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### You are what you wear

Ras, Cindy

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## **You Are What You Wear**

*The effects of exposure to others who are wearing high status or high attractiveness brands on self-perception and behaviour*

**Cindy Ras**

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groningen**

**You Are What You Wear**

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high status or high attractiveness brands  
on self-perception and behaviour

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Cindy

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# Chapter 1

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## Introduction

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## INTRODUCTION

A woman passes by wearing a Gucci shirt, ZARA trousers and a Louis Vuitton Bag. Based on her physical appearance that includes these brands, people may form an impression of her personality and determine how they would interact with her. Another example: a woman has a meeting with an unknown male co-worker who is wearing a Hugo Boss cardigan, G-star pants and who puts his Jaguar car keys on the table. Instantly, she may infer his personality based on his appearance and the brands he surrounds himself with. This inference in turn will determine her behaviour during her interactions with her new co-worker. These examples illustrate that brands may influence people's perceptions of others and the behaviour that results from these perceptions.

Many brands are bought (or rented) as a form of conspicuous consumption, which is generally defined as 'attaining and exhibiting costly items to impress upon others that one possesses wealth or status' (Sundie, Kenrick, Griskevicius, Tybur, Vohs & Beal, 2011, p. 664). Veblen already pointed to conspicuous consumption in 1899, and found that 'the flaunting of luxury possessions has occurred across societies and epochs' (Veblen, 1899, pp. 1-5). Indeed, conspicuous consumption has a very long history. For instance, Egyptian pharaohs already showed off their wealth with gold and pyramids (Veblen, 1899). Conspicuous consumption does not only exist in Western societies but also in developing economies (Linssen, Van Kempen & Kraaykamp, 2011; Van Kempen 2003, 2004). Conspicuous consumption consists of the consumption of exclusive goods that are only limitedly available to others. But exclusivity of goods usually lasts only a short period of time. In the long run it is usually impossible to continuously stay ahead of the consumption behaviour of others and after a while exclusive goods often become more

casual (Frank, 1985). Therefore Veblen explained conspicuous consumption as 'running on a treadmill'.

The global influence of brands seems to grow every day. In Europe and the United States, despite being affected by economic recessions, brands continue to have increasing sales figures. For instance, the L'Oréal Group, a multinational with 28 international fashion and cosmetics brands, again showed a robust growth in 2013 with a sales figure of 22.98 billion euro's, an increase of 5% in one year (Annual Report 2013 L'Oréal Group). Recently, scholars have argued that brands may be the 'new religion' because they have such a strong appeal on consumers and because consumers are often strongly involved in brands, similar to their involvement in religions (Shachar, Erdem, Cutright & Fitzsimons, 2011).

### **An evolutionary perspective on conspicuous consumption**

From an evolutionary perspective, a major function of conspicuous consumption may be to attract mates and to promote one's reproductive success (Griskevicius, Tybur, Sundie, Cialdini, Miller & Kenrick, 2007; Janssens, Pandelaere, Van den Bergh, Millet, Lens & Roe, 2011; Miller, 2009; Roney, 2003; Saad, 2007; Sundie et al., 2011). Parental investment theory (Trivers, 1972) suggests that the sex – in the case of humans the female - who invests most in offspring will select a potential mate based on characteristics that provide long-term reproductive success and the possibility to provide protection and resources. Human females, as a consequence, highly value indications of social dominance and social status in a potential mate and tend to select males who display signals of good financial prospects, economic resources, high social status, ambition and industriousness (Buss, 1999; Colarelli & Dettmann, 2003; Dijkstra & Buunk, 1998, 2002; Massar, 2009). While in the hunter-gatherer times success in hunting for food would signal these characteristics, the current research suggests that, nowadays, buying brands that signal social dominance and social status for men may help to express these characteristics and attract potential mates. Indeed, more than women, men have been found to invest more in displaying and improving their social status and buying brands that signal high social status (Apicella, Dreber, Campbell, Gray, Hoffman & Little, 2008; Dunn & Searle, 2010).

In general, social status has been shown to be a central domain in which men intrasexually compete with other men. Men generally desire to obtain a high social status (Barkow, 1989; Campbell 2002, 2004) and a male's attractiveness as a mate can be improved by wearing clothes and surrounding themselves with objects that indicate

status (Dunn & Searle, 2010). Although women's economic independence has increased over the last decennia, ultimate psychological mechanisms cause women to still feel attracted to men of high status. Illustrative is a study by Saad and Vongas (2009) who found that males driving a high status car were judged as more attractive by women than men driving a low status car. Interestingly, a similar effect was not found among men: males did not find women in a high status car more attractive than women in a low status car (Dunn & Searle, 2010).

Conspicuous consumption, or more specifically the consumption of luxury brands, does not only affect others' perceptions of social status and social dominance, but also rises actual degrees of social dominance in men, as manifest, for instance, in their testosterone levels. Research shows that when men gain or lose social status, their testosterone levels fluctuate accordingly. For instance, Saad and Vongas (2009) found that men's testosterone levels increased after they drove a Porsche 911 Carrera 4S Cabriolet, as opposed to a Toyota Camry wagon.

While for males, attaining status and dominance is a more important venue to attract mates than for females, for females looking physically attractive is a more important venue to attract mates than for males. Parental investment theory suggests that the partner who invests less in offspring will be interested more in multiple matings and tends to seek out mates who signal health and fertility (Trivers, 1972). Human males will therefore choose females who are physically attractive since physical attractiveness is thought to be an indicator of youth and fertility. Research shows that, indeed, men show a preference for youth, physical beauty and a low waist-to-hip ratio in women (see Buss, 1999, for a review). Therefore, among women competition takes place in the domain of physical attractiveness in order to attract a potential mate (Buss, 1999; Campbell, 2002; Feingold, 1990; Singh, 1993; Tooke & Camire, 1991). The fact that men attach much value to female physical attractiveness in a mate may explain why women invest relatively heavily in brands that help them to express and emphasize their physical attractiveness (Burton, Netemeyer & Lichtenstein, 1994; Buss, 1999; Colarelli & Dettmann, 2003; Saad & Gill, 2000; Symons, 1995).

In today's society beauty and physical attractiveness are constantly emphasized as desirable characteristics particularly for women (Hatfield & Sprecher, 1986; Joy & Venkatesh, 1994; Picot-Lemasson, Decocq, Aghassian & Leveque, 2002). Most women will agree that physical attractiveness and beauty are very important to them (Etcoff, Orbach, Scott & d'Agostino, 2004). Since in human mating women who signal fertility will be able to attract high status men, especially women will look for ways to improve their



physical appearance. The cosmetics industries successfully fulfil this need (Askegaard, Gertsen & Langer, 2002). Besides the fact that women try to increase their attractiveness to make them more appealing to the opposite sex, clothing and cosmetics may provide women with higher self-esteem (Cash & Cash, 1982; Hill, Rodeheffer, Griskevicius, Durante & White, 2012; Humphrey, Klaasen & Creekmore, 1971).

### **Studies on mating and conspicuous consumption**

Several studies have shown relations between aspects of mating and conspicuous consumption. For example, Sundie et al. (2011) found that women perceive men who conspicuously show off products that signal high status as being more interested in short-term mating. In their study, male and female participants were first assigned to a mating or a control condition, following which they were asked to (fictively) spend 2.000 dollar on a selection of presented products and services. Participants also filled out questions on their mating investment intention, which measured whether they were more likely to invest in a monogamous relationship (high investment intention) or whether they would prefer short-term relationships (low investment intention). Results showed that when a mating situation was manipulated, men low in mating investment intention were more likely to spend their money on products and services that signalled conspicuous consumption than men high in mating investment intention. Women did not show this tendency when a mating situation was manipulated; for them conspicuous consumption did not seem to provide competitive advantages in the short-term mating market. In addition, there is evidence that exposure to a sexily dressed female may increase single men's attention to status products. Illustrative is a study by Janssens et al. (2011) in which participants were randomly assigned to two conditions: one with a sexily dressed experimenter or one with a plainly dressed experimenter. Next, participants were exposed to ten visuals each containing one picture of a status product, i.e., a Breitling watch, a Porsche or an I-pod, and five pictures of functional products, products which are mainly bought to serve a specific utility, such as a stapler, a towel, a mug or an umbrella. Results showed that exposure to the sexily dressed woman increased single men's ability to remember status products. In a similar vein, there is evidence that when mating goals are salient, men tend to increase their desire to purchase symbolic products, i.e. a car, a watch, or a cell phone (Griskevicius et al., 2007), but women did not show this tendency. In addition, research by Roney (2003) found that when men are physically near women, they are more interested in obtaining wealth than when they are not.

On the basis of the assumption that conspicuous consumption may serve adaptive purposes for men and women with regard to mating and reproduction, the present thesis proposes that exposure to brands that signal a high status may evoke more feelings of competition in men and exposure to brands that signal a high physical attractiveness may evoke more feelings of competition in women.

## **Brand exposure**

The last decade the quantity of research on brand personality has grown. This area of research translates concepts of human personality into a brand personality concept, which is defined as 'the set of human characteristics associated with a brand' (Aaker, 1997, p. 347).

Aaker (1997) describes three categories of brands: symbolic, utilitarian and symbolic-utilitarian brands. A symbolic brand has a self-expressive purpose, which goes beyond the utility of the branded product. It stands, for example, for belonging to a certain group and may boost the self-image of its possessor. Consumers may easily relate these brands to their identity (Fournier, 1994). Some product categories, especially clothing, cosmetics and fragrances have a symbolic meaning to consumers, which may seem more important than their utilitarian use. In addition to their utility, also brands in the symbolic-utilitarian category, like automobiles, beverages and magazines brands may have symbolic meaning to consumers. Brands in the utilitarian category will not be examined in this research, since these brands have less symbolic meaning and are only of practical use, although often manufacturers try to add symbolic meaning to these brands to improve sales margins. More specifically, in the current research only the product categories cars, clothing, cosmetics, magazines and sodas are included.

One of the mechanisms through which brands may exercise their effects is through the personality characteristics that are attributed to brands. Research has shown that individuals find it relatively easy to think about brands as if they are a celebrity or a famous historical figure (Rook, 1985). In addition, individuals may also relate brands to their own personality (Fournier, 1994). The symbolic value refers to 'the power of brands to create, reinforce and communicate consumers' self-concepts' (Sung & Kim, 2010, p. 640). By means of brand personality a brand may be effectively distinguished from its competitors at the symbolic level. Aaker (1997) developed a brand personality framework that has been used by different researchers to study different aspects of the relationship between brands and consumers, for instance the influence of brand personality on self-congruity (Branaghan & Hildebrand, 2011), consumer perceptions

(Maele, Otnes & Supphellen, 2011), brand trust and brand affect (Sung & Kim, 2010) and perceived quality of the brand (Ramaseshan & Tsao, 2007). Although brand personality has been a regular topic of research, little is known about the effects of brand exposure on self-evaluations and non-verbal behaviour (Sung & Kim, 2010). According to Brasel and Gips (2011) the effects of brand exposure on consumer behaviour is an increasingly important area of research, since many recently used marketing techniques increase the frequency of brand exposure, making it interesting to study their effects. In their research, they first asked participants about their media usage and their experience with video games. Next, participants played a video game in which they were asked to race in the same MINI car, except that, each time, the MINI car was branded differently, i.e., with Red Bull, Guinness, Tropicana, Coca Cola or no brand. When racing a MINI with the brand identity of Red Bull, characterized by speed, power, and recklessness, driving speed was found to take a U-shaped form. More specifically, it caused participants to race either harder or slower in the Red Bull branded MINI than in the MINI's with the other brands. The associations participants formed with the Red Bull brand (fast and aggressive) seemed to affect their driving, leading to two types of driving behaviour. First, as might be expected, participants drove faster. However, due to more frequent off-track situations due to reckless driving, relatively many participants also showed slower driving times (Brasel & Gips, 2011).

Another interesting example of research that illustrates the effects of brands on human effect, cognition and behaviour is a study by Fitzsimmons, Chartrand and Fitzsimmons (2008). These researchers exposed participants subliminally either to logo's of Apple or to logo's of IBM and asked participants to report as many unusual uses for a common object as possible, as an operationalization of creative behaviour. They found that participants who were exposed to the Apple logo's reported more creative behaviour than participants who were exposed to the IBM logo's. The researchers explained their finding by the fact that creativity is relatively more often ascribed to the Apple brand, more than to the IBM brand, resulting in more creative behaviour by participants exposed to the Apple brand. This study also showed that brand priming affects actual behaviour.

According to Buss (1999) there is strong evidence that interactions between strangers will lead to immediate, often unconscious, social ranking. Both interaction partners, males and females, tend to categorize others at first glance (Kalma, 1991) on the basis of sex, age, skin colour and physical appearance (Fiske & Neuberg, 1990). Based on this information, people determine their own and the other's position in the social hierarchy

and how they will behave towards their interaction partner. The present research proposes that, as the symbolic importance of brands grows, brands are likely to become a more important basis of categorization. As brands become more symbolic in nature, people may categorize other individuals based on the brands of products such as cars, clothing, magazines and sodas (Dunn & Searle, 2010; Massar, 2009). As previous research has found, conscious awareness is not necessary to realize the effects of actual exposure to stimuli. Individuals, for instance, do not need to consciously recognize stimuli to become influenced by them (Bornstein, Leone & Galley, 1987; Kunst-Wilson & Zajonc, 1980).

### **The present research**

The present research aimed to study the effects of implicit brand exposure on self-rated status, brand appreciation, self-rated attractiveness, self-rated assertive behaviour and actual high and low status non-verbal behaviour. In daily life people are exposed to many brands each day, both consciously and unconsciously, and these brands may have effects on perceptions of the self and on social behaviour. The present research proposes that consumer behaviour is influenced by very subtle and often unconscious cues in the surroundings of individuals. More specifically, the present research studies the effects of a single brand exposure on self-evaluations and social behaviour. For instance, if someone is exposed to a person in a Jaguar, how will this exposure affect his or her self-rated status? And how would it affect the behaviour towards the other individual? According to Brasel and Gibs (2011) research on the exposure to brands on behaviour is relatively scarce, due to the difficulty in measurements. An additional question in the present research is whether a potential mate is a necessary condition to evoke competitive behaviour among men and women, that is, whether people who are exposed to brands that signal high social status (for men) or high physical attractiveness (for women), will lower their self-ratings on social status (men) and physical attractiveness (women). This question is based on previous studies on conspicuous consumption that have included a potential mate in their experimental procedure (Griskevicius et al., 2007; Saad & Vongas, 2009; Sundie et al., 2011). However, here it is argued that just exposing men and women to brands that signal high status respectively high physical attractiveness may evoke an implicit competitive effect, which is a competitive effect that arises without the explicit presence of a potential mate. When indeed implicit competitive effects occur this may indicate that psychological mechanisms related to

mating are so hard-wired that, even without the explicit presence of a potential mate, they affect human cognition and behaviour in response to brands.

The current research focused on the effects of brands on different aspects of the self, and therefore, in Chapter 2 and 3 it was attempted to eliminate social comparison motives, by not including real life or photographed individuals in our manipulations. More specifically, in Chapter 2 an experiment is described in which both male and female participants are exposed to either a picture of a high status car or a picture of a low status car, both without a driver or passenger. After the manipulation participants' self-rated status and brand appreciation were assessed. Since it is likely that some individuals may find status consumption more important than others, the importance of status consumption to the individual was measured as a moderating variable. It was therefore expected that men, especially those who find status consumption important, would report relatively low self-rated status following exposure to a high status automobile brand. In addition, it was hypothesized that the high status brand would be appreciated more than the low status brand, specifically by men who find status consumption important. For women, no effects were expected.

In the research described in Chapter 3 participants were exposed to pictures of brands that either signalled high physical attractiveness or pictures of nature. The central hypothesis was that women, especially those who find physical appearance important, would show higher self-rated attractiveness following exposure to pictures of brands that signal high female physical attractiveness. For men no effects of these pictures were expected. Since for women physical attractiveness is an important domain of social comparison (e.g., Dijkstra, Gibbons & Buunk, 2010), also individual differences in social comparisons in physical appearance were assessed. To study the moderating effect of physical appearance comparisons, the physical appearance comparison scale was included (Thompson, Heinberg & Tantleff, 1991). It was also hypothesized that the mood of women would be lowered following exposure to the high female physical attractiveness pictures, whereas for men a better mood was expected.

In Chapter 4 the focus lies on the brand personality descriptions developed by Aaker (1997): brand competence and brand sophistication. These are two dimensions of the Brand Personality Scale as developed by Aaker (1997), and in three studies it was examined to what extent these brand dimensions are related to perceptions of social status and physical attractiveness. Study 4.1 examined whether male and female participants are able to recognize the brand competence and brand sophistication dimensions based on only three written brand names. In the next studies, men and women were exposed

to a picture of a female confederate who was surrounded by brands that signal high or low brand sophistication (Study 4.2) and to a male confederate who was surrounded by brands that signal high or low brand competence (Study 4.3), after which the effect of these dimensions on participants' self-reported assertive behaviour were assessed (taken from Mussweiler, 2001). Since it is likely that individual differences exist in the importance attached to material possessions, a materialism scale was included (Richins & Dawson, 1992). In line with the previous chapters, it was hypothesized that, following exposure to brands signalling high brand competence, men who are more materialistic would report less assertive behaviour than men who are less materialistic. With regard to women it was hypothesized that, following exposure to brands signalling high brand sophistication, women who are more materialistic would report less assertive behaviour than women who are less materialistic.

Chapter 5 focuses on the effects of exposure to brands signalling high brand competence and brand sophistication on actual non-verbal behaviour (as opposed to self-rated assertive behaviour). In Study 5.1 men and women were exposed to a male confederate who signalled high or no brand competence. Next, men and women were exposed to a similar female confederate who signalled high or low brand competence, and finally, both sexes were exposed to a male confederate who signalled either high or low brand sophistication. In addition to observing and assessing high and low status behaviour of participants, the sociable dominance and aggressive dominance scales as developed by Kalma (1989) were included as dependent variables. According to Tiedens and Fragale (2003), people who are exposed to a high status person will respond in a complementary way, that is with submissive behaviour reflecting low status. Therefore, and in line with the other hypotheses, it was expected that men would show more low status behaviour during dyadic interaction with a male confederate who signalled high brand competence than during dyadic interaction with a male confederate who signalled no brand competence. Next, it was also expected that men would report lower social and aggressive dominance following exposure to brands that signal a high competence compared to brands that signal a low competence. That is, as there was, in contrast to research by Saad and Vongas (2009), no woman present, men were supposed to show relatively more low status behaviour in response to high competence brands. In contrast, in Study 5.2 it was expected that a different process would occur when men would be exposed to a *woman* who signalled a high brand competence as in this case a mating perspective may be evoked in the participants, which may cause them to try to impress the female confederate by showing high status behaviour. Therefore, it was

expected that men would report higher social dominance and aggressive dominance after dyadic interaction with a female confederate who signalled high brand competence than after dyadic interaction with a female confederate who signalled low brand competence. Finally, in Study 5.3 it was expected that both men who interacted with a male confederate who signalled high brand sophistication would show more high status behaviour than men who interacted with a male confederate who signalled low brand sophistication. For women the reverse was expected. In addition, it was expected that especially men would report relatively high social and aggressive dominance after interaction with a male confederate who signalled high brand sophistication compared to low brand sophistication.

In Chapter 6, a summary of the main findings of the present research is presented and the implications of the effects of exposure to brands that signal high status or high physical attractiveness on self-rated status, brand appreciation, mood, self-rated physical attractiveness, self-rated assertive behaviour and actual non-verbal behaviour of men and women are discussed. It is also discussed whether these effects were successfully induced without a potential mating scenario. Finally, the present thesis is concluded with some final thoughts on the current research.







# Chapter 2

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## **Don't look at a Jaguar!**

Exposure effects of a high status brand on men's self-rated status and brand appreciation.

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## INTRODUCTION

Research has shown that wearing or displaying high status brands positively affects the wearer's attractiveness (e.g. Janssens et al., 2011). Less, however, is known about *how* these brands may affect observers' self-evaluations. In the current chapter it is argued that exposure to high status brands can activate processes of intrasexual competition that affect the observer's self-rated status. These intrasexual competitive processes may work unconsciously and without the presence of an explicit competitor.

Recently, in the marketing literature, there is an increasing focus on ultimate explanations rather than on proximate explanations of consumer behaviour. Bagozzi and Natarajan (2000) suggest that the first step in linking marketing to an evolutionary perspective is to study gender effects on consumer behaviour, for instance, on buying behaviour. According to these authors evolutionary thinking may clarify different aspects of consumer behaviour, such as the finding that most buyers of major management and financial periodicals are men (Corazza, 1984; see also Saad, 2008). More specifically, evolutionary reasoning suggests that men and women, in part, follow different mating strategies, that these strategies have been adaptive throughout human generations and can largely be traced back to differences in parental investment. In the human species the minimal males' parental investment to provide healthy offspring consists of sexual intercourse, without further investments, and males may therefore benefit from multiple matings (Trivers, 1972). Based on this reasoning men should have a preference for mates displaying signals of youth, physical beauty and a low waist-to-hip ratio (see Buss 1999 for a review; Singh, 1993). Men select these physically attractive women because these women signal an ability to produce healthy offspring. In support of this line of reasoning, many researchers have found that, for women, physical attractiveness

is an important domain in which they compete with each other (Buss, 1999; Campbell, 2002; Dijkstra & Buunk, 2002; Massar & Buunk, 2009; Singh, 1993; Tooke & Camire, 1991).

Women, on the other hand, tend in general to follow a different strategy to select a mate. Women carry their offspring for a nine-month period and are largely responsible for their child's development after birth (Trivers, 1972). Since women, physically and economically, invest more in their offspring and may benefit less from multiple matings than men, women will highly value a potential mate's ability to provide a good future for their offspring. Indeed, research (e.g. Buss, 1999) has shown that women tend to select males who may provide good financial prospects, economic resources, high social status, ambition and industriousness. Since females select a potential mate based on the characteristics mentioned above, males' intrasexual competition primarily takes place in the status domain (Buss, 1999; Colarelli & Dettmann, 2003; Dijkstra & Buunk, 1998, 2002; Massar, 2009).

### **Influence of status cues on men**

For the purpose of competition with other men in the status domain, men may use brands to signal their status position (Belk, 1988; Miller, 2009). Therefore, in this chapter, conspicuous consumption is thought of as status consumption. Although individuals differ in the value they attach to status consumption, recent studies have shown that in general exposure to status or mating cues do indeed affect men's consumer behaviour (e.g., Dunn & Searle, 2010; Janssens et al., 2011; Saad & Gill, 2000; Saad & Vongas, 2009).

For example, Janssens et al. (2011) found that, in men, exposure to mating cues activated a mate attraction goal with respect to consumer behaviour. More specifically, in their study male participants were presented with a plainly or sexily dressed female confederate. Males who were exposed to the sexily dressed confederate noticed more status products than males exposed to the plainly dressed female experimenter. This expectation is supported by research by Miller (2009) that showed that people make associations between the status of brands and the status of people who use or wear these brands. According to Miller, the brand characteristics of the products an individual uses are often transferred to the individual and ascribed to the user as his or her own personality characteristics. In line with Miller's findings, the current research assumes that observers associate individuals with the brands of the products they wear or use. That is, the person using status brands will be assumed to have similar characteristics as the status brands he or she uses. Illustrative is a study by Dunn and Searle (2010) who manipulated status by seating males and females, who were matched for attractiveness,

in a 'high status' car (Silver Bentley Continental GT) or a 'neutral status' car (Red Ford Siesta ST). When asked to rate the attractiveness of their passenger, females rated the male target as significantly more attractive in the high status context than in the neutral status context. In addition to affecting perceptions of men's status, brands may also affect men's actual social dominance in terms of testosterone levels. Saad and Vongas (2009) showed that men's testosterone levels increased after driving an expensive sports car compared to driving a family sedan. Additionally, they found that when a man's status position is threatened by the wealth display of a male confederate (a 'rival'), the threatened male's testosterone level significantly increased. This effect, however, only occurred when a woman was present.

### **The present research**

The goal of this chapter's research was to examine how men and women differ in their self-rated status and brand appreciation after exposure to automobile brands that signal high or low status. Colarelli and Dettmann (2003) have shown that men have a stronger appreciation for high status brands than for low status brands. These researchers, however, did not examine the influence of the status of the brand on participants' self-rated status. In the current study participants were exposed to a picture of a high or low status automobile brand. The pictures did not include people; merely the picture of the car was presented. No additional instructions were given. That is, participants were, for instance, not asked to rate the car on a specific variable or to form an opinion of it. By means of this procedure, the research aimed to replicate real-life situations in which individuals come across brands, register them – either consciously or largely without conscious effort – and, consequently, are affected by it.

It was hypothesized that exposure to a high status brand may evoke intrasexual competition among men. More specifically, it was expected that men would lower their self-rated status when confronted with a brand that signals high status, even though no male ('rival') was present who displayed these brands. It was thus expected that processes of intrasexual competition would also work without the presence of an actual rival, when men are simply exposed to a picture of a high or low status brand. Contrary to the experiment by Saad and Vongas (2009) mentioned above, no woman was actually present, and therefore a low self-rated status was expected. No effects were expected on females' self-rated status following exposure to a brand that signals high status, since, as noted before, for women, self-rated status is a less relevant domain for intrasexual competition.

A potentially moderating variable was included, i.e., the importance individuals attach to status consumption. Since some men may be more involved in status consumption than others, it is possible that the importance of status consumption as assessed with the Status Consumption Scale moderates the influence of the exposure to a high or low status brand on men's self-rated status (Eastman, Goldsmith & Flynn, 1999). More specifically, it was expected that men who find status consumption relatively important would be more strongly influenced by a brand that signals high status and, as a consequence, would lower their self-rated status more than men who attach less value to status consumption.

## **METHOD**

### *Participants and Design*

The experiment was performed via [www.lifestyle-research.nl](http://www.lifestyle-research.nl). This website was specifically designed for the purpose of the present research. People were requested to participate in this study via Internet by means of recruitment notifications on popular Dutch general interest websites. One hundred eleven participants, 48 males (*Mean age* = 37.96, *SD* = 10.26) and 63 females (*Mean age* = 34.38, *SD* = 8.71), were randomly assigned to either the high status car (Jaguar) condition or the low status car (Volvo) condition. Both the Status of the car and Participant sex were used as between-subjects factors.

### *Materials and Procedure*

Participants were told that they were participating in a lifestyle study. Next, they answered two general questions (about gender and age) and they completed the Status Consumption Scale (Eastman, Goldsmith & Flynn, 1999). This scale measures the tendency to purchase goods and services for the status that they provide their owners. The scale consists of five items that are assessed by means of a five-point Likert-scale (1 = never, 5 = always). Example items are 'I would buy a product just because it has status' and 'A product is more valuable to me if it has some snob appeal' ( $\alpha = .81$ ,  $M = 2.36$ ,  $SD = .57$ ).

Next, participants were exposed either to a picture of a low or a high status car that popped up on the screen for two seconds. In the high status condition participants



Low status Volvo



High status Jaguar

FIGURE 2.1. Stimuli pictures: the low status car (Volvo), respectively the high status car (Jaguar).

were shown a picture of a Jaguar whereas in the low status condition they were shown a picture of a Volvo (see Figure 2.1 for the stimuli pictures). The Volvo represented a more family like car, whereas the Jaguar represented a business car. These stimuli were pre-tested ( $n = 24$ ; 13 males, 11 females,  $M = 44.21$ ,  $SD = 17.57$ ). In line with the expectations the Jaguar was appreciated more ( $M = 7.71$ ,  $SD = 1.71$ ) than the Volvo [ $M = 6.33$ ,  $SD = 1.61$ ,  $t(23) = -2.73$ ,  $p = .01$ ], and the Jaguar was rated higher in status ( $M = 6.79$ ,  $SD = 2.06$ ) than the Volvo [ $M = 5.0$ ,  $SD = 2.27$ ,  $t(23) = 4.59$ ,  $p < .001$ ]. Similar to the study of Saad and Vongas (2009), the cars were perceived as being different in age, with the Jaguar appearing newer than the Volvo.

To realize implicit exposure to the manipulation, participants were not informed that they would be presented with the picture of the car. Furthermore, no additional information about the car was given. After seeing the stimulus picture participants were requested to rate their own status and their appreciation of the brand in the picture on a scale from one to ten (1 = very low appreciation/status and 10 = very high appreciation/status). As a manipulation check, participants were instructed to rate the status of the car in the picture on a similar 10-point scale. Afterwards participants were debriefed and thanked for their participation.



## RESULTS

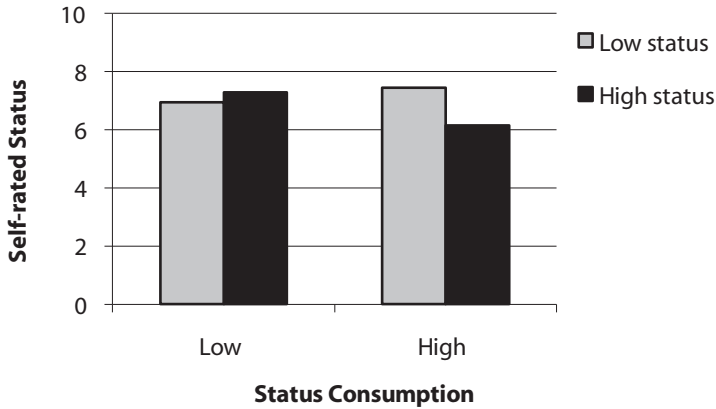
### *Manipulation Check*

As intended, the Jaguar was rated higher in status ( $M = 6.47, SD = 2.29$ ) than the Volvo [ $M = 4.21, SD = 1.95; F(1, 109) = 31.55, p = .000, \eta^2 = .22$ ]. It can therefore be concluded that the manipulation was successful and that further analyses are warranted.

### *Self-rated Status*

A regression analysis with Participant sex (male versus female), Brand status (high versus low) and Status consumption (standardized) as predictors and self-rated status as the dependent variable was conducted. All two-way and three-way interactions were included in the analysis. No main effects of Participant sex, Brand status or Status consumption were found ( $\beta$ 's  $< -.16, t$ 's  $< -1.02, ns$ ), but there was a significant interaction effect between Brand status and Status consumption [ $\beta = .41, t(103) = 2.53, p = .01$ ]. Participants who scored low on Status consumption reported similar ratings of self-rated status in both conditions, but participants who scored high on Status consumption reported higher self-rated status in the low than in the high status condition. This interaction is not described here in more detail as it was qualified by a three-way interaction. The other two-way interactions were not significant ( $\beta$ 's  $< -.19, t$ 's  $< -1.66, ns$ ), implicating that Participant sex did not interact with either Brand status or Status consumption. A significant three-way interaction emerged between Participant sex, Brand status and Status consumption,  $\beta = -.52, t(103) = -2.29, p = .02$ . To interpret this three-way interaction simple effect analyses were performed separately for men and women.

Men who scored low on Status consumption (-1 SD) reported about equal status self-ratings in the low status condition and in the high status condition:  $M = 6.94$  versus  $M = 7.28$  respectively [ $\beta = .25, t(103) = 1.09, ns$ ]. However, men who scored high on Status consumption (+1 SD) reported a significantly lower self-rated status in the high status condition ( $M = 6.14$ ) than in the low status condition [ $M = 7.43; \beta = -.57, t(103) = -2.46, p = .01$ ]. Thus, consistent with the expectation, men who attached a high value to status consumption experienced lower self-rated status following exposure to a picture of the high status car than following exposure to a picture of a low status car (see Figure 2.2).



**FIGURE 2.2.** Self-rated status for men high and low in status consumption after exposure to a brand that signals high or low status.

As expected, for women the simple effects analyses showed no significant main or interaction effects.

### *Brand Appreciation*

Next, a regression analysis with Participant sex (male versus female), Brand status (high versus low) and Status consumption (standardized) as predictors, and brand appreciation as the dependent variable was conducted. All two-way and three-way interactions were included in the analysis. A main effect of Brand status was found [ $\beta = .83, t(99) = 3.839, p < .001$ ]. Participants in the high brand status condition appreciated the brand more ( $M = 6.89, SD = .32$ ) than participants in the low brand status condition [ $M = 5.26, SD = .30; F(1,107) = 13.75, p \leq .001, \eta^2 = .11$ ]. No main effects were found for Participant sex or Status consumption ( $\beta$ 's  $< .22, t$ 's  $< .73, ns$ ). A significant interaction between Brand status and Status consumption was found [ $\beta = .774, t(99) = 2.528, p = .01$ ]. Participants high in Status consumption appreciated the high status car more than participants low in Status consumption [ $\beta = .77, t(99) = 2.528, p = .01$ ]. In the low status condition, participants high or low in Status consumption reported similar brand appreciation [ $\beta = -.09, t(99) = -.31, ns$ ]. The other two-way interactions were not significant ( $\beta$ 's  $< .033, t$ 's  $< .15, ns$ ) but the three-way interaction between Participant sex, Brand status and Status consumption was significant [ $\beta = -.865, t(99) = -2.025, p = .05$ ]. To interpret this interaction effect simple effect analyses were performed for men and women separately. Contrary to the expectations, men who found Status consumption important (+1 SD)

appreciated the car significantly more in the low status condition than in the high status condition [ $M = 7.75$  vs.  $M = 4.61$ ;  $\beta = .997$ ,  $t(103) = 2.346$ ,  $p < .05$ ]. Men who scored low on Status consumption equally appreciated the cars in the low and high status condition [ $M = 5.76$  vs.  $M = 5.71$ ;  $\beta = -.55$ ,  $t(103) = -1.250$ ,  $ns$ ; see Figure 2.3].

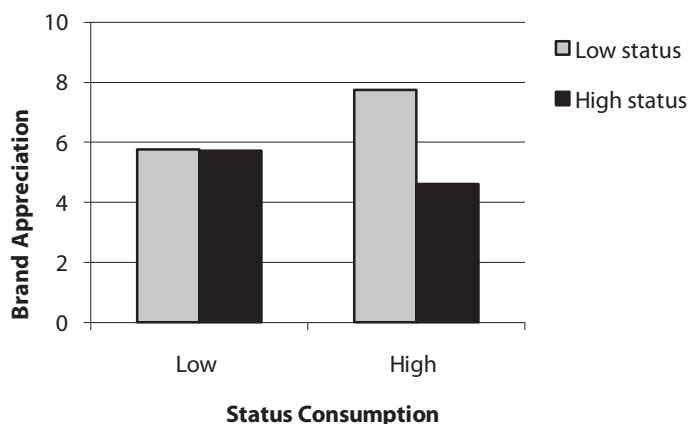


FIGURE 2.3. Brand appreciation for men high and low in status consumption after exposure to a brand that signals high or low status.

As expected, the simple effects analyses showed no significant main effects or interaction effects for women.

## DISCUSSION

The aim of this chapter's study was to examine the effects of exposure of brands that signal high and low status on self-rated status and brand appreciation in men and women. It was argued that the status domain is most relevant in male-male competition, much more than in female-female competition, and that exposure to a high status brand would activate feelings of intrasexual competition in men which would subsequently affect their self-rated status and brand appreciation. In contrast, among women no effects of brand status on self-rated status and brand appreciation were expected since, for women, the status domain is not a relevant domain for intrasexual competition.

Status is one of the most important characteristics on which women base their selection of potential mates. Status may be expressed by displaying a brand, for instance,

of the car one drives in or the clothes one wears. With regard to the latter, Townsend and Levy (1990b), found that high status clothes can make a physically less attractive man more attractive for women as a romantic partner. These authors performed a study in which the status of the costume of two male and two female confederates was manipulated: they either wore a low-status costume (i.e., a Burger King's costume) or a high-status costume (i.e., a business suit). The targets also differed in physical attractiveness, being either physically attractive or physically unattractive. Male and female participants were asked to which extent they were willing to engage in different types of relations with the targets, ranging from coffee and conversation, to sexual encounters and marriage. Results showed that costume status had a greater effect on female participants' willingness to enter into different types of relationship with a male than his physical attractiveness. Interestingly, this effect did not occur among male subjects who responded to female targets of differing in physical attractiveness and status costumes. Townsend and Levy concluded that the status domain is not a domain in which women compete with each other. This is supported by the present study's finding that, among women, brand exposure did not have a significant effect on self-rated status and brand appreciation. In contrast, the present study's results did confirm the hypothesis that the status domain is an important aspect in male-male competition. In addition to previous studies' findings, the present study showed that, even when men are exposed only once to a high status brand without the presence of a rival, a competitive mechanism seems to be evoked that affects men's self-rated status. Thus, merely the short exposure to a high status brand suffices to lower men's self-rated status. The current study suggests that, at least among men, the competitive mechanism takes place quickly and largely outside conscious awareness.

With regard to the moderating effect of the importance of status consumption on self-rated status, expectations were confirmed. After exposure to the high status brand, in this case a Jaguar, men who found status consumption important reported lower self-rated status compared to men who found status consumption less important. Thus, although, in general, men are more competitive in the status domain than women, among men individual differences in the value that is placed on status consumption are important as well, and likely reflect individual differences in competitiveness in the status domain. Our findings that, among men, individual differences matter when it comes to intrasexual competition is in line with previous studies of, for instance, Buunk and Fisher (2009) who showed that individual differences in intrasexual competition exist and are related to individuals' degree of social comparison, among others, with

same-sex rivals. It may be that these differences are also reflected in males' testosterone levels, with men with higher testosterone-levels showing more competitiveness (e.g., Dabbs, 1992).

With regard to the value men attached to status consumption, unexpected results were found for brand appreciation. Although the high status car was appreciated more overall than the low status car, the Jaguar was not appreciated more than the Volvo by men who scored high on status consumption. Moreover, men who scored high on status consumption appreciated the Jaguar *less* than the Volvo. A possible explanation is that participants were requested to assess their self-rated status *before* they rated brand appreciation. It is possible that men who are not able to buy a Jaguar lowered their appreciation of the high status brand to reduce the cognitive dissonance (Festinger, 1957) that is evoked by their lowered self-rated status, as a form of self-protection. This possible explanation could be a topic for future research. For marketing practice this is an important finding. Our study suggests that, because of their potentially ego-threatening effects, high status brands may be less appreciated by men who value status consumption. In the meantime this is exactly the group of men – men who attach high value to high status products – that forms an important target group for marketers of high status products. The challenge for marketers seems to be to make high status products not seem to unavailable for these men, without losing the product's exclusivity.

Although the present study's results are promising, there are also some limitations. First, in manipulating brand status, only one particular status object, i.e., a car, was used. It is unknown whether other status objects may induce similar effects. Also, the current study focused on the results of the exposure to brands on self-rated status and brand appreciation. Additional research on the actual process that links brand exposure and self-rating effects is needed to examine the assumption that brands indeed activate feelings of intrasexual competition in men. Finally, future studies may include a wider variety of participants in terms of age. It is possible that status products are more important to men over 35 who have already entered the workforce and who can afford to buy these products (Belk, 1985).

To conclude, the present study is the first to focus on the effects of a single exposure to a picture of a brand and its effect on self-rated status. It seems that a picture of a high status brand may function as a cue that elicits intrasexual competition in males even in the absence of another male to compete with. Evolutionary adaptive processes thus seem sufficiently hard-wired that men, but not women, are programmed to respond to

status-related cues of intrasexual competition – which may have important implications for consumer behaviour.



# Chapter 3

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## **Beauty is in the eye of the beholder.**

Exposure effects of high physical attractiveness brands on women's self-rated attractiveness and men's mood.

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## INTRODUCTION

In our society beauty and physical attractiveness are constantly emphasized as desirable and admirable characteristics, especially for women (Hatfield & Sprecher, 1986; Joy & Venkatesh, 1994; Picot-Lemasson et al., 2002). Research has shown that both attractive men and women are more successful at work, are more popular, have better social skills, enjoy better physical and mental health, and obtain more dating and sexual partners than less attractive people (Campbell, 2002; Cox & Glick, 1986; Godoy, Reyes-Garcia, Huanca, Tanner, Leonard, McDade & Vadez, 2005). At work they are, for instance, more likely to be hired, to be promoted and to earn high salaries than less attractive individuals (Schwer & Daneshvary, 2000). As a result, the desire to improve one's physical attractiveness seems to be an inherent characteristic of most individuals, especially of women (Askegaard, Gertsen & Langer, 2002; Winston, 2003). Evolutionary psychologists explain the high value of physical attractiveness among women by referring to the mating strategies that men and women follow which have been adaptive throughout human history. According to these scholars men and women's minimal parental investments differ considerably, and, as a consequence, there will be sex differences in mate preferences (e.g. Trivers, 1972). An important difference is the value men and women attach to a potential mate's physical appearance. More than women, men tend to seek out partners who signal health and fertility. As a consequence, males will be more likely to choose females who are physical attractive, since those physical characteristics that are considered attractive, such as relatively low waist-to-hip ratio (Singh, 1993), are indicators of health and fertility. Consistent with this line of reasoning, research has found men to show a preference for mates characterized by youth, physical beauty and a low waist-to-hip ratio (see Buss 1999 for a review). Therefore, it can be expected that women

will mainly compete with each other in the physical attractiveness domain (Buss, 1999; Campbell, 2002; Singh, 1993; Tooke & Camire, 1991). Illustrative is research that shows that, when they feel their relationship is threatened by a romantic rival, women may enhance their physical attractiveness as a mate retention strategy (Buss, Shackelford & McKibbin, 2008; Dijkstra & Buunk, 1998).

As a result of the high value that is placed on female beauty, women are more important consumers on the market of cosmetic surgery and cosmetic products than men. In 2009, for instance, the total world sales market of cosmetics amounted to about 132.2 billion euro. Despite the current economic recession in Europe, this market continues to grow. More specifically, in the Netherlands, where the current study took place, in 2012 2.47 billion euro's were spent on cosmetics, with 86% of the sales being realized by women (Dutch Cosmetics Association Annual Report, 2012). Women tend to compete with each other through the use of products of various brands that enable them to improve and emphasize their physical attractiveness, for instance, by using make-up, nail polish, fake tans and tight clothing (Bloch & Richins, 1992; Campbell, 2004; Tooke & Camire, 1991). Women report feeling more sexually attractive to men when they have used cosmetics (Buss & Schmidt, 1993; Cash & Brown, 1989). Therefore, the current research proposes that brands signalling high female attractiveness will have more effect on the self-rated attractiveness of women, especially among women who find physical appearance important. Physical appearance is a less important partner selection criterion for women who seek a male partner. As discussed in the previous chapter, men are evaluated less on their physical attractiveness, and more on their social status (see Buss, 1999 for a review). This does not mean that these types of products and brands leave men unaffected. Since men are interested in female physical attractiveness for mating purposes, it is likely that they will report a better mood when exposed to brands and products that are associated with female physical attractiveness. Therefore, in the present research it is argued that men report a better mood than women after being exposed to pictures that signal high female physical attractiveness brands. Mood is here defined as 'a consumer's affective state that is relatively global in nature' (Martin, 2003, p. 250).

### **The relevance of social comparisons**

People use information about other individuals for evaluations of themselves based on different characteristics (for reviews, see Dijkstra, Gibbons & Buunk, 2010; Buunk & Gibbons, 2007; Wood, 1996). Social comparison theory was originally formulated by

Festinger (1954), but currently different aspects and views of social comparison have been developed (Dijkstra, Gibbons & Buunk, 2010). Individuals may compare themselves with others who, on a certain attribute, are similar (lateral comparisons), or who are better (upward comparison) or worse off (downward comparison) than themselves. During the process of comparison individuals may focus on similarities between themselves and the comparison target (assimilation) or in differences between themselves and the comparison target (contrast). Depending on the direction and the focus (similarities versus contrast) of comparison, social comparisons may have very diverse effects on self-evaluations. For instance, when comparing oneself with someone who is better off and focussing on differences (contrast), people are likely to experience lowered self-evaluations and feel frustrated or depressed. As physical attractiveness is a visible cue, it plays an important role in social comparisons. Since for women physical attractiveness is an important domain of intrasexual competition, more so than for men, women may be more affected by appearance related social comparisons than men.

When it comes to appearance related social comparisons, among females, the typical form of comparison is upward comparison with a focus on differences. That is, women often tend to compare themselves with images of beauty-ideals, such as same-sex models in advertisements (upward comparisons), focussing on the differences between themselves and the comparison target. As a result, following these comparisons, women often feel less attractive and experience negative affect (Dijkstra, Gibbons & Buunk, 2010). In addition, research has shown that mass media images of female beauty ideals may also increase the likelihood of developing eating disorder symptomatology or other body image related psychopathology (Polivy & Herman, 2002, 2004). Although men are also exposed to images of male beauty ideals, they are far less affected by it in terms of self-evaluations, mood and body related psychopathology, than women (Dijkstra, Gibbons & Buunk, 2010). It must be noted, however, that recently also more positive effects of exposure to physically attractive targets have been found among women (Durkin & Paxton, 2002, Mills, Polivy, Herman & Tiggeman, 2002; Wilcox & Liard, 2000). More specifically, it has been found that one group of women, i.e., those who tend to compare themselves relatively often, may experience positive emotions and enhanced self-evaluations of attractiveness following comparisons with female beauty ideals (Bosch, Buunk, Siero, & Park, 2010), probably due to the fact that these women tend to focus on similarities rather than differences between themselves and the attractive comparison target (e.g., Buunk, Dijkstra, Bosch, Dijkstra & Barelds, 2012).

## **The present research**

The goal of this research was to examine if men and women differ in their self-rated physical attractiveness and mood after exposure to pictures of brands that signal high female physical attractiveness as compared to pictures of natural elements. Male and female participants were exposed to either pictures of cosmetics brands or a glossy magazine brand that signalled high female physical attractiveness or, as a control condition, pictures of natural elements. To replicate real-life situations, no additional instructions were provided.

It was expected that women who are exposed to pictures of brands signalling high female physical attractiveness will report lower physical attractiveness than women who are exposed to pictures of nature. But it was also expected that the importance of physical attractiveness, in terms of the comparisons women make in the domain of physical attractiveness, will moderate the influence of the exposure to pictures of brands that signal high physical attractiveness on women's self-evaluations. More specifically, it was expected that women who are concerned with comparing their appearance to the appearance of other women, are characterized by the inclination to focus on similarities between themselves and others. A recent study by Buunk et al. (2012) showed, for instance, that women who, in general, make relatively frequent social comparisons, focused more on similarities in appearance between themselves and attractive comparison targets than other women. The tendency of these women to focus on similarities may also cause them to experience higher self-evaluations of attractiveness following exposure to products related to female attractiveness, inspiring them, for instance, to use these products to enhance their own appearance. Therefore, women who find physical appearance important were expected to report higher self-rated physical attractiveness after exposure to pictures that signal high female attractiveness compared to pictures of natural elements.

For men, no effects on self-evaluations were expected of exposure to brands that signal high female physical attractiveness as such brands are not relevant for men's self-evaluation. However, it was expected that men would report a better mood in the high physical attractiveness condition than women. In general, men highly value physical attractiveness in a potential mate, and, being exposed to cues of high female physical attractiveness is likely to improve their mood.

## METHOD

### *Participants and Design*

The experiment was performed via [www.lifestyle-research.nl](http://www.lifestyle-research.nl). This website was specifically designed for the purpose of this research. People were requested to participate in this study via internet by means of recruitment notifications on popular Dutch general interest websites. In total two hundred and seventeen participants participated in the present study, with a total of 169 women and 48 men. For analytical purposes, a sample of 51 women was randomly drawn from the total sample of women. In total 48 men ( $Mean\ age = 35.00, SD = 14.35$ ) and 51 women ( $Mean\ age = 25.29, SD = 10.18$ ) participated in this study. They were randomly assigned to one of two conditions (attractiveness vs. nature) of a between-participants design.

### *Materials and Procedure*

Participants were told that they were participating in a lifestyle study. After reporting on their age and gender they completed an online questionnaire to measure the frequency to which they compared their physical appearance with those of others, the Physical Appearance Comparison Scale (PACS; Thompson, Heinberg & Tantleff, 1991). This scale has been used frequently in research on social comparisons in the domain of physical attractiveness and research on eating disorders and body image dysfunction. The scale consists of five items which assess the tendency to compare oneself with others on different aspects of appearance. Example questions are 'At parties or other social events, I compare how I am dressed with how other people are dressed' and 'Comparing your 'looks' to the 'looks' of others is a bad way to determine if you are attractive or unattractive' ( $\alpha = .73$ ;  $Mean = 3.04, SD = .37$ ). The questions were answered on a five-point Likert-scale response format (1 = never, 5 = always).

Next participants were briefly exposed to five pictures. To express the physical attractiveness domain for women, five pictures of brands signalling high physical attractiveness were selected, i.e., perfume (DKNY Apple and Chanel), lip-gloss (Bourjois), foundation (Maxfactor Foundation) and a magazine (Cosmopolitan). For every participant pictures popped up in the same order. Pictures were shown for one second each. In the control condition five pictures of natural elements were shown each for one second (a tree, a group of trees, stones, water and grass). For stimuli pictures see Figure 3.1.

### High physical attractiveness:



### Natural pictures (no attractiveness):



FIGURE 3.1. Stimuli pictures. Pictures of brands that signal high female physical attractiveness (experimental condition) and pictures of natural elements (control condition).

After exposure to these stimuli three questions were asked. The first question, aiming to assess participants' mood, was: 'How do you feel at this moment?' (Mean = 3.75,  $SD = .79$ ). This question was answered on a five-point Likert-scale response format (1 = very bad, 5 = very good). Next participants responded to the questions: 'How attractive do you find the pictures?' ( $M = 3.01$ ,  $SD = .86$ ) and 'How attractive do you find yourself?' ( $M = 3.41$ ,  $SD = .69$ ). Both questions on attractiveness were answered on a five-point Likert-scale response format (1 = totally not attractive, 5 = very attractive). Participants were then thanked for their participation and debriefed.

## RESULTS

### Manipulation Check

The pictures of brands signalling high female physical attractiveness pictures were not found to be more attractive than the pictures of natural elements,  $F(1, 95) = .021$ ,  $p = ns$ . However there was an effect of gender: women found all the pictures more attractive ( $M = 3.29$ ,  $SD = .12$ ) than men [ $M = 2.72$ ,  $SD = .12$ ;  $F(1, 93) = 11.52$ ,  $p < .01$ ,  $\eta^2 = .11$ ].

### *Self-rated physical attractiveness and Physical Appearance Comparison*

A regression analysis with Participant sex (men vs. women), Condition (high physical attractiveness vs. nature) and the Physical appearance comparison scale (PACS, standardized) as predictors and self-rated physical attractiveness as the dependent variable was conducted. There was a marginally significant main effect of Participant sex ( $\beta = .13$ ,  $t(95) = 1.92$ ,  $p = .06$ ). Men found themselves marginally more physically attractive ( $M = 3.53$ ,  $SD = .58$ ) than women [ $M = 3.3$ ,  $SD = .76$ ;  $F(1,95) = 2.8$ ,  $p = .09$ ]. Also a significant main effect of Condition was found ( $\beta = -.14$ ,  $t(95) = -2.039$ ,  $p < .05$ ), showing that participants reported higher self-rated physical attractiveness after exposure to pictures of natural elements than after exposure to pictures that signalled physical attractiveness. The main effect of physical appearance comparison (PACS) was not significant. The two-way interaction between Participant sex and PACS was significant ( $\beta = .25$ ,  $t(96) = 3.89$ ,  $p < .001$ ), indicating that women who found physical appearance important, rated their physical attractiveness higher ( $M = 3.9$ ,  $SD = .21$ ) than women who did not find physical appearance important [ $M = 3.15$ ,  $SD = .10$ ,  $\beta = .36$ ,  $t(96) = 3.63$ ,  $p = .01$ ]. For men this was the other way around, men who found physical appearance important, rated their physical attractiveness lower ( $M = 3.44$ ,  $SD = .14$ ) than men who did not find physical appearance important [ $M = 3.63$ ,  $SD = .13$ ,  $\beta = .14$ ,  $t(96) = 1.72$ ,  $p = .09$ ]. The other two-way interactions were not significant ( $\beta$ 's  $< -.022$ ,  $t$ 's  $< .25$ , *ns*). The three-way interaction of Condition, Participant sex and the Physical appearance comparison scale (PACS) was marginally significant ( $\beta = -.11$ ,  $t(95) = -1.7$ ,  $p = .09$ ). To interpret this three-way interaction simple effect analyses were performed. These showed that women who scored low on the PACS (-1 SD) reported equal – high – levels of self-rated physical attractiveness in both the high physical attractiveness and the nature condition [ $M = 3.46$ ,  $SD = .14$  and  $M = 3.47$ ,  $SD = .11$  respectively,  $\beta = .02$ ,  $t(95) = .20$ , *ns*]. Among women who scored high on the PACS (+1 SD) there was a difference between conditions: these women rated their physical attractiveness significantly higher in the high physical attractiveness condition ( $M = 4.02$ ,  $SD = .14$ ) than in the nature condition [ $M = 3.51$ ,  $SD = .11$ ;  $\beta = .28$ ,  $t(95) = 1.99$ ,  $p = .05$ ; see Figure 3.2 on next page]. Thus, as expected, women who more frequently compare their physical appearance with other females, reported higher physical attractiveness after exposure to high female attractiveness pictures than after pictures of natural elements.

For men, PACS did not affect their self-rated physical attractiveness. Men who scored low on PACS rated their physical attractiveness higher in the attractiveness condition



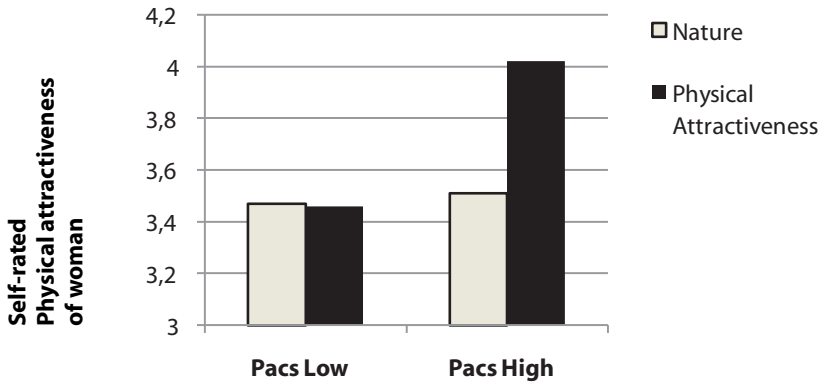


FIGURE 3.2. Self-rated physical attractiveness of women scoring low and high on Physical appearance comparison (PACS) in the nature and high physical attractiveness condition.

[ $M = 3.94$ ,  $SD = .14$ ,  $\beta = -.26$ ,  $t(95) = -2.19$ ,  $p < .05$ ] than in the nature condition ( $M = 3.45$ ,  $SD = .12$ ). And this was also found for men who scored high on PACS, they also rated their physical attractiveness higher after exposure to pictures that signalled high female attractiveness [ $M = 3.08$ ,  $SD = .14$ ;  $\beta = -.43$ ,  $t(95) = -3.17$ ,  $p < .01$ ] than to pictures of nature ( $M = 2.93$ ,  $SD = .12$ ).

#### *Mood and Physical Appearance Comparison*

A regression analysis with Participant sex (men vs. women), Condition (high physical attractiveness vs. nature) and the Physical appearance comparison scale (PACS, standardized) as predictors, and mood as the dependent variable was conducted. No main effects of Participant sex, Condition and Physical appearance comparison were found ( $\beta$ 's  $< -0.16$ ,  $t$ 's  $< .77$ , *ns*). A marginally significant interaction effect was found between Condition and Participant sex ( $\beta = .16$ ,  $t(95) = 1.91$ ,  $p = .06$ ). As expected, men reported a better mood after exposure to pictures that signalled high female attractiveness ( $M = 4.00$ ,  $SD = .15$ ) than pictures that signalled natural elements ( $M = 3.5$ ,  $SD = .18$ ). For women this was the other way around, they reported a better mood after exposure to pictures of natural elements ( $M = 3.81$ ,  $SD = .17$ ) than after exposure to pictures that signal high female attractiveness ( $M = 3.62$ ,  $SD = .15$ ; see Figure 3.3).

The two other two-way interactions were not significant ( $\beta$ 's  $< .12$ ,  $t$ 's  $< .154$ , *ns*), nor was the three-way interaction ( $\beta = -.06$ ,  $t = -.77$ , *ns*).

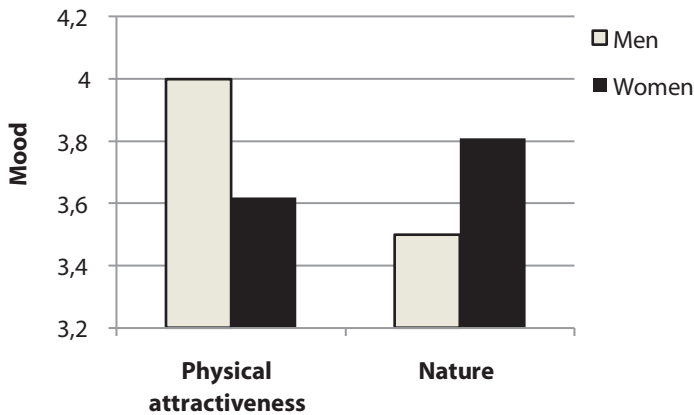


FIGURE 3.3. Self-rated mood as a function of participant sex and condition.

## DISCUSSION

The present study aimed to investigate how exposure to brands that signal high female physical attractiveness would influence self-rated attractiveness and mood among men and women. For this purpose both male and female participants were exposed to pictures of brands that signalled high female physical attractiveness or to natural elements as a control condition, after which their self-rated attractiveness and mood were assessed. For women, but not for men, effects on self-rated physical attractiveness were expected. In addition, it was hypothesized that, among women, the effects would be moderated by the tendency to compare their physical appearance with that of other same-sex individuals. For men, effects on mood were expected. It was expected that men would feel better after exposure to pictures of brands that signal high female physical attractiveness than after exposure to pictures of nature.

With regards to self-rated physical attractiveness, it was found that women who more often compared their appearance with those of other women rated their physical attractiveness higher after exposure to pictures of brands that signal high female physical attractiveness than after exposure to pictures of nature. Consistent with the expectations, the self-rated attractiveness of women who compared their appearance less often did not differ as a function of condition. These results suggest that exposure to pictures of brands that signal high female physical attractiveness may evoke a competitive mechanism, especially in women who have a tendency to compare their

own appearance with the appearance of other women. This finding is consistent with findings of Campbell (2002) who showed that the domain relevant to women is not status, but those resources that will enable them to reach pregnancy and care for their offspring, i.e., physical attractiveness.

Contrary to generally accepted research on social comparison and psychical attractiveness which has shown that exposure to mass media images may evoke negative self-evaluations in women, the present study found women who scored high on physical appearance comparison to rate their physical attractiveness higher after exposure to pictures of brands that signal high female physical attractiveness than after exposure to pictures of nature. This finding is in line with recent findings of Buunk et al. (2012) who showed that women who, in general, make relatively frequent social comparisons, focus more on similarities in appearance between themselves and attractive comparison targets than other women, and as a consequence, may show higher self-ratings of attractiveness. Their tendency to assimilate may cause them to experience higher self-evaluations of attractiveness following exposure to products related to female attractiveness, inspiring them, for instance, to use these products to enhance their own appearance.

The finding that, among women who tend to compare their appearance relatively often with those of others, contributes to recent research that shows that, indeed, pictures signalling high female physical attractiveness may result in positive effects on self-rated attractiveness among women. Previously, for instance, Mills et al. (2002) found that women who viewed ads with idealized female body images felt thinner than women who were exposed to ads with products only. Wood (1989) found that, as long as the comparison target will not be perceived as a competitor, the effects of exposure to these targets may be positive or neutral. More specifically, the results of the present study among women, nicely fits with previous study's results of Bosch et al. (2010) and Buunk et al. (2012) that suggest that women who tend to compare themselves relatively often, and thus likely also in the domain of physical attractiveness, tend to focus on similarities rather than differences between themselves and the comparison target. The present study extends these previous studies by showing that, for self-rated attractiveness to be (positively) affected, no explicit comparison target needs to be present: products and brands may suffice. Although one of the pictures in the high female physical attractiveness condition consisted of a magazine cover picturing an attractive female, the other pictures showed brands only. For marketers this is an important finding. Models may not always be needed to market beauty products; they may even have an adverse effect.

That is, it is possible that exposing women to products and brands without a model may be a safer way to market beauty products. In the manipulation of the current experiment there was one picture of a magazine cover which included a woman, so additional research is required to strengthen this reasoning. It needs to be studied if pictures of beauty products may enhance women's sensitivity to intrasexual competition, make them focus on similarities with whatever attractive women they have in mind and on their possibilities to enhance their appearance, for instance, in order to look like the attractive woman they have in mind. In contrast, the presence of a highly attractive model in the picture may set an unfeasible beauty standard that stimulates women to focus on differences rather than similarities and that, as a consequence, may discourage them to improve their appearance (and thus buy the product).

Unexpectedly, exposure to pictures that signal high female attractiveness also affected males' self-rated physical attractiveness. Men reported higher self-rated physical attractiveness after exposure to pictures of high female attractiveness brands than after exposure to pictures of natural elements. A possible explanation is that the priming with female attractiveness gave them a better mood before they were asked to report their self-rated attractiveness, with improved mood causing higher self-ratings of attractiveness. In addition, according to Saad and Gill (2009) men tend to overestimate their attractiveness if they want to impress a female, a phenomenon they call the 'overconfidence-bias'.

With regard to participants' mood, as expected, the present study also showed that men reported feeling better after exposure to pictures of brands that signalled high female physical attractiveness than after exposure to pictures of nature, whereas for women the reverse was found. A likely explanation is that men reported better mood since men may associate brands that signal high female physical attractiveness with (the presence of) attractive females. In contrast, being exposed to brands that signal high female physical attractiveness, women may experience feelings of intrasexual rivalry, and possibly even feelings of jealousy or envy, worsening their overall mood.

Although the results are interesting, there are also some limitations to the current research. First, the manipulation consisted of brands that signalled female physical attractiveness only. It is, therefore, interesting to study a similar procedure using brands that signal male physical attractiveness. In that case, a comparison can be made between men and women in terms of their responses in the context of intrasexual competition and the role of physical attractiveness in this competition. In addition, the present study employed dependent measures that consisted of one item only. More reliable results

might have been obtained using a multiple-item measure. Nevertheless, the present study contributes to recent findings on the potential positive effects of images of beauty on self-evaluations of men and women. Whereas previous studies mostly limited their study to effects of exposure to images which indicate high physical attractiveness on women in the current study also the effects on men were assessed.





# Chapter 4

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## **Expose your brands to influence the behaviour of others:**

How competence and sophistication of brands influence assertive behaviour.

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## INTRODUCTION

Individuals constantly interact with others and base their judgements and, consequently, their behaviours on the categorization of that other person in terms of social categories such as sex, age, clothing and hair style (Baron & Byrne, 2004; Fiske, Lin & Neuberg, 1999; Fiske & Neuberg, 1990). More specifically, research has shown that, in dyadic interactions, people judge someone else's position in the social hierarchy based on visible characteristics, like age and clothing (Kalma, 1989, 1991). Based on this estimated position in the social hierarchy people determine their relative position towards this person: are they lower or higher in status relative to this person? This estimate may help individuals to choose the most appropriate behaviour: dominant towards those that are perceived to be lower in the social hierarchy and submissive towards those perceived as higher in the social hierarchy. This process of social categorization and social comparison works so quickly that others are instantly treated as belonging to a category, i.e. lower or higher in social status (Fiske, 1998).

In this context, it may be noted that, although social hierarchies are formed more subtle in human beings, human behaviour can be compared to the behaviour of, for instance, chimpanzees (Buss, 1999; De Waal, 1982; Kalma, 1989). In this species, socially dominant males and females, i.e. those who have a high position in the social hierarchy, have important advantages compared to submissive members of the group. They have more access to important resources, such as food and potential mates, and are reproductively more successful than individuals low in the social hierarchy. Among humans socially dominant behaviours contain both elements of verbal and non-verbal behaviour (Buss, 1999; Kalma, 1991). For instance, frequent talking in a conversation is considered dominant behaviour, as is interrupting others who are talking (Kalma, 1989, 1991). In

addition, socially dominant people usually stand up straight, make eye-contact with their conversation partner, smile less often and speak in a clear and relatively low voice (Argyle, 1994), whereas submissive individuals usually show the opposite behaviour. The current research examined the influence of brands on the social categorization individuals make and the behaviour that results from it, in terms of assertiveness. The present study may help to provide insight in the processes that may underlie consumer behaviour, especially in response to products and brands that are associated with high status.

### **Evolutionary perspective on marketing**

In our society the importance of symbolic brands, i.e., brands that communicate consumers' self-concepts to others continues to grow (Sundie et al., 2011). Brands are increasingly used to communicate personal values, wealth and status to others and therefore are highly likely to influence individuals' perceived position in the social hierarchy and the behaviours that are associated with it (Dunn & Hill, 2014; Dunn & Searle, 2010; Hickling, Noel & Yutzler, 1979; Hill, Nocks & Gardner, 1987; Massar, 2009; Sundie et al., 2011; Townsend & Levy 1990 a, 1990b).

However, research has shown that the brands and products that are attractive to men and women may differ (Bagozzi & Natarajan, 2000; Saad & Gill, 2000). Women invest more – also financially - in their physical appearance than men and thus in brands that enhance and/or emphasize their physical attractiveness (Burton, Netemeyer & Lichtenstein, 1994; Buss, 1999; Saad & Gill, 2000; Symons, 1995). In contrast, men have been found to invest more in displaying and improving their social status by exposing brands that enhance or emphasize their social status (Dunn & Searle, 2010). A possible explanation for these findings comes from parental investment theory (Trivers, 1972), which states that the sex – in the case of humans, the female - who invests most in offspring, will select a potential mate based on characteristics that provide long-term reproductive success and the possibility to provide protection and resources. As a consequence, women will value potential mates who exhibit characteristics indicative of a high position in the social hierarchy and use status as an important criterion when selecting a potential mate. On the other hand, the sex that invests less in offspring is expected to be interested more in multiple matings, and to select mates who signal health and fertility. This implies that men are more likely to select a partner who is physically attractive, because physical attractiveness serves as an indicator of youth and fertility.

The mate selection criteria that are relevant in the process of mate selection are reflected in the criteria that individuals focus on in rivals when engaging in competition (Dijkstra & Buunk, 1998). As a consequence, when comparing oneself with rivals and evaluating one's relative position in the social hierarchy, women will be most likely to focus on their own and their rival's physical attractiveness whereas men will be most likely to focus on their own and their rivals' status (Massar, 2009). In the present study it is assumed that the brands that men and women tend to buy or use are influenced by these evolutionarily-based processes. The central issue examined here is how these brands affect individuals' perceptions of others and the degree of assertiveness that may result from these perceptions.

### **Brand personality**

There are different types of brands that may have distinct functions for consumers. Aaker describes three categories of brands: symbolic, utilitarian and symbolic-utilitarian brands (1997). Symbolic brands have a self-expressive purpose, which goes beyond the utility of the branded product. Brands like cosmetics, clothing and fragrances contain a highly symbolic value to consumers with regards to their self-esteem. Symbolic-utilitarian brands are brands like automobiles, beverages and magazines, which have a strong symbolic, but also a utilitarian function for consumers. Brands of both categories are included in this research. Utilitarian brands will not be included, since these brands have mainly a functional meaning, despite that manufacturers are often trying to add symbolic value to these brands.

As the importance of symbolic brands is growing, more research is performed on the effects of different types of brands on consumer behaviour (Aaker, 1997; Austin, Sigauw & Matilla, 2003; Azoulay & Kapferer, 2003; Branaghan & Hildebrand, 2011; Ferraro, Bettman & Chartrand, 2009; Fitzsimons, Chartrand & Fitzsimons, 2008; Grohmann, 2009; Maele, Otnes & Supphellen, 2011; Ramaseshan & Tsao, 2007; Sung & Kim 2010; Sweeny & Brandon, 2006). Particularly Aaker (1997) has contributed to the understanding of the symbolic use of brands by developing a theoretical brand personality framework. She defines brand personality as 'human personality traits associated with a brand' (Aaker, 1997, p. 347) and found that people are able to attribute personality traits to brands. For instance, individuals find it relatively easy to think about brands as if they are a celebrity or a famous historical figure (Rook, 1985). In addition, individuals may also relate brands to their own personality (Fournier, 1998). Fournier performed several case study interviews from which she concluded that the brands participants used had a

strong relationship with their personality. Thinking of a brand or a person in terms of personality traits is a way of categorizing that person or brand, for instance, as a certain 'type'.

In Aaker's research, 37 brands were rated on a list of traits extracted from the literature on human personality, i.e. the generally accepted 'Big Five' (e.g. Barrick & Mount, 1991). A factor analysis of the results extracted five dimensions of brand personality which Aaker described as sincerity (e.g., Hallmark cards), excitement (e.g., MTV television channel), competence (e.g., Wall Street Journal newspapers), sophistication (e.g., Guess Jeans) and ruggedness (e.g., Nike tennis shoes; see Aaker 1997 for a review). Different brands can be assigned to the different brand personality dimensions, and each brand personality dimension consists of different personality traits. For instance, competence was computed as the sum of results of nine personality traits, such as reliable, intelligent and successful. From an evolutionary perspective, it was expected in the present research that men and women would differ in the importance they attach to social status and physical attractiveness. Therefore, two of the five brand personality dimensions that reflect social status and physical attractiveness were selected for the current research, i.e. brand competence and brand sophistication respectively.

Brand sophistication particularly reflects the aspect of physical attractiveness. Although Aaker did not propose specific definitions for each brand personality dimension, in the present research, brand sophistication is defined as the degree to which brands signal the quality of refinement and finesse. This dimension consists of personality traits like '*upper class*', '*glamorous*', '*good looking*', '*charming*', '*feminine*' and '*smooth*' (Aaker 1997), characteristics that are all related to female physical attractiveness. As noted before, since, in the context of intrasexual competition, physical attractiveness is a more important characteristic for women than for men, and therefore it is expected that particularly women's behaviour, in terms of assertiveness, to be affected by displays of physical attractiveness, as is the case when exposed to brands that are high in brand sophistication.

In the current research, brand competence is defined as the degree to which a brand signals capability and high status (Fiske, Cuddy, Glick & Xu, 2002). The brand competence dimension as suggested by Aaker (1997) contains items such as '*reliable*', '*hard working*', '*secure*', '*intelligent*', '*technical*', '*corporate*', '*successful*', '*leader*' and '*confident*'. For the reasons mentioned earlier, it was expected that particularly men's behaviour, in terms of assertiveness, would be affected by displays of high status, as is the case when being exposed to brands that are high in brand competence.

## The present research

The present study's aim was to investigate the effect of exposure to brands displayed by another individual on the assertive behaviour of the observer. It was hypothesized that, in dyadic interactions with strangers, the brands these male and female strangers display will provide information about their position in the social hierarchy, which in turn will influence participants' behaviour towards the stranger in terms of assertiveness. It was expected that men will report less assertive behaviour when confronted with a male that displays brands that signal high brand competence, whereas women will report less assertive behaviour when confronted with a female that displays brands that signal high brand sophistication.

As part of Study 4.1, first, a pre-test was performed to select brands that could be included in the manipulation of brand competence and brand sophistication. Next, in the following of Study 4.1, the aim was to test if participants would indeed recognize the brand personality dimensions as manipulated. Research by Aaker (1997) suggests that consumers will easily associate a brand with certain personality traits. To test this hypothesis, participants were exposed to pre-tested brands in terms of brand competence and brand sophistication. In Study 4.1 the manipulation only included the presence of imaginary individuals, i.e., individuals participants had to imagine themselves.

In Study 4.2 and 4.3 participants were exposed to a picture of a female who is wearing and is surrounded by brands that signal high brand sophistication (Study 4.2) respectively to a picture of a male who is wearing and is surrounded by brands that signal high brand competence (Study 4.3). After the exposure the assertive behaviour of the participants was assessed. To strengthen the manipulation in these two studies, contrary to Study 4.1, an individual was included in the picture who is wearing and holding the brands. Thus, Study 4.2 and 4.3 used the same brands as in Study 4.1, only this time accompanied by a visible person holding or wearing them.

Some people may be more affected by brands and what they imply in terms of the social hierarchy than others. Therefore, in Study 4.2 and 4.3, materialism, i.e., the importance individuals attach to possession-defined success (Richins & Dawson, 1992), was expected to moderate the effect of brand sophistication and brand competence on self-rated assertiveness. It was expected that an individual who is more materialistic will be more affected by the presence of brands than other individuals. More specifically, it was expected that men who are more materialistic would report less assertive behaviour when exposed to someone displaying brands signalling high competence, whereas women who are more materialistic would report less assertive behaviour when exposed

to someone displaying brands of high brand sophistication. In addition, it was expected that men may show more assertive behaviour after exposure to brands that signal high brand sophistication. Since for men physical attractiveness is an important criterion in the mate selection process, being exposed to brands that signal high brand sophistication may evoke an intersexual selection process in men. That is, when exposed to brands that signal high brand sophistication, men may show behaviour that is relatively attractive to women, i.e., behaviour that signals a high status in the social hierarchy.

## STUDY 4.1

### BRAND SOPHISTICATION AND BRAND COMPETENCE

First, a study was conducted to examine whether participants would indeed be able to rate a brand's level of sophistication and competence and attribute these brand characteristics to the individuals that possess them. Participants were requested to imagine the personality traits of an imaginary individual based on three brand names. For example, the three brands could be Mercedes, 7-Up and Sportweek. Participants were requested to imagine the personality of the imaginary person who would use or possess these brands. No additional information on, for instance, the sex of the imaginary person was given.

4

#### METHOD

##### *Participants and Design*

Two hundred seventy four participants, 77 males (*Mean age* = 20.43, *SD* = 1.96) and 197 females (*Mean age* = 19.69, *SD* = 1.53) first year psychology students of the University of Groningen participated in the present study which was conducted online. In return for their participation they received a course credit. All materials and procedures in this study were approved by the Ethical Committee Psychology of the University of Groningen.

##### *Pre-testing Brands<sup>1</sup>*

Based on Aaker's brand personality inventory (1997) a pre-test was conducted to select brands high and low in brand competence and brand sophistication. First, the product categories to be included in the present research were selected: clothing, soda en magazine brands. These symbolic and symbolic-utilitarian product categories consist of brands that have more symbolic value than, for instance, household products (Aaker, 1997). In contrast to utilitarian products, it was expected that these brands would have greater effects on the actual behaviour of participants. Next, three groups of brand names were created: one containing 50 clothing brands, one containing 25 magazine

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1 The author gratefully thanks Moussa El Farouk, Vincent Torpin and Mascha Maasland for their contribution in collecting the pre-test data.



brands and one containing 25 soda brands. For each group of brands 20 participants rated 25 presented brands on 37 brand personality characteristics (taken from Aaker, 1997). The clothing brands were divided into two groups of 25 brands.

This pre-test was presented as a paper and pencil test. In total 100 participants ( $M = 24.5$  years,  $SD = 3.3$ ) were included. Each participant rated 25 brands. For each of these 25 brands participants were asked if they knew the brand. If so, they were asked to rate the brand on the 37 personality traits as proposed by Aaker (1997). If participants did not know the brand they were asked to proceed with the next brand. This procedure resulted in different  $n$ 's for each brand, since familiarity with the brand was a prerequisite for being able to judge a brand's personality. For each brand the five dimensions of brand personality - *competence*, *sophistication*, *sincerity*, *excitement* and *ruggedness* - were computed by summing up scores on the relevant items (see Aaker 1997 for a review). Those brands were selected with the highest respectively lowest scores on the two dimensions relevant for the present research, i.e. sophistication and competence. More specifically, for high brand competence Coca Cola (soda;  $M = 3.84$ ,  $n = 20$ ), Hugo Boss (clothing;  $M = 4.0$ ,  $n = 19$ ) and Quote (a Dutch financial magazine;  $M = 3.94$ ,  $n = 14$ ) were selected. For low brand competence Fernandez (soda;  $M = 2.2$ ,  $n = 7$ ), Privé (a Dutch gossip magazine;  $M = 2.14$ ,  $n = 17$ ) and Australian (clothing;  $M = 2.19$ ,  $n = 18$ ) were selected. Brands included in the high brand sophistication dimension were Gucci (clothing;  $M = 4.29$ ,  $n = 17$ ), Perrier (soda;  $M = 3.89$ ,  $n = 14$ ) and Cosmopolitan (magazine;  $M = 4.01$ ,  $n = 17$ ). Brands that scored low on brand sophistication were 3es cola (soda;  $M = 1.89$ ,  $n = 20$ ), Computer Idee (Dutch magazine;  $M = 2.1$ ,  $n = 12$ ) and Australian (clothing;  $M = 1.54$ ,  $n = 19$ ).

### *Materials and Procedure*

Based on these pre-test results, twelve brands were selected to include in Study 4.1. The purpose of this study was to check if male and female participants would indeed associate the brand characteristics of sophistication and competence with the individual using or wearing them. Participants were told that they participated in a study on brands and were asked to fill out an online questionnaire. First, two general questions (gender, age) were asked, after which all participants were asked to rate the personality of four imaginary persons on twenty-one personality traits (opposite poles on a single dimension on a nine point scale, e.g. 1 = submissive – 9 = dominant). These selected traits were taken from research by Sadalla, Kenrick and Vershure (1987) and included fifteen bipolar adjectives. The adjectives nondominant-dominant, sexually attractive-sexually unattractive,

weak-strong, soft-hard, tough-tender, rugged-delicate, feminine-masculine, bad-good, warm-cold, nice-awful, pleasant-unpleasant, intelligent-unintelligent, ugly-beautiful, low income- high income, physically attractive-physically unattractive were selected to reveal the real purpose of the study. In addition, these adjectives were combined with the personality traits from both the brand competence and brand sophistication scale (Aaker, 1997).

Each participant was asked to form an image of a person based on three presented brand names. The first description was: Cosmopolitan, Gucci and Perrier, brands that signalled high brand sophistication. The second description was: Computer Idee, Australian, and First Choice Cola, brands that signalled low brand sophistication. The third description was Quote, Hugo Boss and Coca Cola, brands that signalled high brand competence and the last description was: Privé (Dutch gossip magazine) Australian and Fernandez, signalling low brand competence. After the rating process the ratings on the individual personality traits were combined to form the brand sophistication and brand competence dimension, to examine whether participants indeed attributed the 'right' personality characteristics to the imaginary persons that can be expected on the basis of the associated brand names.

## RESULTS AND DISCUSSION

### *Brand Competence*

In the two different personality descriptions, with individuals who used brands representing high and low brand competence, the traits '*reliable*', '*hard working*', '*secure*', '*intelligent*', '*technical*', '*corporate*', '*successful*', '*leader*' and '*confident*' were combined to form a scale for brand competence. Participants first rated the traits of the personality description representing high brand competence on the brand competence scale ( $\alpha = .74$ ), and next they rated the traits of the personality description representing low brand competence on the brand competence scale ( $\alpha = .73$ ). As can be expected, the imaginary individual associated with the high competence brands was rated as more competent ( $M = 5.98$ ,  $SD = .67$ ) than the imaginary individual associated with the low competence brands [ $M = 5.01$ ,  $SD = .64$ ,  $t(273) = 16.38$ ,  $p < .01$ ].

### *Brand Sophistication*

In the two different personality descriptions, with individuals who used brands representing high and low brand sophistication, the traits '*upper class*', '*glamorous*', '*good looking*', '*charming*', '*feminine*' and '*smooth*' were combined to form a scale for brand sophistication. First, participants rated the traits of the personality description representing high brand sophistication on the brand sophistication scale ( $\alpha = .66$ ), and next they rated the traits of the personality description representing low brand sophistication on the brand sophistication scale ( $\alpha = .77$ ). As can be expected, the imaginary individual associated with the high sophistication brands was rated as more sophisticated ( $M = 6.22$ ,  $SD = .79$ ) than the imaginary individual who was associated with the low sophistication brands [ $M = 4.10$ ,  $SD = .80$ ],  $t(273) = 24.83$ ,  $p < .01$ ].

Earlier it was suggested that brand personality traits may reflect on the individual displaying, wearing or using these brands. It was found that participants indeed attributed the characteristics of brands to imaginary strangers. It is striking that individuals are able to derive an imaginary person's personality merely from the characteristics of three brand names. In Study 4.2 and 4.3, rather than asking participants to imagine a person, a picture of a male or female was used who was holding or wearing the proposed brands as suggested by Austin et al. (2003).

## STUDY 4.2

### BRAND SOPHISTICATION

The aim of Study 4.2 was to examine the effect of exposure to a picture of a female that signals either high or low brand sophistication on participants' self-rated assertiveness. The same brands were used as in Study 4.1. to represent high and low brand sophistication. The manipulation consisted of a picture of a female holding and wearing either high or low sophistication brands.

#### METHOD

##### *Participants and Design*

In total two hundred and one participants, 92 male (*Mean age* = 20.39, *SD* = 3.58) and 109 female (*Mean age* = 19.96, *SD* = 4.55) first year psychology students of the University of Groningen participated in the present study which was conducted online. Participants were randomly assigned to one of two conditions, i.e. low or high brand sophistication, in a two (Brand sophistication: low versus high) by two (Gender: men versus women) between subject experiment. In return for their participation participants received a course credit. The procedure in this study was approved by the Ethical Committee Psychology of the University of Groningen.

##### *Materials and Procedure*

Study 4.2 used the same brands that signalled high or low brand sophistication as in Study 4.1. To replicate the results in a situation in which an actual person displays brands, participants were exposed to a picture of a young woman named 'Sarah', who was holding and wearing brands in different product categories that represent either high brand sophistication [i.e., Gucci (clothing), Perrier (soda), and Cosmopolitan (magazine)] or low brand sophistication [i.e., First Choice cola (soda), Computer Idee (Dutch magazine) and Australian (clothing)]. The female took on a similar pose in both pictures wearing a black T-shirt, on which the Gucci and Australian brands were added by the computer afterwards. For stimuli pictures, see Figure 4.1.



**FIGURE 4.1.** Stimuli pictures of a female holding/wearing brands that signal low brand sophistication (Australian, Computer Idee and First Choice cola) or high brand sophistication (Gucci, Cosmopolitan and Perrier).

To measure the importance of material goods to an individual, the subscale 'Possession-defined Success' of the Materialism scale (Richins & Dawson, 1992) was selected, a scale that will be referred to as the materialism scale. This scale consists of six questions which can be answered on a five-point Likert-scale response format (1 = strongly disagree, 5 = strongly agree). Examples items are: 'I like to own things that impress people' and 'Some of the most important achievements in life include acquiring material possessions' ( $\alpha = .75$ ,  $M = 2.51$ ,  $SD = .92$ ).

The experiment was performed by means of a digital questionnaire on the internet. Participants were told that they were participating in a study on the ability to form accurate impressions of others based on limited information. First, two general questions (gender, age) were asked, followed by the items of the materialism scale (Richins & Dawson, 1992). Next, each participant was randomly assigned to the high or low brand sophistication condition and was shown the picture of 'Sarah' (see Figure 4.1) for two seconds. Participants were instructed to study the picture carefully. Next, participants were asked to imagine having a dyadic encounter with 'Sarah'. They were informed that they would have to answer some questions about this encounter later on in the experiment. Next, participants rated 'Sarah' on twenty-one personality characteristics, of which fifteen were filler items (adapted from Sadalla et al., 1987) to conceal the real purpose of the study. Six of the personality traits were derived from the brand sophistication dimension (Aaker, 1997) in order to check the manipulation. Next, participants were instructed to imagine meeting 'Sarah' on a bench in the park and engaging in a

conversation with her about a topic important to them, and to report how assertively they would behave towards her during this conversation (see Mussweiler, 2001). The assertiveness scale was developed by Mussweiler (2001) to study the consequences of comparisons with the social standard on participants' self-evaluation of assertiveness. This scale consists of five questions ( $\alpha = .67$ ,  $M = 5.17$ ) and measures participants' evaluation of their assertiveness. Example questions are: 'How resolutely would you defend your opinion' (1 = not at all resolutely, 5 = very resolutely) and 'How important is it to you to convince others of your point of view' (1 = not at all important, 9 = very important). To form an overall evaluation of participant's assertiveness, each question was transformed into z-scores.

## RESULTS AND DISCUSSION

### *Manipulation Check*

The personality traits 'upper class', 'glamorous', 'good looking', 'charming', 'feminine' and 'smooth' were combined to form a sophistication measure (Aaker, 1997) ( $\alpha = .64$ ). As expected, Sarah was rated as more sophisticated in the high ( $M = 6.32$ ,  $SD = .86$ ) than in the low brand sophistication condition ( $M = 5.72$ ,  $SD = 1.03$ ,  $F(1,194) = 19.12$ ,  $p < .01$ ,  $\eta^2 = .08$ ). It was therefore concluded that the manipulation was successful.

### *Assertive behaviour and Materialism*

A regression analysis with Participant sex (male vs. female), Brand sophistication (high vs. low) and Materialism (standardized) as predictors, and assertive behaviour as a dependent variable was conducted. All two-way and three-way interactions were included in the analysis ( $n = 195$ ). A main effect of materialism was found ( $\beta = .38$ ,  $t(188) = 3.84$ ,  $p \leq .001$ ). Participants high in materialism reported more assertiveness than participants low in materialism. No main effects of Brand sophistication or Participant sex were found ( $\beta$ 's  $< -.11$ ,  $t$ 's  $< -.91$ ,  $ns$ ). A significant interaction effect was found between Materialism and Brand sophistication,  $\beta = -.43$ ,  $t(188) = -2.92$ ,  $p \leq .05$ , indicating that participants low in materialism, reported less assertive behaviour in both conditions, whereas participants high in materialism reported more assertiveness in the high brand sophistication condition than in the low brand sophistication condition. This interaction will not be described here further as it was qualified by a three-way interaction. In addition, a marginally significant interaction effect was found between Materialism and Participant sex

( $\beta = -.22$ ,  $t(188) = -1.70$ ,  $p = .09$ ), that will not be discussed further. The two-way interaction between Brand sophistication and Participant sex was not significant ( $\beta = -.09$ ,  $t = -.49$ , *ns*). Thus, unlike what was expected, overall, women did not show less assertive behaviour in response to a woman with brands high in sophistication. Finally, as noted previously, the three-way interaction between Participant sex, Brand sophistication and Materialism was significant [ $\beta = .50$ ,  $t(188) = 2.63$ ,  $p = .01$ ]. To interpret this three-way interaction, simple effect analyses were performed for men and women separately

These analyses showed that women low in materialism (-1 SD) reported significantly less assertive behaviour in the low than in the high brand sophistication condition [ $M = -.34$  vs.  $M = -.08$  respectively;  $\beta = .16$ ,  $t(188) = 2.05$ ,  $p \leq .05$ ]. In contrast, women high in materialism reported relatively more assertive behaviour in the high than in the low brand sophistication condition [ $M = .25$  vs.  $M = .12$  respectively;  $\beta = .23$ ,  $t(188) = 2.65$ ,  $p = .01$ ; see Figure 4.2].

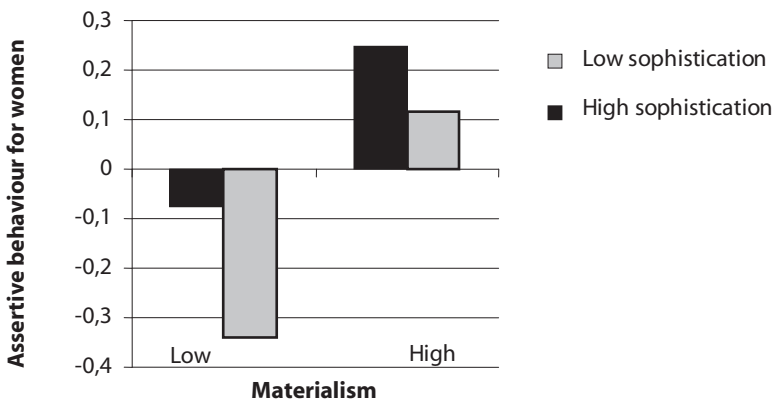
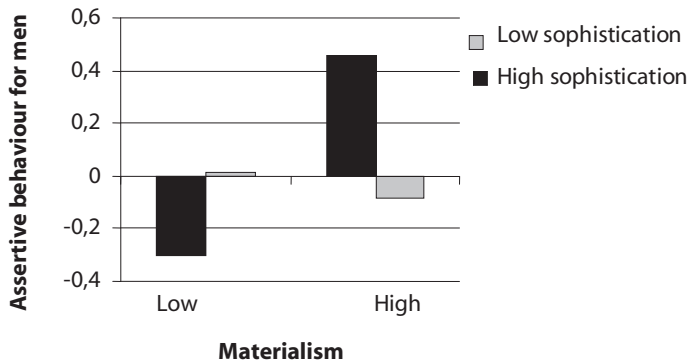


FIGURE 4.2. Assertive behaviour scores for women high and women low in materialism after exposure to a picture of a woman who signalled high or low brand sophistication.

For men results differed. Among men low in materialism assertiveness did not differ as a function of brand sophistication condition ( $M = .02$  vs.  $M = -.31$  respectively;  $\beta = -.05$ ,  $t(188) = -.47$ , *ns*). In contrast, in the high sophistication condition men high in materialism reported more assertive behaviour ( $M = .46$ ) than men low in materialism [ $M = -.31$ ;  $\beta = .38$ ,  $t(188) = 3.84$ ,  $p < .01$ ; see Figure 4.3].



**FIGURE 4.3.** Assertive behaviour scores for men low and men high on materialism after exposure to a picture of a woman who signalled high or low brand sophistication.

Unexpectedly, women high in materialism reported relatively more assertive behaviour in the high than in the low brand sophistication condition. A possible explanation is that the high sophistication brands may have triggered an aspirational effect in women high in materialism (Aaker, Benet-Martinez & Garolera, 2001; Aaker, 1997; Lockwood & Kunda, 1999). That is, women who see material goods as a way to improve their quality of life, may see ‘Sarah’ as a role model, in the sense that she inspires them to improve their position in the social hierarchy by means of brands that reflect high sophistication. As a result, they may have assimilated rather than contrasted themselves to the position of ‘Sarah’, showing more assertive behaviour as a consequence. The results of men are, in part, in line with the expectations. That is, men who scored high on materialism reported higher assertive behaviour in the high brand sophistication condition than in the low brand sophistication condition. In contrast to the expectations, however, men who scored low on materialism reported more assertive behaviour in the low than in the high brand sophistication condition. The fact that the predicted effect was only found among men high in materialism indicates a potential relationship between individual differences in materialism and mating interests. It is, for instance, possible that men who are relatively materialistic are, unconsciously, more focused on and/or interested in mating opportunities. The high value they place on material goods may, unconsciously, reflect a high interest in mating and status as a means of attracting a mate (Miller & Todd, 1998; Saad, 2007; Townsend & Levy, 1990).



## STUDY 4.3

### BRAND COMPETENCE

The aim of Study 4.3 was to examine the effects of exposure to a picture of a male that was surrounded by brands that signalled high brand competence on participants' self-rated assertiveness. Study 4.3 consisted of an experiment that, in its method and procedure, resembled Study 4.2, but with a different manipulation.

#### METHOD

##### *Participants and Design*

In total, one hundred thirty six participants, 66 male (*Mean age* = 20.47, *SD* = 3.32) and 70 female (*Mean age* = 19.94, *SD* = 1.75) first year students from the University of Groningen were randomly assigned to one of the two conditions - low or high brand competence - in a two (Brand competence: low versus high) by two (Gender: men versus women) between subject experiment. The procedure in this study was approved by the Ethical Committee Psychology of the University of Groningen.

##### *Materials and Procedure*

The procedure of this experiment was highly similar to that in Study 4.2, with the exception of the stimuli pictures which included the high and low competence brands from Study 4.1 and which showed a male instead of a female who was surrounded by brands. In the high brand competence condition the male in the picture, introduced as 'Kevin', was holding three brands: Coca Cola, Hugo Boss and Quote (a Dutch financial magazine); in the low brand competence condition he was holding the brands Fernandez, Privé (a Dutch gossip magazine) and Australian. Similar to the woman in the picture that was used in to Study 4.2; the man in the picture held a neutral facial expression and bodily pose in a similar fashion in both pictures (low and high brand competence condition). Like the woman in Study 4.2, 'Kevin' was dressed in the same black shirt in both pictures, to which the different clothing brand names (Hugo Boss and Australian) were added digitally afterwards (see Figure 4.4).



**FIGURE 4.4.** Stimuli pictures of a man holding and wearing brands that signal low brand competence (Australian, Privé and Fernandez) and high brand competence (Hugo Boss, Quote and Coca Cola).

As in Study 4.2, materialism ( $\alpha = .71$ ,  $M = 2.53$ ,  $SD = 1.03$ ; Richins & Dawson, 1992) was assessed to measure the importance of material goods to an individual. The assertive behaviour of participants was assessed by the same measure of assertive behaviour as in Study 4.2 ( $\alpha = .68$ ,  $M = 5.53$ ; Mussweiler, 2001).

## RESULTS AND DISCUSSION

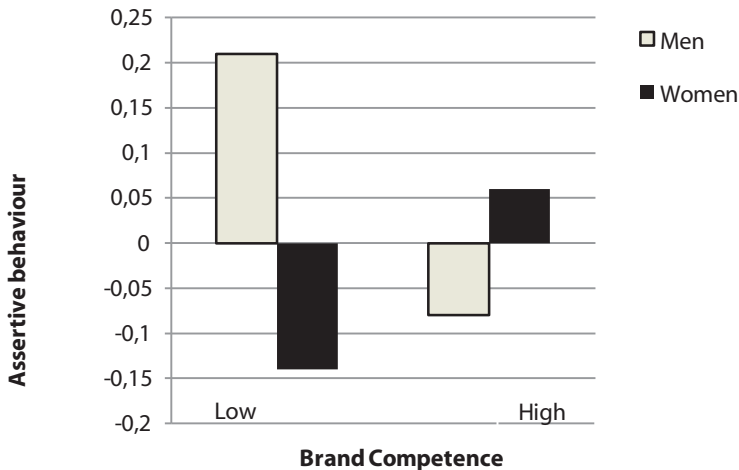
### *Manipulation Check*

The personality traits 'reliable', 'hard working', 'secure', 'intelligent', 'technical', 'corporate', 'successful', 'leader' and 'confident' were combined to form a competence measure ( $\alpha = .65$ ). In the high brand competence condition, 'Kevin' was judged to be more competent ( $M = 5.17$ ,  $SD = .72$ ) than in the low brand competence condition [ $M = 4.6$ ,  $SD = .94$ ,  $F(1,134) = 15.94$ ,  $p < .001$ ,  $\eta^2 = .10$ ]. It can therefore be concluded that the manipulation was successful.

### *Assertive behaviour and Materialism*

The scores on the assertiveness measure (Mussweiler, 2001) were transformed into z-scores. A regression analysis with Participant sex (male vs. female), Brand competence (high vs. low) and Materialism (standardized) as predictors, and assertive behaviour as a dependent variable was conducted. All two-way and three-way interactions were

included in the analysis ( $n = 135$ ). A main effect of participant sex was found [ $\beta = .35$ ,  $t = 2.19$ ,  $p < .05$ ], showing that men reported more assertive behaviour than women. The main effects of Brand competence and Materialism were not significant ( $\beta$ 's  $< .19$ ,  $t$ 's  $< 1.24$ ,  $ns$ ). A significant interaction effect between Brand competence and Participant sex was found,  $B = -.47$ ,  $t(128) = -2.10$ ,  $p < .05$ . Men reported less assertive behaviour in the high brand competence condition ( $M = -.08$ ,  $SD = .11$ ) than in the low brand competence condition ( $M = .21$ ,  $SD = .12$ ), whereas females reported more assertive behaviour in the high brand competence condition ( $M = .06$ ,  $SD = .11$ ) than in the low brand competence condition ( $M = -.14$ ,  $SD = .11$ ; see Figure 4.5).



**FIGURE 4.5.** Assertive behaviour scores for men and women after exposure to a picture of a man who signalled high or low brand competence.

The other two-way interactions were not significant ( $\beta$ 's  $< .26$ ,  $t$ 's  $< -1.46$ ,  $ns$ ), nor was the three-way interaction,  $\beta = -.13$ ,  $t(128) = -.56$ ,  $ns$ .

Consistent with the expectations, among men, Study 4.3 reported less assertive behaviour in the high brand competence condition than in the low brand competence condition. In contrast, women reported more assertive behaviour in response to a male holding or wearing brands that signal high brand competence, than in response to a male displaying brands signalling low brand competence. A possible explanation is that women unconsciously view the male surrounded by brands of high brand competence

as an interesting potential mate with a relatively high social status. In order to impress the male, they may, unconsciously, show a relatively high level of assertive behaviour.

In contrast to the expectations, in Study 4.3 participants' level of materialism did not assert significant effects on their responses towards the male and the level of competence of the brands that surrounded him. It may be so, that since a student sample was used, males showed more similarities in their lifestyle and level of materialism, resulting in no significant difference in level of materialism in men in Study 4.3.

## GENERAL DISCUSSION

The present research aimed to study the influence of two aspects of brand personality, i.e., brand sophistication and brand competence, on self-rated assertive behaviour shown by men and women. Based on reasoning from an evolutionary perspective on intrasexual competition it was expected that exposure to a male confederate (Study 4.3) surrounded by brands signalling high brand competence would negatively affect men's assertive behaviour. Women, on the other hand, were expected to be affected by a brand's level of sophistication rather than brand competence, such that women exposed to a female surrounded by brands signalling high sophistication would report less assertive behaviour than women confronted with a female surrounded by brands that signal low sophistication (Study 4.2). It was furthermore hypothesized that this relationship would be moderated by individual differences in materialism. To investigate these hypotheses, three studies were conducted.

The aim of Study 4.1 was to investigate whether participants do indeed derive an individual's personality from the characteristics of the brands he or she surrounds him- or herself with. This basic finding, on which also Study 4.2 and 4.3 are built, is interesting to marketers. Usually, in marketing, individuals, especially models and celebrities, are used to enhance a product's appeal: by presenting and surrounding a product by attractive people, marketers hope that the product becomes 'contaminated' with the characteristics of these people and the positive feelings consumers have concerning these attractive people (Eagly et al, 1991; Feingold, 1992). Study 4.1 shows that the reverse process may occur as well: people, at least the ones one does not know, become also 'contaminated' by the characteristics of brands and products. In other words, brands have the power to affect first impressions and to make one-self look more attractive or competent, and marketers may use this as an argument for consumers to buy certain brands.

In Study 4.2 participants were presented with a photograph of a female surrounded by brands that signal high brand sophistication. Although, in contrast to the expectation, women did not show less assertive behaviour in response to a woman with brands high in sophistication, as expected, materialistic tendencies (Richins & Dawson, 1992) moderated the relationship between brand sophistication, participant sex and assertive behaviour. It was expected that women high in materialism would report less assertive behaviour when exposed to a female target who was surrounded by brands that signal high brand sophistication than women low in materialism. Contrary to the expectations, women high in materialism reported more assertive behaviour in the high brand sophistication condition than in the low brand sophistication condition. A possible explanation is that these women have a relatively strong self-improvement motive and, more than other women, feel inspired by the female in the picture to improve their appearance, causing an assimilation effect in assertive behaviour (Wood, 1989).

Among men a different pattern of results was found. Whereas men low in materialism did not differ in assertive behaviour in the high and low brand sophistication conditions, as expected, men high in materialism reported more assertive behaviour in the high sophistication condition than in the low sophistication condition. This finding suggests that men with a relatively strong materialistic tendency feel a need to compete more with other men when exposed to brands signalling high brand sophistication. Assertive behaviour is one way to compete with other men and to assert one's status, and it is possible that men who are relatively materialistic use brands with the ultimate goal to impress and attract mates.

Study 4.3 examined brand competence and found that, in line with the expectations, men reported less assertive behaviour in the high brand competence condition than in the low brand competence condition. A likely explanation is that men, when exposed to another man surrounded by brands that signal high brand competence, perceive that man to be of high status in the social hierarchy and, as a result, experience a decline in their own status, and, consequently, respond with less assertive behaviour. Future research may study men's assertiveness responses to a male surrounded by brands signalling high brand competence, while in the presence of females. Keverne (1979 cited in Kemper, 1990, pp. 28-30) found that, in a group of Talapoin Monkeys, when men form a group in the absence of females, their desire to show social stratification appears to be less pronounced. This suggests that the present study's finding may become even more pronounced when females would be present, for instance, in the picture of the male target. In this particular study, no female was present and therefore men might have

shown less assertive behaviour in response to the men displaying brands signalling high brand competence.

Among women Study 4.3 revealed the reverse pattern of results: women reported more assertive behaviour in the high brand competence condition than in the low brand competence condition. A possible explanation is that, among women, the picture of the man surrounded by brands that signal high competence made the man in the picture salient as an interesting potential mate, at least more than the man in the low brand competence condition. As a consequence, a mechanism of mate attraction may have become activated, stimulating women to show more assertiveness in response to the perceived high status male than in response to the perceived low status male.

Taken together, these studies show that the competence and sophistication of the brands individuals surround themselves with, are useful characteristics when individuals categorize individuals they do not know well. Recent studies on incidental consumer brand encounters focus on the effects of incidental exposure to brands on brand choice. Ferraro, Bettman and Chartrand (2009) have shown that the encounter with others holding or wearing certain brands affects behaviour, even when these encounters were incidental and largely outside participants' awareness. In their studies participants were implicitly exposed to a water brand 'Dasani' for several times. It was found that the higher the frequency of the implicit exposure to this brand, the more likely participants were to select this brand out of four presented water brands. This effect was explained by the mere exposure effect (Zajonc, 2001). The present study extends these previous studies by showing that the presence of brands, and their characteristics, influence behavioural tendencies in terms of assertiveness (in line with Ferraro, Bettman & Chartrand, 2009; Fitzsimons, Chartrand & Fitzsimons, 2008), behaviour that goes far beyond the consumer-related behaviours studied by consumer researchers. Thus, brands may not only affect our behaviour as a consumer but also our interpersonal behaviour and relationships with others. This knowledge can be used to market and advertise products more creatively and/or efficiently.

### **Limitations and suggestions for future research**

Although the results of the present research are promising, some limitations need to be mentioned. The studies in this chapter show that participants have no problem rating an unknown individual's personality based on brand characteristics. However, more research is needed to clarify how individuals become associated with the brand characteristics they surround themselves with. What happens in the minds of the observer?

Since social ranking is assumed to arise automatically, implicit priming studies may be helpful at revealing insight into the unconscious process that underlies the forming of impressions in response to different brands.

To further strengthen the present study's results, the current research needs to be cross-validated and extended, for instance by using different brands, or by studying different age groups. As research (Belk, 1988) has shown, different brands may attract different age groups. In his research, Belk focused on the level of materialism of different age groups and on different professional groups, such as secretaries and machine shop workers that show a difference in their preference for certain brands. The current studies may also be performed in different cultures. As physical attractiveness and social status are evolutionary constructs and are assumed to be universally relevant, from a theoretical point of view it would be expected that these studies to come up with similar results.

To conclude, this chapter's research has added to the recent findings in consumer behaviour literature, by showing that brand evaluations often consist of an unconscious process and that brand encounters affect intended behaviour (Ferraro, Bettman & Chartrand, 2009; Fitzsimons, Chartrand & Fitzsimons, 2008). Moreover, these studies are the first to provide more insight in the evolutionary processes which may affect the influence of brand exposure on the reported assertive behaviour of men and women.

# Chapter 5

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Effects of brand competence and brand sophistication on non-verbal behaviour and self-rated dominance.

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## INTRODUCTION

Recently, both conspicuous consumption and intrasexual competition have been introduced as motives for consumption in consumer behaviour research (Dunn & Hill, 2014; Dunn & Searle, 2010; Janssens et al., 2011, Sundie et al., 2011). It has been suggested that both men and women buy certain products to enhance respectively their social status and physical attractiveness, in order to attract mates and to compete with members of the same sex. In present society, men and women may thus enhance their attractiveness to potential partners through the use of brands.

Aaker (1997) describes three categories of brands: symbolic, utilitarian and symbolic-utilitarian brands. A symbolic brand has a self-expressive purpose that goes beyond the utility of the branded product. It stands, for example, for belonging to a certain group and it may boost the self-image of its possessor. Consumers may easily relate these brands to their identity (Fournier, 1994). Especially product categories such as clothing, cosmetics and fragrances have a symbolic meaning to consumers, a meaning that often stressed more in advertising than their utilitarian use. In addition to their utility, also brands in the symbolic-utilitarian category, like automobiles, beverages and magazines brands may have symbolic meaning to consumers. Brands in the utilitarian category, that have no symbolic meaning and are only of practical use, will not be examined in this research, since they do not add to an individual's perceived status in the social hierarchy.

Several studies have shown that the use of brands may influence individuals' position in the social hierarchy, and subsequently, their behaviour towards others (Dunn & Searle, 2010, Hill, Nocks & Gardner, 1987; Hickling, Noel & Yutzler, 1979; Massar, 2009; Sundie et al., 2011; Townsend & Levy 1990a, 1990b). In addition, research has also shown that

different brands and products may be more attractive to men than to women (Dunn & Searle, 2010; Janssens et al., 2011; Sundie et al., 2011). Women have been shown to invest more – also financially - in their physical appearance than men (Buss, 1999; Burton, Netemeyer & Lichtenstein, 1994; Saad & Gill, 2000; Symons, 1995) and to be attracted to brands and products that allow them to enhance their physical appearance. On the other hand, men have been found to invest more in displaying and improving their social status (Dunn & Searle, 2010; Apicella et al., 2008), and to be attracted to those products and brands that allow them to express themselves. In the present research it was assumed that the use of brands may signal high social status, and may therefore induce low status non-verbal behaviour in observers. High and low status behaviour can be evoked in various situations, and in the current research the focus lies on how such behaviours may be evoked by the brands that others are associated with.

### **Brand personality**

As the importance of symbolic brands is growing in the social interactions individuals have with others (Shachar et al., 2011), more research is performed on the effects of brand characteristics on different aspects of consumer behaviour, including self-congruity (Branaghan & Hildebrand, 2011), perceptions of brand personality (Maele, Otnes & Supphellen, 2011), brand trust and brand affect (Sung & Kim, 2010), and perceived quality of the brand (Ramaseshan & Tsao, 2007). Although the number of studies on the different effects of exposure to brands is increasing, research on the effect of brand exposure on social behaviour is relatively scarce (Chartrand & Fitzsimons, 2011). People encounter other people every day, and categorize others based on their appearance (Fiske & Neuberg, 1999). Since brands are more frequently used to communicate one's personality to others, as a consequence, the influence of brand exposure on impression formation may be rather strong. Based on the social category a person is placed in, people determine if this other person is higher or lower in the hierarchy, which may influence the behaviour towards this individual. The current research argues that brands may play an important role as an indicator of social categorization and hierarchization processes.

Many previous studies are based on research by Aaker (1997), who has contributed to the understanding of the symbolic use of brands by developing a theoretical brand personality framework. She defined brand personality as 'human personality traits associated with a brand' (Aaker, 1997, p. 347) and found that people are able to attribute personality traits to brands. In her research 37 brands were rated on a list of traits

extracted from the literature on human personality, e.g. the generally accepted 'Big Five' (e.g. Barrick & Mount, 1991). From these ratings, Aaker extracted five dimensions of brand personality, which were described as *sincerity*, *excitement*, *competence*, *sophistication* and *ruggedness*. In the current research it was expected that men and women would differ in the importance they attach to different brand dimensions – related to the domain in which intrasexual competition takes place- and therefore, the effects of brand competence and brand sophistication were examined.

The dimension 'brand sophistication' is defined as the degree to which a brand signals the quality of refinement and finesse and particularly reflects characteristics like 'upper class', 'glamorous', 'good looking', 'charming', 'feminine' and 'smooth' (Aaker, 1997). These traits are especially related to female physical attractiveness. Therefore, it was assumed that brands that signal high sophistication will particularly affect the behaviour of females. In contrast, competence is defined as the degree to which a brand signals capability, and can be linked to social status and financial prospects (Fiske, Cuddy, Glick & Xu, 2002). In the present research, this brand dimension is assessed by items such as 'reliable', 'hard working', 'secure', 'intelligent', 'technical', 'corporate', 'successful', 'leader' and 'confident' (Aaker, 1997). Therefore, it was assumed that brands that signal high brand competence would affect the behaviour of men more than the behaviour of women (Sczesny, Spreemann & Stahlberg, 2006; Fiske et al., 2002).

### **Automatic effects of brand exposure on behaviour**

Although the influence of brands on different aspects of consumer behaviour has been studied in the past, little is known about the effects brands have on actual non-verbal behaviour of observers. One of the exceptions is research by Fitzsimons, Chartrand and Fitzsimons (2008) in which participants were subliminally exposed to either the logo's of Apple or of IBM. Next, participants completed a standard creativity measure, in which they were asked to generate as much unusual uses for a specific object as possible. Participants exposed to Apple logo's were able to generate more of these ideas than participants exposed to IBM logo's. In addition, Fitzsimons et al. found that goal-relevant brands, i.e., brands that may evoke goal based priming effects, may evoke behaviour that is more goal directed than brands that are less goal-relevant. These authors also suggested that brands may evoke behaviour that may be opposite to the expected behaviour, caused, for example, by the gender of the target that displays brands. For example, although the brand Tiffany's may be linked to femininity, it may evoke more masculine behaviour in males. The present research examined if exposing men and

women to brands that are important to them from a parental investment theory perspective (Trivers, 1972), like social status for men and physical attractiveness for women, will affect their non-verbal behaviour.

### **The present research**

It was expected that men and women would behave differently depending on the brands exhibited by their interaction partners. Research by Tiedens and Fragale (2003) has shown that an individual who encounters a high status person, will respond in a complimentary way, that is, with submissive behaviour reflecting a low status. In the current research it was suggested that, in dyadic interactions with strangers, the brands these strangers display will provide information about the stranger's status in the social hierarchy, which in turn will influence participants' non-verbal behaviour towards this stranger. Thus, the aim was to examine whether dyadic interaction with a male or female confederate is influenced by the fact that he or she is wearing and surrounded by brands that either signal high or no competence (Study 5.1), high or low competence (Study 5.2), and high or low sophistication (Study 5.3). The present research specifically focussed on the effects of these brand characteristics on non-verbal behaviour, as well as on social dominance and aggressive dominance (based on Kalma, 1989).

Specifically, it was expected that men will show more low status non-verbal behaviour during interaction with a male confederate who is surrounded by brands that signal high brand competence than men who interact with a male confederate who is not surrounded by these brands or who is surrounded by brands that signal low competence. For women, similar effects were expected for brand sophistication. That is, women were expected to show more low status non-verbal behaviour during interaction with a female confederate who is surrounded by brands that signal high brand sophistication than women who interact with a female confederate who is surrounded by brands that signal low brand sophistication. In addition, it was expected that when men who interact with a female who is surrounded by brands that signal high brand competence, will show more high status behaviour than men who interact with a female who is surrounded by brands that signal low brand competence. In this situation, men may unconsciously try to impress the female confederate by showing high status behaviour. In addition, also females may show high status behaviour during interaction with a female confederate who signals high brand competence compared to interaction with a female confederate who signals low brand competence. Females will try to compete with other women as a result of intrasexual competition. In Study

5.3 male and female participants interacted with a male confederate who is surrounded by brands that signal high or low brand sophistication. Chapter 3 already showed men to be affected by high female attractiveness pictures and in the current research this issue will be explored further. It was expected that men will show high status behavior, and females low status behaviour during interaction with a male who is surrounded by brands that signal high brand sophistication.

In the present study non-verbal behaviour in response to strangers displaying brands was observed, recorded and analysed. To date, not many researchers conducted observational research in this domain. Because non-verbal behaviour occurs mainly automatically (Bargh & Chartrand, 1999) the present research is unique in providing information on how individuals respond without direct conscious awareness to others wearing high or low status brands. This is important because individuals may not always be aware of how they interact with others (Mussweiler, Rüter & Epstude, 2004). As a consequence, assessing intended behaviours by means of questionnaires only may reveal different results. In the current research, different types of behaviour were selected. It was decided to focus on the frequency of nodding and 'looking at the confederate while *listening*', which are indicators of low status behaviour (Aygyle, 1994). In addition, it was decided to focus on the frequency of interrupting and 'looking at the confederate while *talking*', which are indicators of high status behaviour (Argyle, 1994). In addition to these observations, after their interaction with the confederate, two additional dependent variables were assessed by means of questionnaires, i.e., the general tendency of an individual to behave in a socially or aggressively dominant way (as taken from Kalma, 1989). It was expected that men will report higher social dominance than women in general, but that men who are exposed to a male confederate who signals high brand competence will report higher social and aggressive dominance than men who are exposed to a male that signals low brand competence. Although males may not show actual high status behavior, they may report social dominance intentions as a form of cognitive dissonance (Festinger, 1957).

## PRE-TESTING BRANDS<sup>2</sup>

### *Measures and Procedure*

Based on the same pre-test as in Chapter 4, the higher and lowest brands in the brand competence and brand sophistication conditions were selected by 100 participants ( $M$  age = 24.5 years,  $SD = 3.3$ ).

As a result, for high brand competence Coca Cola (soda;  $M = 3.84$ ,  $n = 20$ ), Hugo Boss (clothing;  $M = 4.0$ ,  $n = 19$ ) and *Quote* (a Dutch financial magazine;  $M = 3.94$ ,  $n = 14$ ) were selected. For low brand competence Fernandez (soda,  $M = 2.2$ ,  $n = 7$ ), *Privé* (a Dutch gossip magazine;  $M = 2.14$ ,  $n = 17$ ) and Australian (clothing;  $M = 2.19$ ,  $n = 18$ ) were selected. Brands included in the high brand sophistication dimensions were Gucci (clothing;  $M = 4.29$ ,  $n = 17$ ), Perrier (soda;  $M = 3.89$ ,  $n = 14$ ) and *Cosmopolitan* (magazine;  $M = 4.01$ ,  $n = 17$ ). Brands that scored low on brand sophistication were 3es cola (soda;  $M = 1.89$ ,  $n = 20$ ), *Computer Idee* (Dutch magazine;  $M = 2.1$ ,  $n = 12$ ) and Australian (clothing;  $M = 1.54$ ,  $n = 19$ ).

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2 The author gratefully thanks Moussa El Farouk, Vincent Trorpin and Mascha Maasland for their contribution in collecting the pre-test data.

## STUDY 5.1

### BRAND COMPETENCE, MALE CONFEDERATE<sup>3</sup>

The aim of Study 5.1 was to investigate whether exposure to brands that signal high brand competence will affect males' high status behaviour and their self-reports on the social dominance and aggressive dominance scales.

#### METHOD

##### *Participants and Design*

In total one hundred twenty five participants, 64 male (*Mean age* = 21.07, *SD* = 2.65) and 61 female (*Mean age* = 19.53, *SD* = 1.72) first year students from Stenden University of Higher Professional Education in Leeuwarden were randomly assigned to one of two conditions: high brand competence or no brand competence. The procedure in this study was approved by the Ethical Committee Psychology of the University of Groningen.

##### *Materials and Procedure*

Participants were told that they participated in an experiment about the development of a new game. Upon arrival to the lab they were brought in contact with a male confederate named 'Leo', who was introduced as an employee of a game development company. Based on the pre-test's results, in the high brand competence condition the confederate was wearing a Hugo Boss cardigan and had two branded products on his desk: a bottle of Coca Cola and an issue of Quote magazine (a Dutch financial magazine). In the control condition there was no brand on the confederates' cardigan, and there were no products on his desk. The male confederate briefly explained the rules of the game. The game was presented as a sharing candy game in which participants were given a choice of four possibilities of sharing some candies with the confederate.

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3 Fennis, B.M. (2008) Branded into submission: brand attributes and hierarchization behaviour in same-sex and mixed-sex dyads. *Journal of Applied Social Psychology*, 38 (8): 1993 – 2009.  
The stimulus materials, dependent measures and dataset of the male part of this participant sample were unfortunately used in this article without the permission of this dissertation's author.  
The results of the current study were also published in the master thesis of the current author (Ras, 2003).



Each possibility had a different way of sharing the candy to both parties, giving more candy to the confederate, more to the participant, or sharing the candy equally. This process was followed six times. Each game presented different sharing possibilities. The game and its explanation took approximately 5 minutes per total game. Participants were asked permission to be filmed during the game by two cameras, supposedly for internal review. Different types of participants' non-verbal behaviour during the games were independently rated by two judges. A high frequency of nodding and a high frequency of 'looking at the confederate *while listening*' were included as two measures of low status behaviour. The frequency of interrupting and the frequency of 'looking at the confederate *while talking*' were included as two measures for high status behaviour.

After the game, of which the games' results did not differ between the different conditions participants filled out a questionnaire taken from Kalma, which contained two constructs, i.e., sociable dominance ( $M = 30.44$ ,  $SD = 4.74$ ) and aggressive dominance (Kalma, 1989;  $M = 21.64$ ,  $SD = 4.52$ ). The sociable dominance scale as developed by Kalma, will be referred to as the social dominance scale and consists of 8 items that were assessed on a 9-point Likert-scale response format (1= totally not descriptive, 9 = very descriptive;  $\alpha = .73$ ). Example items are 'I don't experience problems with thinking of subjects to talk about in a group of people' and 'People often turn to me when a decision must be made'. The aggressive dominance scale consists of 7 items which were answered on a 9-point Likert-scale response format (1= totally not descriptive, 9 = very descriptive;  $\alpha = .55$ ). Example items are 'I can lie without it being noticed' and 'I make smart sarcastic remarks towards people who I think deserve it'. After the participants filled out and returned their questionnaire, they were thanked and debriefed.

## RESULTS AND DISCUSSION

### *High status behaviour*

For interrupting no significant main effects were found of Brand competence [ $F(1,121) = 1.73$ , *ns*,  $\eta^2 = .01$ ] or Participant sex [ $F(1,121) = .07$ , *ns*,  $\eta^2 = .00$ ]. Also no interaction effect of Brand competence and Participant sex on interrupting was found:  $F(1,121) = 1.46$ , *ns*,  $\eta^2 = .01$ .

There was a significant effect of Brand competence on 'looking at the confederate while talking',  $F(1,121) = 8.98$ ,  $p = .01$ ,  $\eta^2 = .07$ . Participants who interacted with the confederate who signalled high brand competence looked significantly more often at the

confederate while talking to the confederate ( $M = 6.92, SD = .45$ ) than participants who interacted with the confederate who signalled no brands ( $M = 5.03, SD = .45$ ). No main effect of Participant sex [ $F(1,121) = .00, ns, \eta^2 = .00$ ] and no significant interaction effect between Brand competence and Participant sex on 'looking at the confederate while talking' was found [ $F(1, 121) = .53, ns, \eta^2 = .01$ ].

### Low status behaviour

For nodding no main effects were found of Brand competence [ $F(1,121) = 2.17, ns, \eta^2 = .02$ ] and Participant sex [ $F(1,121) = 1.03, ns, \eta^2 = .01$ ]. A significant interaction effect emerged of Brand competence and Participant sex on nodding [ $F(1,121) = 5.49, p < .05, \eta^2 = .04$ ]. Men nodded significantly more often in the high brand competence condition ( $M = 11.69, SD = 1.03$ ) than in the no brand condition [ $M = 7.72, SD = 1.03, F(1,62) = 6.52, p = .01, \eta^2 = .01$ ]. Women nodded with similar frequencies in the no brand condition ( $M = 9.10, SD = 1.06$ ) as in the high brand competence condition [ $M = 8.19, SD = 1.04, F(1,59) = .44, ns$ ; see Figure 5.1].

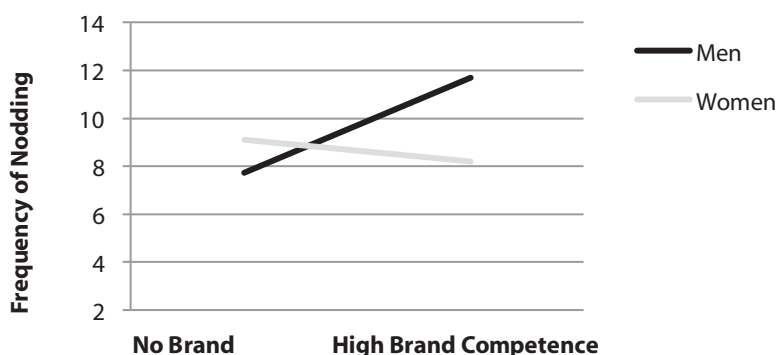


FIGURE 5.1. Frequency of nodding for men and women in dyadic interaction with a male confederate who signalled no brand competence or high brand competence.

There was also a significant main effect of Brand competence on 'looking at the confederate while listening'. Participants who interacted with a male confederate who signalled high brand competence, looked significantly more often at the confederate while listening to him ( $M = 18.62, SD = .77$ ) than participants who interacted with a male

confederate who signalled no brands [ $M = 15.96$ ,  $SD = .78$ ,  $F(1, 121) = 5.91$ ,  $p < .05$ ,  $\eta^2 = .05$ ]. No main effect of Participant sex on 'looking at the confederate while listening' was found [ $F(1,121) = .35$ ,  $ns$ ,  $\eta^2 = .01$ ], nor a significant interaction effect [ $F(1,121) = .001$ ,  $ns$ ,  $\eta^2 = .00$ ].

### Social Dominance

The analysis revealed a main effect of Participant sex on social dominance. Men reported higher social dominance than women [ $M = 4.01$ ,  $SD = .07$  vs.  $M = 3.60$ ,  $SD = .71$ ;  $F(1,118) = 16.97$ ,  $p < .001$ ]. In addition, the interaction between Participant sex and Brand competence was significant ( $F(1,118) = 16.97$ ,  $p = .01$ ,  $\eta^2 = .13$ ). Men reported higher social dominance after the interaction with the confederate who signalled high brand competence than after interaction with the confederate who signalled no brands [ $M = 4.13$ ,  $SD = .10$  vs.  $M = 3.89$ ,  $SD = .10$ ;  $F(1,60) = 3.24$ ,  $p = .07$ ]. In contrast, women reported similar social dominance after interaction with the male confederate who signalled no brands ( $M = 3.68$ ,  $SD = .10$ ) as after interaction with the male confederate who signalled high brand competence [ $M = 3.52$ ,  $SD = .10$ ,  $F(1,58) = 1.07$ ,  $ns$ ; see Figure 5.2].

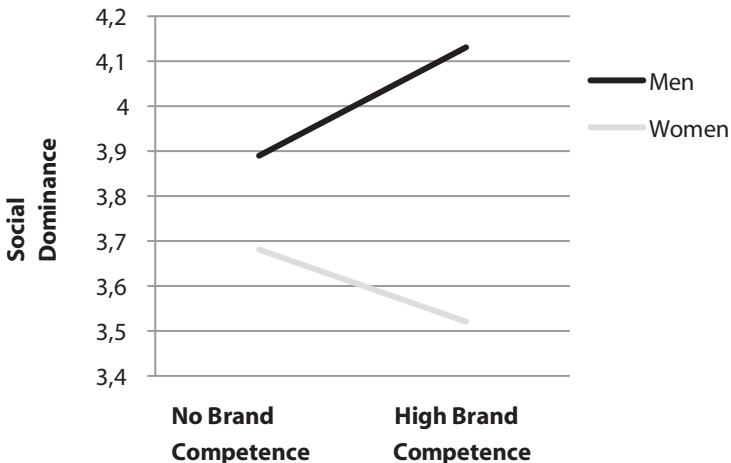


FIGURE 5.2. Social dominance of men and women in dyadic interaction with a male confederate who signalled no brand competence or high brand competence.

### *Aggressive Dominance*

The analysis revealed no main effects of Participant sex or Brand competence on aggressive dominance. In addition, no interaction effects between Participant sex and Brand competence were found.

In general, the hypotheses were confirmed. In terms of nodding men showed more low status behaviour during interaction with a male confederate who signalled high brand competence compared to the male confederate who signalled no brand competence. To conclude, Study 5.1 confirmed the hypothesis that men show more indicators of low status behaviour after dyadic interaction with a male confederate who signalled high brand competence than to a male confederate who signalled no brands. Women nodded similarly in both conditions. In contrast to their behaviour, men reported higher social dominance in the high brand competence condition than in the no brand competence condition. This was also the other way around for women. Aggressive dominance did not show significant effects in this study. Remarkably, women showed more low status behaviour when they interacted with a male confederate who was not surrounded by brands than when they interacted with a male confederate who was surrounded by brands. This suggests that, whereas men tend to feel they compete with the male confederate and therefore show low status behaviour, women may, unconsciously, make an effort at attracting him.

## STUDY 5.2

### BRAND COMPETENCE, FEMALE CONFEDERATE

Study 5.1's results clearly showed an influence of high competence brands on participants' behaviour. Since this first study used an 'empty' control condition, i.e., without any brands present, the question remains whether low competence brands may evoke behavioural results that are opposite to the influence of high competence brands. Therefore, Study 5.2 included a condition using low competence brands, making it possible to compare the influence of low competence brands with the influence of high competence brands. In addition, the male confederate was changed to a female confederate, since it is possible that Study 5.1's results are partly due to the fact that the confederate was a male.

#### METHOD

##### *Participants and Design*

In total one hundred twenty participants, 60 male (*Mean age* = 21.52, *SD* = 3.02) and 60 female (*Mean age* = 20.87, *SD* = 2.70) Dutch students of the Northern University of Higher Professional Education participated in this study. The design was a 2 (Brand competence: low/high) x 2 (Participant sex: male/female) between factor design in which participants were randomly assigned to one of two conditions in which they were either presented with brands of low or high brand competence. The procedure in this study was approved by the Ethical Committee Psychology of the University of Groningen.

##### *Materials and Procedure*

The same experimental procedure was followed as in Study 5.1, and the same brands were used in the high brand competence condition. This study differed in two ways from Study 5.1. First, instead of using no brands, low competence brands from the pre-test were used in the manipulation of low brand competence. Second, the gender of the confederate was female. A female confederate named 'Ellen' was surrounded by brands signalling high or low brand competence as reported in the pre-test. Similar to Study 5.1, participants were asked for permission to record their verbal and non-verbal behaviour during the game. After interacting with the confederate, participants filled out the dominance questionnaire which consisted of the social ( $\alpha = .69$ ) and aggressive

dominance scale ( $\alpha = .59$ ). After the participants had filled out the questionnaire, they were thanked for their participation and debriefed.

## RESULTS AND DISCUSSION

### *High status behaviour*

There was a significant effect of Participant sex on interrupting. Men interrupted the female confederate significantly more often than women [ $M = 1.70$ ,  $SD = .19$  vs.  $M = 1.06$ ,  $SD = .20$ ;  $F(1,115) = 5.38$ ,  $p < .05$ ,  $\eta^2 = .05$ ]. No significant main effect was found of Brand competence:  $F(1,115) = 2.77$ ,  $ns$ ,  $\eta^2 = .02$ . However, a significant interaction effect was found between Brand competence and Participant sex on interrupting:  $F(1,115) = 4.61$ ,  $p < .05$ ,  $\eta^2 = .04$ . Women interrupted the female confederate more often when she signalled low brand competence ( $M = 1.59$ ,  $SD = .28$ ) than when she signalled high brand competence ( $M = .53$ ,  $SD = .28$ ). Men interrupted the female confederate similarly when she signalled high brand competence ( $M = 1.77$ ,  $SD = .28$ ) as when she signalled low brand competence ( $M = 1.63$ ,  $SD = .28$ ); see Figure 5.3).

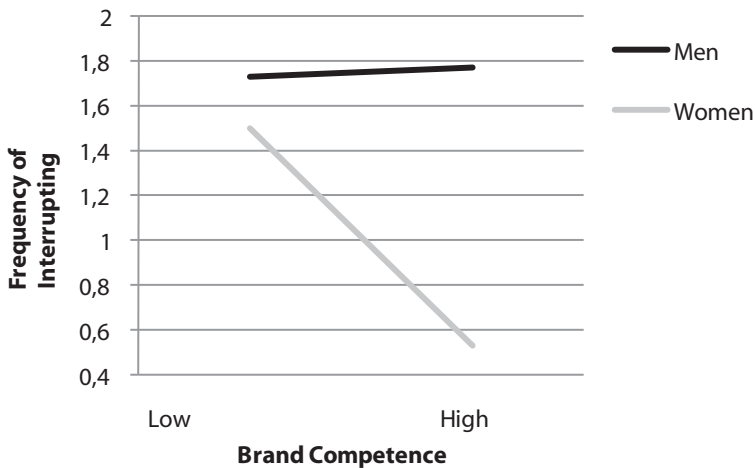


FIGURE 5.3. Frequency of interrupting of men and women in dyadic interaction with a female confederate who signalled either low or high brand competence.

Also a significant main effect of Participant sex was found on 'looking at the confederate while talking' [ $F(1,115) = 9.83, p < .01, \eta^2 = .08$ ]. Men looked more often at the confederate while talking than women did ( $M = 20.83, SD = 1.34$  vs.  $M = 14.85, SD = 1.34$ ). No significant main effect was found of Brand competence [ $F(1,115) = .53, ns, \eta^2 = .01$ ] nor an interaction between Participant sex and Brand competence on 'looking at the confederate while talking' [ $F(1,115) = .98, ns, \eta^2 = .01$ ].

### *Low status behaviour*

There was a significant main effect of Brand competence on nodding: participants who interacted with a female confederate who signalled low brand competence nodded more often than participants who interacted with the female confederate who signalled high brand competence [ $M = 15.35, SD = .82$  vs.  $M = 9.23, SD = .82; F(1,116) = 27.74, p < .01, \eta^2 = .19$ ]. No significant main effect was found of Participant sex [ $F(1,116) = .002, ns, \eta^2 = .00$ ] nor a significant interaction effect between Brand competence and Participant sex [ $F(1,116) = .31, ns, \eta^2 = .00$ ].

A main effect was found of Brand competence on 'looking at the confederate while listening': participants who interacted with a female confederate who signalled high brand competence looked significantly less often at the confederate while listening than participants who interacted with a female confederate who signalled low brand competence ( $M = 19.62, SD = 1.48$  vs.  $M = 32.15, SD = 1.48; F(1,116) = 35.86, p < .01, \eta^2 = .24$ ). No main effect of Participant sex on 'looking at the confederate while listening',  $F(1,116) = .082, ns, \eta^2 = .00$ , nor a significant interaction effect was found,  $F(1,116) = .012, ns, \eta^2 = .00$ .

### *Social Dominance*

The analysis with Brand competence and Participant sex as fixed factors and Social dominance as a dependent variable showed a main effect of Participant sex. Similar to Study 5.1, men reported higher social dominance than women [ $M = 3.67, SD = .62$  vs.  $M = 3.45, SD = .56; F(1,115) = 3.98, p = .05$ ]. No significant main effect of Brand competence or interaction effects were found.

### *Aggressive Dominance*

The analysis showed a main effect of Participant sex. Men reported more aggressive dominance than women [ $M = 3.30, SD = .09$  vs.  $M = 2.99, SD = .09; F(1,115) = 5.56, p$

= .02]. No main effect of Brand competence nor an interaction effect between Brand competence and Participant sex was found.

Summarizing, the results of Study 5.2 did not confirm the hypothesis that men show more high status behaviour, i.e., interrupting, than women when interacting with a female confederate. In addition, women showed more high status behaviour during interaction with a female confederate who signalled low brand competence than during interaction with a female confederate who signalled high brand competence. In terms of their non-verbal behaviour, women seemed to contrast themselves with the confederate who signalled high brand competence. A possible explanation is that female participants felt intimidated by the high status female confederate, causing them to behave in a low status way.

In Study 5.3 the present experiment was replicated with brands reflecting high and low brand sophistication. In this experiment, similar to Study 5.1, again a male confederate participated, since it might be the case that the mere presence of a woman evokes female participants' intrasexual competition tendencies independent of the brands that are present. Therefore, in Study 5.3, it was investigated how interaction with a male confederate who signalled high or low brand sophistication would affect men's and women's high and low status behaviour, social dominance and aggressive dominance.



## STUDY 5.3

### BRAND SOPHISTICATION, MALE CONFEDERATE

Because in Chapter 3 men were found to be affected by pictures of high female attractiveness, the current study aimed to examine the effects of exposure to a male confederate surrounded by brands that signal high sophistication, expecting participants' to show high assertive behaviour and social and aggressive dominance. The procedure in this study was similar to that in Study 5.2, except for the individual and the brand dimension in the manipulation. Whereas in Study 5.2 this was a female confederate, in Study 5.3 this was a male confederate. Also the brand dimension that was manipulated changed, from brand competence in Study 5.2 to brand sophistication in Study 5.3.

#### METHOD

##### *Participants and Design*

In total, one hundred twenty three, 64 male (*Mean age* = 21.78, *SD* = 5.31) and 59 female (*Mean age* = 21.17, *SD* = 3.46) students from the Northern University of Higher Professional Education in Leeuwarden, the Netherlands were randomly assigned to one of the two conditions that were reflected by high and low brand sophistication. The procedure in this study was approved by the Ethical Committee Psychology of the University of Groningen.

##### *Materials and Procedure*

The procedure of this experiment was similar to Study 5.2's procedure, except for two elements. The brand dimension was changed from brand competence to brand sophistication. The sex of the confederate was similar to the sex of the confederate in Study 5.1: a male confederate called 'Leo' assisted the participants in this experiment.

Based on the results from this chapter's pre-test, in the high brand sophistication condition the male confederate named 'Leo' was wearing a Gucci T-shirt and had a Perrier (soda), and Cosmopolitan (magazine) on his desk. In the low brand sophistication condition Leo was wearing an Australian T-shirt and had a First Choice cola (soda) and a Computer Idee (Dutch computer magazine) on his desk.

Similar to Study 5.1 and 5.2 participants were asked for permission to record their behaviour while they would supposedly play a game. After the game participants were

requested to fill out a questionnaire which contained the social dominance scale ( $\alpha = .72$ ) and the aggressive dominance scale ( $\alpha = .52$ , Kalma, 1989). After participants returned their questionnaire, they were thanked for their participation and debriefed.

## RESULTS AND DISCUSSION

### *High status behaviour*

For interrupting no significant main effects were found of Brand sophistication ( $F(1,119) = .008$ , *ns*,  $\eta^2 = .00$ ), nor Participant sex [ $F(1,119) = 2.51$ , *ns*,  $\eta^2 = .02$ ]. In addition, no significant interaction effect was found between these two variables, ( $F(1,119) = .72$ , *ns*,  $\eta^2 = .01$ ). For 'looking at the confederate while talking' no significant main effect was found of Brand sophistication,  $F(1,119) = 3.17$ , *ns*,  $\eta^2 = .03$ , Participant sex,  $F(1,119) = .33$ , *ns*,  $\eta^2 = .003$ , nor was a significant interaction effect found between these two variables,  $F(1,119) = .60$ , *ns*,  $\eta^2 = .01$ . In sum, none of the conditions in the experiment affected indicators of high status behaviour.

### *Low status behaviour*

There was a significant main effect of Brand sophistication on nodding,  $F(1,119) = 6.09$ ,  $p < .05$ ,  $\eta^2 = .05$ . Participants who interacted with a male confederate who signalled low brand sophistication nodded more often than participants who interacted with a male confederate who signalled high brand sophistication. ( $M = 24.16$ ,  $SD = 4.17$  vs.  $M = 9.96$ ,  $SD = 3.97$ ). There was no significant main effect of Participant sex on nodding,  $F(1,119) = .18$ , *ns*,  $\eta^2 = .001$ , nor a significant interaction effect,  $F(1,119) = .42$ , *ns*,  $\eta^2 = .004$ . For 'looking at the confederate while listening' no main effects were found of Brand sophistication,  $F(1,119) = .22$ , *ns*,  $\eta^2 = .002$ , or Participant sex,  $F(1,119) = 1.44$ , *ns*,  $\eta^2 = .012$ , nor a significant interaction effect,  $F(1,119) = 1.77$ , *ns*,  $\eta^2 = .02$ .

### *Social Dominance*

The analysis showed a significant main effect of Participant sex. Similar to Study 5.1 and 5.2, men reported *higher* social dominance ( $M = 3.78$ ,  $SD = .08$ ) than women ( $M = 3.51$ ,  $SD = .08$ ,  $F(1,119) = 5.78$ ,  $p < .05$ ). A marginally significant main effect was found for Brand sophistication. That is, participants who interacted with a male confederate who signalled high brand sophistication reported a higher level of social dominance ( $M = 3.74$ ,  $SD = .08$ ) than participants who interacted with a male confederate who signalled

low brand sophistication ( $M = 3.54$ ,  $SD = .08$ ;  $F(1,119) = 2.98$ ,  $p < .10$ ). No significant interaction effects were found.

### *Aggressive Dominance*

The analysis showed a main effect of Participant sex. Men reported a higher level of aggressive dominance than women [ $M = 3.45$ ,  $SD = .09$  vs.  $M = 3.11$ ,  $SD = .09$ ;  $F(1,119) = 6.81$ ,  $p = .01$ ]. No main effect of Brand competence or an interaction effect was found.

To summarize, in contrast to the expectations, Study 5.3 found no interaction effects between Participant sex and Brand sophistication. However, similar to Study 5.1 and Study 5.2, men again reported higher social dominance than women. In addition, similar to Study 5.2, men also reported higher aggressive dominance than women.

## **GENERAL DISCUSSION**

The current research was performed to investigate whether dyadic interaction with a male or female confederate who signalled either brand competence or brand sophistication would influence participants' non-verbal behaviour and their level of social and aggressive dominance. From recent findings on conspicuous consumption and intrasexual competition (Dunn & Searle, 2010; Janssens et al., 2011; Sundie et al., 2011), it seems that symbolic and symbolic-utilitarian brands are used to express the individual's personality to others, and that brands may also be used to compete with same-sex others in the attraction of potential mates. It was therefore hypothesized that men would prefer brands that may enhance their social status, whereas women would prefer brands that enhance their physical attractiveness. In the present research these motives were operationalized by, respectively, the brand personality dimensions of brand competence and brand sophistication.

It was hypothesized that a dyadic interaction with a male confederate who signalled high brand competence, would increase the low status behaviour of men. Women, on the other hand, were expected to show more low status behaviour during dyadic interaction with a female confederate who signalled high brand sophistication. In addition, during interaction with a female confederate who signalled high brand competence, men were expected to show more high status behaviour, whereas women were expected to show more low status behaviour. It was also expected that men would

report more social and aggressive dominance. In addition, it was expected that men who interacted with a male confederate who signalled high brand competence, would report higher social dominance and aggressive dominance than men who interacted with a male confederate who signalled low brand competence. To investigate these hypotheses three studies were conducted in which non-verbal behaviours were the main dependent variables. In line with the expectations, Study 5.1 showed that men indeed nodded more often – a non-verbal sign of low status behaviour - during dyadic interaction with a male confederate who signalled high brand competence. Women nodded similarly in both conditions. In contrast with the predictions, for the frequency of interrupting, no significant interaction effect was found between gender and brand competence signalled by the confederate. A possible explanation is that male participants felt lower in status as they were not familiar with the game and the confederate introduced himself as a representative of a game development office, suggesting that he was an expert in games, outperforming the participant in this regard. This may have caused men to show more low status behaviour, because, at least in a verbal discussion with the confederate, they would not be able to 'win'. For women a mating motive may have been evoked, causing them to show more high status behaviour during interaction with the male confederate who signalled high brand competence compared to the male who signalled no brands. Although no rivals were present, women may have displayed this behaviour unconsciously to impress the male and potential rivals.

Interestingly, whereas in Study 5.1 men showed more low status behaviour in response to a male confederate, they reported higher social dominance. In line with the literature, the present research shows that there is a difference in the behaviour that men report in questionnaires and the non-verbal behaviours that are assessed by means of observation (Reis & Gable, 2000). A possible explanation is that the male participants may have felt threatened by the male in the experiment, evoking a competitive mechanism, which may have caused the low status behaviour. They showed low status behaviour, and they may have compensated this behaviour by reporting higher social dominance in their self-reports. Again, for women the reverse was found, with women reporting higher social dominance after dyadic interaction with a male confederate who signalled no brands than after dyadic interaction with a male confederate who signalled high brand competence.

In Study 5.2 a female confederate was surrounded by brands that signalled high or low brand competence. For men, no significant effects were found of exposure to a female who signalled high brand competence on high status behaviour. Recent re-

search on the effects of conspicuous consumption on men's testosterone levels shows that when a female is present as a female confederate, testosterone levels of male participants increase (Saad & Vongas, 2009), causing men to behave more dominantly. In addition, it is possible that men feel they should try to impress the female who signalled high brand competence to attract her as a potential mate causing more high status behaviour in men. (Archer, 2006; Roney, Mahler & Maestripieri, 2003).

Women showed the opposite behaviour: they interrupted the female confederate significantly more often when she signalled low brand competence than when she signalled high brand competence. The latter finding suggests that women may also compete with other women in the brand competence dimension. It is possible that women were less impressed by the female confederate who signalled low brand competence than by the female confederate signalling high brand competence. Therefore, female participants may have shown less assertive behaviour after exposure to a female confederate who signalled high brand competence. Recent research by Wang and Griskevicius (2014) found that, whereas men seem to expose their luxury brands to mainly impress potential mates, women seem to expose luxury brands to impress other women. Although it was hypothesized that women would show high status behavior during interaction with a female confederate who signalled high brand competence, female participants may have been affected by the high brand competence brands signalled by the female confederate, resulting in low status behavior among women.

In Study 5.3 brand sophistication was manipulated (low vs. high) and it was expected that women would show more low status behaviour during interaction with a male confederate who signalled high brand sophistication than during interaction with a male confederate who signalled low brand sophistication. In contrast to the expectations, no significant interaction effects between participant sex and exposure to brands that differed in brand sophistication on low or high status behaviour were found in this study. A possible explanation is that females were confused during the interaction with the male confederate who signalled high brand sophistication since brands that signal high brand sophistication are usually worn or used by women. It is highly likely that the manipulation would have been resulted in other effects when the confederate would have been a female. In line with previous studies (e.g., Kalma, 1989), all three studies in this chapter found men to report higher social dominance than women. From a parental investment perspective this can be expected. Since men compete more than women in the social status domain, they are more likely to report higher social dominance than women.

Although Chapter 5's results are somewhat mixed, its findings may contribute to the consumer behaviour literature and specifically to recent research on automatic effects on motivated behaviour (Ferraro, Bettman & Chartrand, 2009) and incidental consumer brand encounters (Fitzsimons et al., 2008). Research by Ferraro et al. (2009) has shown that encountering people holding or wearing certain brands affects behaviour, even when these brand encounters were incidental and largely outside participants' awareness. In their studies participants were implicitly exposed to a water brand 'Dasani' several times and the higher the frequency of the implicit exposure to this brand, the more likely participants were to subsequently select this brand out of four presented water brands. A strength of the present research is that it focused on non-verbal behaviours and the fact that participants were not aware that the brands included in the study played a role neither in the manipulation nor of the assessment of their non-verbal behaviours. As a result, the relatively natural occurrence of verbal (interruptions) and non-verbal behaviour could be assessed. Because participants were asked to play a game with the confederate, brands could be presented in a non-obtrusive way, i.e., in a similar way as people encounter most brands each day.

By means of this design, the current research shows that brand encounters influence actual behavioural tendencies (in line with Ferraro et al., 2009; Fitzsimons et al., 2008) in a way that go beyond the consumer behaviours examined by previous research. The present studies show that brands and the characteristics they reflect may shape first impressions of strangers and have consequences for the way people interact with individuals using or wearing these brands. In addition, the present studies show that brand characteristics may evoke different behavioural responses in men and women. In addition to confirming the relevance of status-related or competence brands for men in the mating domain (Griskevicius et al., 2007; Saad & Vongas 2009; Sundie et al., 2011), the current studies show that brand sophistication might also be relevant for men, even if a mating goal is not actively activated. It is possible that, although a mating goal is not explicitly activated, mere indications of female physical attractiveness suffice to, unconsciously, trigger mating goals. Using these insights in marketing and advertising may increase sales figures for marketers. Especially men may be motivated to appear more dominant than they actually are and brands high in brand competence may help men to achieve this goal. For women, brands that may increase their physical attractiveness or use this aspect in their advertising may increase sales figures.

### **Limitations and suggestions for future research**

This research is the first experiment on consumer behaviour that focussed on the *behavioural* effects of dyadic interactions with a male and female confederate who either signalled high, low or no brand competence or high or low brand sophistication. Although the results are interesting, they are also mixed and not completely in line with the initial expectations. Thus, more research is needed to more precisely examine gender differences in behaviour in response to brands differing in their characteristics. For instance, performing a gender specific experiment, that includes only male participants with a male confederate, may help understand in more detail how and why males precisely respond to brands high in characteristics that are important to them. In addition, it would be interesting to study the specific brands that evoke the strongest effects among men. Research may also study the extent to which the effects of brand characteristics depend on the brand characteristics participants surround themselves with. More research may also be performed on different non-verbal behaviours, to have a better understanding of the behaviour that is most influenced by exposure to brands.

To conclude, the present research adds to the recent findings in the consumer behaviour literature that brand evaluations can be an unconscious process and that brand encounters do indeed affect behaviour (Ferraro et al., 2009; Fitzsimons et al., 2008). Moreover, these studies are the first to provide more insight in the evolutionary processes which affect the influence of brands on the reported assertive behaviour of men and women.

# Chapter 6

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## General Discussion

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## INTRODUCTION

In the past decades, conspicuous consumption and intrasexual competition motives have been introduced in consumer behaviour research. Since conspicuous consumption - i.e., buying goods and spending money to show off one's wealth and status - currently is mainly visible in the brands that are bought and used by individuals, brands were the main focus of the current research. Brands continuously seem to have a strong influence on consumer behaviour, even during recessions, and in both Western and developing countries (Van Kempen 2003, 2004). Recently, some researchers referred to brands as the 'churches of modern times' (Shachar et al., 2011) because the intensity in which some consumers are involved with their brands seems similar to the intensity of religions.

Conspicuous consumption has existed since thousands of years and it has been suggested that such consumption may be adaptive (Sundie et al., 2011). Researchers have indeed provided evidence for mating success after showing off branded products (Sundie et al., 2011; Janssens et al., 2011, Griskevicius et al., 2007). Men are not only perceived to be more attractive when they wear a white shirt with a tie, a navy blazer and a Rolex on their wrist than when merely wearing a Burger King's costume, women are also more interested in engaging in different types of relationships with them, ranging from sex to marriage (Townsend & Levy, 1990). From an evolutionary perspective, the brands that attract men and women will differ, with men investing more in displaying and improving their social status (Apicella et al., 2008; Dunn & Searle, 2010) and women investing more in their physical appearance (Buss, 1999; Saad & Gill, 2000; Symons, 1995). The present research suggests that, as a consequence, men and women will be affected differently by brands that are related to the domain in which they compete

with same-sex others, i.e., for men social status and for women physical attractiveness. The current research studied the effects of exposure to brands that signal high social status and physical attractiveness on self-rated status, brand appreciation, mood, and self-rated physical attractiveness of men and women. Also the effects of exposure to men and women who signal high, low or no brand competence or high or low brand sophistication on self-reported assertive and observed high and low status behaviour and self-reported social dominance were examined.

Although some of the present research's hypotheses were confirmed, other results raised new questions. First, a short summary of the main findings of each chapter will be provided, after which implications, limitations and a final conclusion are described.

## **SUMMARY OF MAIN FINDINGS**

### **Chapter 2**

In this Chapter the effects of exposure to a high status (Jaguar) or low status (Volvo) car on self-rated status and brand appreciation were studied. Since individuals may differ in the value they attach to status, the importance of status consumption (Eastman, Goldsmith & Flynn, 1999) to an individual was included as a moderating variable. Men and women were exposed to either a picture of a car that signalled high status (Jaguar) or a picture of a car that signalled low status (Volvo). As hypothesized, men who found status consumption important reported lower self-rated status after exposure to the high status car than after exposure to the low status car. Among men who did not find status consumption important, no differences were found in self-rated status after exposure to the high or low status car. Confirming the hypothesis, it was also found that the Jaguar was appreciated more than the Volvo. But, contrary to expectations, men who found status consumption important appreciated the Jaguar less than the Volvo. In contrast, men who scored low on the importance of status consumption equally appreciated both brands. For women no effects were expected nor found on both self-rated status and brand appreciation after exposure to the two stimuli. To sum up, the results from this chapter confirmed previous research (Buss 1999; Townsend & Levy, 1990b) that showed status to be more important to men than to women. In addition, there were differences in the influence of exposure to high or low status products on self-rated status, especially among men who indicated that they considered status consumption important.

### Chapter 3

In Chapter 3 the effects of exposure to brands that signal physical attractiveness on self-rated attractiveness and mood were examined. Both male and female participants were briefly exposed to five pictures of products that are associated with high female physical attractiveness (pictures of perfume, make-up, and a glossy magazine) or five pictures of natural elements (grass, stones, water, and trees). Next, self-rated attractiveness and mood were measured. Since the importance of physical appearance may differ between individuals, the Physical Appearance Comparison Scale (Thompson, Heinberg & Tantleff, 1991) was included as a potentially moderating variable. It was hypothesized that men would report a better mood after exposure to pictures that signal high female physical attractiveness than women, whereas the opposite was expected for women. Results confirmed these expectations, but for women the effects on mood were not significant. In addition, these results were not affected by men's tendency to compare their own physical attractiveness with that of other men: independent of this tendency, men reported higher self-rated physical attractiveness after exposure to brands that signal high physical attractiveness than after exposure to nature pictures.

In addition, after being exposed to products signalling high female attractiveness men rated their physical attractiveness higher than women did. Interestingly, and contrary to the hypothesis, women who did not often compare their appearance with that of other women were not affected by exposure to the stimuli: they reported equally high levels of self-rated attractiveness in both conditions. As expected, women who compared their physical appearance often with the appearance of others reported a higher self-rated physical attractiveness after exposure to the high female attractiveness pictures than after exposure to the pictures of natural elements.

To sum up, the results of this chapter show that physical attractiveness may also be important for men, as it affected their self-rated physical attractiveness and mood. Contrary to the expectations, the results in this chapter showed assimilation effects for women with a tendency to compare their appearance with those of other women: they reported higher physical attractiveness after exposure to physical attractiveness pictures.

### Chapter 4

After confirming in the previous chapters that exposure to brands or products that signal either status or attractiveness may influence people's self-reported status and physical attractiveness, it was examined whether and how brands would influence

self-reports of behaviour. More specifically, in Chapter 4 the effects of brand sophistication and brand competence (see Aaker, 1997) on self-reported assertive behaviour of men and women was examined. First, a study was conducted to examine whether participants recognized the brand sophistication and brand competence dimensions when exposed to brands high and low on these dimensions. Three brand names, one of a clothing brand, one of a magazine brand, and one of a soda brand were presented to describe an individual, after which participants were asked to rate this individual on several personality traits (taken from Aaker, 1997). As hypothesized, the brands used in the manipulation scored high or low on the brand competence and brand sophistication dimension. This procedure was repeated four times: for high brand competence (Hugo Boss, Quote, Coca Cola), low brand competence (Australian, Privé, Fernandez), high brand sophistication (Gucci, Cosmopolitan, Perrier) and low brand sophistication (Australian, Computer Idee, 3-es Cola). The results of this study confirmed that men and women indeed perceived an individual who was surrounded by brands that signalled high brand competence as more competent than individuals surrounded by brands that signalled low brand competence. Likewise, participants assigned a similar level of sophistication to a person as the level of sophistication of the brands the person was surrounded with.

Next, Chapter 4 described two similar studies designed to measure the effects of exposure to a picture of a female who signalled or low high brand sophistication (Study 4.2) and a picture of a male who signalled high or low brand competence (Study 4.3) on subsequent self-reported assertive behaviour. Since some people may find brands and possessions more important than others, a materialism scale (Richins & Dawson, 1992) was included as a potentially moderating variable. The results of Study 4.2 showed that women reported more assertive behaviour after exposure to brands that signalled high brand sophistication than after exposure to brands that signalled low brand sophistication, despite their level of materialism. In addition, men who scored high on materialism reported overall more assertive behaviour than men who scored low on materialism. The results of Study 4.3, in which the focus shifted to the brand competence dimension, showed that men reported significantly less assertive behaviour in response to exposure to brands that signalled high brand competence than to brands that signalled low brand competence. For women the reverse was found. Materialism showed no significant effects in this study.

Thus, these studies suggest that men and women attribute those characteristics to an individual that are expressed by the brands he or she is surrounded with. In addition,

Chapter 4's studies showed that, as expected, men reported less assertive behaviour after exposure to brands that signalled high brand competence. Contrary to this finding, women reported more assertive behaviour after exposure to brands that signalled high brand sophistication. It seems that for men and women exposure to an evolutionary relevant domain, for women sophistication and for men competence, results in contrast effects for men and assimilation effects for women.

## Chapter 5

In the final empirical chapter of this dissertation the effects of brands on actual (in contrast to self-reported) assertive behaviour and self-reported social and aggressive dominance were examined. Three experimental studies were conducted in which male and female participants interacted with a male confederate who signalled either signalled high brand competence (Hugo Boss, Quote, Coca Cola) or no brand competence (Study 5.1), with a male confederate who signalled either high (Gucci, Cosmopolitan, Perrier) or low brand sophistication (Australian, Computer Idee, 3-es Cola: Study 5.3) and with a female confederate who signalled high or low brand competence (Australian, Privé, Fernandez: Study 5.2). In all three experiments non-verbal behaviours were recorded, observed and coded, to form high and low status behaviour measures. In addition, participants' tendency to act in a socially dominant way in daily life was assessed by means of self-report.

Results were largely in line with the results found in the previous chapters. In Study 5.1 men displayed more low status behaviour during interaction with a male confederate who signalled high brand competence than during interaction with a male confederate who signalled no brands, an effect that was only found for nodding. For women the reverse was found: women showed lower status behaviour during interaction with a male confederate who signalled no brands, than during interaction with a male confederate who signalled high brand competence – again, an assimilation effect. As in Chapter 4, women responded by assimilating, men by contrasting themselves.

Study 5.2 revealed that, in response to a female confederate, men did not show significantly more high status behaviour in the high brand competence condition. Note that this effect is in contrast to the effect found in Study 5.1 where men interacted with a male confederate: whereas in response to a male confederate who signalled high brand competence men showed more low status behaviour, in Study 5.2 no significant differences in status behaviour were found.

For women the effects were the opposite of the effects for men. For instance, women interrupted the female confederate more when she signalled high brand competence than when she signalled low brand competence. Finally, in all three studies, men reported higher social dominance than women.

## **IMPLICATIONS AND LIMITATIONS**

### **An evolutionary perspective on consumer behaviour**

The current research was based on an evolutionary-psychological perspective, and focused on dimensions deemed most relevant to males and females, i.e., social status and physical attractiveness respectively. This perspective was applied to the effects that exposure to brands may have on self-evaluations and behaviour. It was hypothesized that men who were exposed to brands that signalled high status or high brand competence would lower their self-rated status, self-reported assertive behaviour and high status behaviour. Women who were exposed to brands that signalled high physical attractiveness or high brand sophistication were expected to both report higher self-rated physical attractiveness and higher - self-reported and actual - assertive behaviour.

Overall, exposure to high status brands resulted in less dominance and a lower status among men. Study 2.1 showed that men lowered their self-rated status after exposure to a high status car, although this was only true for men who found status consumption important. In addition, in Study 4.3 it was found that men who were exposed to high brand competence, reported less assertive behaviour than men who were exposed to low brand competence. In Study 5.1 actual high and low status behaviour were measured as well as self-rated social dominance. In this study men who were exposed to high brand competence showed relatively low status behaviour in terms of more frequent nodding, but they reported at the same time a relatively high social dominance. A possible explanation is that a competitive mechanism was evoked because men were supposed to play a game with a male confederate and that they therefore showed low status behaviour. Afterwards they may have compensated for this low status behaviour by reporting a high level of social dominance.

Unexpectedly, the results of Study 3.1 showed that men reported higher physical attractiveness after exposure to pictures that signalled high female attractiveness, even though such an effect was only expected for women. However, in general, men reported higher self-rated attractiveness than women, and women tend to have a more accurate

view of themselves regarding their physical attractiveness as compared to men (Saad & Gill, 2009) and are more self-critical (Kopala-Sibley, Mongrain, & Zuroff, 2013). Similarly, Study 4.2 also showed that men were affected by brands that signalled high brand sophistication. In this study, in general, men who scored high on materialism reported more assertive behaviour in response to a female confederate who signalled high brand sophistication than men who scored low on materialism. Brand sophistication may also be connected to social status, and may therefore have – unconsciously - caused more assertive behaviour in men to impress a potential mate, even when an actual female target is not present. In addition, several studies have shown that male physical attractiveness may be a very important characteristic of male mate value, especially when men are evaluated by women for short-term relationships (Frederick & Haselton, 2007, Gangestad & Simpson, 2000). Illustrative is a study by Li and Kenrick (2006) that showed that for long-term mates, men prefer a potential partner of high physical attractiveness whereas women prefer a potential partner of high status, whereas, in contrast, for short-term mates both men and women prefer a potential mate high in physical attractiveness. Since dyadic interactions with the confederate were brief, they may have been interpreted as more similar to short-term mating situations than to long-term ones.

In Chapter 3, women who found physical appearance comparison important, reported higher self-rated physical attractiveness after exposure to high female attractiveness pictures than after exposure to pictures of natural elements. Studies 4.2 and 5.2 showed that women high in materialism reported more assertive behaviour after exposure to the picture of the female signalling high brand sophistication and during interaction with the female confederate who was surrounded by brands that signalled high brand sophistication than after exposure to the female confederate who signalled low brand sophistication. The finding that women reported more assertive behaviour in response to women signalling high attractiveness may be explained by the possible assimilation effects of social comparison (Mussweiler, Rüter & Epstude, 2004). Research suggests that when individuals feel psychologically close to a target, they may assimilate to the target in terms of self-evaluations or behaviour (Brewer & Weber 1994; Brown, Novich, Lord & Richards, 1992). In addition, Mussweiler, Rüter and Epstude (2004) found that self-evaluations are more likely to be assimilated towards moderate standards compared to extreme standards. It is possible that, in the present research, participants evaluated the high female attractiveness pictures as being of 'moderate' attractiveness rather than of high attractiveness, facilitating assimilation effects.



Contrary to the generally accepted idea that exposure to stimuli that reflect high physical attractiveness may cause lower self-rated attractiveness in women, the current studies suggest that exposure to pictures related to high female physical attractiveness may not only have negative effects on women but may have beneficial effects as well. This is in line with a study by Mills et al. (2002) in which women who viewed ads from a female glossy magazine with characteristics of the beauty-ideal felt thinner than women who were exposed to ads of the same magazine that included only beauty and fashion products. The reason that women may respond positively to idealized images of women may be caused by the fact that it helps them to create a 'thin or beauty fantasy' which may help explain why women seem to enjoy viewing these glossy magazines (Durkin & Paxton, 2002, Mills, Polivy, Herman & Tiggeman, 2002; Wilcox & Liard, 2002). Wood (1989) also found that as long as the comparison target is not perceived as a competitor, the effects of exposure to these targets may be either positive or neutral. With regard to the present study's results, it is therefore possible that female participants did not perceive the female in the manipulation as a competitor.

### **Effects of brand exposure**

The present research focused on the influence of brand exposure on self-rated status, brand appreciation, mood, self-rated physical attractiveness, self-rated assertive behaviour, high and low status behaviour and self-reported social dominance in men and women. Individuals are exposed to numerous brands each day, mainly implicitly, and although individuals may not be aware of the exposure, the current research has shown that these encounters may affect the individual in terms of self-evaluations and behaviour. Especially the findings on the non-verbal responses displayed in response to brands differing in brand characteristics are of interest. These responses are usually expressed without awareness, and findings on these responses address the growing interest in unconscious processes that has occurred in consumer psychology the last ten years (Chartrand & Fitzsimons, 2011). This is evident, for example, from a special edition of the *Journal of Consumer Psychology* in 2011. Non-conscious consumer psychology is described as 'a category of consumption behaviour that is driven by processes that occur outside consumer's conscious awareness' (Chartrand & Fitzsimons, 2011, pp. 1). Because of the worldwide use of brands, there is a need for research on the effects of unconscious brand exposure on the self and behaviour. In addition, research on the effects of brands on self-evaluations and behaviour, such as described in the present dissertation, are important for another reason. The number of brands each individual

unconsciously encounters each day is continuously increasing, and, as a consequence, it can be expected their effects on consumers and their behaviour are likely to increase as well. Although some researchers have studied the effects of brand exposure on, for instance, brand choice, research on the effects of brand exposure on actual behaviour is relatively rare. The current research has shown that the effects of brand exposure may be strong and may differ for men and women. Only a few researchers begun to assess the effects of incidental consumer brand encounters on actual behaviour. Research by Ferraro, Bettman and Chartrand (2009) has shown, for instance, that encountering people holding or wearing certain brands affects behaviour, even when these brand encounters were largely outside of people's awareness. The higher the frequency with which participants were implicitly exposed to a water brand 'Dasani', the more likely they were to subsequently select this brand out of four presented water brands. Moreover, a study by Fitzsimons, Chartrand and Fitzsimons (2008) showed that participants primed with Apple logo's ascribed more unusual uses for a common object, showing more creativity, than participants who were primed with the IBM logo's. Still research on the effects of brand exposure on different aspects of the self and behaviour is relatively scarce. The present research contributed to this scarce literature on this topic, by showing consistent effects of exposure to different brands on self-report measures as well as behaviour.

### **Limitations and relevance**

Although the present research showed interesting results, there are also a number of limitations. For example, both Chapter 2 and 3 included only one study. Moreover, in Study 2.1 participants were exposed to a high status Jaguar and a low status Volvo only. Exposure to other automobile brands or other product categories may result in different effects. Comparing different brands in more product categories would therefore extend the present line of research. In Study 3.1 participants were exposed to pictures that either signalled high female physical attractiveness or pictures of natural elements. There was no condition in which participants were exposed to pictures that signalled low female physical attractiveness. Such a manipulation may have caused different results. Including different brands in future research, for instance brands that signal male physical attractiveness like shaving cream, and male deodorant may corroborate the results of the current research. It remains the question whether similar effects would have been obtained when using different brands and, therefore, how generalizable the present research's findings are.

The studies in this dissertation, specifically those in Chapter 5, showed that self-reported behavioural intentions may differ from actual behaviour as observed by researchers. More specifically, in Chapter 5, among men, observed assertive behaviour differed from self-reported social dominance. According to Reis and Gable (2000) individuals are often not capable of estimating their (intended) behaviours: how individuals think they would behave in a certain situation may not actually be the behaviour they will show when the situation occurs in real life. An extensive part of consumer research, however, is based on self-report measures and the present research's findings therefore suggest that results may be different when actual behaviour was to be observed.

Nonetheless, the current research is relevant to marketers. It shows how important brands are in everyday life and how important it is to invest in building brands. It also shows the advertising industry how important it is to relate advertising campaigns to the mating game. Both men and women, unconsciously, seem to be attracted to and affected by these implicit competitive effects caused by brands that relate to their mate value: social status for men and physical attractiveness for women. Advertisers and marketers may benefit from the present research for their marketing and advertising strategy.

## **CONCLUSION**

Recent research on the role of conspicuous consumption and intrasexual consumption motives may shed a new light on consumer behaviour. Especially research on non-conscious consumer psychology and the effects of brand exposures on non-verbal behaviour contribute to knowledge on why men and women feel attracted to and consume certain brands. In the present research participants were exposed to brands that signalled either low or high physical attractiveness, brand sophistication, social status or brand competence. Recent research has also studied the effects of exposure to status products on behaviour, but in these studies often a mating scenario is made salient. For instance, participants are primed on intrasexual competition by exposure to a potential mate during the interaction (e.g., Sundie et al. 2011).

In addition, the current research also focussed on the effects of exposure to brands that may represent the evolutionarily relevant domains for men and women, status and physical attractiveness. Although participants were not explicitly presented with a mating scenario, the effects of brands that signal high status or competence on self-

rated status and non-verbal behaviour may, nonetheless, have been caused due to the priming of mating goals. In sum, the present research contributes to the consumer behaviour literature not only by using experiments and self-report measurements, but also by assessing non-verbal behaviour. Because this latter type of research is not very common, the current research adds valuable insights into how individuals may really respond to brands differing in their characteristics (rather than how individuals *think* they do). Concluding, the present research adds to the current literature on the effects of brand exposure on behaviour of individuals from an evolutionary perspective and hopes to inspire other researchers to use behavioural measures as dependent variables.



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## Nederlandse Samenvatting

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## SUMMARY IN DUTCH

*'Zeg me wat je eet, leest en draagt en ik weet wie je bent'* –branddating.nl

Zomaar een middag in het centrum van een stad. Een man stapt uit zijn auto (Jaguar) en hij loopt het centrum in. Hij heeft een rechte houding en draagt merkkleding van Hugo Boss en Ralph Lauren. Hij passeert een jonge vrouw en kijkt haar net iets langer aan dan nodig is. Ze is onder de indruk van zijn verschijning en weet niet hoe ze moet reageren.

Een beschrijving van een toevallige ontmoeting in een willekeurige stad. De vrouw ziet de man en vormt zich direct een beeld van de man, mede op basis van de merken die hij draagt. Door alle kenmerken die zij ziet, bepaald ze haar reactie en haar gedrag. In dit proefschrift heb ik betoogd dat merken die mensen dragen, invloed hebben op de zelfbeoordelingen, stemming, gedragsintenties en daadwerkelijk gedrag van anderen. Opzichtige consumptie lijkt steeds meer toe te nemen in ons dagelijks leven. Dit fenomeen, het kopen van producten en het uitgeven van geld om indruk te maken op anderen door status en rijkdom te laten zien, is vaak zichtbaar door merken die individuen kopen en gebruiken. Recent hebben onderzoekers merken omschreven als de 'kerken van de moderne tijd' (Shachar et al., 2011) omdat de betrokkenheid van sommige consumenten bij hun merken zo groot is, dat het vergelijkbaar is met het aanhangen van een religie.

Opzichtige consumptie bestaat al eeuwen, en er wordt aangenomen dat dit gedrag adaptief is en het een rol speelt bij aantrekken van potentiële partners. Onderzoekers hebben aangetoond dat er bewijs is van de positieve invloed van het gebruik van hoge status producten op het verleiden van een mogelijke partner (Sundie et al., 2011; Janssens et al., 2011, Griskevicius et al., 2007). Vanuit een evolutionair oogpunt verschillen de merken die mannen en vrouwen aantrekken, waarbij mannen hun sociale status willen laten zien (Apicella et al., 2008; Dunn & Searle, 2010) en vrouwen willen investeren in hun fysieke aantrekkelijkheid (Buss, 1999; Saad & Gill, 2000; Symons, 1995).

Dit proefschrift heeft als uitgangspunt dat mannen en vrouwen vooral worden beïnvloed door de merken in het domein waarin zij concurreren met anderen voor het aantrekken van een potentiële partner, voor mannen sociale status en voor vrouwen fysieke aantrekkelijkheid. In dit proefschrift beargumenteer ik dat blootstelling aan merken die hoge sociale status uitstralen op mannen een negatief effect hebben op zelf gewaardeerde status, merkwaardering, stemming en zelf gewaardeerde fysieke aantrekkelijkheid. Daarentegen verwachtte ik dat en merken die een hoge fysieke aantrek-



kelijkheid uitstralen dit soort effecten hebben op vrouwen. Daarnaast beargumenteer ik dat blootstelling aan mannen en vrouwen die hoge, lage of geen merkcompetentie of hoge of lage merkverfijning effect hebben op assertieve gedragsintenties, zelf gewaardeerde sociale en agressieve dominantie en hoog en laag status gedrag.

In hoofdstuk 2 beschrijf ik dat mannen die hoge status consumptie belangrijk vinden, hun status lager beoordelen na blootstelling aan een Jaguar, een auto die een hoge status uitstraalt. De mannelijke en vrouwelijke proefpersonen werden blootgesteld aan een foto van een hoge (Jaguar) of lage status (Volvo) auto, waarna zij een beoordeling gaven van hun eigen status en de merkwaaarding van de auto. Omdat niet alle mensen status consumptie even belangrijk vinden, werd de status consumptie schaal (Eastman, Goldsmith & Flynn, 1999) toegevoegd als moderator. Conform mijn hypothese, waardeerden mannen die status consumptie belangrijk vonden hun status lager na blootstelling aan de foto van de hoge status auto, terwijl ze dat niet deden bij de foto van de lage status auto. Bij mannen die status consumptie niet belangrijk vonden, werden geen verschillen gevonden van blootstelling aan de foto van de hoge of lage status auto. In overeenstemming met de hypothese, werd ook gevonden dat de Jaguar meer werd gewaardeerd dan de Volvo.

In tegenstelling tot de verwachting, waardeerden mannen die status consumptie belangrijk vonden de Jaguar minder dan de Volvo. Mannen die status consumptie minder belangrijk vonden, waardeerden beide automerken gelijk. Voor vrouwen werden geen effecten verwacht en ook niet gevonden, omdat vrouwen met elkaar concurreren op een ander domein, namelijk fysieke aantrekkelijkheid. Concluderend, bevestigen deze resultaten eerder behaalde onderzoeksresultaten (Buss 1999; Townsend & Levy, 1990b) die hebben aangetoond dat status belangrijker is voor mannen dan voor vrouwen.

In hoofdstuk 3 werden de effecten van blootstelling aan foto's van merken die een hoge vrouwelijke fysieke aantrekkelijkheid uitstralen op zelf gewaardeerde fysieke aantrekkelijkheid en stemming onderzocht. Ik beargumenteer in dit hoofdstuk dat vrouwen die worden blootgesteld aan foto's die hoge vrouwelijke fysieke aantrekkelijkheid uitstralen, hun eigen fysieke aantrekkelijkheid en hun stemming lager zullen waarderen. In deze studie werden mannelijke en vrouwelijke proefpersonen kort blootgesteld aan vijf foto's van merken die worden geassocieerd met een hoge mate van vrouwelijke fysieke aantrekkelijkheid (foto's van parfum, make-up en een glossy) of vijf foto's van natuurlijke elementen (gras, stenen, water en bomen). Na deze blootstelling waardeerden de proefpersonen hun eigen fysieke aantrekkelijkheid en stemming. Omdat de mate waarin individuen het vergelijken van hun fysieke voorkomen belangrijk

vinden kan verschillen tussen individuen, werd de 'Physical Appearance Comparison Scale' een schaal die de mate van vergelijking van het fysieke voorkomen met anderen meet (Thompson, Heinberg & Tantleff, 1991) toegevoegd als een moderator. Ik beargumenteer in dit hoofdstuk dat mannen een betere stemming zullen aangeven na de blootstelling aan foto's die een hoge mate van vrouwelijke fysieke aantrekkelijkheid uitstralen dan vrouwen. Voor vrouwen werd het omgekeerde verwacht. De resultaten van deze studie bevestigden deze verwachtingen.

Deze effecten werden niet beïnvloed door de mate waarin mannen hun fysieke voorkomen vergelijken met het fysieke voorkomen van andere mannen; mannen waardeerden hun fysieke aantrekkelijkheid hoger na blootstelling aan foto's van merken die een hoge mate van vrouwelijke fysieke aantrekkelijkheid uitstraalden dan na blootstelling aan de foto's van natuurlijke elementen. Ook waardeerden mannen hun fysieke aantrekkelijkheid hoger na blootstelling aan foto's van merken die een hoge mate van vrouwelijke fysieke aantrekkelijkheid uitstraalden dan vrouwen.

Interessant en conform de verwachting, waardeerden vrouwen die hun fysieke voorkomen minder vaak vergeleken met anderen hun fysieke aantrekkelijkheid hetzelfde in beide condities; zij werden niet beïnvloed door de blootstelling aan foto's die een hoge mate van vrouwelijke fysieke aantrekkelijkheid uitstraalden. Vrouwen die hun fysieke voorkomen vaker vergeleken met het fysieke voorkomen van anderen, waardeerden hun fysieke aantrekkelijkheid hoger na blootstelling aan foto's die een hoge mate van vrouwelijke fysieke aantrekkelijkheid uitstraalden dan na blootstelling aan de foto's van natuurlijke elementen.

Concluderend laten de resultaten van dit hoofdstuk zien dat fysieke aantrekkelijkheid niet alleen belangrijk is voor vrouwen, maar ook voor mannen. Conform de hypothese, laten de resultaten in dit hoofdstuk zien dat vrouwen met een sterke neiging om hun fysieke voorkomen te vergelijken met het fysieke voorkomen van anderen een hogere fysieke aantrekkelijkheid rapporteerden na blootstelling aan de foto's die een hoge mate van vrouwelijke fysieke aantrekkelijkheid uitstraalden dan na blootstelling aan de foto's van natuurlijke elementen.

Na de conclusies uit de vorige hoofdstukken dat blootstelling aan merken die een hoge status of hoge vrouwelijke fysieke aantrekkelijkheid uitstralen de zelf gewaardeerde status of fysieke aantrekkelijkheid beïnvloeden, heb ik onderzocht of dit hetzelfde is voor assertieve gedragsintenties. Ik beargumenteer in hoofdstuk 4 dat dit zo is. In dit hoofdstuk zijn de effecten van merkverfijning en merkcompetentie (zie Aaker, 1997) op zelf gewaardeerde assertieve gedragsintenties van mannen en vrouwen onderzocht.

Eerst is een studie uitgevoerd om na te gaan in hoeverre mensen merkverfijning en merkcompetentie herkennen na blootstelling aan merken die hoog of laag scoren op deze dimensies. Drie merknamen, één van een kledingmerk, één van een tijdschriftenmerk en één van een frisdrankmerk werden gepresenteerd om een persoon te beschrijven, waarna de proefpersonen werd gevraagd de persoon te beoordelen op diverse persoonseigenschappen (zie Aaker, 1997). Deze procedure werd vier keer herhaald, voor hoge merkcompetentie (Hugo Boss, Quote, Coca Cola), lage merkcompetentie (Australian, Privé, Fernandez), hoge merkverfijning (Gucci, Cosmopolitan, Perrier) en lage merkverfijning (Australian, Computer Idee, 3-es Cola). De resultaten van deze studie bevestigden dat mannen en vrouwen iemand die met merken is omringd die een hoge competentie uitstraalden als meer competent beoordeelden dan individuen die waren omringd met merken die een lage competentie uitstraalden. Ook bij merkverfijning waren dezelfde resultaten te zien.

Daarna beschrijf ik in hoofdstuk 4 twee identieke studies die het effect aantonen van blootstelling aan een foto van een vrouw die hoge of lage merkverfijning uitstraalt (Studie 4.2) en een foto van een man die hoge of lage merkcompetentie uitstraalt (Studie 4.3) op zelf gerapporteerd assertief gedrag. Omdat sommige mensen merken en producten belangrijker vinden dan anderen, is een materialismeschaal toegevoegd die individuele verschillen in het belang dat mensen hechten aan materialisme meet (Richins & Dawson, 1992). De resultaten van Studie 4.2 laten zien dat vrouwen meer assertief gedrag rapporteren na blootstelling aan merken die een hoge merkverfijning uitstralen dan na blootstelling aan merken die een lage merkverfijning uitstralen, ongeacht welk belang ze hechten aan materialisme. Mannen die belang hechten aan materialisme, rapporteerden meer assertief gedrag dan mannen die geen belang hechten aan materialisme. De resultaten van Studie 4.3, waarin de manipulatie was aangepast naar merkcompetentie, laat zien dat mannen minder significant assertief gedrag rapporteerden na blootstelling aan hoge merkcompetentie dan na blootstelling aan lage merkcompetentie. Voor vrouwen werd het tegengestelde gevonden. In deze laatste studie is er echter geen effect gevonden van het belang dat het individu hecht aan materialisme.

Concluderend laten deze studies zien dat mannen en vrouwen eigenschappen toekennen aan individuen op basis van de merken die zij bij zich dragen. De studies in hoofdstuk 4 laten daarnaast ook zien, dat conform de verwachting, mannen minder assertief gedrag rapporteren na blootstelling aan hoge merkcompetentie dan na blootstelling aan lage merkcompetentie. Dit in tegenstelling tot vrouwen, die meer assertief gedrag rapporteren na blootstelling aan hoge merkverfijning dan aan lage merkverfijning. Het

lijkt erop dat blootstelling aan een evolutionair relevant domein, voor vrouwen verfijning en voor mannen competentie, resulteren in contrast effecten voor mannen en assimilatie effecten voor vrouwen.

In de onderzoeken beschreven in hoofdstuk 5 worden de effecten van merken op daadwerkelijk (in tegenstelling tot voorgenomen) assertief gedrag en op zelf geëvalueerde sociale en agressieve dominantie gerapporteerd. Drie experimenten zijn uitgevoerd waarin mannelijke en vrouwelijke proefpersonen een mannelijke onderzoeksleider kort ontmoetten die of hoge merkcompetentie (Hugo Boss, Quote, Coca Cola) of geen merkcompetentie uitstraalde (Studie 5.1), waarin de proefpersonen een mannelijke onderzoeksleider korte ontmoetten die hoge (Gucci, Cosmopolitan, Perrier) of lage merkverfijning (Australian, Computer Idee, 3-es Cola: Studie 5.3) uitstraalde en waarin de proefpersonen een vrouwelijke onderzoeksleider kort ontmoetten die hoge of lage merkcompetentie uitstraalde (Australian, Privé, Fernandez: Studie 5.2). In alle drie de experimenten werd het (non-) verbale gedrag opgenomen, geobserveerd en gecodeerd om hoge en lage status gedragsmaten te creëren. Ook werd de mate waarin de proefpersonen zelf rapporteren zich sociaal en agressief dominant te gedragen gemeten.

De resultaten waren grotendeels in lijn met de resultaten van de studies beschreven in vorige hoofdstukken. In Studie 5.1 lieten mannen vaker laag status gedrag zien tijdens interactie met de mannelijke onderzoeksleider die hoge merkcompetentie uitstraalde dan met de mannelijke onderzoeksleider die geen merkcompetentie uitstraalde. Voor vrouwen werd het tegengestelde gevonden: vrouwen lieten vaker laag status gedrag zien tijdens interactie met de mannelijke onderzoeksleider zonder merken, dan tijdens de interactie met de mannelijke onderzoeksleider die een hoge merkcompetentie uitstraalde – wederom een assimilatie effect. Studie 5.2 toonde aan dat mannen niet vaker hoog status gedrag lieten zien tijdens interactie met de vrouwelijke onderzoeksleider die hoge merkcompetentie uitstraalde dan tijdens interactie met de vrouwelijke onderzoeksleider die lage merkcompetentie uitstraalde. Dit effect is in contrast met het effect dat werd gevonden in Studie 5.1 waarbij mannen interacteerden met een mannelijke onderzoeksleider; mannen laten onderdanig gedrag zien na blootstelling aan een mannelijke onderzoeksleider die hoge merkcompetentie uitstraalde.

Vrouwen onderbraken de vrouwelijke onderzoeksleider vaker wanneer zij een hoge merkcompetentie uitstraalde dan tijdens interactie met de vrouwelijke onderzoeksleider die hoge merkcompetentie uitstraalde. In alle drie de studies rapporteerden mannen een hogere sociale dominantie dan vrouwen.

## CONCLUSIE

Recent onderzoek naar opzichtig koopgedrag en intraseksuele competitie laten een nieuw licht schijnen op consumentengedrag. In het bijzonder onderzoek naar de effecten van blootstelling aan merken op non-verbaal gedrag draagt bij aan de kennis waarom mannen en vrouwen zich aangetrokken voelen om bepaalde merken te kopen en te gebruiken. Dit proefschrift draagt hieraan bij. Proefpersonen werden in verschillende studies blootgesteld aan merken die hoge of lage fysieke aantrekkelijkheid, hoge of lage sociale status, hoge of lage merkcompetentie of hoge of lage merkverfijning uitstraalden. Ik heb beargumenteerd dat effecten van blootstelling ontstaan wanneer merken aansluiten bij de evolutionair relevant domeinen voor mannen en vrouwen, namelijk sociale status en fysieke aantrekkelijkheid.

Alles beschouwend kan dit onderzoek bijdragen aan de literatuur over consumentengedrag door het gebruik van gedragsexperimenten en het meten van niet alleen zelf-rapportages, maar ook van non-verbaal gedrag. Daarmee voegt het huidige onderzoek waardevolle nieuwe inzichten toe aan hoe individuen écht reageren op merken die verschillende kenmerken hebben (in tegenstelling tot gedragsintenties, dat wil zeggen, hoe individuen denken dat ze zullen reageren). Ten slotte draagt het huidige onderzoek mede bij aan de bestaande literatuur over het effect van blootstelling aan merken op gedrag van individuen vanuit een evolutionair perspectief.





## CURRICULUM VITAE

Cindy Ras (1975, Amsterdam, the Netherlands) finished her study Management, Economics and Law in higher Professional Education (also known as Co-op HEAO) in February 1998. In 1999 she started a part-time Social Science Master at the Free University of Amsterdam. During this time, she worked in various marketing positions at Polectro Plaza, Office Consign, KPMG and Groot Haar & Orth.

From 2004 until 2007 she worked at Friesland Foods as an account manager in Leeuwarden and also as a marketing project manager at the Corporate Marketing Department (now FrieslandCampina) in Meppel. In 2004 she finished her Master of Social Sciences and started her part-time external PhD project at the University of Groningen. From 2007 until 2012 she was the director of Marketing Leeuwarden, responsible for the city marketing of the municipality of Leeuwarden. From 2012 until 2014 she was the director City marketing of the municipality of Helmond.

Cindy worked on her PhD thesis "You are what you wear. The effects of exposure to others who are wearing high status or high attractiveness brands on self-perception and behaviour" from 2004 until 2014.

Additionally, in these ten years she loved to travel the world, and visited Aruba, Canada, Costa Rica, Cuba, Finland, France, Germany, Italy, New Zealand, Norway, Spain, Sweden and the United States (New York and California). During these journeys she also executed other dreams, like running the marathon of New York (2005) and Amsterdam (2004), surviving a night at the Ice Hotel in Jukkasjärvi (Sweden, 2005), meeting the real Santa Claus in Rovaniemi (Lapland, Finland, 2005), seeing the Northern Light in Tromsø (Norway, 2007), and swimming with wild Hector's dolphins in Akaroa Harbour (New Zealand, 2013). And most important, her biggest dream came true: having children. Her son Vincent was born in 2009, her daughter Valérie in 2011.

From 2013 onwards, Cindy has started her company StudioCRas in marketing, trends and research. Currently, Cindy is also working as a Coordinator External Contacts and Lecturer Marketing, Lifestyle Research and Consumer Insights at the Fontys Academy for Creative Industries in Tilburg.