand, (4) positive emotions towards a brand, and (5) confessions of love to a brand (Ahuvia, 2005).

In 2012, Batra et al. conceptualized their brand love prototype model, containing seven core elements of brand love, namely: (1) self-brand integration, (2) passion-driven behaviors, (3) positive emotional connection, (4) long-term relationship, (5) positive overall attitude valence, (6) attitude certainty and confidence (strength), and (7) anticipated separation distress. Furthermore authors claim that also quality beliefs have the power to facilitate brand love. By empirically testing their model, Batra et al. (2012) were able to identify brand love's power to enhance intention to re-purchase, to boost brand loyalty and to stimulate positive word of mouth (WOM) as well as an immunity against negative information.

As valuable as results from contemporary brand love studies are, it has to be noted that over the years, brand love research developed on two different paths, departing from two different theories of love, namely theories of interpersonal love on the one hand (e.g., Ahuvia, 2006; Shimp & Madden, 1988; Kamat & Parulekar, 2007) and parasocial love on the other hand (e.g., Batra et al, 2012; Albert et al., 2008). This triggered a discussion between scholars about the applicability of the two approaches to brand love.

Brand Love. Interpersonal?

The triangular theory of interpersonal love by Sternberg (1986) describes love as an interplay of *intimacy* (1) (emotional connectedness in a love relationship), *passion* (2) (physical appeals in a love relationship) and *decision/commitment* (3) (decision to enter and willingness to maintain a relationship).

When Shimp and Madden (1988) picked up on Sternberg's theory, their goal was to translate the concept of love to a consumer consumption context. For the course of their study they slightly altered the initial love triangle to *liking* (1), *yearning* (2) and *decision/commitment* (3). Based on this altered model their study resulted in eight kinds of love, whereas each type of love either contains one, two, all three or none of the love triangle components, indicating the particular strength and intensity of love each love style entails. According to Shimp & Madden (1988), the eight kinds of love consumers perceive towards consumption objects are: nonlove(1), liking (2), infatuated love (3), empty love (4), romantic love (5), companionate love (6), fatuous love (7), and consummate love (8).

Since then, many scholars followed Shimp & Madden (1988) and based their brand love studies on interpersonal love theories (e.g., Ahuvia, 1993; 2005; Carroll et al., 2006; Wang et al., 2004).

However, Albert et al. (2008), Fetscherin (2012) and Batra et al. (2012) began to question the applicability of interpersonal love approaches to consumer-brand relationships. Batra et al. (2012) criticizes that the academic world still lacks insight into how consumer actually perceive love towards brands and calls for a better grounded and clear understanding of this consumer experience.

Investigating consumer's physical responses to no either human or inanimate objects (brands), Yoon & Gutsches (2006) were able to show that judgements about brands are processed in a different part of the brain than judgements about other humans and that medial prefrontal cortex activation is significantly higher when processing information about humans. On the basis of their findings, they propose that the human brain processes brand personalities differently than human personalities (Yoon & Gutsches, 2006), which points to a fundamental difference between interpersonal love and love directed towards an object like a brand.

By claiming that a relationship between a consumer and a brand can never be bi-directional but will always be unidirectional, Fetscherin (2012) points to the main limitation of simply transferring the interpersonal love approach to consumer-brand relationships. He tested the applicability of both love approaches to brand love and revealed that brand love is rather a form of parasocial love than interpersonal love (Fetscherin, 2012).

Finally, Langer et al. (2015) investigated the similarities and differences between interpersonal love and brand love. Results showed that one of the most significant difference between the two concepts is the nature of feelings and intentions underlying them. Although brand love entails strong emotions, interpersonal love shows to be emotionally motivate, whereas brand love is rather rationally driven (e.g. by the level of product quality). Moreover, scholars concluded that brand love is not as arousing as interpersonal love, hence brands elicit similar feelings we have towards good friends (Langer et al., 2015).

Brand Love. Parasocial?

According to Wang et al. (2004) "although love is an outcome of bi-directional interaction between two partners, when the target of love is replaced with an object (e.g., product or brand), love becomes unidirectional" (p.320). This implies that love between a human and an object is possible, but due to the inanimate object's inability to reciprocate the love, its nature changes from bi-directional to unidirectional, thus a one-sided love that is grounded in the parasocial relationship approach.

The parasocial relationship approach is based on the concept of parasocial interaction (PSI) specified by Horton & Woll (1956) that describes a one-sided relationship of a human entity with a "remote media persona". In its fundamentals, parasocial relationships are not completely different from the

interpersonal relationships, as the only difference is vested in the unidirectional nature of parasocial relationships (Fetscherin, 2012).

So, what is (brand) love?

When thinking about love, probably everyone would agree on its interpersonal and bi-directional nature. Aron & Aron (1991) claim love to be a psychological state where two persons include each other into their own self's, performing an expansion of themselves through the inclusion of the other one, which leads the authors to a definition of love being:

"The constellation of behaviors, cognitions and emotions associated with the desire to enter or maintain a close relationship with a specific other person" (Aron & Aron, 1991, p. 26).

In the light of the bi-directionality of love in this definition, it is absolutely coherent to question the nature of a consumer-brand relationship being interpersonal.

However, as diverse as brand love research, are definitions and interpretations of love. According to Branden (1980), directing love towards an object is not that different from directing love towards another human, as he shares the view that:

"The origin of our desire to love lies in our profound need to value, to find things in the world which we can care about, can feel excited and inspired by. It is our values that tie us to the world and that motivate us to go on living. Every action is taken for the purpose of gaining or protecting something we believe will benefit our life or enhance our experience" (p.67).

This notion of love is indeed of a more unidirectional, even slightly materialistic nature, depicting human lovers as gatherers, searching, collecting and nurturing lovable "objects" (e.g., humans, things etc.) that add pleasure and quality to their lives.

As this example shows, building brand love research on a unidirectional love approach rather than on a bi-directional approach seems to be more reasonable. Consequently this study will be based on a unidirectional understanding of love, as it empirically has been proven to be a more realistic and feasible starting point for further research in the field of love relationships between consumers and brands (Fetscherin, 2012).

However one should keep in mind that due to the rapid development of communication technology (e.g. web 2.0) marketers constantly gain better abilities to communicate, interact and exchange value with consumers in a more vital and rich manner. A development that could take the "love approach discussion" in consumer behavior research to another level.

Who is a Lover?

Building on the seven core dimensions of brand love developed by Batra et al. (2012) and the Big Five personality dimensions (Costa & McCrae, 1992) Rauschnabel, Ahuvia, Ivens & Leisching (2015) aimed at empirically revealing the personality of brand lovers. As Batra et al. (2012) showed, brand love is not stable, univariate state of mind but is rather variable with regard to its level of intensity. Consequently, Rauschnabel et al. (2015) decided to search the key to a better understanding of brand love's variability in the likewise diverse concept of human personality. Results showed that extraversion, a personality trait entailing a high need to form interpersonal relationships, was significantly related to brand love (complementary effect). Moreover, neurotic respondents with a tendency to be less socially successful showed an increased level of brand love (compensatory effect). Although only partial, results indicate that consumers form love relationships with brands for a certain purpose, no matter if compensatory or complementary in nature. This insight should motivate consumer research to further explore the antecedents of brand love as a better understanding of the variability of brand love can lead to more valuable managerial outcomes (Batra et al., 2012). Puzakova et al. (2009) suggest, that connecting the concept of anthropomorphism and its antecedents to a consumer context might contribute to a deeper comprehension of consumer-brand relationships.

Anthropomorphism

The Oxford Dictionary (Soanes & Stevenson, 2005) defines anthropomorphism as the "attribution of human characteristics or behavior to a god, animal, or object" (p. 66).

Stemming from the Greek words Anthropos (meaning "human") and morphe (meaning "shape" or "form"), anthropomorphism implies more than just assigning cues of human life to inanimate objects. According to Epley et al. (2007) anthropomorphism "entails attributing humanlike properties, characteristics, emotions, intentions or mental states to real or imagined nonhuman agents and objects" (p.865). Although the concept of anthropomorphism is generally well-known, the psychological mechanisms underlying this phenomenon remained unexplored for a long time. To date, only few scholars accepted the challenge to shed light on the antecedents of anthropomorphism (e.g., Epley et al., 2007; Hunting, 2013; Epley, Akalis, Waytz, & Cacioppo, 2008).

For many years, anthropomorphism was view as an automatic psychological process (Guthrie, 1993). However, Epley et al. (2007) challenge this view as by claiming that the tendency to anthropomorphize non-human objects is individually determined by three factors, thus "human knowledge", "sociality motivation" and "effectance motivation".

The authors view anthropomorphism rather as a result of inductive reasoning than a simple procedure of human judgement (Epley et al, 2007; Guthrie 1993). The academic discussion about the nature of anthropomorphism in general and the nature of brand anthropomorphism in particular (Puzakova et al., 2009) build the basis for further exploration in this area.

Anthropomorphism & Brand Love

In 1998, Susan Fournier started to explore the relationships consumer form with brands and argued that in order for being perceived as a relationship partner by consumers, a brand needs to possess particular human attributes (i.e., feelings, emotions, and a soul) (Fournier, 1998). However, Aggarwal & McGill (2012) argued that brands are inanimate objects that are less valued and are accredited less worth by humans.

After hypothesizing about the antecedents of consumer-brand relationships and on the basis of Fournier's (1998) elaborations about this topic, Puzakova, Kwak & Rocereto (2009) concluded that consumers, before they are able to start engaging in a brand-relationship, may humanize these brands in the first place, in order to turn a non-human entity into an appropriate, valuable, human-like relationship partner. Suggestions about the theoretically highly valuable concept of "humanized brands" inevitably led scholars to the concept of anthropomorphism, a cognitive process of attributing human characteristics and personality traits to non-human objects or entities. Finally Puzakova et al. (2009) ended up in defining anthropomorphized brands as "brands perceived by consumers as actual human beings with various emotional states, mind, soul, and conscious behaviors that can act as prominent members of social ties" (Puzakova et al., 2009, pp. 413-414).

As a relationship is a strong tie between two entities, involving deep emotional feelings, with the feeling of love being the highest and most intense form, it is anticipated that the concept of brand anthropomorphism stands in relation to the concept of brand love. Although brand love and anthropomorphism are concepts of high interest in behavioral and marketing literature, they have mainly been explored independently from each other so far.

In her thesis, Hunting (2013) aimed to fill this gap and was able to identify a causal relationship between anthropomorphism and brand love. One year later, Rauschnabel & Ahuvia (2014) revealed in one of their studies that the "perceived level of anthropomorphism is an important predictor of brand love and most of its sub-dimensions" and that it stimulates consumers to apply their interpersonal relationship abilities to brands. Furthermore, Rauschnabel (2015) showed that through the act of anthropomorphizing brands, thus classifying these non-human entities into the human category, people tend to evaluate these more positively, identify them as plausible relationship partners and

integrate them in their selves (self-brand integration) which, summed up, stimulates brand love. While, to date, some scholars already succeeded in finding evidence for anthropomorphism being an antecedent of brand love, more research is needed in order to validate findings and gain further important insights into consumer behavior. Thus, the following hypothesis unfolds:

H1: Anthropomorphism is an antecedent of Brand Love.

Antecedents of anthropomorphism

As previously reasoned, it is expected that people, who tend to humanize a certain brand (brand anthropomorphism), will show a higher level of love for this brand.

However, this assumption raises a new question: Why do humans tend to anthropomorphize non-human objects. Is it merely because, by putting unfamiliar objects in the human category, we try to counteract uncertainty? Or is it something we do in order to fulfill deeper needs?

In their article “On Seeing Human: A Three-Factor Theory of Anthropomorphism”, Epley et al. (2007) propose that anthropomorphism is not an automatic and invariant psychological process but that the tendency to anthropomorphize non-human objects is individually determined by three factors, thus human knowledge, sociality motivation and effectance motivation. Along, they identify the need to belong and chronic loneliness as key psychological determinants for sociality motivation and the need for closure and the desire for control as key determinants for effectance motivation. Furthermore, they name self-congruity as a key variable leading to anthropomorphic thinking, meaning that the tendency to anthropomorphize is based on the ability to elicit “knowledge about humans when making inferences about nonhuman agents” (Epley et al., 2007). In summary, Epley et al. see anthropomorphism as the result of an interplay of several psychological motivations and human’s tendency to inductively reason about unfamiliar objects in their environment on the basis of their knowledge about their own kind, free along the lines: “judging others (objects/brands) by one’s own standards.”

Sociality motivation as antecedent of anthropomorphism

According to Malär et al. (2011), consumers build relationships with brands in order to compensate for unsatisfied, human needs. Epley et al. (2007) identify sociality as one of these essential human needs, thus a need to enter and maintain social bonds with other human beings. In case humans lack these essential social bonds, they tend to compensate for this by anthropomorphizing non-human objects in their environment in order to (unconsciously) turn them into suitable replacements for (not existing)

human relationship partners (Epley et al., 2007). Building on this conceptualization, Puzakova et al. (2009) reason that, as any other inanimate object, also brands can be identified as a possible social relationship partners by socially excluded individuals. Moreover, authors argue that the state of perceived social disconnection triggers individuals to actively search for social clues in their environment (Epley et al., 2007; Puzakova et al., 2007). This stands in line with Eyssel & Reich (2013), who were able to observe an increase in participant's tendency to anthropomorphize a robot after deliberately putting them in an emotional loneliness condition.

Additionally, Rauschnabel & Ahuvia (2014) see an individual's social motivation as the main reason for the formation of consumer-brand relationships and argued that this mechanism might be the best explanation for the strong relationship between anthropomorphism and brand love they found in their study. Thus, by creating humanized brands, marketers might be able to turn a non-human entity into a social clue that has the power to satisfy consumer's basic human need for sociality, which in turn might tie them even stronger to the consequently anthropomorphized brand.

Need to belong

Leary et al. (2013) label humans as "the most gregarious of all animals" (p.610), eager to build social ties with other human beings in their environment, with the goal of being an active part of a social group and effectively and efficiently interact with its members. Even though each individual differs in its need to belong to groups of others and its ambition to build social relationships, deep down inside a naturally rooted desire to belong to and be accepted by others exists in everyone (McCracken et al., 1989). Understandingly, Baumeister & Leary (1995) identify the need to belong as a "powerful, fundamental, and extremely persuasive motivation", a motivations that drives socially disconnected individuals to actively search for social clues in their environment (Epley et al., 2007; Puzakova et al., 2007). In line with these propositions, Gardner, Pickett, and Brewer (2000) found that when people's need to belong was not satisfyingly fulfilled, they were more receptive for social information in their environment, compared to non-social information, a mechanism that academically is referred to as: "The ability to sense, perceive accurately, and respond appropriately to one's personal, interpersonal, and social environment" (Bernieri, 2001, p.3). Due to the academically proven importance of the need to belong concept in social contexts, Epley et al. (2007) hypothesize that the more receptive people are for social clues in their environment, the stronger might be their tendency to anthropomorphize the sources of those clues. Thus, the following hypothesis unfolds:

H2: Need to belong positively influences consumer's tendency to anthropomorphize their favorite brand.

Numerous studies about compensatory consumer behavior, like compulsive buying (e.g. O'Guinn & Faber, 1989) and self-gift giving (e.g. Mick & DeMoss, 1990) supported the assumption of many elements of consumption behavior being compensatory in nature. Heath, Tynan & Ennew (2011) describe the act of self-gift giving (actively buying products for oneself as a present) as being therapeutic. According to the authors, self-gift giving consumer behavior's therapeutic power is especially rooted in the social interaction resulting from the shopping experience and is "frequently linked to individuals' desire to feel 'loved', 'appreciated', 'rewarded' or 'compensated'" (Heath et al., 2011, p. 138). In the light of these findings, it can be anticipated that the event of consuming a product / brand for the purpose of satisfying certain social need can lead to a strong social experience, strengthening the consumer-brand relationship, eventually resulting in a brand love. Accordingly, in their paper about anthropomorphized brands, Puzakova et al. (2009) propose that in order to compensate for the social pain individuals experience when their need to belong is not satisfyingly met, they might form strong affective ties with brands instead. In accordance, Fournier (2016) summarizes that especially materialistic consumers and those who show a high interpersonal anxiety and avoidant style tend to attach to brands in order to compensate for interpersonal insecurity and to counterbalance an unmet need to belong. According to Dunn & Hoegg (2014), building relationships with brands has the power to alleviate fear when interpersonal contact is not available. Thus, the following hypothesis unfolds:

H3: Need to belong positively influences consumer's tendency to feel love for their favorite brand.

Chronic loneliness

Besides a strong unsatisfied desire to belong to others, humans suffering from social disconnection can perceive a deep feeling of loneliness, a state that over time might get chronic. However, as much as individuals differ in their need for social company and acceptance, as much do they differ in their perceived level of loneliness (Pickett et al., 2004; Cacioppo et al., 2006).

Maner et al. (2007) revealed that experiencing social disconnection leads people to form relationships with "new sources of potential affiliation" (p.42) and that even the hypothetical chance of being social excluded in the near future resulted in participants being highly more eager to form new relationships and, moreover, to evaluate these new ties more positively. Epley et al. (2008) go one step further by proposing that lonely people might be completely uninterested in (re-) establishing social bonds with other humans and rather prefer connections with non-human entities instead, maybe due to a high level of social frustration. In line with these insights, Puzakova et al. (2009) assume that chronically

lonely consumers are more receptive for social clues stemming from human like personality features of brands in their environment, which in turn might lead to a successful humanization of these brands, basically just for the purpose of defeating the unpleasant state of loneliness resulting from social disconnection. Thus, the following hypothesis unfolds:

H4: Chronic loneliness positively influences consumer's tendency to anthropomorphize their favorite brand.

According to McPherson, Smith-Lovin & Brashears (2006) the number of lonely individuals steadily increases. As it was previously noted, loneliness is a highly unpleasant state and numerous studies proved that humans actively seek sources of compensation in order to combat this state. Perse & Rubin (1990) showed that media use in form of watching television is frequently used to counterbalance loneliness and Krause-Parello (2008) found that interactions with pets had the power to lower elderly ladies' perceived level of loneliness. Transferring the concept of loneliness compensation to the consumption context Lastovicka & Sirianni (2011) propose, that in our 'consumption culture', lonely individuals might be motivated to cure their miserable emotional state by forming 'safe' relationships with consumption objects, that have no power to socially rejected them. In their paper about anthropomorphized brands, Puzakova et al. (2009) suggest that consumers might humanize brands in order to counteract the undesired feeling of chronic loneliness, thus use a brand as a substitute to compensate for a lack of human connectedness. All in all, chronic loneliness perceived by consumers might lead to an active search for relationship substitutes that might be found in the world of humanized brands. Finally, due to the highly emotional involvement with the substitutional object (brand), a strong relationship e.g. a brand love might evolve. Moreover it is anticipated that lonely consumer's fears of being relegated to the initial state of loneliness in case the consumer-brand relationship ends (Puzakova et al., 2009) their brand love might be even more robust and long-lasting. Consequently the following hypothesis unfolds:

H5: Chronic loneliness positively influences consumer's tendency to feel love for their favorite brand.

Effectance motivation triggers anthropomorphism

Waytz et al. (2010) define effectance as the motivation to "attain mastery of one's environment" (p. 410), which implies that humans strive to control happenings and activities in their direct environment and desire to effectively and efficiently function within this environment (White, 1959). Consequently,

Epley et al. (2007) reason that the desire of making sense of the world surrounding them and the aim of reducing any source of uncertainty, drives humans to humanize unknown objects in their environment. Waytz et al. (2010) aimed at finding statistical evidence of effectance motivations leading to higher levels of unknown agent humanization and were able to show that the participants in their study tended to humanize certain gadgets more, when these were identified as being unpredictable. Nonetheless, authors call for more academic validation in this field.

Need for closure

The concept of need for closure is rooted in an interplay of human comprehension, decision making and uncertainty reduction processes (Kruglanski, 1990). Basically, the concept describes a human tendency to judge a particular uncertain situation (or any other source of uncertainty) as quickly as possible and finally to remain stable in this (pleasant) state of comprehension (Roets & Van Hiel, 2011). Similarly, as individuals differ in certain sociality needs, or other needs in general, they vary in their way and speed of how they make sense of the world around them. Whereas a person high in need for closure does not require a whole lot of information or time for a final judgement, simply due to his motivation to solve and terminate an ambiguous state of mind as quickly as possible, a person low in need for closure is not that sensitive to ambiguity and takes his time to gather information, for the purpose of a well-grounded judgement (Kruglanski & Webster, 1996). Kruglanski & Webster (1994) see the need for closure as a stable difference between individuals, however, they admit that the extent to which individuals differ in their need for closure might depend on situational factors (Kruglanski & Webster, 1994). In terms of brand anthropomorphism, Puzakova et al. (2009) propose that the social clues radiated by brands with human features might be very effectively absorbed by consumers high in need of closure, due to their tendency to react quickly and intuitionally to those clues. Moreover, the authors suggest that those individuals are less likely to adjust their initial anthropomorphic judgement and faithfully remain in this state (Puzakova et al., 2009). Thus, the following hypothesis unfolds:

H6: Need for closure positively influences consumer's tendency to anthropomorphize their favorite brand.

As individuals high in need for closure might be more quickly and thus more easily be affected by social clues radiated by a brand, which in turn might lead to a faster and more stable brand anthropomorphism (Puzakova et al., 2009), the relationship becomes more stable and long-lasting as well, which could lead to a higher tendency to finally fall in love with the brand. Consequently the following hypothesis unfolds:

H7: Need for closure positively influences consumer's tendency to feel love for their favorite brand.

Desire for control

Burger (1992) defines people's desire for control as their "preference to control the events in their lives" (p.4). Although controlling one's life seems to be a reasonable goal for everyone likewise in the first place, it has to be kept in mind that control is also linked to "responsibility and a pressure to perform well" (p.3), which leads to individual differences in preferring to control or rather be controlled, depending on the particular situation (Burger, 1992).

When it comes to anthropomorphism, Epley et al. (2007) argue that eliciting knowledge about the self and, on the basis of this knowledge, reasoning about any uncertain non-human entity might give individuals a certain amount of control over the event of dealing with and overcoming ambiguity. The authors build this assumption on Holland et al. (1986), who identify induction as an effective process of satisfying needs that evolve from effectance motivation. Puzakova et al. (2009) pick up on this reasoning and hypothesize that consumers high in desire for control rather inductively reason about brands, thus rather pass through a process of anthropomorphism than other consumers. Thus, the following hypothesis unfolds:

H8: Desire for control positively influences consumer's tendency to anthropomorphize their favorite brand.

According to Puzakova et al. (2009) satisfying the need for control and predictability results in positive feelings. Furthermore, when being in control of an uncertain situation with e.g. an unknown brand, this control enables a consumer to predict future interactions with the brand (Puzakova et al., 2012). As predicting events of interaction with a brand in the future can be interpreted as an initial attempt to build a long-term relationship with this brand, a behavior which has been identified as being an antecedent of brand love (Batra et al., 2012), the following hypothesis unfolds:

H9: Desire for control positively influences consumer's tendency to feel love for their favorite brand.

Self-Congruity triggers anthropomorphism

According to Sirgy (1982), consumers can perceive congruity between their self-image and the image of a brand. Moreover he reasons, that consumers use certain products and brands, in order to actively express this particular self-image. This stands in line with Aaker (1997) who claims that the perceived personality of a brand supports consumers in expressing their own self-concept.

According to Epley et al. (2007), one of the key elements that drive anthropomorphism is the knowledge individuals have about themselves and their own kind and in order to reason about uncertain or in-human object they intuitively access this information and project it onto the unknown agent. Building on this basic principle and on the fact that humans are very sensitive to human clues in their environment (Guthrie, 1993), Puzakova et al. (2009) hypothesize that when a brand shows human personality traits and behaviors similar to that of the consumer himself category knowledge might be activated as part of the judgement process. As the activation of this human category-knowledge might drive individuals to anthropomorphize (Epley et al., 2007), the following hypothesis unfolds:

H10: Self-congruity positively influences consumer's tendency to anthropomorphize their favorite brand.

Academic research suggests that a congruence between a consumer's self-concept and a brand's image leads to desired affective responses (Belk, 1988; Klein, Kleine & Allen, 1995; Wallendorf & Arnould; 1988). Moreover, self-image / brand-image congruity results in greater brand attachment (e.g., Richins, 1994) and is expected to enhance brand loyalty (e.g., Underwood, 2003). Due to its academically proven positive effect on consumer-brand relationships, the following hypothesis unfolds:

H11: Self-congruity positively influences consumer's tendency to feel love for their favorite brand.

The effect of relationship status

According to Epley et al. (2007) "anthropomorphized agents can act as powerful agents of social connection when human connection is lacking". As the number of single households and online dating platforms is rising, marketing professionals might be interested in how to create strong brands that attract the growing single population.

The concept of anthropomorphism seems so be an interesting avenue, due to its hypothesized rootage in fundamental human needs and motivations (e.g., Epley et al., 2007; Puzakova et al., 2009). In her Thesis, Hunting (2013) noticed that single/unmarried respondents show a higher tendency to anthropomorphize their favorite mobile phone brand than people who stated to be in a relationship. Due to current demographical developments further insights into the connection between relationship status and its moderating role on anthropomorphism and brand love could be of great importance for marketing practice. Consequently the following hypothesis unfolds:

H12: Relationship status influences people's tendency to anthropomorphize their favorite brand.

In their study about the personality of brand lovers Rauschnabel et al. (2015) found that singles show a higher brand love for their favorite fashion brand than couples do, but only in terms of self-brand integration. Hunting (2013) revealed that single/unmarried consumers perceive more love for their mobile phone brand compared to consumers who are in a relationship. As exploring the relationship between marital status and brand love could lead to favorable managerial insights and academic research in this area is still scarce, the following hypothesis will be tested:

H13: Relationship status influences people's tendency to feel love for their favorite brand.

3. Methodology

Survey development

In order to explore the relationships between the dependent variables anthropomorphism and brand love and the independent variables sociality motivations, effectance motivations and self-congruity, a survey was developed by means of the online research tool Qualtrics. The survey consisted of 42 questions and was programmed in a way that in the beginning respondents were asked to type in their favorite brand. All further questions adjusted automatically, using the information given by the respondent. Consequently, every respondent answered a survey that individually referred to their favorite brand. The survey was set up in English, as well as in German language. In order to assure proper content and comprehension consistency between the two survey versions, a small pretest was conducted. A convenience sample of six people with mastery in both, English and German language, tested whether the two versions were coherent in terms of wording and understandability. Both surveys were adjusted based on their feedback.

Measurement Scales

For this study the researcher was interested in the following independent variables: need to belong (1), chronic loneliness (2), need for closure (3), desire for control (4) and self-congruity (5). Moreover the dependent variables brand love (6) and anthropomorphism (7) were examined. Existing scales built the basis for the development of the final survey questions however, wording of the original items was altered that they did not measure respondent's personality traits in general, but rather aimed at determining how their individual level of certain traits influenced them during a brand decision / purchase situation.

Independent variables

Need to belong

Based on the five most reliable items from the Need to belong Scale (NTBS) from Leary, Kelly, Cottrell and Schreindorfer (2012) ($\alpha = .81$) five questions were created. The item wording was altered to match the purpose of this study. An example of the wording transformations of items is: "I want other people to accept me." -> "When I choose brand X, I do so in order to be accepted by others." All questions were measured on a 7-point Likert scale, ranging from 1 "strongly disagree" to 7 "strongly agree".

Chronic loneliness

To measure chronic loneliness, five items from the UCLA loneliness scale (Russell, 1996) ($\alpha = .92$) were adapted to a brand decision and purchase situation. An example of the wording transformation of items is: "How often do you feel left out?" -> "Brand X makes me feel less excluded from others". All questions were measured on a 7-point Likert scale, ranging from 1 "strongly disagree" to 7 "strongly agree".

Need for closure

Five items from the Need for Closure (NFC) scale of Roets (2011) ($\alpha = .87$) were chosen and altered to match the purpose of this study. An example of the wording transformations of items is: "I find that a well ordered life with regular hours suits me" -> "I think that a well ordered life, where I surround myself with brand X regularly suits me." All questions were measured on a 7-point Likert scale, ranging from 1 "strongly disagree" to 7 "strongly agree".

Desire for control

The four items for this scale were developed on the basis of the Desire for Control (DC) scale from Burger and Cooper (1979) ($\alpha = .81$). The four items considered to be most suitable for the purpose of this study were selected and adjusted. Participants were asked to rank the four statements on a 7-point Likert scale ranging from 1 "does not apply to me at all" to 7 "always applies to me". An example of the wording transformations of items is: "I enjoy making my own decisions" -> "When it comes to brands, I enjoy making my own decisions."

Self-congruity

This item was measured as a single item and adopted from Sirgy et al. (1997). Participants were asked to rate their level of agreement (1 = "strongly disagree", 7 = "strongly agree") to the following statement: *"Take a moment to think about brand x. Think about the kind of person who typically uses brand x. If you did so, try to describe this person using one or more personal adjectives such as, stylish,*

classy, sexy, old, or whatever comes to your mind to describe the typical user of x. Once you've done this, indicate your agreement or disagreement to the following statement: X is consistent with how I see myself when I use it." (X= the favorite brand individually named by each respondent).

Dependent variables

Anthropomorphism

In order to measure to what extent respondents anthropomorphized their favorite brand the anthropomorphism questionnaire (IDAQ) from Waytz, Cacioppo and Epley (2010) ($\alpha = .82$) was utilized. The original scale contains twenty items and was reduced to five items for the purpose of this study. Examples of created statements are "Brand X has emotions." or "Brand X has a mind of its own." Respondents were asked to rank their agreement to the five statements on a 7-point Likert scale from 1 "strongly disagree" to 7 "strongly agree".

Brand love

The seven items that measured brand love in this study were selected from the mini scale of brand love (Brand love Central, 2013). The scale opened with an item that directly measured brand love ("Overall, how much do you "love" brand X?"). The following items covered brand love antecedents like self-brand integration, passion driven behavior, anticipated separation distress, passionate desire to use, attitude valence and emotional attachment ("To what extent to you feel a positive emotional connection with brand X?"). On a 7-point Likert scale ranging from 1 (not at all) to 7 (very much) participants had to indicate how much "love" they feel for their preliminary chosen favorite brand.

Additional variables

Purchase Intention

Due to purchase intention being a valuable outcome of brand love relationships (Batra et al., 2012), it was decided to include a purchase intention measure. In order to see how likely respondents were to purchase a product of their favorite brand, purchase intention was measured with two items, adopted from Petrosuhis & Monroe (1987). On a 7-point Likert scale respondents had to indicated their overall intend to re-purchase a product of their favorite brand X. (1 = "strongly disagree", 7 = "strongly agree").

Well-being

Several scholars share the view that a lack of social relationships negatively influences human's happiness (e.g., Argyle, 1987; Freedman, 1978) and that people with stronger intimate social bonds tend to enjoy a better well-being (McAdams & Bryant, 1987). Moreover Waytz et al. (2010) assume that anthropomorphism, beside efficacy, also might enhance well-being. Due to the anticipated connections to sociality and effectance determinants, it was decided to include well-being as an independent variable and explore its relationship with anthropomorphism and brand love. Well-being was measured as a single item. On a 7-point Likert scale respondents had to indicate their overall well-being based on the following statement: "I am satisfied with my life." (1 = "strongly disagree", 7 = "strongly agree").

Participants & Data collection procedure

In total 250 respondents completed the survey (N=250) that was distributed via social media. One respondent did not answer the questions regarding education level and income, nonetheless it was decided to include this response in all further analyses as it contained valuable information about the main variables of interest. Respondents were aged between 15 and 71 years (average age= 33.9, SD= 10.2). Gender was unequally distributed with 56 respondents being male (22.4%) and 194 being female (77.6%). Beside 31% of participants, who hold an academic degree (Bachelor or Master) more than half of the sample completed a vocational education (54.2%), which is very common in Germany for people who finish secondary school and do not choose (or are not qualified) for an academic study and instead follow a practical vocational training. When it comes to relationship status, the majority of participants reported to be allied. 28% stated to be married, 27.6% said to be in a relationship, living together with their partner, 16.4% in a relationship, not living together with their partner and 28% indicated to be single/unmarried, from which 2.8% reported to be divorced. 32.1% of the respondents refused to reveal information about their income, 30.1 % indicated to earn less than €10.000,- per year, 46% had an income between €10.000,- and €50.000,-. A few of 4.1% stated to exceed the amount of €50.000, - per year. Table 1 depicts detailed demographic information of the sample.

Table 1: Descriptive statistics of the sample

		N	%
Demographic information		250	
Gender	Male	56	22.4
	Female	194	77.6
Age	0-20	32	12.8
	21-40	168	67.2
	41-60	49	19.6
	60+	1	0.4
Relationship status	Married	70	28
	In a relationship, living together	69	27.6
	In a relationship, not living together	41	16.4
	Divorced	7	2.8
	Single / unmarried	63	25.2
Education level	Secondary school	37	14.9
	Vocational education	135	54.2
	Bachelor degree	43	17.3
	Master degree	34	13.7
Income	< €20,000,-	65	26.1
	€20,000,- to €30,000,-	40	16.1
	€30,000,- to €40,000,-	36	14.5
	€40,000,- to €50,000,-	14	5.6
	> €50,000,-	14	5.6
	Not specified	80	32.1

Factor, reliability & correlation analyses

Table 2: Factor analysis

Measurement Item	Factor								
	1	2	3	4	5	6	7	8	9
Need to belong									
1 It bothers me if other people don't seem to accept me because of brand X.				0.52					
2 When I feel that others don't seem to accept me because of brand X, I definitely will try to avoid this brand.				0.63					
3 If I purchase a product of brand X, I care about what others think about me.				0.52					
4 If I purchase a product of brand X, I do so in order to be accepted by others.	0.42			0.62					
5 I do not like being alone.									0.78
Chronic loneliness									
1 Brand X makes me feel being closer to others.	0.80								
2 Brand X makes me feel less excluded from others.	0.85								
3 Brand X makes me feel that others get to know me better.	0.79								
4 Brand X makes me feel less isolated from others.	0.85								
5 Brand X makes me feel better understood by others.	0.83								
Need for closure									
1 I think that a well ordered life, where I surround myself with brand X regularly suits me.		0.41				0.56			
2 I don't like buying brands without knowing what I can expect from them.							0.72		
3 By setting up a routine with the help of brand X I can enjoy a better life.						0.60			
4 Brand X gives me a clear and structured way to live, what I really appreciate.						0.64			
5 I don't like unforeseeable situations.							0.70		
Desire for control									
1 I try to avoid situations where someone else tells me which brands to buy.									0.42
2 When it comes to brands I enjoy making my own decisions.					-0.61	0.42			
3 When it comes to brand recommendations I rather prefer to be the one who <u>gives</u> recommendations than the one who receives them.								0.72	
4 I like to influence the purchase behavior of others by recommending them brand X.								0.47	

Note. Factor loadings that are grouped are presented in bold.

A factor analysis was performed in order to test if the items belonging to the independent variables measured the corresponding construct. After orthogonal rotation (Varimax) results revealed that for the need to belong concept, item 5 loaded on a different component than the other 4 items, consequently item 5 (“I do not like being alone”) was excluded from the construct. Furthermore, it was detected that the 5 items of the need for closure construct loaded on two different components, namely item 1, 3 & 4 loaded together on the one hand and item 2 & 5 together on the other hand. It was decided to choose for the subset of items 1, 3 & 4, as it showed a higher internal consistency (Cronbach’s alpha). Unfortunately analyses showed that all items of the desire for control construct did not measure the actual construct, consequently it was excluded from further research. All items of chronic loneliness loaded the actual construct satisfyingly.

Table 3: Mean scores, standard deviations and reliability analysis

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Cronbach's alpha</i>	<i>N of items</i>
<i>Independent variables</i>					
Need to belong	250	2,16	1,21	0.64	4
Chronic loneliness	250	2,29	1,44	0.92	5
Need for closure	250	4,07	1,70	0.77	3
Desire for control	250	4,82	1,06	0.33	4
Self-congruity	250	4,91	1,73	-	1
Purchase intention	250	5,86	1,33	0.72	2
Well-being	250	5,76	1,45	-	1
<i>Dependent variables</i>					
Anthropomorphism	250	4,56	1,11	0.86	5
Brand love	250	4,12	1,49	0.83	8

The mean scores of constructs reveal that respondents reported a relatively low need to belong ($M = 2.16$). Correspondingly, chronic loneliness was rated rather negatively as well ($M = 2.29$). These results indicate that respondents do neither feel very socially disconnected due to their brand choices, nor do they care that much about how their social environment evaluates their relationship with these brands. A quite high mean of well-being ($M = 5.76$) and a very high intent to re-purchase a product of the personally stated favorite brand ($M = 5.86$) completes a picture of very stable and self-confident consumers that, eventually, either have never experienced social rejection or exclusion from an in-group based on their brand-preferences or simply are not susceptible to social pressure of this form.

All in all, participants reported a moderately positive tendency to anthropomorphize ($M = 4.56$) and feel love ($M = 4.12$) for their favorite brand. A slightly positive mean score on self-congruity ($M = 4.91$)

shows that the consumers in this study experience a moderately good match between their own self-concept and the perceived brand personality of their favorite brand.

All constructs were tested for internal consistency by performing a reliability analysis using SPSS. All in all, scores higher than 0.7 indicate an acceptable reliability, scores higher than 0.8 as considered as good (Nunnally, 1978; Pallant, 2005).

Deleting several items lead to reliability scores as depicted in table 3. The desire for control construct showed poor reliability and was excluded from further analyses. Self-congruity and well-being were measured as single items. Detailed information about items deleted can be found in appendix B.

Table 4: Correlation analysis

		1	2	3	4	5	6	7	8
<i>Measures</i>									
1	Well-being	1							
2	Need to belong	-0.12	1						
3	Chronic loneliness	-0.18**	0.54**	1					
4	Need for closure	0.06	0.32**	0.48**	1				
5	Anthropomorphism	0.07	0.09	0.19**	0.24**	1			
6	Brand Love	-0.02	0.23**	0.44**	0.55**	0.33**	1		
7	Purchase Intention	0.08	0.09	0.10	0.32**	0.14*	0.43**	1	
8	Self-congruity	0.11	0.17**	0.23**	0.35**	0.31**	0.40**	0.30**	1

** Correlation is significant at the 0.01 level (2-tailed).

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

Table 4 depicts the correlations between the different constructs. A correlation always takes a value between -1 and 1; whereas -1 indicates a highly negative correlation, 0 means no correlation and values around 1 show high positive correlation.

The correlation analysis shows quite high correlations between chronic loneliness and need to belong (0.54), need for closure (0.48) and brand love (0.44). Moreover, brand love highly correlates with the need for closure construct (0.55). Correlations do not imply causation, but simply indicate that a relationship exists between two variables. Further information about the relationship between constructs will be obtained by performing multiple regression analyses.

4. Results

Data analysis

In order to explore the hypothesized relationships between the previously defined dependent and independent variables several multiple regressions and analyses of variance (ANOVA) had been performed.

Anthropomorphism

It was hypothesized that sociality motivation, effectance motivation and self-congruity are positively related to brand anthropomorphism. In other words, it was assumed that consumers who score high, respectively on sociality motivation (high need to belong & high perceived chronic loneliness) and effectance motivation (high need for closure & high desire for control), would show a greater tendency to anthropomorphize their (preciously self-chosen) favorite brand. Moreover it was anticipated that a high score on self-congruity (perceived fit between the own self-concept and the favorite's brand personality) would stimulate the process of classifying the brand in the human category (categorical thinking) which in turn would lead to a successful anthropomorphization of that brand (Puzakova et al., 2009).

Multiple regression analysis revealed, that motivations and self-congruity accounted for 10% of the variance of anthropomorphism ($R^2 = 0.10$). Detailed information about the relationships between anthropomorphism and the independent variables can be found below in table 5.

Table 5: Multiple regression motivations, self-congruity and well-being on anthropomorphism

	B	SE	β	t	P	R²
<i>Anthropomorphism</i>						0.11
Need to belong	-0.06	0.09	-0.05	-0.68	0.50	
Chronic loneliness	0.12	0.08	0.12	1.47	0.14	
Need for closure	0.10	0.06	0.11	1.49	0.14	
Self-congruity	0.21	0.06	0.25	3.80	***	
Well-being	0.05	0.06	0.05	0.80	0.43	

Note. *** $p < 0.05$

Anthropomorphism & sociality motivation

The hypothesis that sociality motivation is a significant predictor of anthropomorphism was not supported in this study. Actually results revealed a non-significant negative relationship between need to belong construct and anthropomorphism ($\beta = -0.06$, $p = -0.05$) which implies that the higher a consumer scores on need to belong, the lower his tendency to anthropomorphize his favorite brand. In contrast, the chronic loneliness construct had an influence on anthropomorphism, however this influence was not significant ($\beta = 0.12$, $p = 0.14$). Consequently, hypotheses 2 & 4 are rejected.

Anthropomorphism & effectance motivation

Assumptions about the relationship between effectance motivation and anthropomorphism were not confirmed. Analyses showed, that a higher need for closure results in a higher level of anthropomorphism, however not significantly ($\beta = 0.09$, $p = 0.19$). Desire for control was not included in this part of the analyses, as it showed poor reliability and no valid conclusions could have been drawn from results. All in all hypotheses 6 & 8 are not supported.

Anthropomorphism & self-congruity

The anticipated positive relationship between self-congruity and anthropomorphism was significantly supported in this study. Respondents who experienced a high self-concept-brand-fit were more likely to anthropomorphize that particular brand ($\beta = 0.21$, $p < 0.05$). Therefore and in line with the literature, hypothesis 9 is confirmed.

Anthropomorphism - Additional analyses

Anthropomorphism & Relationship status

It was assumed that relationship status would influence respondent's tendency to anthropomorphize their favorite brand due to a hypnotized higher or lower feeling of loneliness. Even though the chronic loneliness construct itself had no significant influence on anthropomorphism, a subsequently performed one-way ANOVA showed that anthropomorphism means of the various relationship groups significantly differed from each other ($p = 0.03$, $F = 2.66$). When comparing means, singles and people who said to be in a relationship but were living alone, reported a marginally higher tendency to anthropomorphize their favorite brand than all other participants. Unfortunately the Turkey post-hoc test did not show significant values in order to statistically verify this observation, which could be attributed to the test's conservative nature and the small sample size of the different groups.

Table 6: ANOVA relationship status and anthropomorphism

	<i>Anthropomorphism</i>	
	Mean	SD
married	3.85	1.56
in a relationship, living together	3.91	1.67
in a relationship, not living together	4.56	1.29
divorced	3.66	1.31
single	4.39	1.26

Note. items measured on a 7-point likert scale (1=not at all / 7=very much)

Brand Love

In order to investigate the influence of motivations and self-congruity on brand love several multiple regressions were run. Results indicate that 39% of the variance of brand love can be explained by the independent variables.

Table 7: Multiple regression motivations, self-congruity and well-being on brand love

	B	SE	β	t	P	R²
<i>Brand Love</i>						0.39
Need to belong	-0.05	0.06	-0.06	-0.91	0.36	
Chronic loneliness	0.18	0.05	0.23	3.42	***	
Need for closure	0.25	0.04	0.37	6.31	***	
Self-congruity	0.14	0.03	0.21	4.10	***	
Well-being	-0.03	0.04	-0.03	-0.63	0.53	

Note. ***p<0.05

The hypothesis that sociality motivation positively influences brand was partly supported. On the one hand, the need to belong construct had a non-significant negative relationship with brand love ($\beta = -0.06$, $p = 0.32$) which implies that the higher a consumer's need to belong, the lower he tends to perceive love for his favorite brand. Therefore, hypothesis 3 is rejected.

Brand Love & sociality motivation

On the other hand, chronic loneliness had a significant influence on brand love ($\beta = 0.25$, $p < 0.05$), which means that the more lonely respondents felt, the more love they experienced for their favorite brand. Thus, hypothesis 5 is rejected.

Brand Love & effectance motivation

Assumptions about the relationship between effectance motivation and brand love were also partly confirmed. Analyses revealed positive results about the need for closure construct and its relationship with brand love. More specifically it can be concluded, that a higher need for closure results in a higher level of brand love ($\beta = 0.31$, $p < 0.05$). Desire for control was not included in this part of the analyses, as it showed poor reliability and no valid conclusions could have been drawn from results. All in all, hypothesis 7 is confirmed. Hypothesis 9 is rejected.

Brand Love & self-congruity

The anticipated positive relationship between self-congruity and brand love was significantly supported in this study. Respondents who experienced a high self-concept-brand-fit were more likely to feel love for that particular brand ($\beta = 0.17$, $p < 0.05$). Therefore, hypothesis 9 is confirmed.

Brand Love & anthropomorphism

Table 8: Multiple regression motivations, self-congruity, well-being and anthropomorphism on brand love

	B	SE	β	t	P	R²
Brand Love						0.40
Need to belong	-0.04	0.05	-0.05	-0.80	0.43	
Chronic loneliness	0.16	0.05	0.21	3.20	***	
Need for closure	0.24	0.04	0.37	6.10	***	
Self-congruity	0.12	0.04	0.19	3.38	***	
Well-being	-0.03	0.04	-0.04	-0.78	0.44	
Anthropomorphism	0.11	0.04	0.15	2.81	***	

Note. *** $p < 0.05$

On the basis of hypothesis 1 it was expected, that anthropomorphism would have a positive relationship with brand love. Regression analysis confirmed this assumption, showing a strong relationship between the two variables ($\beta = 0.33$, $p < 0.05$) and that 10% of the variance of brand love can be explained by anthropomorphism.

All in all, results shows that from all variables of Epley et al.'s three-factor theory only self-congruity had the power to predict anthropomorphism ($\beta = 0.21$, $p < 0.05$), which in turn positively influenced brand love ($\beta = 0.33$, $p < 0.05$). Therefore it can be concluded that anthropomorphism functions as a mediator between self-congruity and brand love. Consequently hypothesis 1 is confirmed.

Brand Love - Additional Analyses

Brand Love & Relationship status

It was anticipated that respondent's relationship status would have an influence on their tendency to feel love for their favorite brand. More specifically it was hypothesized that singles / unmarried participants would show a higher brand love than participants who are married or in a relationship. A one-way ANOVA showed, that single, divorcees and people who said to be in a relationship but were living alone, reported a marginally higher brand love than all other participants. However, mean differences between the various relationship groups were not significant ($F = 1.88$, $p = 0.11$).

Table 9: ANOVA relationship status and brand love

	<i>Brand Love</i>		
	N	Mean	SD
married	70	4.35	1.56
in a relationship, living together	69	4.43	1.67
in a relationship, not living together	41	4.75	1.29
divorced	7	4.96	1.31
single	63	4.75	1.26

Note. measured on a 7-point likert scale (1=not at all / 7=very much)

Brand Love, well-being & purchase intention

Analyses did not reveal any positive influence of respondent's well-being ($\beta = -0.03$, $p = 0.41$) on their tendency to feel love for that particular brand. Actually well-being had a negative relationship with brand love, indicating that the more consumers are satisfied with their life, the less they are likely to develop a brand love.

Brand love & product categories

Table 10: ANOVA product category on brand love and anthropomorphism

	Brand Love ^{a)}			Anthropomorphism ^{b)}	
	N	Mean	SD	Mean	SD
Technological brands	37	4,79	1,16	<u>4,49</u>	1,41
FMCG brands	74	4,68	1,02	<u>3,72</u>	1,69
fashion brands	132	4,42	1,12	4,22	1,37
Others	7	4,57	1,40	4,51	1,24

^{a)} measured on a 7-point likert scale (1=not at all / 7=very much)

^{b)} measured on a 7-point likert scale (1=strongly disagree / 7=strongly agree)

The survey that builds the basis for this study was created in a way that respondents had the freedom to individually name their personal favorite brand, no matter from which product category. Even though some scholars suggest that brands from rather hedonic than utilitarian product categories have more potential to evoke brand love (Caroll & Ahuvia, 2006) and technological products/brands are more likely to trigger anthropomorphic thinking (Mick & Fournier, 1998; Moon, 2000; Turkle, 1984) this study resigned to focus on a specific product category. The purpose of this approach was to not restrict respondents in their brand choice and consequently obtain more personal and unbiased answers to the survey questions, as every individual is different in his / her product preferences and interests. One person might be very technic affine, whereas another person might not attach great importance to technological products which in turn might influence the level of brand involvement and finally the intensity of a reported brand love or experienced anthropomorphism. Interestingly, after screening the list of all named favorite brands in this study, it was discovered that nearly all brands could easily be assigned to one of three main product categories, namely FMCG brands (food, beverages & cosmetics), fashion brands (clothing & luxury accessories) and technology brands

(smartphones, computers & cars). The role of product category has been subject of many studies in the field of consumer relationships so far, but often resulted in converse conclusions (Fetscherin, et al., 2014). Kressmann et al (2006) found that product category involvement positively influenced brand relationship quality. On the contrary, Valta (2013, p. 101) came to the conclusion that “product category involvement does not significantly impact brand relationship quality”.

In order to explore whether the three categories in this research show differences in terms of brand love and anthropomorphism intensity (as elementary parts of a brand relationship), an analysis of variance (ANOVA) was performed. Table 10 shows, that when it comes to brand love, no significant differences can be observed between the three categories ($F= 1.55$, $p= 0.20$). However, findings showed that for anthropomorphism, means significantly differed between categories ($F= 2.91$, $p= 0.04$). More specifically, a post hoc analysis revealed that respondents, who named a technology brand, anthropomorphized their favorite brand significantly more than respondents, who chose a FMCG brand.

The results concerning brand love stand in line with Fetscherin et al. (2014), who compared consumer brand relationships on the basis of four product categories (cars, mobile phones, shoes & soft drinks; categories quite similar to the categories coded in this study) and who also were not able to show product category differences for the brand relationship construct brand love. However, the higher level of anthropomorphism for technology brands in this study supports the assumption that products from this category more successfully stimulate this mechanism than do brands from other categories (Mick & Fournier, 1998; Moon, 2000; Turkle, 1984).

Purchase Intention - Additional Analyses

Purchase Intention & its antecedents

Table 11: Multiple regression motivations, self-congruity, well-being, anthropomorphism and brand love on purchase intention

	B	SE	β	t	P	R²
<i>Purchase Intention</i>						0.21
Need to belong	0.03	0.07	0.03	0.43	0.67	
Chronic loneliness	-0.16	0.07	-0.17	-2.22	***	
Need for closure	0.11	0.06	0.14	2.00	***	
Self-congruity	0.10	0.05	0.14	2.10	***	
Well-being	0.04	0.05	0.04	0.73	0.47	
Anthropomorphism	-0.02	0.06	-0.03	-0.44	0.66	
Brand Love	0.45	0.09	0.37	5.10	***	

Note. ***p<0.05

Due to the academically proven relationship between brand love and purchase intention (Batra et al., 2012) it was decided to carry out additional analyses and treat this construct as an dependent variable in order to explore the connections between motivations, self-congruity, anthropomorphism, brand love and purchase intention for this sample. Multiple regression analysis illustrated that all independent variables together accounted for 21% of the variance of purchase intention ($R^2 = 0.21$).

Need for closure ($\beta = 0.14$, $p < 0.05$) and self-congruity ($\beta = 0.14$, $p < 0.05$) lead to a significantly higher purchase intention. In other words, consumers who are high in need for closure and feel great congruence between themselves and their favorite brand are more likely to re-purchase a product of that particular brand. Chronic loneliness had a significantly negative relationship with purchase intention ($\beta = -0.17$, $p < 0.05$), indicating that the more lonely consumers feel, the less likely they are to make a purchase.

Finally, results verified brand love's strong predictive power on purchase intention ($\beta = 0.37$, $p < 0.05$). Thus, consumers who feel love for their favorite band are more likely to re-purchase it in the future, a finding that stands in line with Batra et al. (2012). All in all, results show that from all variables of Epley et al.'s three-factor theory chronic loneliness, need for closure and self-congruity had the power to predict both, purchase intention and brand love, whereas brand love had a significant positive influence on purchase intention as well ($\beta = 0.45$, $p < 0.05$). Therefore it can be concluded that brand love mediates the relationship between these three variables and purchase intention.

Hypotheses & Results

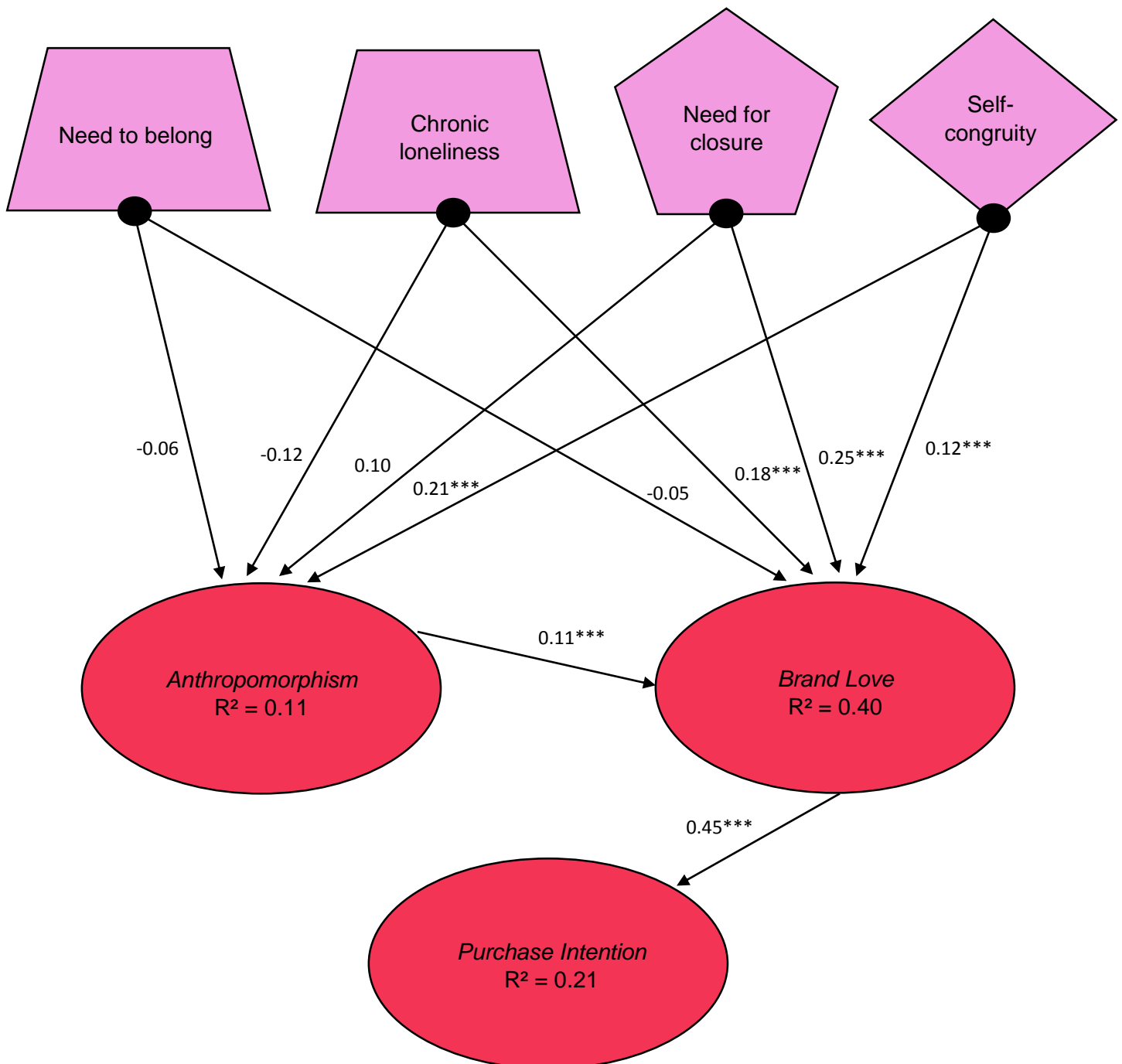
Table 12: Hypotheses and results

Hypothesis		Result
H1	Anthropomorphism is an antecedent of Brand Love	confirmed
H2	Need to belong positively influences consumer's tendency to anthropomorphize their favorite brand	rejected
H3	Need to belong positively influences consumer's tendency to feel love for their favorite brand	rejected
H4	Chronic loneliness positively influences consumer's tendency to anthropomorphize their favorite brand	rejected
H5	Chronic loneliness positively influences consumer's tendency to feel love for their favorite brand	confirmed
H6	Need for closure positively influences consumer's tendency to anthropomorphize their favorite brand	rejected
H7	Need for closure positively influences consumer's tendency to feel love for their favorite brand	confirmed
H8	Desire for control positively influences consumer's tendency to anthropomorphize their favorite brand	rejected
H9	Desire for control positively influences consumer's tendency to feel love for their favorite brand	rejected
H10	Self-congruity positively influences consumer's tendency to anthropomorphize their favorite brand	confirmed
H11	Self-congruity positively influences consumer's tendency to feel love for their favorite brand	confirmed
H12	Relationship status influences people's tendency to anthropomorphize their favorite brand	confirmed
H13	Relationship status influences people's tendency to feel love for their favorite brand	rejected

Motivations, Anthropomorphism, Brand Love & Purchase Intention – The Model

Based on the previously analyzed and reported results of the relationships between effectance motivation (need to belong & chronic loneliness), sociality motivation (desire for control (x) & need for closure), self-congruity, anthropomorphism, brand love and purchase intention, the following model was developed.

Figure 1: Structural Model and corresponding results



5. Discussion

Sociality motivation & anthropomorphism

As opposed to the literature (e.g., Epley et al., 2007; Epley et al., 2008; Puzakova et al., 2009) this study did not reveal any significant relationships between the sub-concepts of sociality motivation and anthropomorphism. In contrast, an increase in need to belong negatively influenced the elicitation of anthropomorphic thinking. Chronic loneliness showed to be positively related to anthropomorphism, however, the relationship was not significant. In the following sections we will try to find explanations for contradictory findings and interpret the final results.

Need to belong

In the study at hand respondent's need to belong was negatively related to the corresponding scores on anthropomorphism. This indicates that the stronger respondent's need to belong, the less they are likely to humanize their favorite brand.

According to Epley et al. (2007), insignificant findings might be attributed to an interplay of people being different in their sociality needs and the situational factor of social disconnection influencing an individual's tendency to humanize non-human entities.

It has to be noted that the survey items measuring need to belong were altered in a way that they did not measure respondent's need to belong in general (personality trait), but rather aimed at determining how their individual level of this need influenced them during a particular brand decision / purchase situation.

In the light of these alterations, results seem to be plausible. People who agreed to statements like "If I purchase a product of brand X, I do so in order to be accepted by others", showed that they have a strong need to belong and that their actions concerning brands are directed towards gaining higher acceptance by and thus more inclusion into a desired in-group of other consumers. When high in need to belong, they might rather behave in a way that assures a (re-) establishment of social ties with real humans, thus their interest and tendency to anthropomorphize increases.

However, in general participants in this study showed a quite low need to belong ($M = 2.16$), which might indicate that the majority of the sample does not perceive an urgent need to be part of a brand in-group, consequently does not care about if others accept them based on their brand choices, or are simply satisfied with their level of social inclusion.

Due to their low need to belong, they have no reason to compensate for any feeling of social exclusion, thus they are not motivated to anthropomorphize. This stands in line with Epley et al. (2007), who see the absence of a feeling of social disconnection as a reason to not anthropomorphize.

Both argumentations are in agreement with Epley et al. (2007), who propose that developmental influence of differences in perceived relationship quality could lead to insignificant results concerning sociality motivation and anthropomorphism.

All in all, results indicate that respondents in this study were not high in their need to belong and consequently not motivated to humanize their favorite brand. However, in case their need to belong would increase, results can be interpreted in a way that consumers would rather “use” a certain brand as a tool in order to (re-) establish social connection to human in-group members than making the effort to humanize and use it as a replacement for social connection.

Chronic loneliness

In this study chronic loneliness was positively related to anthropomorphism, indicating that an increase in respondent’s level of loneliness would lead to a corresponding increase of humanizing their favorite brand, however, results were not significant.

It has to be noted that the survey items measuring chronic loneliness were altered in a way that they did not measure respondent’s loneliness in general (personality trait), but rather aimed at determining how their individual level of loneliness influenced them during a particular brand decision / purchase situation.

People who agreed to statements like “Brand X makes me feel less isolated from others” showed that they perceive a high level of loneliness and exploit their favorite brand in order to counteract this loneliness, possibly by humanizing it. Although positively related, the anticipated influence of chronic loneliness on anthropomorphism was not significant.

According to Epley et al. (2007) insignificant findings might be attributed to an interplay of people being different in their sociality needs and the situational factor of social disconnection influencing an individual’s tendency to humanize non-human entities.

Results show, that consumers participating in this study did not feel very lonely ($M = 2.29$), however, if their loneliness would increase, so would their tendency to humanize their favorite brand, which supports the assumptions of e.g. Epley et al. (2007) & Puzakova et al. (2009).

Moreover, Epley et al. (2007) argue that developmental influence of differences in perceived relationship quality could lead to insignificant results concerning sociality motivation and

anthropomorphism. Consequently the insignificant results in this study might be attributed to the sample not feeling highly lonely. Low scores on sociality motivation were accompanied by a high reported level of well-being ($M = 5.76$), which once again highlights the fact that the participants in this study had no fundamental reason to anthropomorphize.

Effectance motivation & anthropomorphism

As opposed to the literature (e.g., Epley et al., 2007; Epley et al., 2008; Puzakova et al., 2009), this study did not reveal any significant relationships between the sub-concepts of effectance motivation and anthropomorphism. Although the concept of need for closure was positively related to anthropomorphism, the relation was not significant.

Need for closure

In this study need for closure was positively related to anthropomorphism, indicating that an increase in respondent's need for closure would lead to a corresponding increase of humanizing their favorite brand, however, results were not significant.

It has to be mentioned that the survey items measuring need for closure were altered in a way that they did not measure respondent's need for closure in general (personality trait), but rather aimed at determining how their individual level of this need influenced them during a particular brand decision / purchase situation.

People who agreed to statements like "Brand X gives me a clear and structured way to live, what I really appreciate" showed that they highly enjoy the state of reduced uncertainty that result from surrounding oneself with a well-known brand.

All in all, results showed that participants were neither high, nor low in their need for closure ($M = 4.07$). These not very meaningful and insignificant results might be explained by the notion of Epley et al. (2007) that consumers are more motivated to anthropomorphize if non-human agents violate their expectations, thus shows own goals and intention. This leads to the conclusion that the stimulus material eventually did not sufficiently conceptualized the situation where a non-human agent (a brand) violates the consumer's expectations and by this, increases uncertainty, which would be highly unappreciated by individuals high in their need for closure.

Moreover, Epley et al. (2007) claim that the way how individuals comprehend their environment and how they make sense of it changes over time and so does their motivation to deal with it. Children for instance show a generally higher tendency to anthropomorphize than grown-ups (Bering & Bjorklund, 2004) and scholars reason that those being highly inexperienced and thus highly motivated to

understand and judge the world around them, are likely to show an increased tendency to anthropomorphize (Epley et al., 2007). Consequently, insufficient results may be attributed to a relatively old sample with only 12, 8% of respondents being younger than 20 years old.

Motivations, self-congruity & brand love

Based on Puzakova et al. (2009) it was expected that the same variables influencing anthropomorphism might also have an effect on brand love. Analyses revealed, that of the three-factor theory of anthropomorphism by Epley et al. (2007), three antecedents significantly predicted brand love, namely chronic loneliness (sociality motivation), need for closure (effectance motivation) and self-congruity (elicited agent knowledge). The expected and affirmed positive relationship between self-congruity and brand love stands in line with a great number of research findings that a good fit between a consumer's self-image and the image of a brand leads to affective responses towards that brand (e.g., Belk 1988; Klein, Kleine & Allen 1995; Wallendorf & Arnould 1988) and greater brand attachment (Malär et al., 2011). Moreover our findings stand in line with Sirgy (1982), who claimed that consumers can perceive congruity between their self-image and the image of a brand which drives consumers to use those products and brands, in order to actively express this particular self-image.

Brand love & purchase intention

Due to purchase intention being a valuable outcome of brand love relationships (Batra et al., 2012), it was decided to include a purchase intention measure. The goal was to verify the already empirically proven influence of brand love on consumer's purchase intention and additionally explore the interplay of this concept with sociality & effectance drivers, as well as self-congruity. All in all, analyses revealed that chronic loneliness (sociality motivation), need for closure (effectance motivation) and self-congruity (elicited agent knowledge) significantly predicted purchase intention, as well as brand love. Finally, and in line with Batra et al. (2012), brand love significantly predicted purchase intention ($\beta = 0.37$, $p < 0.05$). Therefore, it can be concluded that brand love functions as a mediator between three variables of Epley et al.'s three-factor theory and purchase intention.

Anthropomorphism, Brand Love & relationship status

Although this study was not able to show a causal relationship between sociality motivation and anthropomorphism, a significant effect of relationship status on anthropomorphism was noted. Analyses revealed that singles and people who said to be in a relationship but were living alone, reported a marginally higher tendency to anthropomorphize their favorite brand than all other participants. This finding stands in line with Hunting (2013), who showed that single/unmarried

consumers perceive more love for their mobile phone brand compared to consumers who are in a relationship. Although Rauschnabel & Ahuvia (2015) could prove that singles show a higher brand love for their favorite fashion brand than couples do, this study did not succeed in finding statistical evidence for singles showing higher levels of brand love for their favorite brand compared to the rest of the sample.

6. Limitations & Further Research

As most studies, the study at hand has its limitations, which will now be discussed in further detail.

First of all, it needs to be considered that the data for this study was mainly collected from members of a Facebook community for people stemming and / or living in a particular German city. Consequently, the chance that members show certain similarities in their personality, attitudes and opinions (due to geographical closeness and thus real life relationships among each other) is quite high.

Bagozzi & Dholakia (2002) argue that (virtual) “groups, once formed, are very influential in shaping and changing the member’s opinions, preferences, and actions” (p.19). Consequently, due to intense interaction, members could have created sort of a shared consciousness, or at least a subset of similar cognitive and behavioral patterns, which could have led to more homogenous answers to the questionnaire. Furthermore, Bagozzi & Dholakia (2002) identified a so called “we-intention”, influencing the behavior of members of a (virtual) communities. They showed that in (virtual) communities the regular “personal intention” to a certain action changes into a “we-intention”, a way of group-acting that strengthens member’s feeling of being part of that (virtual) community. Thus a “compliance effect” could have biased final results, as after the link to the online survey had been posted, many members of the community started discussing and interpreting the aim of the study and the composition of the questionnaire. Opinions about brands, about marketing activities in general all the way up to the concept of materialism were discussed. Consequently, it has to be considered that these discussions could have influenced members who participated in the survey after they had been biased by opinions shared by their group members. All in all, results of this study cannot be generalized to the whole population.

Secondly, it has to be considered that the alteration of items measuring the sociality and effectance constructs could have led to less reliability / validity, solely considering that the need for closure scale showed a very poor reliability ($\alpha=0.33$) as compared to the original scale ($\alpha=0.81$), which resulted in the exclusion of the whole construct and thus a loss of valuable information. Survey items were altered

in a way that they did not measure respondent's sociality and effectance motivations in general (as a personality trait), but rather aimed at determining how their individual level of those motivations influenced them during a particular brand decision / purchase situation. As statements and questions were directly focused on a certain brand and possible social and effectual consequences, the alteration of items might have increased their power to measure brand love on the one hand, but might have decreased their applicability to anthropomorphism in general. However, in line with e.g. Hunting (2015) and Rauschnabel & Ahuvia (2015), the study at hand was able to prove the existence of the promising relationship between anthropomorphism and brand love. Moreover, three antecedent who stand in a well-grounded theoretical relation to anthropomorphism showed to directly influence brand love, a concept theoretically related to anthropomorphism (Puzakova et al., 2009). These effects could be interpreted as valuable sign of sociality & effectance motivations actually being an antecedent of (brand) anthropomorphism but contemporarily existing scales not being able to measure this relationship. Thus, this calls for the development and validation of a scale explicitly measuring brand anthropomorphism.

Furthermore, it has to be noted that respondents in this study showed relatively low scores on sociality motivation. Unfortunately several hypotheses were based on the assumption that high levels of sociality motivation would lead to a certain expected outcome. Consequently, possible follow up studies should control for the individual variability in sociality in the first place.

Another limitation of this study is the translation of scale items to another language. In order to be able to also sample German consumers, the validated scale items measuring the dependent and independent variables were translated to German. Although the German scales were pre-tested, discussed and adjusted with a small sample consisting of people with mastery in both languages, alterations could have led to a loss of reliability / validity. Further academic effort could be put into valid translations of important academic constructs within consumer behavior / social psychology in order to make research carried out in non-English speaking areas more generalizable.

A fourth limitation of this study may be attributed to the cultural environment in which the research took place. As already mentioned, most participants were German consumers but just as individuals differ in their needs for sociality & efficacy, so do different cultural groups. In line with Asquith (1986), it has to be kept in mind that some cultures are more likely to humanize non-human entities than others. Further anthropomorphism research in different cultures should be carried out and finally be compiled, in order to build a rich framework of intercultural patterns of this phenomena.

Finally, the freedom of choice which was granted the participants in this study, to unrestrainedly name their favorite brand could be labeled a limitation. Although the decision to proceed in this manner was

well considered, academic proof, that brands from rather hedonic than utilitarian product categories have more potential to evoke brand love (Caroll & Ahuvia, 2006) and technological products/brands are more likely to trigger anthropomorphic thinking (Mick & Fournier, 1998; Moon, 2000; Turkle, 1984), should not be completely disregarded. Actually the study at hand found an indication for the fact that consumers who named a technology brand, showed a greater tendency to humanize this brand than consumers who named e.g. a fashion brand. Further research should be conducted in order to shed more light on the question if the variability in brand anthropomorphism and / or brand love is, amongst other, attributed to product category.

Another avenue for further research in the field of brand anthropomorphization might be found in the social media landscape. As Aggarwal & McGill (2012) argue, brands are inanimate objects that are less valued and are accredited less worth by humans. Consequently, humanizing brands appears to be promising and social media platforms might give marketers a great and cheap opportunity to successfully humanize their brands.

Epley et al. (2007) and Puzakova et al. (2009) share the view, that human-like behavior of a non-human entity triggers human category knowledge, which in turn stimulates anthropomorphic thinking, resulting in the humanization of this inanimate object.

Furthermore, Puzakova et al. (2009) define anthropomorphized brands as "brands perceived by consumers as actual human beings with various emotional states, mind, soul, and conscious behaviors that can act as prominent members of social ties" (Puzakova et al., 2009, pp. 413-414) and social media offer brands a perfect stage to be a "member of social ties" and consequently appear more "human" to consumers.

According to Gensler et al. (2013), intimate conversations through social media stimulates the humanization of a brand. This points to the importance for brands to not only being present on social media platforms but also actively starting, nurturing and participating in conversations with their network of friends, fans and followers. More genuinely "acting human" on social media platforms through e.g. building an own social network by following other related brands might support the humanization-process of a brand (Gensler et al., 2013). Further research should test the academic significance of social media mediated brand-consumer interaction with regard to brand anthropomorphism.

Even in general, it would be interesting to relocate the topic of brand anthropomorphism, its antecedents and outcomes to online social networks. This call stands in line with Aggarwal & McGills (2012), who argue that academic research needs to pay more attention to the social importance consumers give brands in their social networks. Research questions could address whether consumer

perceive brands, that are actively present on social media, are more humanized than brands that are inactively present and which particular marketing actions result in the highest levels of humanization. Likewise, it should be explored if those brands being present but in an inactive or wrong manner (e.g. acting against values held by target groups), support the undesired opposed effect of humanization, namely dehumanization (e.g., Haslam et al., 2007; Puzakova et al. 2009).

Generally, research could focus on testing whether sociality and effectance motivation are more relevant for a successful brand anthropomorphization online, than they appeared to be in the “offline world” so far. For instance it could be tested if consumers who feel chronically lonely perceive a “social media active” brand as more humanlike and consequently experience greater brand attachment. Social presence theory (Short, Williams, & Christie, 1976) might be a fundamental part of such research.

Simultaneously, it could be investigated if consumers really perceive organization’s marketing activities/efforts (like lively participating in social media) as direct actions of a brand, actively, autonomously and human-like participating in a brand-consumer relationship (Fournier, 1994). Results would clarify if more academic research in this field is worth the effort in terms of economic relevance.

In addition, further research should be conducted in order to produce more fruitful insights into how consumer’s relationship status is connected to their motivation to anthropomorphize in general, and to humanize brands in particular.

According to Epley et al. (2007), “anthropomorphized agents can act as powerful agents of social connection when human connection is lacking”. As the number of single households and online dating platforms is rising, marketing professionals might be interested in how to create strong brands that attract the growing single population. The concept of anthropomorphism seems so be an interesting avenue, due to its hypothesized rootage in fundamental human needs and motivations (e.g., Epley et al., 2007; Puzakova et al., 2009). Hunting (2013) and the study at hand were already able to show a connection between brand anthropomorphism and relationship status, however, more research is needed to validate findings. Due to current demographical developments further insights into the connection between relationship status and its moderating role on anthropomorphism and brand love could be of great importance for marketing practice.

Finally, Waytz et al. (2010) note that maybe “the most fundamental consequence of anthropomorphism is its implication for moral agency” (p.425). In line with Gray (2007), who found that people deplore harmful treatment of non-human entities with human characteristics, the authors claim that “anthropomorphism grants an entity the capacity for feeling pain and pleasure, thus

creating moral concern” (p.425). Given this suggestion, further research might investigate if humanized brands are more resistant to attacks from competition, as consumers might perceive the attack as morally questionable. However, as being human also entails being highly responsible for one’s own actions, it might be challenging for crisis management to effectively deal with morally false actions of human brands. We see this research avenue as highly valuable for organizations of all kinds.

7. Managerial implications

All in all, the study at hand contributes to marketing practice in a way that it found statistical evidence for the relevance of brand anthropomorphism for brand love. This provides marketing management with more certainty that effortful and costly activities directed towards bringing their brands alive will be fruitful. Moreover, we successfully identified self-brand-congruity as a key variable enhancing brand love one the one hand and driving anthropomorphism on the other hand. This finding points to the importance of creating brands that are perfectly tailored to target customers, not only in terms of functionality and design, but also in terms of values, self-ideals and personality traits (Batra et al., 1996). Additionally, anthropomorphism moderated the effect of self-congruity on brand love, which shows that humanizing a brand strengthens the influence of self-congruity on brand love. In other words, anthropomorphism strengthens a brand love that was developed based on a perceived fit between a consumer’s self-image and a brand’s image – a final motivation to create humanized brands with lively personalities fitting the personalities of target consumers.

Finally, result show that besides self-congruity, chronic loneliness and need for closure significantly predicted brand love, which is a rich indication for management practice that explicitly targeting consumers who feel lonely and eager to reduce uncertainty fast might be promising, as these seem to be more likely to develop love for a brand.

All in all, in this study participants reported a moderately positive level of brand love for their favorite brand ($M = 4.12$) and indicated to be highly willing to re-purchase a product of this brand ($M = 5.86$). This insight is of great value for the economy, as Lastovicka & Sirianni (2011) found that “love-smitten consumers nurture their beloved possessions, in part, by buying complementary products and services.” In line, our findings highlight the great economic value of loved brands as consumers in love with a certain brand might be eager to surround themselves with a family of related products under a loved brand’s name. Consequently, this study should motivate product and brand managers to actively build lovable product families and actively market those product lines as “families”, “friends” or “fellows”.

In the previous section of further research, we already mentioned the possible importance of social media platforms with regard to brand anthropomorphism and brand love. Consequently, social media and brand managers should seriously consider designing social media strategies, with the purpose of intensively radiating more human cues in the name of their brands. Those strategies could, among others, be based on the marketing suggestions, Rauschnabel & Ahuvia's (2015) propose at the end of their paper about anthropomorphism and brand love, namely on (1) communication in the first person, (2) usage of stimuli which resemble human characteristics, (3) creation of strong brand personalities and (4) interaction through social media.

Practical Implications

In the light of the findings in this study, we would advise to create marketing campaigns that more directly and proactively address consumer's sociality and effectance needs. Too often advertisements mainly focus on showing an ideal world / state / situation that can be created by using / eating / buying a certain product. Thus, they solely tell their audience what the desired status quo looks like or what they as consumers (should) want and need, without obviously justifying why this specific ideal should be pursued. This cognitive transfer, the interpretation of the message, the transfer of its meaning and the decision if its appeal matches the very own personal situation – this very crucial step is too often left to the consumer.

Consequently, we would advise to create advertisements that verbally point to a possibly unconscious and suppressed unmet sociality / effectance need. A manufacturer of sneakers, for instance, could directly address its teenage target group by asking: "Do you sometimes feel really excluded from the people in Highschool? Do you feel like no one really knows you and understands who you really are? Come on, join the X sneaker family and be part of our colorful team!". This example combines triggering an effectance need and additionally brings in the idea of product families, for substitute social attachment.

When it comes to food manufacturers, the same strategy of direct appeals could be pursued. As Macht & Simons (2000) showed, people coping with negative emotions are motivated to eat more than they would normally do. Consequently marketers should use direct and non-sugarcoated appeals like: "Hey you, you look sad, like the weight of the world is on your shoulders! You think life is more than unfair? No, it isn't, because we have what you need! Get up off that couch, put some sneakers on and get yourself X!" All in all, practitioners should position, tailor, verbalize and visualize their messages in a more "human" manner. A manner that makes clear and obvious that we are all human beings, having needs and desires we constantly try to satisfy and that this pursuit is nothing to be ashamed about – it's simply human.

8. Conclusion

In conclusion, the present study aimed at finding empirical evidence for anthropomorphism not being a constant and invariable mental process that's either activated or not but more being a divergent psychological mechanism that's level of activation and intensity is dependent on individual differences.

In their three-factor theory of anthropomorphism, Epley et al. (2007) present their theory that human's tendency to anthropomorphize non-human entities (like brands) is based on their individual level of sociality motivation, effectance motivation and elicited self-knowledge (i.e., self-congruity).

On the contrary, analyses of the collected data in this study showed, that only self-congruity significantly influenced anthropomorphism, whereas sociality and effectance motivations had no significant effect. Surprisingly, the results of this study imply that consumers do not even need to anthropomorphize a brand in order to build a love-like emotional relationship with it. Analyses revealed that self-congruity, chronic loneliness (sociality motivation) and need for closure (effectance motivation) had a direct, positively significant influence on brand love.

Nonetheless, it was proven, that anthropomorphism has the power to enhance brand love. Moreover, this effect is strengthened, when the identity of the favorite brand matches the self-concept of the participant.

Furthermore, additional analyses indicated that participants rather anthropomorphize technological brands, than FMCG brands and verified purchase intention as being a direct, valuable outcome of brand love.

Findings imply, that marketing practice should definitely pursue a humanization of their brands and tailor them to the self-image of the particular target group. Furthermore, advertising should actively appeal to the deeply rooted human sociality and effectance needs.

Appendix A – The online survey

Alterations and translation into German language

Vielen Dank, dass Sie sich die Zeit nehmen an meiner Umfrage zum Thema "Marken-Liebe" teilzunehmen und mir so helfen, meinen Master im Bereich Marketing an der University of Twente abzuschließen.

Zu Anfang der Umfrage werden Sie gebeten Ihre Lieblingsmarke zu nennen. Die nachfolgenden Fragen werden sich dann automatisch auf diese Marke beziehen. Dabei gibt es keine "richtigen" oder "falschen" Antworten - mich interessiert Ihre ganz persönliche Meinung.

Diese Umfrage ist **zu 100% anonym**, besteht aus **15 Fragen** und dauert **ungefähr 10 Minuten**.

Sollten Sie Fragen bezüglich dieser Umfrage haben, oder sollten Sie an den Ergebnissen der Studie interessiert sein, können Sie mich unter folgender Email-Adresse kontaktieren:

j.a.streowski@student.utwente.nl

Josefine Streowski

Thank you for participating in my study about 'Brand Love' and thereby helping me to finish my Master at the University of Twente.

Before the survey starts you will be asked to name your favorite brand. The following questions will then automatically refer to this particular brand. There are no "right" or "wrong" answers, I am purely interested in your personal opinion.

This survey is **100% anonymous**, consists of **15 questions** and takes **about 10 minutes** to fill in.

Should you have any questions regarding this study, or should you be interested in the results, do not hesitate to contact me by mail:

j.a.streowski@student.utwente.nl

Josefine Streowski

Nennen Sie Ihre Lieblingsmarke. Dabei ist es egal aus welcher Produktkategorie diese stammt. Einfach eine Marke, die sie oft und gerne nutzen und die Ihnen vielleicht sogar ein bisschen ans Herz gewachsen ist.

.....

Name your favorite brand. It does not matter from which product category. Simply a brand that you like and use often and that somewhat grew dear to you.

.....

Need to belong

Original construct	Altered construct	German translation
a. If other people don't seem to accept me, I don't let it bother me.	a. It bothers me if other people don't seem to accept me because of x.	a. Wenn ich merke, dass andere mich auf Grund von x nicht akzeptieren, trifft mich das sehr.
b. I try hard not to do things that will make other people avoid or reject me.	b. When I feel that others don't seem to accept me because of x, I definitely will try to avoid this brand.	b. Wenn ich merke, dass andere mich auf Grund von x nicht akzeptieren, werde ich auf jeden Fall versuchen, diese Marke zu meiden.
c. I seldom worry about whether other people care about me.	c. If I purchase a product of x, I don't let it bother me what others think about me.	c. Wenn ich mich für x entscheide, ist es mir nicht egal, was andere deswegen über mich denken.
d. I want other people to accept me.	d. If I purchase a product of x, I do so in order to be accepted by others.	d. Wenn ich mich für x entscheide, tue ich dies mit dem Ziel, von anderen akzeptiert zu werden.
e. I do not like being alone.	e. I do not like being alone.	e. Ich mag es nicht alleine zu sein.

Chronic loneliness

Original construct	Altered construct	German translation
a. How often do you feel that you are no longer close to anyone?	a. x makes me feel being closer to others.	a. Durch x fühle ich mich anderen näher.

b. How often do you feel left out?	b. x makes me feel less excluded from others.	b. Durch x fühle ich mich von anderen nicht so ausgeschlossen.
c. How often do you feel that no one really knows you well?	c. x makes me feel that others get to know me better.	c. Durch x fühle ich, dass andere mich besser kennen
d. How often do you feel isolated from others?	d. x makes me feel less isolated from others.	d. Durch x fühle ich mich nicht so isoliert von anderen.
e. How often do you feel that there are people that really understand you?	e. x makes me feel better understood by others.	e. Durch x fühle ich mich besser von anderen verstanden.

Need for closure

Original construct	Altered construct	German translation
a. I find that a well ordered life with regular hours suits me.	a. I find that a well ordered life, where I surround myself with x regularly suits me.	a. Ich finde, dass ein geregeltes Leben, in dem ich mich regelmäßig mit x umgebe, gut zu mir passt.
b. I don't like to go into a situation without knowing what I can expect from it.	b. I don't like buying brands without knowing what I can expect from them in advance.	b. Ich mag es nicht, Marken zu kaufen, ohne vorher zu wissen, was ich von diesen erwarten kann.
c. I find that establishing a consistent routine enables me to enjoy life more.	c. By setting up a routine with the help of x I can enjoy life better.	c. Durch das Schaffen von Routine mit Hilfe von x kann ich das Leben mehr genießen.

d. I enjoy having a clear and structured mode of life.	d. x gives me a clear and structured way to live, which I really appreciate.	d. x gibt mir eine klare und strukturierte Art und Weise zu leben, was ich sehr mag.
e. I dislike unpredictable situations.	e. I don't like unforeseeable situations.	e. Ich mag unvorhersehbare Situationen nicht.

Need for control

Original construct	Altered construct	German translation
a. I try to avoid situations where someone else tells me what to do.	a. I try to avoid situations where someone else wants to tell me which brand to buy	a. Ich versuche Situationen zu vermeiden, in denen mir jemand anderes vorschreiben möchte, welche Marken ich kaufen soll.
b. I enjoy making my own decisions.	b. When it comes to brands I enjoy making my own decisions.	b. Wenn es um Marken geht, genieße ich es, meine eigenen Entscheidungen zu treffen.
c. When it comes to orders, I would rather give them than receive them	c. When it comes to brand recommendations I rather prefer to be the one who <u>gives</u> recommendations than the one who receives them.	c. Wenn es um Marken-Empfehlungen geht, bin ich lieber derjenige, der Empfehlungen gibt, als derjenige der Empfehlungen bekommt.
d. I enjoy being able to influence the actions of others.	d. I like to influence the purchase behavior of others	d. Ich mag es das Kaufverhalten anderer zu

	by recommending them x.	beeinflussen, indem ich ihnen x empfehle.
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Self-congruity

Original construct	German translation
<p>Take a moment to think about x. Think about the kind of person who typically uses x. If you did so, try to describe this person using one or more personal adjectives such as stylish, classy, sexy, old, or whatever comes to your mind to describe the typical user of x. Once you've done this, indicate your agreement or disagreement to the following statement:</p> <p>"x is consistent with how I see myself when I use it."</p>	<p>Nehmen Sie sich einen Moment Zeit und denken Sie über x nach. Denken Sie an den typischen Konsumenten, der x nutzt. Wenn Sie das getan haben, versuchen sie diesen Konsumenten mit einem oder mehreren Adjektiven zu beschreiben, wie z.B. stilvoll, klassisch, sexy, alt – was auch immer Ihnen einfällt, um einen typischen Verbraucher von x zu beschreiben. Wenn Sie das getan haben, geben Sie bitte an, zu welchem Grad Sie folgender Aussage zustimmen:</p> <p>„x steht im Einklang mit dem Bild das ich von mir selbst habe, wenn ich diese Marke nutze.“</p>

Purchase Intention

Original construct	German translation
<p>a. If you were planning to buy this type of product, would you choose a product of x?</p>	<p>a. Wenn Sie planen würden ein Produkt dieser Kategorie zu kaufen, würden Sie sich dann für ein Produkt von x entscheiden?</p>

b. If a friend was looking for this type of product, would you advise him or her to purchase a product of x?	b. Wenn ein Freund an einem Produkt dieser Kategorie interessiert wäre, würden Sie ihm oder ihr zum Kauf eines Produktes von x raten?
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Anthropomorphism

Original construct	German translation
a. x has a free will.	a. x hat einen freien Willen.
b. x has emotions.	b. x hat Emotionen.
c. x has intentions.	c. x hat Intentionen.
d. x has a consciousness.	d. x hat ein Gewissen.
e. x has a mind of its own.	e. x hat einen eigenen Willen.

Brand Love

Original construct	German translation
a. Overall, how much do you "love" x?	a. Ganz allgemein, wie sehr lieben Sie x?
b. To what extent is x connected to something "deep" and valuable about who you are as a person?	b. Inwiefern ist x verbunden mit etwas „Tiefem“ und Wertvollem in Bezug auf wer Sie als Person sind?
c. To what extent do you feel the desire to use / surround yourself with x?	c. Inwiefern spüren Sie ein Verlangen danach x zu nutzen / sich mit x zu umgeben?
d. To what extent do you feel a positive emotional connection to x?	d. Inwiefern haben Sie das Gefühl, dass Sie eine positive, emotionale Bindung zu x haben?

e. Please express the extent to which you expect that x will be part of your life for a long time to come?	e. Denken Sie, dass x für längere Zeit ein Teil Ihres Lebens sein/bleiben wird?
f. Suppose x was to go out of existence, to what extent would you feel upset?	f. Stellen Sie sich vor, x würde plötzlich nicht mehr existieren, zu welchem Grad wären Sie darüber traurig?
g. What is your overall evaluation of x?	g. Wie würden Sie x allgemein bewerten?
h. How intense are these overall feelings and evaluations you just gave above?	h. Wie intensiv würden Sie die oben von Ihnen angegebenen Gefühle und Bewertungen einstufen?

Well-being & Demographics

Original construct	German translation
I am satisfied with my life.	Ich bin zufrieden mit meinem Leben.
What is your gender? <ul style="list-style-type: none"> • male • female 	Bitte geben Sie Ihr Geschlecht an. <ul style="list-style-type: none"> • männlich • weiblich
What is your age?	Wie alt sind Sie?
What is your marital status? <ul style="list-style-type: none"> • Married • In a relationship, living together • In a relationship, not living together • Divorced • Widowed • Single 	Wie ist Ihr Familienstand? <ul style="list-style-type: none"> • Verheiratet • In einer Beziehung, zusammenlebend • In einer Beziehung, nicht zusammenlebend • Geschieden • Verwitwet • Single

<p>What is your highest level of education (does not have to be finished at this moment)?</p> <ul style="list-style-type: none"> • Primary school • Secondary school • Vocational education • Bachelor degree • Master degree 	<p>Was ist Ihr höchster Schulabschluss (muss noch nicht abgeschlossen sein):</p> <ul style="list-style-type: none"> • Grundschule • Weiterführende Schule • Berufsausbildung • Bachelor • Master
<p>What is your annual gross disposable income?</p> <ul style="list-style-type: none"> • I would rather not answer this question • < €20.000,- • €20.000,- to €30.000,- • €30.000,- to €40.000,- • €40.000,- to €50.000,- • > €50.000,- 	<p>Wie hoch ist Ihr jährliches Bruttoeinkommen?</p> <ul style="list-style-type: none"> • Ich möchte diese Frage lieber nicht beantworten • < €20.000,- • €20.000,- bis €30.000,- • €30.000,- bis €40.000,- • €40.000,- bis €50.000,- • > €50.000,-

Appendix B

Construct	Measurement item	N	Mean	SD	Rel. (α) (if item is deleted)
<i>Need to belong</i> X	Bothers me if not accepted because of brand X	250	2.42	1.85	0.44
	Try to avoid brand X if not accepted	250	1.52	1.12	0.47
	If purchase brand X, care about what other think	250	2.78	2.23	0.43
	If purchase brand X, do so to be accepted	250	1.90	1.57	0.38
	Do not like being alone	250	4.56	2.21	0.64
Total		250	2.64	1.09	0.53
<i>Chronic loneliness</i>	Brand X makes me feel being closer to others	250	2.50	1.74	0.91
	Brand X makes me feel less excluded	250	2.25	1.62	0.90
	Brand X makes me feel other know me better	250	2.30	1.64	0.91
	Brand X makes me feel less isolated	250	2.30	1.72	0.90
	Brand X makes me feel better understood by others	250	2.11	1.55	0.90
Total		250	2.29	1.44	0.92
<i>Need for closure</i> X X	Well-ordered life with brand X suits me	250	4.75	1.98	0.60
	Do not like not knowing what to expect	250	5.07	2.05	0.66
	Routine with brand X enjoy better life	250	3.89	2.08	0.54
	Brand X gives structured way to live	250	3.56	2.08	0.55
	Do not like unforeseeable situations	250	4.52	2.07	0.69
Total		250	4.36	1.34	0.77
<i>Desire for control</i>	Avoid brand recommendations	250	4.50	2.20	0.23
	Own brand-decisions	250	6.45	1.14	0.27
	Rather give than receive brand recommendations	250	4.20	1.67	0.27
	Like to influence others purchase behavior	250	4.17	2.10	0.32
Total		250	4.82	1.06	0.33
<i>Self-congruity</i>	Congruence between self-image and brand X	250	4.91	1.73	-
<i>Purchase intention</i>	Intention to buy a product of brand X	250	5.85	1.55	-
	Intention to recommend products of brand X to friends	250	5.88	1.47	-
Total		250	5.87	1.34	0.72
<i>Well-being</i>	Level of satisfaction with life in general	250	5.76	1.45	-
<i>Anthropomorphism</i>	Intentions of brand X	250	4.33	1.87	0.85
	Free will of brand X	250	4.30	1.88	0.84
	Emotions of brand X	250	4.47	1.72	0.81
	Consciousness of brand X	250	3.73	1.90	0.82
	Mind of its own of brand X	250	3.77	2.00	0.81
Total		250	4.12	1.50	0.86
<i>Brand Love</i>	Brand Love towards brand X	250	5.63	1.43	0.81
	Self-brand integration with brand X	250	3.80	1.92	0.81
	Passion to use brand X	250	4.75	1.58	0.81
	Emotional connection with brand X	250	4.26	2.00	0.80
	Long-term relationship with brand X	250	5.33	1.70	0.81
	Anticipated distress absence brand X	250	4.87	2.00	0.81
	Attitude valence towards brand X	250	3.05	1.33	0.80
	Attitude strength	250	4.78	0.86	0.83
Total		250	4.56	1.11	0.83

Appendix – The Top Ten most favorite Brands

1. Nike
2. Adidas
3. Apple
4. L`oréal
5. Samsung
6. Esprit
7. Only
8. Mercedes
9. Milka
10. Zara

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