Faces of Marketing

Examining consumer responses to depictions of people in marketing

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To
My Father
Hans Holmquist
1949–2010

Foreword

This volume is the result of a research project carried out at the Center for Consumer Marketing at the Stockholm School of Economics (SSE).

This volume is submitted as a doctor's thesis at SSE. In keeping with the policies of SSE, the author has been entirely free to conduct and present her research in the manner of her choosing as an expression of her own ideas.

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Director of Research
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Professor and Head of the
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This dissertation has taken five years to complete. It has been an interesting journey, especially for someone who in a sense grew up at a university. As a child I watched my mother, first as a doctorate student herself and then as she advised others. Doctorate students seemed to be demanding people, needing lots of attention and patience and always talking about boring things. With this in mind, I would like to thank the people who have helped me, taught me, and reassured me patiently while I wrote this dissertation. First, I would like to thank ICA, for financing my doctorate studies through the Nils-Erik Wirsäll program, and the Torsten Söderberg Foundation, for financing the data collection of several studies in this dissertation. Then, I would like to thank my supervisor, Magnus Söderlund, a true scholar and intellectual and probably the most dedicated researcher I have ever met. Special thanks for your kind response and understanding during the turbulent time around my father's sudden illness and passing.

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Stockholm, August 10, 2015

Hanna Berg

Contents

Chapter 1

Introduction

Depictions of people are ubiquitous in modern marketing. As the prominence of pictorial elements in marketing has increased during the last century, so has the prevalence of depictions of people (Aydınoğlu and Cian, 2014; McQuarrie, 2007). Depictions of people in marketing surround us; they are so commonplace in our everyday environments that we often even fail to reflect on their presence. They are used in most visual marketing (Wedel and Pieters, 2007), such as advertisements and in-store marketing, and there are many different types of depictions. Store mannequins are a frequently used example of three-dimensional depictions of people in marketing. Most two-dimensional depictions of people in marketing are photographs, but illustrations (for example drawings of people or avatars) are also quite common (Aydınoğlu and Cian, 2014; SOU 2008:5).

Previous consumer research about depictions of people in marketing has concentrated on photographs, rarely including other types of depictions. Very few studies have focused on three-dimensional depictions, like store mannequins. The consumer responses to photographs of people in marketing, however, have been a topic of consumer research for many years (e.g., Baker and Churchill, 1977; Caballero and Solomon, 1984; Chestnut, Lachance, and Lubitz, 1977). This line of research has focused on specific, visible characteristics of the depicted people, for example attractiveness, ethnicity, or celebrity status. In this dissertation, this aspect of the depictions will be defined as the *person characteristics* of the depicted people.

The most frequently studied person characteristic in consumer and marketing research has been attractiveness (Buunk and Dijkstra, 2011; Söderlund and Lange, 2006). A number of studies throughout the years have found that the attractiveness of depicted people has positive effects on the consumer responses to the marketing that features them (Bower and Landreth, 2001; Lynch and Schuler, 1994). The explanations for these positive effects center on the halo effects of the attractiveness (Dion, Berschied, and Walster, 1972). Effects of other person characteristics have also been found, such as celebrity status (Erdogan, 1999; Keel and Nataraajan, 2012), ethnicity (Deshpandé and Stayman, 1994; Green, 1999; Martin, Lee, and Yang, 2004), and body type (D'Alessandro and Chitty, 2011; Halliwell and Dittmar, 2004).

Other characteristics of the depictions than person characteristics have rarely been examined in consumer research. The focus of previous research has been on who the person in the picture is – the person characteristics that he or she has – and not on *how* the person is depicted. This dissertation will define those aspects of the depictions, how people are depicted, as *depiction characteristics*. One such depiction characteristic is whether the depiction contains a person or not. This is sometimes called the mere presence of a person (Argo, Dahl, and Manchanda, 2005). Aydınoğlu and Cian (2014) described pictures showing people as person pictures and demonstrated that the presence of a person in an advertisement picture affects the consumer responses to the advertisement. Poor, Duhachek and Krishnan (2013) found that viewing pictures of people consuming food (compared with pictures of only the food) affects the consumer responses to the pictures. In consumer research, the only depiction characteristic thus far to attract any specific research attention is the mere presence of a person in a depiction. This is surprising, since the stylistic properties of other types of depictions (other than depictions of people) are known to affect the consumer responses to the marketing that includes them (Peracchio and Meyers-Levy, 1994, 2005).

The way in which people are depicted in marketing varies, and several important depiction characteristics are related to faces. Human faces are particularly important in person perception. Faces easily attract our attention, and we derive much information from just a brief glance at another

human face, such as person characteristics, facial expressions, and the recognition of familiar faces (Palermo and Rhodes, 2007). One depiction characteristic related to faces concerns whether the depictions include the heads and faces of the depicted people. Depictions of people in marketing are often cropped and the share of the person shown in the depiction therefore varies. Depictions sometimes represent a whole person, and sometimes only parts of the person. An example of cropped depictions of people in marketing that do not show faces is the "headless" pictures of models often used in online retailing. The heads and faces of decorative models are cropped out of many product pictures used in online retailing (Considine, 2011). The same depiction characteristic exists in physical stores, where retailers frequently use "headless" store mannequins in their visual merchandising. Another important depiction characteristic related to faces is the facial expressions of the depicted persons. The people depicted in marketing will always have some facial expressions in the depictions. However, the consumer responses to depictions of specific facial expressions have thus far not been isolated in consumer research. Previous research in services marketing has demonstrated positive effects of exposure to smiling service employees (Pugh, 2001; Söderlund and Rosengren, 2010), but there have been no corresponding studies to isolate and study specifically the effects of depicted smiles in marketing.

Both these depiction characteristics, cropped "headless" depictions and smiling facial expressions, are commonly used in marketing. Retailers frequently use headless mannequins and pictures of cropped models. Pictures of smiling people are used in many marketing contexts. Although very common, no previous research has specifically addressed how these *depiction characteristics* affect the consumer responses to the marketing that features them. This dissertation will thus examine the effects of these two depiction characteristics related to the faces of depicted people: cropped depictions not showing heads and faces and depictions showing smiling facial expressions.

Research problem

Depictions of people can be found in most kinds of visual marketing (Aydınoğlu and Cian, 2014). Most studies about depictions of people in marketing have focused specifically on two-dimensional depictions, especially photographs of people used in advertising. No previous research has focused on the consumer responses to three-dimensional depictions, for example store mannequins. Consumer research about the consumer responses to photographs of people in marketing has until lately focused mainly on person characteristics, such as the attractiveness or celebrity status of the depicted people (Buunk and Dijkstra, 2011). Many studies have focused on the consumer responses to the attractiveness of the depicted people, for example different levels of attractiveness (Bower and Landreth, 2001) and types of attractiveness (Ashmore, Solomon, and Longo, 1996). Surprisingly little, however, is known about how depiction characteristics affect the consumer responses to the marketing in which the depictions are featured. Nevertheless, the depiction characteristics that have been examined in the extant research, such as the presence or absence of a person in pictures, demonstrate that depiction characteristics might influence the consumer responses.

The depiction characteristics studied in this dissertation are related to faces. Both depiction characteristics, cropped "headless" depictions and depictions showing smiling facial expressions, have previously been studied in psychology research. Among others, Yovel, Pelc, and Lubetzky (2010) examined the person perception processes used for pictures of cropped, "headless" people. Pixton (2011) is one of many researchers to have used pictures of smiling people to study the psychological responses to facial expressions. Psychology research often includes depictions of people but rarely considers their marketing effects. Many of the psychological responses to depictions of people documented in psychology research can, however, offer explanations for how consumers respond to the same type of depiction in a marketing context. Given that the depiction characteristics studied in this dissertation have been demonstrated to have psychological effects on individuals and that the stylistic properties of depictions can affect the consumer responses (Peracchio and Meyers-Levy, 1994, 2005),

there is reason to believe that the depiction characteristics of the depictions of people used in marketing will affect the consumer responses.

These research gaps mean that there is a lack of guidance from research findings for marketers using depictions of people. Depictions of people are frequently used in marketing, and considering that they are quite costly to produce and use, the lack of knowledge about how depiction characteristics affect the consumer responses to the depictions is rather surprising. As previous research about depictions of people in marketing has focused mainly on photographs of people, research about other types of depictions used in marketing is lacking. Depictions of people in marketing are often seen as controversial, and they are often a topic of discussion concerning the role of marketers in creating and upholding idealized societal standards of physical attractiveness. Marketers should therefore benefit from more information about how the depiction characteristics of the depictions of people that they use affect the consumer responses to them.

Purpose of the dissertation

The main purpose of this dissertation is to further the understanding of the consumer responses to depictions of people in marketing through a number of empirical studies. Depictions of people are an element of marketing that is used frequently by a great number of marketers. The empirical studies in the dissertation examine how consumers respond to two depiction characteristics related to the faces of people depicted in marketing. Specifically, the empirical studies examine the consumer responses to cropped depictions that do not show heads and faces and to depictions showing smiling facial expressions. The consumer responses to the depiction characteristics are examined with a special focus on attitudes, intentions, and visual attention. Depictions used in online retailing, store displays, packaging designs, and advertising are studied and all the depictions studied in the dissertation are of decorative (anonymous) models. The empirical studies of this dissertation also examine the explanatory role of psychological mechanisms in the consumer responses to the depictions. As we respond to depictions of people with the same psychological reactions as when encountering people in real life, psychological theories are used to explain

the responses to the depictions of people in marketing. Specifically, the consumer responses to the depiction characteristics are discussed in terms of theories about face and person perception, elaboration, attraction, self-referencing, and emotional contagion. The role of consumer characteristics, such as consumer gender and consumer expertise, is also examined.

This dissertation contributes to marketing and consumer research by adding to the existing body of knowledge about the consumer responses to depictions of people in marketing. Previous research about depictions of people in marketing has mostly focused on person characteristics. Previous research in psychology about similar depictions has focused on the psychological effects of the depictions on individuals but not on their role as consumers. Most previous research has also been limited to photographs and has not included other types of depictions of people. The four articles included in this dissertation address these research gaps, but they also contribute to the research field of psychology in that several of the research studies explore practical applications of recent theoretical findings from that discipline.

Outline of the dissertation

This dissertation includes four article manuscripts, in which the findings from nine empirical studies are reported. Before the articles are introduced, the theoretical framework of the dissertation is presented (Chapter 2) and the methodological perspectives and procedures are discussed (Chapter 3). The articles are then introduced (Chapter 4), followed by a discussion of how the findings contribute to marketing research and practice (Chapter 5) and the conclusions of the dissertation (Chapter 6). The final four chapters (Chapter 7 to Chapter 10) consist of the four research articles.

Chapter 2

Theoretical framework

The theoretical framework of this dissertation consists of four parts. The purpose of the first part is to provide a general overview of the previous research about pictorial elements in marketing and visual rhetoric theory. The second part discusses depictions of people in marketing, focusing on definitions, the contexts in which they can be found, and their prevalence. The third part reviews the previous research findings on the consumer responses to depictions of people in marketing. The fourth part introduces some of the psychological processes offering potential explanations for the consumer responses to the depiction characteristics studied in this dissertation.

Visual rhetoric and the role of pictorial elements

During the last century, pictorial elements have increasingly come to dominate marketing at the expense of verbal marketing messages (Aydınoğlu and Cian, 2014; McQuarrie, 2007). This development has been even more apparent in advertising and since the mid-1990s, when the dominance of pictures began to accelerate even more. In communication, pictorial elements have many advantages over textual elements. First, pictorial elements attract more visual attention than textual elements, such as brand information and copy in advertisements (Pieters and Wedel, 2004). Pictures are also more easily recognized (Nelson, Reed, and Walling, 1976) and remembered (Childers and Houston, 1984) than verbal information, a phenome-

non that is sometimes called the *picture superiority effect*. In addition, the *visual preference heuristic* (Townsend and Kahn, 2014) means that people prefer visual to verbal information. Pictorial elements in communication also evoke emotional responses more easily (Hill, 2004). Pictorial elements can also be used to establish implicit connections between objects and concepts through a form of visual syntax, interpreted by visually literate viewers (Messaris, 1998).

Consumer researchers have always been interested in how consumers respond to visual elements and imagery in marketing, although more research about the consumer responses to visual marketing is of course still needed (Wedel and Pieters, 2007). In the 1980s a number of prominent research articles, such as those by Mitchell (1986) and Rossiter and Percy (1980), demonstrated that pictures in advertisements affect consumer attitude formation just as much as verbal information, if not more. Scott (1994) criticized this earlier line of research for relying solely on theories of classical conditioning, affective response, and information processing to explain the consumer responses to the pictures and argued against its division of images into *informational images* and *images devoid of information* (Scott, 1994, p. 258). Scott suggested that images cannot be interpreted without consideration of the cultural context in which they are situated and interpreted but that our responses to imagery are often learned, based on schemata and responses to visual tropes (arguments in figurative form) and symbolism in communication. Scott proposed that images used in marketing are not merely visual representations of objects but constitute visual rhetoric.

During the decades since Scott (1994), the study of visual rhetoric has emerged as an interdisciplinary field of research, combining elements of rhetorical theory with theories from disciplines such as psychology, linguistics, art history, cultural studies, and communication research (Hill, 2004). To be considered as conveying a visual rhetoric, a visual object (or *artefact*) must be symbolic, involve human intervention, and somehow be presented to an audience for the purpose of communication (Foss, 2004). Visual rhetoric theory has successfully been applied to consumer research, particularly to explore the consumer responses to visual rhetorical figures, such as

rhyme, antithesis, pun, and metaphor (e.g., McQuarrie and Mick, 1999, 2003; Phillips and McQuarrie, 2004).

A central element of visual rhetoric theory is questioning *copy theory*, the view of pictures as objective visual representations of objects (Scott, 1994). In visual rhetoric theory, images used in communication are considered as subjective, intentional visual statements, conveying both semiotic and semantic information for the purpose of persuasion. This viewpoint is somewhat at odds with the way in which pictures are viewed in society today. Photographs especially are often treated as objective evidence of real-life events (hence the term photographic evidence). Milgram (1976) described photographic images as a created reality, created subjectively and with intent by the photographers taking the pictures. Scott (1994) supported this view of photography as a highly subjective art, commenting that:

> In sum, we must learn to understand cameras not as machines that record the world as it is (or even as we see it) but as machines designed to represent the world in the manner we have learned to show it. (Scott, 1994, p. 261)

Interestingly, viewing pictorial elements used in marketing from a visual rhetoric perspective increases the responsibility that marketers need to assume for visually communicated marketing messages. If visual objects used in communication cannot be devoid of information (Scott, 1994), then any pictorial element used in marketing should be considered as potentially containing information that could affect the consumer responses to it. This principle should not only apply to pictures used in advertising, of which persuasion is the explicit objective (Hill, 2004). More utilitarian visual objects used in marketing than advertisement images, such as product pictures and mannequins, may also need to be considered as conveying visual rhetoric, whether they are intended to convey information or not. The onus of responsibility for marketing messages has often been debated (Pollay, 1986), but traditionally marketers and marketing researchers have been unwilling to assume responsibility for the unintended effects of imagery used in marketing (Holbrook, 1987a; Martin and Gentry, 1997).

Consumers do not only respond to the objects depicted in marketing; the visual style of the depictions can also affect the consumer responses.

The stylistic properties of images, such as picture cropping (Peracchio and Meyers-Levy, 1994, 2005) and the camera angle (Meyers-Levy and Peracchio, 1992; Scott, 1994), can affect the consumer responses to the marketing that they are featured in. McQuarrie (2007) advocated that research into the pictorial elements used in marketing should aim to examine pictorial differentiations in the types of images frequently used by marketers and that the pictorial differentiations should be meaningful in terms of their effects on consumers. In terms of depictions of people, Aydınoğlu and Cian (2014) described such differentiation between *person pictures* and *product pictures*. Poor, Duhachek, and Krishnan (2013) introduced another example of picture differentiation, between *consummatory images* (images of people consuming food) and *food images* (pictures of food with no people in them). The articles in this dissertation examine such pictorial differentiations in the context of depictions of people in marketing and in the form of depiction characteristics related to faces. The next section focuses on the types of depictions of people in marketing, the contexts in which depictions of people used in marketing can be found, their prevalence, and the roles of the depicted people. After that, the previous research about the consumer responses to depictions of people in marketing will be reviewed.

The use of depictions of people in marketing

Depictions of people in marketing constitute part of the *visual marketing* of firms. Visual marketing is a term used for the visual aspects of marketing, which was defined by Wedel and Pieters as follows:

> […] what we term visual marketing; that is, the strategic utilization by firms of commercial and noncommercial visual signs and symbols to deliver desirable and/or useful messages and experiences to consumers. (Wedel & Pieters, 2007, pp. 1–2)

As examples of visual marketing, Wedel and Pieters (2007) mentioned advertisements (e.g., television advertisements, newspaper advertisements, billboards, online advertisements), product packages, point-of-purchase stimuli (e.g., store displays, shelf signage, flyers), and corporate visual iden-

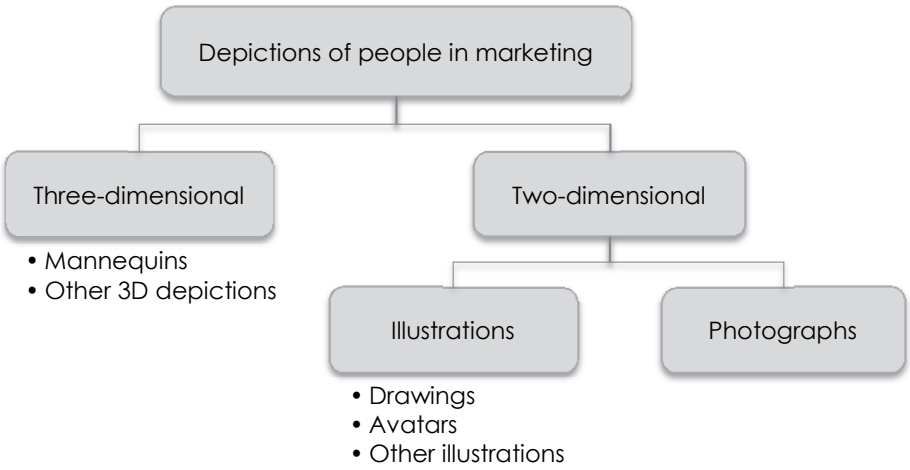
tity communication (e.g., vehicles, restaurant napkins, corporate brochures). The consumer responses to visual marketing have been a topic of marketing research for many years. A recent research trend has been to use eye-tracking methodology, which has been introduced to consumer research to measure visual attention to different marketing stimuli (Wedel and Pieters, 2008). Eye-tracking technology is widely used in both commercial and academic marketing research (Hendrickson and Ailawadi, 2014).

Depictions of people can be found in most forms of visual marketing, across marketing channels. Two-dimensional depictions of people are very common in visual marketing. Aydınoğlu and Cian (2014) used the term *person picture* for (two-dimensional) pictures used in marketing showing people. Person pictures are very common in most forms of visual marketing, not least in advertising. As the pictorial content of advertising has increased, so has the prevalence of person pictures. In a study of outdoor advertising by Swedish researcher Anja Hirdman (SOU 2008:5), almost half of the advertisements observed in the study contained person pictures. The study included 922 billboard advertisements located in streets and subway stations in central Stockholm. Most person pictures in the advertisements were photographs of people (found in 40 percent of the advertisements), but some were illustrations of people (e.g., drawings, which were found in 8.5 percent of the advertisements). Person pictures are also prevalent in other areas of visual marketing. For example, in in-store environments, person pictures are used on signage and in packaging design to attract consumer visual attention (Hendrickson and Ailawadi, 2014). In online retailing, person pictures are also very commonly used. Photographic representations of products are an important part of online visual merchandising and most online fashion retailers display clothing on human models (Khakimdjanova and Park, 2005). A common depiction characteristic of online product pictures is that the heads and faces of models are cropped out of the pictures, leaving pictures of "headless" models. One possible reason for cropping out the heads and faces of models is that the pictures become cheaper to produce and use (Considine, 2011). However, online retailers and catalogue companies also analyze customer and website data to determine which pictures generate the best sales responses, and pictures are produced accordingly (Mears, 2011).

It is important to note that, despite the research focus on photographs of people, not all depictions of people used in marketing are two-dimensional. Store mannequins – three-dimensional depictions of people – are very frequently used in fashion retailing to display clothing. Seeing clothing displayed on mannequins provides consumers with fit information and helps them to visualize the clothing's appearance when worn by a person (Oh and Petrie, 2012; Sen, Block, and Chandran, 2002). Mannequin styles have varied greatly throughout the years, from simple dressmakers' forms used to display clothing in the 1840s, through wax figure mannequins in the early twentieth century (which would melt in heat), to more realistic mannequins in the 1970s (Schneider, 1997). Today mannequin styles are often more abstract, although styles vary between different retailers and stores. A common variation in mannequin styles is that while some mannequins are more anthropomorphic, complete with hair and painted facial features, others are very abstract, to the point of even lacking heads and faces. In fact, an exploratory study of store displays in a typical mall (located in the US) showed that most of the mannequins did not have heads (this study is reported in more detail in Article 3).

Other examples of three-dimensional depictions of people in marketing include 3D holograms, which are used in fashion shows and fashion marketing (*The Independent*, 2011), 3D avatars used as virtual salespeople in online retailing (Mull, Wyss, Moon, and Lee, 2015), and 3D product pictures used in online retailing (Ha, Kwon, and Lennon, 2007). Figure 1 below (on the next page) summarizes these different types of depictions of people in marketing.

Figure 1. Types of depictions of people in marketing

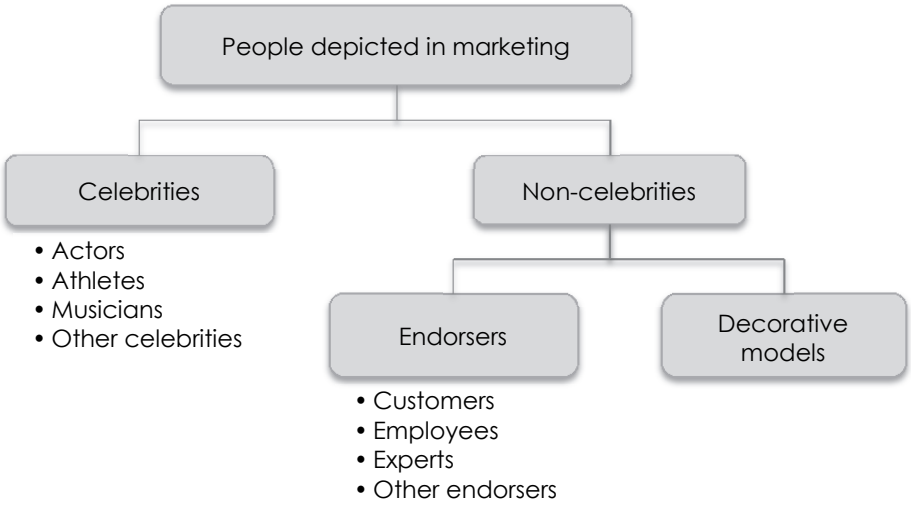


When it comes to the *people* in the depictions, their roles in marketing vary. *Decorative model* is a term used to describe anonymous models depicted in marketing (Chestnut et al., 1977). Sometimes depictions of decorative models show products co-exposed with models (Söderlund and Lange, 2006). In this case, the purpose of including depictions of decorative models in marketing does not have to be entirely esthetic, but can also include product demonstration. Part of the role of the decorative models is then to demonstrate the products, for example the fit of a garment or the operation of a technical product. Söderlund and Lange (2006) defined three ways in which models and products can be implicitly connected in pictures: (1) by using the products, (2) by being visually juxtaposed with (but not using) the product, and (3) by being depicted with a symbolic connection to the product. Sometimes the connection between the models and the products and brands that they are co-exposed with visually is described in a verbal statement, but often the persuasion attempts are more indirect in that the connection is merely implied, for example by juxtaposing pictures of models with pictures of products. This is an example of the type of visual syntax described by Messaris (1998), in which the connection between the models and the products and brands with which they are visually co-exposed is merely implied. Visually literate consumers exposed to the imagery then infer a connection, for example that the models use or endorse the products and brands. Sometimes decorative models are used to illustrate con-

sumers or intended users of products (Aydınoğlu and Cian, 2014). In other cases, the depictions show people who are not models, but actual consumers, employees, or experts endorsing the products. Some of these endorsers are anonymous; others are *celebrity endorsers*, famous persons compensated to promote products or brands, who are frequently depicted in marketing (Erdogan, 1999; Kaikati, 1987).

Figure 2 (below) illustrates these roles of people depicted in marketing. The depictions studied in this dissertation are not of celebrities or other endorsers; all the depictions portray anonymous, decorative models. The empirical studies in this dissertation also focus on two types of depictions: three-dimensional mannequins and two-dimensional photographs. In addition, the consumer responses to the absence of heads and faces are examined both in mannequins and in photographs of models.

Figure 2. Roles of people depicted in marketing



As mentioned, there is a relatively rich research literature about the consumer responses to depictions of people in marketing, although most previous studies have focused on the responses to person characteristics and two-dimensional depictions. The next section discusses the findings and contributions of this previous research.

Previous research about depictions of people in marketing

Consumer research about depictions of people in marketing has previously concentrated on photographs of models and on the person characteristics of the depicted people. For other types of depictions than model photos, less previous research exists. Outside an advertising context, not much research has been undertaken about how depictions of people affect the consumer responses to marketing. A notable exception is an early study by Caballero and Solomon (1984) of the sales response (in terms of actual purchase behavior) to an in-store display containing photos of decorative models. No research has specifically focused on the effects of store mannequins, even though they are ubiquitous in retailing. The few previous studies that have included store mannequins have concentrated on store displays and have not specifically studied the consumer responses to mannequins (e.g., Fiore, Yah, and Yoh, 2000; Sen et al., 2002).

During the last forty years or so, however, a relatively large number of research studies have focused on the use of photographs of physically attractive decorative models in advertising and their effects on evaluations of products, advertisements, and brands. Largely, these studies have reported positive effects of including photos of attractive models in advertisements on ad and brand recognition (Chestnut et al., 1977), attitudes (Baker and Churchill, 1977), and sales response (Caballero and Pride, 1984). The focus of this research has been on the effects of the attractiveness of the models. Most explanations of these attractiveness effects start with the attractiveness halo effects of the attractiveness of the depicted people, the human tendency to associate beautiful people with positive things (Buunk and Dijkstra, 2011; Dion et al., 1972). Among the other person characteristics that have been studied are body shape (Bian and Foxall, 2013; Halliwell and Dittmar, 2004), attractiveness type (Ashmore et al., 1996; Bower and Landreth, 2001; Buunk and Dijkstra, 2011), sexiness (Dudley, 1999; Jones, Stanaland, and Gelb, 1998), ethnicity (Deshpandé and Stayman, 1994; Forehand and Deshpandé, 2001; Green, 1999; Martin et al., 2004; Ryu, Park, and Feick, 2006; Sierra, Hyman, and Torres, 2009), and celebrity sta-

tus (Erdogan, 1999; Kaikati, 1987; Kamins, 1990; Keel and Nataraajan, 2012).

These studies, however, did not explicitly assess any depiction characteristics. Notable exceptions are Aydınoğlu and Cian (2014) and Poor et al. (2013), who compared pictures with and without people in them and found that this depiction characteristic, the mere presence of a person, affected the consumer responses. Aydınoğlu and Cian (2014) found that the responses to the pictures were moderated by domain-specific self-esteem. Consumers with low self-esteem evaluated ads with product pictures more positively, but consumers with high self-esteem evaluated ads with person pictures more favorably. Poor et al. demonstrated that consummatory pictures (pictures of people consuming food) had positive effects on taste perceptions of unhealthy foods.

For the last decades, the research emphasis on person characteristics has not been extended to model gender. In fact, recent research on decorative models has typically only included female models (e.g., Bian and Foxall, 2013; Bower, 2001; Bower and Landreth, 2001; Buunk and Dijkstra, 2011; D'Alessandro and Chitty, 2011; Dittmar, Halliwell, and Stirling, 2009; Dittmar and Howard, 2004; Peck and Loken, 2004; Richins, 1991). Some earlier studies did include male models and were able to demonstrate effects of both model and consumer gender on the sales response (Caballero and Pride, 1984), advertisement evaluations (Baker and Churchill, 1977), and product evaluations (Lynch and Schuler, 1994). The findings, however, varied between contexts and product categories, which meant that many researchers found their results difficult to interpret in a meaningful and generalizable way (e.g., Baker and Churchill, 1977). There are reasons to think that there would be differences in the consumer responses to depictions of male and female models. The theoretical reasoning behind this is discussed below, together with other psychological processes proposed as mediators and moderators of the consumer responses to depictions of people in marketing. The role of consumer gender and model gender in the way in which consumers respond to cropped pictures of models will be examined in the empirical studies of this dissertation.

The role of psychological processes

In this dissertation, a number of psychological mechanisms are proposed as explanations for the consumer responses to depictions of people in marketing. Some of these theories and findings, borrowed from psychology, are new to consumer research, while others just have not been applied before to depictions of people in marketing. The mediating and moderating properties of these psychological processes are examined in the articles. The following section provides a theoretical background to these psychological processes.

Face and person perception

Because social interaction is so central to humans, other individuals play a significant role in our perceptive processing. We quickly identify other people in our field of vision and are almost instantly able to register a wealth of information about them (Macrae and Bodenhausen, 2001). Consequently, depictions of people in marketing attract our attention easily and are perceived and processed quickly. Faces are particularly important; just from a quick look at another human face we are able to discern facial familiarity, emotional expressions, and direction of attention (Kanwisher and Moscovitch, 2000). Facial attractiveness is also central to assessments of overall attractiveness (Langlois, Kalakanis, Rubenstein, Larson, Hallam, and Smoot, 2000). fMRI (functional magnetic resonance imaging) studies have identified an area in the human brain specialized in face processing, the *fusiform face area*. A human preference for looking at human faces also exists, and even as newborn babies we are drawn to look at face-like forms (Johnson, Dziurawiec, Ellis, and Morton, 1991). The central role of faces in our perceptive processes also applies to depictions of other people in marketing. For example, eye-tracking studies have demonstrated that human models, particularly their faces, attract more visual attention than other objects in advertisements (Ju and Johnson, 2010).

Faces have a special capacity to command attention. In fact, only stimuli that are truly novel or unique to an observer may be able to compete successfully with faces for attention. Faces are recognized automatically, even

pre-attentively, and identified and categorized faster than most other stimuli. The initial stages of face processing are unavoidable, beyond the involvement of intentions. In subsequent stages of face processing, more selective attention is directed to faces. Even in cluttered modern environments, faces remain the most biologically and socially significant stimuli to humans. In fact, processing unfamiliar faces, such as those depicted in marketing, may even require more attention than processing highly familiar faces, although we still have a preference for familiar faces (Palermo and Rhodes, 2007). The manner in which we process faces also differs from the way in which we process other types of objects. Faces are processed holistically, meaning that a human face is recognized and perceived more as an entity than as a sum of parts, in processes using relatively less part decomposition than for other objects. One indicator of global, holistic processing is that inversion (i.e., turning objects upside down) impairs the recognition of objects for which holistic processing is employed, such as faces, but does not affect the recognition of other objects (Farah, Wilson, Drain, and Tanaka, 1998). Another important indicator of holistic processing is that parts of the holistically perceived object (e.g., a nose) are recognized more easily when presented in the right context (e.g., a nose pictured in a face) than they are when presented separately (Tanaka and Farah, 1993).

How entire human forms are processed depends on the gender of the person who is perceived. Objectification theory (Fredrickson and Roberts, 1997) suggests that women and female bodies are viewed as objects. This claim was supported by some recent research in perception psychology, showing that men and women are perceived fundamentally differently (Bernard, Gervais, Allen, Campomizzi, and Klein, 2012; Gervais, Vescio, Förster, Maass, and Suitner, 2012). For men, holistic processing is used for pictures of faces and bodies in something called a *composite person effect* (Aviezer, Trope, and Todorov, 2012). However, for pictures of women, holistic perception is not employed (Bernard et al., 2012; Gervais, Vescio, & Allen, 2011; Gervais et al., 2012). Compared with men, women are perceived more like objects (hence the term *objectified*), as collections of (body) parts, just as predicted by objectification theory. Interestingly, the composite person effect is also diminished for headless bodies of men, indicating that headless male bodies are not processed holistically, but more like ob-

jects (Yovel et al., 2010). These differences in how men and women are perceived could affect the consumer responses to depictions of them used in marketing. As mentioned, previous research has found evidence of different consumer responses to male and female decorative models (Baker and Churchill, 1977), although the results varied across product categories and contexts, making their interpretation difficult. By applying a person perception perspective to the analysis, this dissertation will attempt to analyze further the differences in effects for depictions of male and female models. In particular, the different responses found for headless depictions of men and women make this line of research relevant to the study of cropped, "headless" depictions.

Not only the absence of heads and faces, but also the relative size of faces in depictions can affect the responses to them. In fact, the share of a picture that consists of the face of a depicted person can determine the attributions made about that person. Archer, Iritani, Kimes, and Barrios (1983) called the relative size of the face in a picture its face-ism index (which can assume a value from 0 = there is no face in the picture to 1= there is only the face in the picture). When Archer et al. manipulated pictures to have higher face-ism indexes (such as they would have in close-up pictures and portrait shots), the respondents judged the people in them to be more intelligent, ambitious, and attractive than when the same people were depicted in images with lower face-ism indexes. A review of pictures by the same authors spanning six centuries of art and media also revealed that the face-ism indexes for pictures of women were consistently lower, leading to the conclusion that while men are represented with their faces, women are represented with their bodies.

The findings of Archer et al., together with the differences in the perceptual processes used for male and female headless bodies, should be relevant to interpreting the consumer responses to the cropped depictions without heads studied in this dissertation. If men are represented with their faces and women with their bodies, then it is likely that cropping out the heads of the depicted men and women should have different effects. The consumer responses to both male and female headless depictions will thus be examined in the articles of this dissertation. Perception processes can of course not fully explain the consumer responses to depictions in marketing.

At the very least, cognitive processing is also involved. Below, some aspects of cognitive processing related to elaboration, which should affect the consumer responses to depictions of people in marketing are discussed.

Elaboration

The consumer level of elaboration can affect the consumer responses to marketing stimuli and especially to depictions of people in marketing (Petty, Cacioppo, and Schumann, 1983). Interestingly, women and men not only are perceived differently, but also have different thresholds for elaboration. Women as a group have a lower threshold for elaborating on message cues than men do (Meyers-Levy and Sternthal, 1991). These gender differences in elaboration thresholds are related to the traditional gender roles in patriarchal societies, in which the more subordinate roles traditionally assumed by women require a greater understanding of subtle interpersonal cues and therefore provide a stronger motivation for women to elaborate upon them (Meyers-Levy and Sternthal, 1991). The level of elaboration that is employed depends not only on gender, but also, for example, on the level of knowledge. Consumers process information differently depending on their level of knowledge (Alba and Hutchinson, 1987; Hutchinson and Eisenstein, 2008). Expert consumers, consumers with high levels of product category knowledge, have more advanced cognitive structures, a better memory for product information, and a lower threshold for elaboration in their area of expertise. These differences in elaboration should affect the consumer responses to depictions of people in marketing, especially when it comes to the cropped, headless depictions of people studied in this dissertation. The moderating roles of both consumer gender and consumer knowledge in the effects of headless depictions of people in marketing on the consumer responses will be examined in the articles of this dissertation. The consumer responses to depictions of people in marketing are likely to be affected not only by elaboration, but also by other aspects of the cognitive processing of the depictions. The next section will focus specifically on the role of attraction in the consumer responses to depictions of people in marketing.

Attraction

Most studies about decorative models in marketing have focused on the attractiveness of the models as an explanation for their effects (Söderlund and Lange, 2006). This type of theory assumes that positive halo effects of the models' attractiveness are transferred to the brands and products co-exposed with them. Dion et al. (1972) described such positive effects of attractive people on attributions as *attractiveness halo effects*, summarizing their findings in the quote "what is beautiful is good." There are some variations to these types of theories. Brumbaugh (1993), for example, suggested a two-step halo-effect model, in which the effects of including attractive models in pictures depend not only on the physical attractiveness of the models, but also on the personality attributions that we make about them. Söderlund and Lange (2006) proposed that the positive effects of decorative models are moderated by consumer emotions, which are evoked by automatic attractiveness appraisals of the models and attitudes towards the models, which are affected positively by their attractiveness. Some early studies on decorative models (e.g., Baker and Churchill, 1977) attempted to explain further the attractiveness effects based on contemporary theories of interpersonal attraction (e.g., Berscheid and Walster, 1969), but this theoretical stance did not prove fruitful in the interpretation of the research findings in the area. Most studies about attractive models have been able to demonstrate positive effects on the consumer responses to marketing. However, there are some reports of negative responses to attractive models, especially among female consumers. Jones, Stanaland, and Gelb (1998) found that female consumers responded with negative attitudes towards advertisements featuring sexy female models ("cheesecake ads"), but identified no corresponding effect for men viewing advertisements with sexy male models ("beefcake ads"). Bower (2001) also found that highly attractive models prompted adverse reactions in some women. These negative reactions in turn had negative effects on both their evaluations of the models and the effectiveness of the advertisements. One likely explanation for such negative responses to attractive models is social comparisons with the models. According to social comparison theory (Festinger, 1954), we have a tendency to compare ourselves with others and react negatively when the

comparisons are not to our advantage. Social comparison with pictures of people in the media is common, although the amount of social comparison varies between individuals (Grabe, Ward, and Hyde, 2008). Although most research on social comparison with marketing images has focused on female consumers, negative effects on the self-esteem of men have also been demonstrated (Barlett, Vowels, and Saucier, 2008).

The stereotypical beauty ideals so often represented in modern marketing are sometimes criticized as being the cause of the low self-esteem issues and eating disorders prevalent among young women (Richins, 2001). Female decorative models in particular are often significantly younger, thinner, and whiter than the average female consumer (Dittmar and Howard, 2004a). The stereotypical beauty ideals reflected in depictions of people in marketing are not limited to pictures of decorative models. Mannequin proportions have, for example, also come to differ more and more from those of the average woman. Finnish researchers had already concluded in the early 1990s that if the mannequins of the day had been real young women, they would not have menstruated, due to having too low a percentage of fat in their body composition (Rintala and Mustajoki, 1992). The Finnish study compared vintage mannequins from the 1920s, 1930s, 1950s, and 1960s with contemporary mannequins and found decreasing mannequin measurements from the 1950s onwards. Ironically, there is no research to support the idea that any depictions of people in marketing have to reflect stereotypical beauty ideals to achieve the desired positive effects. Studies have, for example, not been able to demonstrate any difference in advertisement effectiveness between advertisements in which extremely thin models were used and advertisements in which average-sized models were used, as long as both types of models were equally attractive (Dittmar and Howard, 2004a; Dittmar and Howard, 2004b). Other studies have been able to demonstrate positive consumer responses to less stereotypical depictions, for example in advertisements depicting people from the same ethnic minorities (Green, 1999). Campaigns featuring less stereotypical images, like the Dove "Real Women" campaign with women of more diverse ages, ethnicities, and body types, have also been successful (Bissell and Rask, 2010).

The question, when it comes to the headless depictions studied in this dissertation, is how the attractiveness of the models is affected by having their heads cropped out of the pictures. Since facial attractiveness is important to overall attractiveness assessments (Langlois et al., 2000), there is reason to believe that the perceived attractiveness of the models would decrease. This question will be addressed further in the empirical studies of this dissertation. The following section discusses the importance of the self, and of self-referencing processes, to the way in which consumers respond to depictions of people in marketing.

Self-referencing

The *self* is an increasingly important concept in consumer research, especially in terms of how it is defined through consumption (e.g., Belk, 1988) and brands (e.g., Escalas and Bettman, 2005). Importantly, in the context of this dissertation, the self-concept is highly involved in the way in which consumers relate to visual stimuli in marketing, such as depictions of people. The cognitive process of connecting external information related to the self to information about the self that an individual has previously stored in memory is called self-referencing (Debevec and Iyer, 1988). Self-referencing specifically mediates the consumer responses to visual stimuli in marketing, and a high level of self-referencing has positive effects on product attitudes and intentions (Debevec and Romeo, 1992). A general human preference for self-related information means that the more consumers perceive any marketing as relating to themselves, the more they will elaborate on it, which in turn increases its capacity for persuasion (Burnkrant and Unnava, 1995).

Consumer self-referencing is affected by properties of visual stimuli in marketing, such as whether advertisement pictures contain people or not (Aydınoğlu and Cian, 2014). The characteristics of the people depicted in marketing can also affect consumer self-referencing for the marketing that includes them (Martin et al., 2004). By using pictorial elements, marketers always risk imposing imagery on consumers that is not consistent with their self-images (Lutz and Lutz, 1978). If consumers cannot identify with the people depicted in marketing, this can influence the perceived self-

relevance of the marketing negatively. Low self-referencing for depictions of people in marketing can in turn have a negative impact on the consumer responses to the marketing and vice versa. The degree of self-referencing can depend on the reference groups to which the consumers and the depicted people belong. For example, Martin et al. (2004) demonstrated that consumer self-referencing is higher when ad models are of the same ethnicity as consumers and that this has a positive effect on the consumer responses to the ad in terms of attitudes and intentions.

The desire to associate brands with aspirational reference groups, and not with dissociative reference groups, may be one reason that companies use stereotypical depictions of people in their marketing. There is a contention in the advertising and fashion industries that "thinness sells," because thin people are a reference group to which many contemporary consumers aspire to belong (Dittmar and Howard, 2004a). This contention is not based on any research findings, and, as the "real women" campaigns from Dove show (Bissell and Rask, 2010), it may even be advantageous for a brand to use depictions that better represent the in-group of the consumers, especially if this intent is communicated clearly to those consumers. Another such example is the positive reactions of consumers from ethnic minorities to advertising with pictures of people from their own ethnic background (Green, 1999). As self-referencing is a known mediator of consumer responses to depictions of people in marketing, there is reason to believe that it plays a role in the consumer responses to the way in which depictions of people in marketing are cropped. The role of self-referencing as a mediator of the effects of cropped depictions of people in marketing will therefore be examined in the articles of this dissertation. The next section will discuss how emotional contagion from the facial expressions of decorative models in marketing can affect the way in which consumers respond to the marketing that features the models.

Emotional contagion

Exposure to depictions of people in marketing can evoke emotional responses in consumers in many ways. As previously mentioned, humans have an innate preference for looking at other people (Johnson et al., 1991)

that extends to depictions of people, no matter how abstract the depictions are. The attractive faces so commonly found in marketing can also cause positive emotional responses themselves in the people viewing them (O'Doherty, Winston, Critchley, Perrett, Burt, and Dolan, 2003; Söderlund and Lange, 2006). However, not all emotional responses to depictions of people in marketing are positively valenced. As mentioned, social comparison with depictions of people in marketing can lead to negative emotions in many consumers (e.g., Bower, 2001; Dittmar and Howard, 2004; Dittmar et al., 2009; Martin and Gentry, 1997; Richins, 1991).

Another way in which depictions of people in marketing can affect consumer emotions is through the facial expressions of the depicted people. Previous research has seldom taken the emotional expressions of people depicted in marketing into account. Emotional expressions are, however, common in marketing. Pictures of smiling facial expressions are frequently used, and faces showing emotional expressions tend to attract more visual attention (Palermo and Rhodes, 2007). Smiling faces are also more easily recognized, especially when the smiling person is female (Pixton, 2011). According to emotional contagion theories (Hatfield, Cacioppo, and Rapson, 1992; Howard and Gengler, 2001; Neumann and Strack, 2000), human emotions are contagious. The mere exposure to a photo of a person displaying an emotional expression is enough to induce congruent emotions in the person viewing the picture. This emotional contagion can in turn affect the consumer responses to the marketing in which the pictures are presented through an affect-as-information mechanism (Forgas, 1995).

There is a lack of research into how the emotional expressions of people depicted in marketing affect the consumer responses to the marketing that features them. In the service marketing literature, studies of the consumer responses to smiling facial expressions have demonstrated positive effects of service encounters with smiling service workers on customer satisfaction (Pugh, 2001; Söderlund and Rosengren, 2010) and product attitudes (Howard and Gengler, 2001) through emotional contagion and affect infusion. Whether a picture of a smiling person in marketing *per se* can produce similar consumer responses is, however, still largely unknown. In a study by Nelson, Hammerle, and Beall (1988), an advertisement with a pho-

to of a smiling (female) dentist produced higher intentions to call for an appointment with the dentist than a photo of the same dentist in which she did not smile. The dentist was also rated as more friendly and attractive. As the advertisement in this case was for a service and the person depicted was the service provider, it is unclear whether the findings can be extended to other (non-service) depictions and contexts. Although Nelson et al.'s study does indicate that depictions of smiles can have positive effects on the consumer responses, it cannot be excluded that the positive effects were due to exposure to a smiling service worker, corresponding to the positive effects demonstrated amongst others by Söderlund and Rosengren (2010). The isolated effects of exposure to depictions of smiling people on the consumer responses, defined here (and in Article 4) as *the smile appeal*, are therefore as yet unknown and will thus be examined in the empirical studies of this dissertation.

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This chapter reviewed the previous research pertaining to the consumer responses to depictions of people in marketing. Specifically, the chapter focused on research relevant to the depiction characteristics related to faces studied in this dissertation. First, the role of pictorial elements in marketing was discussed, followed by a discussion of visual rhetoric and the need for more research on pictorial differentiation in the pictorial elements used in marketing. Then, the prevalence and forms of depictions of people in marketing were examined, before summarizing the previous research findings on the consumer responses to the depictions. Finally, the psychological processes proposed to explain the consumer responses to the depictions were discussed. Theories about face and person perception, elaboration, attraction, self-referencing, and emotional contagion were reviewed. The role of these psychological processes in explaining the consumer responses to depictions of people in marketing will be examined further in the articles of this dissertation. Before introducing the articles, the next chapter discusses the methodological perspectives and procedures of this dissertation.

Chapter 3

Research methodology

The purpose of this dissertation, to examine the consumer responses to depictions of people in marketing, is addressed in nine empirical studies. The findings from these studies are reported in four article manuscripts intended for publication in academic journals. Three of the articles have already been accepted for publication and the fourth (Article 1) is under review for possible publication. The empirical studies examine the studied depiction characteristics, headlessness and smiling facial expressions, across different types of depictions and marketing contexts. Different psychological processes are also proposed as explanations for the consumer responses to the depictions. The most important of these processes were summarized in the theoretical framework of this dissertation (Chapter 2). Before introducing the articles, this chapter discusses the methodological perspectives and procedures employed in this dissertation. Detailed descriptions of the methods used in each of the empirical studies can be found in the article manuscripts (Chapter 7 to Chapter 10).

Perspectives

Scientific perspective

In terms of scientific perspective, this dissertation assumes a deductive approach to research, in that hypotheses are generated based on theory and tested in a number of empirical studies. The theoretical foundation of this

dissertation mostly consists of academic journal articles and academic books by authors adhering to what is often referred to as a positivist philosophy of science, which has traditionally been dominant in both marketing research and consumer research (Anderson, 1983; Deshpande, 1983). Adopting that definition of positivism, this dissertation can also be said to assume a positivistic research perspective. Given the predominance of this approach to research in the previous research about depictions of people in marketing, this was a logical choice. Additionally, this approach to research was an appropriate choice for the research area of this dissertation and the research questions addressed in the articles.

Some have argued that claims of the existence of a research paradigm in consumer research are exaggerated and that the dominant approach to consumer research should in any case not be labeled positivistic, as this is an inaccurate description (Hunt, 1991). The overrepresentation of what is often called the positivistic approach to research has also been discussed and criticized extensively within the research field, especially during the late 1980s and 1990s (Calder and Tybout, 1987; Holbrook, 1987b; Holbrook and O'Shaughnessy, 1988). More recent internal criticism of the hypothetico-deductive epistemology that dominates consumer research includes the assertion that it fosters research that is too theoretical and focuses too much on psychological constructs and processes rather than on actual consumer behavior (Pham, 2013). Another issue, also according to Pham (2013), is that as both researchers and readers of research, we are prone to overreliance on and overgeneralization of results that are statistically significant, especially if these are published in peer-reviewed journals. Increased use of other research perspectives and approaches in consumer research is often advocated (Hudson and Ozanne, 1988), although the difficulties in publishing work based on alternative research methods and paradigms are also acknowledged in the field (Lynch, Alba, Krishna, Morwitz, and Gurhan-Canli, 2012). The emergence of the consumer culture theory (CCT) field (Arnould and Thompson, 2005) in consumer research is largely a reaction to these issues in more mainstream consumer research.

These methodological discussions, however important, do not lessen the appropriateness of the scientific perspective employed in this dissertation. The theories and the psychological responses measured in the studies

are included as explanations for the consumer responses, which are of focal interest in the dissertation. Finally, the scientific perspective and approach to research of this dissertation are well suited to the research area and the research questions, as well as congruent with the long tradition of research in the area.

Research perspective

This dissertation applies a consumer perspective to the study of depictions of people in marketing. The primary unit of analysis in all the empirical studies is the consumer. A corporate perspective on the depictions is not included in this dissertation, except in discussions of managerial and practitioner implications. The research focus is always on the consumer responses to the depictions and not any strategies or intentions of the marketers. The studies are also limited to those responses that individuals have in their role as consumers and not any other roles or faculties that they may have. The psychological responses to the depictions are included only insofar as they can be assumed to contribute to or explain the consumer responses.

A visual rhetoric perspective of the depictions is also assumed, in that all depictions are considered to contain information that can be perceived by consumers and that no depictions are considered to be devoid of information. Marketing practitioners may not view the purpose of some of the depictions studied in this dissertation as conveying any specific message. For example, the product pictures used in online retailing and store mannequins are mainly used to display products and for decorative purposes. However, by assuming a visual rhetoric perspective, all depictions used in marketing are still considered to carry information with the potential to be used for purposes of persuasion.

Procedures

In the following section, the methodological choices involved in the empirical studies of this dissertation are discussed. There are many commonalities in the methods used in all the studies, and these are discussed in the follow-

ing sections. Detailed descriptions of each of the empirical studies can be found in the article manuscripts (Chapter 7 to Chapter 10).

Experimental research designs

The empirical studies reported in the article manuscripts all employed experimental designs and controlled experimental settings. The research procedures involved stimuli manipulations and comparisons of consumer responses to the stimuli between experiment groups. The experiment treatments consisted of exposure to manipulated depictions of people. Typically, depictions of people were manipulated and the consumer responses after or during exposure to them were measured. The experiments all used full-factorial, between-subjects designs, and the experiment participants were randomly allocated to experiment groups. To minimize the impact of confounding variables, the phenomena studied were isolated as much as possible. In the experiments reported in the articles, the methodological procedures associated with experimental methods were strictly adhered to, such as the random allocation of participants to experimental groups. The specific methods used in all the experiments are described in detail in the article manuscripts.

Experimental methods are often criticized for creating settings that are too artificial, posing research questions that are too fragmented and isolated, overusing student samples (more about this later), and producing results that are not applicable to practical situations and problems (Kardes, 1996; Söderlund, 2010). This criticism is, however, often founded on an exaggeration of the advantages of more "natural" research settings combined with a lack of understanding of experimental methodology and its unique role in hypothesis testing and establishing causal relationships between variables (Kardes, 1996). Other, perhaps more relevant, concerns are the effects that experimental settings have on participants. Participants can, for example, be influenced by researcher expectations (especially if the researcher is present) as well as by their own knowledge about the research topic, obedience, and the wish to perform in accordance with expectations (Söderlund, 2010). These issues are more difficult to address but must be taken into account in the analysis and interpretation of experiment results.

Stimuli development

The types and contexts of depictions of people in marketing covered in the articles are of course not exhaustive, but they should be considered as a number of examples to help shed light on different aspects of the research question. In other words, the experiments in this dissertation use samples of stimuli. More extensive sampling of experiment stimuli, the inclusion of more variations in the experiment manipulations, is sometimes called for to increase the representativeness of the stimuli (Söderlund, 2010). Due to practical considerations, most experimental research studies use small convenience or strategic samples of stimuli. Adding a larger sample of stimuli is often impractical, if not impossible, since this requires even more experiment groups and thereby very large numbers of participants. This methodological problem is particularly relevant to experiments using depictions of people as stimuli, as ideally a large and representative sample of depictions would be used to minimize the impact of idiosyncrasies in the depicted individuals (Söderlund, 2010). To avoid this problem as far as possible, it is important that the sample of stimuli is as representative as possible of the population of possible stimuli. This can, for example, be achieved by selecting naturally occurring stimuli (Jackson and Jacobs, 1983).

The stimuli used in the experiments were selected to be as realistic and ecologically valid as possible. In several of the experiments reported in this dissertation, the stimuli consisted of depictions previously used by companies in their marketing. The stimuli used in the studies reported in Article 1 and Article 2 were product pictures used by online retailers in their online stores. The mannequins used as stimuli in Article 3 had previously been used by a clothing retailer in store displays (before being kindly donated for use in our research). In the empirical studies reported in Article 4, model photographs were digitally integrated with (1) a photograph of a juice carton of a well-known brand purchased at a local store and (2) a fictive advertisement for a well-known chain of convenience stores. Furthermore, in several of the empirical studies, stimuli development was discussed beforehand with representatives of companies using similar depictions of people in their marketing. The stimuli used in all the experiments were pre-tested

on small student and convenience samples and/or reviewed by other, experienced, researchers in the field.

Sampling and data collection

The data collection for the empirical studies was performed in different settings and with different samples of participants. The experiments using eye-tracking methodology in Article 3 and Article 4 were laboratory studies, and the participants were recruited either from passers-by outside the laboratory building or by a recruitment agency. The data collection was also executed through online questionnaires. The studies reported in Article 1, Article 2, and Article 3 included data collected in web surveys with participants from online consumer panels. Article 2 and Article 4 included data from studies carried out in classrooms with student samples. Student samples are a form of convenience sample that is very commonly used in consumer and marketing research. In fact, researchers in the field have often criticized the too-frequent use of student samples, as student populations are rarely representative of consumer populations (Pham, 2013). The same criticism can be found in psychology research, in which American college student samples have been termed "WEIRD samples" (Western, Educated, Industrialized, Rich, and Democratic), but there the criticism centers on the cultural differences found in many psychological concepts (Heine, 2010). Student samples are, however, still widely used and for good reason. The concepts and constructs examined in consumer research can often very well be tested on students, as these are assumed to be general, basic processes (Kardes, 1996). Moreover, when using experimental designs, researchers are more concerned with relative than absolute effects of experiment treatments (Söderlund, 2010). Thus, the random allocation of participants to experiment groups is more important to secure than the representativeness of the sample.

Other convenience samples used in this dissertation, like the sample of passers-by and the sample recruited by the agency, were more diverse in terms of age in that the average ages were older and the age ranges wider. The same tendency could be seen for the consumer panel samples from Nepa and YouGov, in which the age and gender distributions were more

representative of the Swedish population. This is not surprising, since both consumer panels are frequently used for political polls. The use of consumer panels, such as Amazon MTurk (used in Study 1 of Article 3), is sometimes advocated as a more representative alternative to student samples (Buhrmester, Kwang, and Gosling, 2011). However, the use of consumer panel samples is accompanied by other methodological drawbacks, such as a lack of control over the way in which surveys are completed and issues of self-selection and compensation in panel recruitment (Pham, 2013). Still, the popularity of consumer panel samples in social sciences is steadily increasing and studies have shown results that are comparative to more conventional samples (student samples), as long as the researchers monitor the survey participant recruitment and response quality successfully (Paolacci, Chandler, and Ipeirotis, 2010).

In the studies using online samples, we used online consumer panels maintained by the companies Amazon and YouGov. In one study (Article 3), students helped to recruit participants among passers-by outside the laboratory building. In another study (Article 4), a recruitment agency arranged for participants to come to the laboratory, after which my co-author instructed the respondents and collected the data. For all the other studies, the data collection and participant recruitment was performed by myself and my co-authors. The participants recruited by the agency and the consumer panel participants were compensated for their participation in the studies.

Measurements and questionnaire construction

Consumer responses and psychological responses were measured with self-administered questionnaires in the experimental studies and the results were later analyzed with quantitative methods. The participants in the experiments completed questionnaires containing the relevant measurements for the study at hand. Either the participants viewed the stimuli before completing the questionnaire or the stimuli were included in the questionnaire. The questionnaires were either printed on paper or distributed online. Most constructs were measured with multi-item question designs, and most items were answered on bipolar and unipolar rating scales. In self-administered

questionnaires, the construction and wording of the questions and the questionnaire design can influence the result and care has to be taken to avoid this sort of methodological bias (Jacoby, 1978; Peterson, 2005; Schwarz, 2003; Weaver and Schwarz, 2008). With multi-item question designs, care must be also taken to ensure that items measure the same underlying construct (Söderlund, 2006). Using established measurements, such as scales that have been defined and validated in previous research, is one way to ensure measurement quality (Viswanathan, 2008). To ensure the methodological quality of the questions and questionnaires in this dissertation, a number of steps were followed. First, experienced researchers in the field reviewed all the questionnaires used in the empirical studies of this dissertation beforehand. Most questionnaires were also pre-tested on small convenience samples. Established measurements and scales, adapted from previous research, were used to measure most of the variables in the studies.

Two of the studies also included eye-tracking measurements. Eye-tracking methodology has been used successfully in previous consumer research studies to measure the visual attention of consumers (e.g., Atalay, Bodur, and Rasolofoarison, 2012; Hendrickson and Ailawadi, 2014; Wästlund, Otterbring, Gustafsson, and Shams, 2015). In two of the empirical studies of this dissertation, described in Article 3 and Article 4, eye-tracking methodology was combined with survey methodology. The participants in one of the experiments (Article 3) viewed the stimuli with portable glasses (Tobii glasses) that recorded their eye movements. By combining a scene camera with a camera registering the eye movements of the participants, the eye-tracking equipment registered overt visual attention to the stimuli. The participants in another experiment (Article 4) viewed the stimuli on a computer screen, below which a stationary eye-tracking system (Tobii X120) was placed to record their eye movements. After viewing the stimuli, the participants completed questionnaires with self-reported measurements. The data from the eye-tracking and self-reported survey could then be paired for each participant and thus combined and analyzed jointly. The kind of triangulation of methodologies that this represents has often been called for in consumer research (Deshpande, 1983). The results of the eye-tracking measurements were compiled with software provided by the

manufacturer of the eye-tracking equipment (Tobii Technologies). This software was also used to generate so-called heat maps that visually illustrate the viewing patterns of the respondents. The data from the eye tracking were combined with the survey data and analyzed with quantitative methods.

Chapter 4

Empirical studies

To address the research purpose, nine empirical studies were designed, the findings from which are reported in four article manuscripts. This chapter introduces the articles, and the complete articles can be found in Chapter 7 to Chapter 10 of this dissertation. The main findings of each article are summarized and the individual contributions of each article discussed.

Article 1

Title: Heads you lose? Consumer response to cropped pictures of decorative models in online visual merchandising

Single-authored manuscript, submitted for possible publication in the *Journal of Retailing and Consumer Services* (second round of reviews)

The first article examines how the absence of heads and faces of models in photographs affects the female consumer responses to products in terms of purchase intentions. The article is set in an online retail context. The studied depictions of people are product pictures consisting of photographs of decorative models used in online fashion retailing. Product pictures dominate online visual merchandising, partly because viewing them is the only way for online consumers to inspect products before a purchase (Kim and Lennon, 2008). In online product pictures of decorative models, the heads

of the models are often cropped, resulting in product pictures that seemingly show "headless" models wearing the products. The article is based on an experiment comparing purchase intentions between the same products shown in product pictures with cropped and uncropped models. The experiment included six pictures of female models sampled from online retailers, showing three different products, and an online panel sample of female consumers (N = 619). The results showed higher purchase intentions for the clothing displayed in pictures with cropped, "headless" models. The article also investigates the role of self-referencing in the way in which consumers respond to cropped models, as self-referencing is a known mediator of the consumer responses to visual stimuli (see a discussion of this in Chapter 2). The results showed that the positive effects of using cropped product pictures on purchase intentions were mediated by self-referencing for the products. Self-referencing was higher for the products depicted with cropped models.

In the article, it is proposed that the cropped product pictures made it easier for female consumers to identify with the target group for the products, which meant higher self-referencing – and consequently higher purchase intentions – for the products. As female models are rather dissimilar to the average female consumer (Dittmar and Howard, 2004a), removing some of the characteristics of the models should have made it easier for female consumers to identify with the models in the pictures. The findings also correspond to previous research demonstrating negative emotional responses to highly attractive decorative models in some female consumers, leading to negative effects on their attitudes and intentions towards the marketing (Bower, 2001). Although cropped pictures of models are common in online retailing, this particular depiction characteristic has not previously attracted any research interest. There is no indication either that the retailers themselves have studied or considered the consumer responses to the cropped pictures. In fact, the main reasons that some retailers use cropped pictures are reportedly that they are relatively cheap to produce and use and that they provide a uniform online presentation of the merchandise (Considine, 2011). This article, however, demonstrates that cropped product pictures have positive effects on the consumer responses to the products. The article therefore makes an empirical contribution to

research on retailing. Additionally, this article makes a theoretical contribution to research about the consumer responses to depictions in marketing by focusing on a previously unstudied depiction characteristic (headlessness) and on product pictures in a rarely studied context (online retail). In addition to these contributions, the article also represents a practical application of some resent research from the field of psychology, which showed that pictures of headless bodies are perceived differently from bodies with heads (Yovel et al., 2010).

Article 2

Title: Headless: The role of gender and self-referencing in consumer response to cropped pictures of decorative models

Single-authored manuscript, forthcoming in *Psychology & Marketing*

The second article focuses on the same depiction characteristic as the first one, the absence of heads and faces in pictures. Article 2 examines the effects of cropped product pictures on product attitudes and the mediating role of self-referencing. This article also explicitly addresses the question of how cropping affects the perceived attractiveness of the models. Additionally, the article includes pictures of both male and female models and examines the moderating effects of consumer and model gender on the consumer responses to the product pictures. This article is also set in an online retail context, and the depictions of people in marketing are product pictures used in online retailing. Cropped, headless photographs of both female and male models are commonly used in online retailing. The article is based on three studies, all with experimental designs, comparing the effects of cropped and uncropped product pictures of male and female models on the product attitudes of male and female consumers. All the product pictures were sampled from online retailers. Study 1 used a male and female student sample (N = 99), Study 2 used a male and female online panel sample (N = 840), and Study 3 used a female-only online panel sample (N = 413).

Article 2 compares the perceived attractiveness of models in cropped and uncropped pictures. As expected, considering that facial attractiveness is central to overall attractiveness assessments (e.g., Langlois et al., 2000), the uncropped models were perceived as more attractive. The effects of the cropped pictures on product attitudes were moderated by both model and consumer gender. The product attitudes were more positive for the product pictures with uncropped male models, irrespective of consumer gender. The male consumer attitudes were more positive for the products in the uncropped pictures of female models. In line with the findings in Article 1, female consumers consistently demonstrated more positive product attitudes towards clothing in the pictures with cropped models. Female consumers exhibited higher self-referencing for the products depicted with cropped female models, and male consumers exhibited higher self-referencing for products depicted with uncropped male models. The positive effects on product attitudes were mediated by self-referencing for the products for both these groups.

Although the perceived attractiveness of the models in the product pictures was lower for the cropped models, they still produced more positive effects for female consumers when the depicted models were female. This finding, while consistent with the findings of Article 1, only applied to female consumers viewing product pictures with female models. As an explanation for the positive effects of the cropped pictures of female models on female consumers, Article 2 offers the same theoretical explanations as Article 1. However, it also adds that elaborating more on contextual cues, such as the characteristics of the uncropped female models, may make it more difficult for female consumers to identify with the target group for the products. Article 2 corresponds with the findings of Article 1, but also adds insights into the effects of cropping pictures on perceived attractiveness and the moderating role of consumer and model gender. In terms of empirical contributions, the article examines a type of product pictures, with cropped male and female models, that is common in online retailing and its effects on different consumer segments (men and women). One important empirical *and* theoretical contribution of Article 2 is the reintroduction of the gender aspect (and male models) to the research area. As mentioned in Chapter 2, most recent studies of decorative models have on-

ly included female models. This article also makes a theoretical contribution to research about depictions in marketing by focusing on the depiction characteristic headlessness and on product pictures in online retail.

Finally, this article demonstrates a practical application of some rather recent findings from psychology research on gender differences in person perception (Aviezer et al., 2012; Gervais et al., 2012). This research shows that, in accordance with objectification theory (Fredrickson and Roberts, 1997), women are perceived more as objects. Holistic perception of bodies and heads as a unit is common for men but not for women, but the holistic perception does not apply to headless bodies of men (Yovel et al., 2010). Consequently, the appearance of "headless" models in online product pictures should disturb the holistic processing for male models but not for female models.

Article 3

Title: Does the presence of a mannequin head change shopping behavior?

Manuscript co-authored with Annika Lindström, Jens Nordfält, Anne L. Roggeveen, and Dhruv Grewal, forthcoming in the *Journal of Business Research*

The third article also focuses on the absence of heads and faces, but this time the depictions are not two-dimensional photographs, but three-dimensional store mannequins. The article examines the effects of headless mannequins on purchase intentions and visual attention to products in three experiments. Eye-tracking technology is used to measure the visual attention to the mannequins. This article too is set in a retailing context, namely visual merchandising in physical stores. Mannequins are frequently used in retailing, but they have not attracted much previous research interest. The few studies that have included mannequins did not investigate any effects of the mannequins *per se* but studied them as parts of store displays. Mannequins vary in their designs, and a common style is headless mannequins: mannequins designed without heads and faces. Headless mannequins

are very frequently used in retailing. In fact, an exploratory observation study reported in Article 3 showed that headless mannequins were even more common in a US mall than headed mannequins. This article compares purchase intentions, envisioning, and visual attention for products displayed either on a headless or on a headed mannequin in two experiments. Two store mannequins were used, one mannequin designed without a head and one designed with a head, complete with a wig and painted facial features. The mannequins were both designed to look female, and the two products used in the experiments were women's apparel. Study 1 used an online questionnaire and an online panel sample of female consumers ($N = 252$) and Study 2 combined a self-completion questionnaire with eye-tracking methodology ($N = 79$).

There was no difference in purchase intentions between the mannequin styles when the setting was an online store. The results in physical stores were moderated by consumer category knowledge: in this case, consumer knowledge about fashion and clothing. Expert consumers, defined as consumers with a high level of category knowledge, demonstrated higher purchase intentions towards the clothing when it was displayed on the headless mannequin. Novice consumers, with low levels of category knowledge, displayed higher purchase intentions towards the clothing when it was displayed on the mannequin with a head. Envisioning, consumers' ability to envision themselves in the clothing, was also higher for expert consumers when the mannequin was headless and for novices when the mannequin had a head. Envisioning of the products mediated the effects on purchase intentions. The analysis of the eye-tracking data showed no significant differences in the amount of visual attention paid to the focal product between the two mannequin styles, although in the headed condition the participants spent more time viewing the head area. The expert consumers also viewed the accessories (a bag and a bracelet) more when the mannequin did not have a head.

The depiction characteristic examined in this article was the same as that in the two first articles with cropped pictures of models in that the heads of the mannequins were not present. However, the effects of the cropped mannequin style were not comparable to the effects of the cropped product pictures. For mannequins, there was no main effect of

mannequin style (even for female consumers viewing female mannequins). Instead, the consumer responses to the headless and headed mannequins depended on the cognitive processing and previous category knowledge of the consumers. Cognitive processing and elaboration (in this case, consumers envisioning themselves in the clothing) differ for experts and novices (see Chapter 2 and, e.g., Alba and Hutchinson, 1987). Although the attention to the focal products in Article 3 did not differ, the effects of mannequin style on purchase intention were moderated by consumer category knowledge. The headless mannequins only produced higher purchase intentions in consumers with high category knowledge, indicating that the more detailed, headed mannequins disturbed their processing of the products rather than facilitating it. With the headless mannequin, the experts were also able to take in more details in the scene and thus spent more time viewing the accessories (a bracelet and a bag).

This article makes an empirical and theoretical contribution by studying the consumer responses to mannequins, a type of depiction that has not been studied previously. It also demonstrates the importance for retailers to consider mannequin styles carefully and for further research to be conducted in the area. A methodological contribution is that the article applies eye-tracking methodology to complement traditional survey measurements in consumer research. Eye tracking has been used before in consumer research, but there are still not many published studies combining the two methods. In this study, the eye-tracking measurements provided exploratory data on how consumers view mannequins (e.g., if there is a head, they will spend a great deal of their viewing time looking at it), but they also added to the experiment findings by establishing that experts viewed the accessory items more when the mannequin did not have a head. A theoretical contribution of the article is therefore that consumer knowledge affects not only the consumer responses to the mannequins, but also the visual attention paid to them. Another theoretical contribution is the demonstration of the role of consumer knowledge in the way in which consumers respond to different mannequin styles.

Article 4

Title: Spreading joy: Examining the effects of smiling models on consumer joy and attitudes

Manuscript co-authored with Magnus Söderlund and Annika Lindström, forthcoming in the *Journal of Consumer Marketing*

The fourth article focuses on another depiction characteristic, the facial expressions of the depicted people. Specifically, the article examines the effects of pictures of smiling models on attitudes, consumer joy, perceived typicality, and visual attention. The two studies reported in the article are set in the advertising and product packaging design contexts. The two types of depictions are photographs of models in advertisements and photographs of models used in package designs. The depiction characteristic studied is models depicted with smiling facial expressions. Depictions of smiling faces are very common in marketing, but there is a lack of research that isolates the effects of exposure to pictures of smiling models in marketing, or *the smile appeal* as this is defined in the article. In three experiments, attitudes towards the marketing objects, consumer joy, and visual attention were compared between marketing with a picture of a smiling model and marketing with a picture of the same model but with a neutral facial expression. All the pictures used were photographs of female models. The same models were photographed both smiling and with neutral facial expressions. The photographs were digitally inserted into pictures of an advertisement and a package design. Study 1 and Study 2 used student samples and self-report questionnaires, but Study 3 (N = 30) used eye-tracking methodology to measure the visual attention of participants when they viewed the marketing. The results included more positive attitudes and higher consumer joy after viewing advertisements and packaging with pictures of the models smiling. Marketing objects with pictures of smiling models were also perceived to be more typical (i.e., as having a higher degree of typicality). The positive effects on consumer joy were mediated by typicality, and the positive effects on attitudes were mediated by consumer joy. An analysis of the eye-tracking measurements showed no difference in

the visual attention paid to the marketing. This indicates that increased attention for the marketing featuring a smiling facial expression did not cause the positive effects on attitudes. As mentioned in Chapter 2, emotional facial expressions, especially smiling faces, tend to attract visual attention. Increased attention given to the marketing including smiling faces would therefore have been a potential alternative explanation for the positive effects of smiling faces demonstrated in Article 4. That the marketing with pictures of smiling faces was perceived as more typical could also have affected visual attention and processing fluency, but as demonstrated in the article, this was not the case. It should be noted that visual attention for the marketing was measured in an isolated laboratory setting where exposure was forced (participants were explicitly asked to view the packaging). Additionally, in the experiment setting there were no other marketing objects to compete for visual attention.

In Article 4, the positive effects of emotions are explained by emotional contagion in that the pictures of smiling faces led to an increased level of joy in the consumers. The increased levels of consumer joy in turn led to more positive attitudes through affect transfer. Positive esthetic responses can also themselves lead to positive affect. The article proposes that the typicality of the smiling picture caused such a positive esthetic response, in turn contributing to the positive effects on consumer joy. An important empirical contribution of this article is that packaging designs are seldom studied in marketing, particularly depictions of people in such designs. However, pictures of smiling people are very often used in marketing, including packaging designs. Few previous research studies have isolated the effect of smiling facial expressions in pictures. Previous research has found positive effects of smiling facial expressions in service marketing contexts, with smiling service workers, but no previous research has isolated the smile appeal in pictures. Smiling pictures are, however, common in all visual marketing, and there seems to be an assumption among both practitioners and researchers that smiling facial expressions would have positive effects. The main theoretical contributions of Article 4 are therefore the isolation and establishment of such a positive response to smiling facial expressions in pictures, as well as the exploration of the role of some of the mechanisms (emotional contagion and typicality perceptions) behind the

positive effects. The article also makes a methodological contribution in that it combines eye-tracking methodology and self-report questionnaires in examining the processes behind the positive response to the smiling pictures.

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Chapter 4 introduced the four articles of this dissertation. The empirical results of each article were briefly described, along with the conclusions and a discussion of their separate contributions. Table 1 (below) summarizes the contexts and key variables measured in each article.

Table 1. Overview of the articles

No. of studies	Depiction type/context	Depiction characteristic	Psychological processes	Moderators	Mediators	Consumer responses
Article 1: Heads you lose? Consumer response to cropped pictures of decorative models in online visual merchandising						
One	Model photos/ online retailing	Headless (vs. head)	Self-referencing		Self-referencing	Purchase intentions
Article 2: Headless: The role of gender and self-referencing in consumer response to cropped pictures of decorative models						
Three	Model photos/ online retailing	Headless (vs. head)	Self-referencing (Attraction)	Gender	Self-referencing	Product attitudes
Article 3: Does the presence of a mannequin head change shopping behavior?						
Two	Mannequins/ store displays	Headless (vs. head)	Elaboration	Consumer expertise Online/ offline store	Elaboration (envisioning)	Purchase intentions Visual attention
Article 4: Spreading joy: Examining the effects of smiling models on consumer joy and attitudes						
Three	Model photos/ advertisements Packaging designs	Smiling (vs. neutral)	Emotional contagion		Consumer joy Typicality	Attitudes Visual attention

Chapter 5

Contributions

This chapter focuses on the joint contributions of the articles. The contributions to research are discussed in relation to the theoretical framework of the dissertation. The first section therefore follows the same structure as the theory chapter (Chapter 2 of this dissertation). The chapter ends with a discussion of the contributions to marketing practice.

Contributions to consumer research and marketing theory

This dissertation contributes to marketing research and consumer research by adding to the existing body of knowledge about the consumer responses to depictions of people in marketing. The articles address a number of research gaps. First, as previously mentioned, according to McQuarrie (2007), there is a need for research into the pictorial elements of marketing to examine pictorial differentiations, such as the depiction characteristics studied in this dissertation. Secondly, the previous research about depictions of people in marketing has mostly concentrated on person characteristics, not on depiction characteristics. The articles examine two such depiction characteristics, the absence of heads and smiling facial expressions, in depictions of people in marketing. There is also a lack of research on other kinds of depictions of people in marketing than photographs. The previous research has mostly been limited to photographs of models and has rarely

included other types of depictions of people, such as mannequins or illustrations. Another important contribution of the articles is that most of the empirical studies (eight out of nine) in this dissertation are set in retailing contexts, while most of the previous research on depictions of people in marketing has studied depictions used in advertising. This dissertation also contributes to psychology research in that several of the articles represent practical applications of recent theoretical findings from that discipline.

All four articles make both theoretical and empirical contributions to research. However, the emphasis differs somewhat between the articles. The empirical contributions are more salient in Article 1 than the theoretical contributions. It represents the first study on a particular depiction characteristic, namely the absence of heads, which is often used by online retailers in product pictures. The theoretical contributions – although not negligible – are less important than the empirical contributions. Article 3 also makes an important empirical contribution, as the first research article specifically to examine the consumer responses to store mannequins. However, Article 3 also makes an important theoretical contribution by examining the roles of elaboration and visual attention in explaining the consumer responses to the mannequins. The emphasis in Article 2 is on its theoretical contributions, particularly in examining the gender aspect, which has been lacking in research in the field for some time. Additionally, the gender differences are explained by applying recent theory from perception psychology. Article 4 is also characterized by its theoretical contribution, as it is the first research article to isolate the effects of the smile appeal in pictures (of non-service workers) and to examine the mechanisms behind them. Article 3 and Article 4 also represent methodological contributions to research, as eye-tracking methodology is combined with the self-report surveys traditionally used in quantitative consumer research. Interestingly, the positive effects on consumer joy constitute an example of a positive unintended effect of marketing, while most previously reported unintended effects of marketing have been negative. This means that Article 4 also contributes to the literature about the unintended effects of marketing and advertising (Pollay, 1986). In the following sections, the joint contributions of the articles to different areas of research are discussed.

Findings concerning the consumer responses to the depictions

The articles of this dissertation demonstrate that depictions of people in marketing do affect the consumer responses to the marketing that features them. Specifically, the articles demonstrate the effects of the depiction characteristics absence of heads and smiling facial expressions. The three first articles show that the absence of heads in mannequins and models in online product pictures affect product attitudes and purchase intentions regarding the marketed clothing products. The findings indicate that the effect of this depiction characteristic on the consumer responses depends on the characteristics of the consumers and the differences in their processing strategies and cognitive elaboration. The consumer responses also depend on the gender of the decorative models, a person characteristic that has not been studied in recent years. Article 2 included both female and male models, and effects of both model gender and consumer gender on the consumer responses were found. Article 4 highlights another depiction characteristic: the facial expressions of models. Depictions of smiling people are very common in marketing, although any specific inquiries into their effects have been notably absent from research. Article 4 demonstrates that depictions of smiling facial expressions have a positive effect on the consumer responses to the marketing through emotional contagion and affect transfer.

Most previous research on depictions of people in marketing has concentrated on photographs of models used in the advertising industry. Article 3 includes another type of depiction of people in marketing, namely mannequins. Mannequins are very common in retailing and the design and styles used by retailers vary greatly. However, before the studies reported in Article 3, no research specifically focused on them. Article 3 shows that the style of the mannequins affected the consumer responses to the displayed products and demonstrates the need for consumer research to take depictions of people in marketing other than model photographs into account. Together with Article 3, Article 1 and Article 2 also include depictions of people in marketing used in contexts other than advertising. Although most previous research about depictions of people in marketing has been conducted in the area of advertising, depictions of people are used frequently

in many other areas of marketing. One such non-advertising context in which depictions of people are frequently used in marketing is online retailing, as demonstrated in Article 1 and Article 2, in which depictions of people used in an online retailing context are examined.

Findings concerning the role of psychological processes

In the following sections, the findings related to the role of psychological processes in the consumer responses to depictions of people in marketing are discussed.

Findings concerning face and person perception

According to face-ism theories (Archer et al., 1983), the relative size of faces in pictures of people influences the attributions made about the depicted persons. Recent research in psychology (Aviezer et al., 2012) has also demonstrated that the complete absence of a face in a depiction of a person – headlessness – affects the responses to it. In Article 1 and Article 2, the consumer responses differed between cropped and uncropped pictures of models. The explanation for the varying consumer reactions to the cropped models involves gender differences in perception processes. The holistic processing of bodies with heads is disturbed for headless male bodies (Yovel et al., 2010), which contributes to the negative consumer responses to cropped pictures of male models in Article 2. For women, however, there was no holistic processing to disturb, and heads could therefore be removed from the product pictures without disturbing the person perception processes.

There were also reasons, based on theory and previous research, to believe that the absence of a face should affect the visual attention. Faces are information-rich and attract attention easily. As demonstrated in Article 1, Article 2, and Article 3, the absence of faces in marketing did not entirely determine the consumer responses to the marketed products. In fact, most of the psychological processes behind the consumer responses to the depictions discussed in the articles of this dissertation relate more to cognitive processes than to differences in attention or perception. In Article 3, the analysis of the eye-tracking measurements shows no statistically significant

differences between how the expert consumers and how the novice consumers viewed the clothing (the focal product) displayed on the mannequins. The only difference in the attention paid to products between experts and novices found in the eye-tracking measurements was the higher amount of visual attention paid to the accessories by the experts when viewing the headless mannequins. This, however, should be a rather important finding both for future research and for practitioners. More attention to the accessory products could lead to more purchases of that (quite profitable) product category. The analysis of the eye-tracking measurements also shows that when the mannequin had a head, both experts and novices spent a considerable amount of their viewing time looking at the head. Since there was no previous research on store mannequins, this exploratory finding about how mannequins are visually perceived by consumers is unique.

In Article 4, the analysis of the eye-tracking measurements did not show any differences in how consumers viewed the packaging when its design included a picture of a model with a smiling or a neutral facial expression. The picture of a smiling model did not attract more attention *per se* than the picture of a model with a neutral facial expression. The consumers viewed both packaging designs in the same manner, paying no more attention to the picture of a smiling model than to the picture of the same model with a neutral facial expression. Here, however, the explanation for the differences in the consumer responses to the two versions of the packaging did not lie in cognitive processing, but rather in emotional contagion from the pictures and in their perceived typicality.

Findings concerning elaboration

In addition to perceptual processes, elaboration plays a role in explaining the consumer responses to the depictions of people in marketing studied in this dissertation. As mentioned, the responses to the cropped, headless, product pictures studied in Article 1 and Article 2 can partly be explained by differences in how men and women are perceived, but gender differences in elaboration also play a role. The only group of consumers for which the absence of a face had positive effects was female consumers viewing cropped and uncropped pictures of models, as demonstrated in

both articles. Women as a group have a lower threshold for elaboration (Meyers-Levy and Sternthal, 1991). This should mean that women as a group are more prone to elaborating on social cues, such as the person characteristics of the models. Elaborating more on the characteristics of female models probably made identification more difficult, due to the apparent dissimilarity between most female consumers and models. According to Debevec and Romeo (1992), negative reactions to visual stimuli that consumers cannot identify with can lead to counterarguments and lower willingness to consider the marketing message – in this case, the displayed clothing. Cropping out the heads and faces of the models left fewer person characteristics to elaborate on, which meant less risk of counterarguments and a greater chance of the consumers identifying with the target group for the products.

In Article 3, the differences in how the consumers responded to the mannequins with and without heads also involved differences in elaboration. In this case, elaboration for the consumers meant envisioning themselves in the clothing. The consumer responses to the mannequins differed between experts and novices, as information is processed and elaborated on differently depending on the level of category knowledge that a person has (Alba and Hutchinson, 1987). The product attitudes of the experts were more positive when the products were displayed on headless mannequins. The higher category knowledge of the experts meant that they did not need the contextual information provided by the heads and were better able to focus on the products (including the accessories) when the mannequins did not have a head. For novices, however, the product attitudes were more positive when the mannequins had heads, indicating that they needed the contextual information that a head provided. These differences led to higher purchase intentions and envisioning for clothing displayed on the headed mannequins for expert consumers but to higher purchase intentions and envisioning for the headed mannequins for novice consumers.

Findings concerning attraction

Previous research about depictions of people in marketing has greatly emphasized the role of the perceived attractiveness of the depicted people. Attractive people are undoubtedly still over-represented in the depictions of

people used in marketing. Article 2 demonstrates that removing the heads and faces of models in product pictures reduces their perceived attractiveness. This finding is not surprising, considering the central role of facial attractiveness in perceptions of overall attractiveness (Langlois et al., 2000). However, despite the decreased attractiveness of the cropped models, Article 1 and Article 2 find that female consumers displayed more positive attitudes, higher purchase intentions, and more self-referencing regarding the products when they were displayed in product pictures with cropped (less attractive) female models than with the more traditional uncropped models.

By removing the heads and faces of the decorative models, many of the characteristics of the models were also removed from the product pictures. This in turn made self-referencing and identification with the intended target groups for the products easier for the female consumers. These findings correspond to the previous findings by Bower (2001) demonstrating negative effects of highly attractive models on the attitudes and intentions of female consumers. The results also support the previous findings demonstrating that depictions of people in marketing do not have to portray stereotypical ideals to have positive effects on the consumer responses to them (e.g., Dittmar and Howard, 2004a, 2004b). In fact, as demonstrated in Article 1, Article 2, and Article 3, depictions of people in marketing do not even have to have heads to exert positive effects on the consumer responses to the marketing.

Findings concerning self-referencing

In Articles 1 and 2, the consumer responses to depictions of people in marketing are related to the self-concepts of consumers. Self-referencing mediated the effects of the pictures of headless models on the product attitudes and purchase intentions. For male consumers, self-referencing was higher when viewing uncropped pictures of male models, but for female consumers self-referencing was higher when viewing cropped, headless pictures of female models. These findings correspond to previous research identifying self-referencing as a mediator of the consumer responses to visual stimuli (Debevec and Romeo, 1992). As humans have a preference for self-related objects, being able to relate visual stimuli in marketing to the

self increases processing and has positive effects on attitudes and intentions.

The most interesting finding related to self-referencing is that it increased for women when the heads of models were absent from the pictures. This finding is in line with previous research showing that self-referencing is higher when consumers can easily identify with the depicted people, for example when the depicted persons are of the same ethnicity (Martin et al., 2004). However, in Article 1 and Article 2, the positive effects on self-referencing were due not to any person characteristic (who is in the picture) but to a depiction characteristic (how the person is portrayed). In other words, the positive effect was not caused by what was in the picture but by what had been removed from the picture. By showing less of the depicted people, by removing their heads and faces, more positive effects were achieved. This finding in itself constitutes a contribution to the research on depictions of people in marketing.

Findings concerning emotional contagion

Article 4 studies another depiction characteristic, the facial expressions of depictions of people in marketing. The article compares the consumer responses to marketing with smiling and neutral facial expressions. Emotional contagion from the pictures of smiling models resulted in more consumer joy, which in turn had positive effects on attitudes through affect transfer. Previous research has not isolated the effects of depictions of smiling faces on the consumer responses to the marketing. As depictions of smiling faces are common in marketing, this was an important research gap to address. The findings reported in Article 4 also call into question whether some of the findings of previous studies including pictures of smiling people should be re-evaluated, taking the effect of facial expressions and emotional contagion from the pictures into account. For example, some of the previously demonstrated positive effects of attractiveness, at least in part, could be due to emotional contagion from the attractive people if they were depicted smiling.

Another important finding in Article 4 was that the marketing with smiling faces was perceived as more typical than the marketing featuring neutral faces. This could be explained both by the ubiquity of smiling faces

in marketing and by the general human proficiency in identifying smiling faces (Pixton, 2011). Smiling women in particular are quickly identified. The typicality of the marketing with smiling faces did not, however, affect the visual attention paid to the marketing. Because typicality causes an esthetic response associated with positive affect, the typicality in itself also contributed to higher levels of joy in the consumers.

Contributions to marketing practice

Marketing practitioners should benefit from increased knowledge about how the depictions of people that they use in marketing affect consumers. Research in the area has previously been lacking, especially when it comes to depiction characteristics. Despite this lack of research, marketers very frequently use all the types of depictions of people examined in this dissertation. More knowledge about how consumers respond to the depictions, and why they do so, should lead to better practices amongst marketers. Based on the findings, a general recommendation for marketers is to pay attention to depiction characteristics – how people are depicted – rather than just who is in the depiction. Importantly, the depictions of people used in marketing must be selected with the consumers and the contexts that the marketing is intended for in mind. The findings in this dissertation indicate that the consumer responses depend on consumer characteristics like gender and consumer knowledge.

The findings of this dissertation should also indirectly benefit consumers. Improved marketing strategies for the use of depictions of people in marketing will hopefully lead to more pleasant consumer experiences with the depictions, such as improved retail experiences and advertisement consumption experiences. The increased product self-referencing that some of the depiction characteristics resulted in (as reported in Articles 1 and 2) and the ability to identify with the target group for the products should also help consumers in processing product information and envisioning themselves purchasing and owning the products. In the findings reported in Article 3, the ability for consumers to envision themselves in clothing was also affected by the mannequin style and level of knowledge. If clothing retailers can help consumers to envision themselves wearing the products by im-

plementing improved mannequin designs, this would be a great advantage to consumers. Finally, using more pictures of smiling people in marketing would lead to more consumer joy, something that would benefit both consumers and society at large.

The following two sections discuss more specific implications for marketing practitioners using the types of depictions that the dissertation focuses on: cropped depictions of people and pictures of smiling people in marketing.

Cropped depictions of people in marketing

Cropped depictions of people are quite common in marketing. The practice of cropping out heads and faces is especially common in the two contexts studied in the articles of this dissertation, online retailing product pictures and store mannequins. The findings from the articles show that the way in which consumers respond to cropped depictions depends on both the type of depiction and the context in which the depictions are presented. There were some notable differences in the consumer responses to headless mannequins and headless photographs. Female consumers demonstrated more positive attitudes and higher purchase intentions towards the clothing products when shown on headless models in product pictures. However, for the headless mannequins, the responses of female consumers depended on their level of knowledge about the product category (fashion and clothing). Only expert female consumers, with high levels of fashion knowledge, showed higher purchase intentions for clothes presented on headless mannequins. For the headless mannequins, the consumer responses also depended on whether the store was online or offline. In online stores, the mannequin style (headed or headless) had no effects on the purchase intentions.

In addition to the context and type of depiction, the characteristics of the consumers also determine their responses to cropped depictions. First, the gender of the consumers, and that of the models, affects the consumer responses to cropped "headless" pictures. Cropped pictures in online product pictures only produce positive results for female consumers. The likely reason for this is that cropping out the heads of models facilitates fe-

male consumers' identification with the target group for the products. When the consumers are male, or when female consumers view product pictures with male models, the uncropped pictures produce more positive attitudes. Other characteristics of consumers can also affect the responses to cropped depictions. One such example is consumer knowledge. As mentioned, the headless mannequins only generated higher purchase intentions for expert consumers. In summary, when using cropped depictions of people in marketing, practitioners should be advised to consider the target group of consumers, as well as the type of depiction. Marketers should also consider the context in which the depictions will be used, such as whether the depictions are to be used in online or offline stores.

A positive implication of the findings for marketers is that in several cases simpler, less elaborate and expensive depictions – the headless mannequins and cropped photographs – worked not only as well as traditional depictions, but even better than them. In a sense, cropping out the heads and faces of people in depictions is the opposite of using more diverse models in marketing in that many defining features of the models are omitted. Marketers often face criticism for the lack of diversity among the models used in marketing (Bissell and Rask, 2010), and as these findings suggest, showing fewer features of the models could be an alternative route. In this way, marketers can avoid the risk of imposing imagery on consumers that interferes with their identification with the target group for the products. In the case of mannequins, the findings from Article 3 show that the absence of a head allows expert consumers to envision themselves in the clothing better.

Finally, marketers also need to consider the ethical aspects of using cropped depictions of models. Decapitation is a concept that is, and should reasonably always be, attached to negative connotations. Especially cropping out body parts of women in advertising is a practice that has received much criticism from feminists throughout the years. The practice of using cropped pictures of women in marketing has sometimes even been described as dehumanizing (Conley and Ramsey, 2011). In light of the findings of this dissertation, perhaps another question to pose is whether the practice of cropping out heads of female models in pictures (and to some extent mannequins) will contribute to the continued objectification of

women in society. Is it, for example, possible that continued exposure to cropped depictions of women could perpetuate or even strengthen the societal tendency to objectify women? Because of these considerations, a final word of advice for marketers wishing to use cropped depictions of people in marketing is also to consider the ethical aspects – and unintended effects – of doing so.

Depictions of smiling people in marketing

Depictions of smiling people are often used in marketing, although previous research has surprisingly not isolated the effects of *the smile appeal*. When using depictions of people in marketing, the facial expressions of the depictions need to be considered. Facial expressions have remarkably not been taken into account in previous research. For example, research on the effects of attractive models has overlooked the facial expressions of the models. Depictions of smiling people are often used by marketers, and have been used for a long time. Examples are advertisement photographs of smiling people and smiling store mannequins. In fact, the frequency with which smiling depictions are used indicates that there is an implicit understanding among practitioners that including pictures of smiles in marketing will have positive effects. The accuracy of this assumption was confirmed in Article 4. The main finding was that including pictures of smiling people in marketing objects had positive effects on consumer attitudes through a process involving emotional contagion. This means that consumers exposed to pictures of smiling people in marketing experience more joy – since smiles are contagious – and that this joy, through affect infusion, leads to more positive consumer attitudes. Interestingly, the increase in consumer joy after exposure to pictures of smiling facial expressions in marketing represents a positive unintended effect of marketing: increased consumer joy. This is highly unusual, as most previously reported unintended effects of marketing have been negative, such as the negative effects of exposure to stereotypical beauty ideals on self-esteem (Grabe et al., 2008).

Another important observation is that the depicted smiles did not have any effects on the respondents' attention to the marketing objects in which

they were featured. The consumers viewing the packaging with a picture of a smiling model did not pay more attention to the model picture or the packaging than did the consumers viewing a packaging featuring a model depicted with a neutral facial expression. However, as mentioned, it is important to note that in the study reported in Article 4, the marketing with smiling facial expressions were presented to the consumers in a context free from competing visual stimuli. The potential of visual marketing to capture attention is also important to consider, especially in cluttered marketing environments, such as magazine advertising or store shelves. When it comes to this depiction characteristic too – whether the depicted person is smiling – the context in which the depictions are to be used is important. Although the findings of Article 4 indicate a near universal positive effect of smiling facial expressions in marketing, they would not be appropriate in every context. For example, using depictions of smiling faces in an advertisement for a funeral agency would most likely be inappropriate. Furthermore, many of the pictures of people traditionally used in fashion marketing depict non-smiling people (Phillips and McQuarrie, 2010).

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Chapter 5 discussed the joint contributions of the articles. Most importantly, the articles showed that depictions of people do affect the consumer responses to the marketing that features them. The studied depiction characteristics, the absence of heads and faces and smiling facial expressions, also affected the consumer responses to the marketing in which they were included. In the articles, effects on attitudes, intentions, and visual attention were demonstrated. The findings also indicated that psychological processes, including person perception, self-referencing, elaboration, and emotional contagion, play a role in explaining the consumer responses to the depiction characteristics. The consumer responses were in some cases also affected by the gender and category knowledge of the consumers. Implications for marketers using the depictions of people studied in this dissertation were also discussed.

Chapter 6

Conclusions

Before continuing with the articles, this chapter contains some concluding remarks based on the first five chapters as well as on the findings of the articles. The chapter starts with a synthesis of the findings and concludes with a section on the limitations of the dissertation and suggestions for future research.

Synthesis of the findings

In addition to the discussion of theoretical and practical contributions in Chapter 5, the findings from the empirical studies are here synthesized into three tentative themes. These loosely organized themes combine the previously discussed theoretical and practical implications of the findings.

Theme 1: "Less is more"

Sometimes, choosing depictions of people in marketing that contain less information renders better results. Pictorial elements have many positive qualities, such as attracting attention and being preferred to texts, and in many marketing contexts detailed, information-rich imagery is favored as it is esthetically pleasing, stimulating, and easily provides consumers with much information (McQuarrie, 2007). Still, when using any form of pictorial elements, marketers always risk imposing imagery on consumers that is at odds with their own visualizations. Such imposed imagery can have nega-

tive consequences for product and brand evaluations and intentions if it does not correspond to consumers' self-images and narrative processing of the marketing (Lutz and Lutz, 1978). Depictions of people can easily constitute imposed imagery, because they are such a rich source of information to humans. When perceiving another person, even if that person is merely a depiction of a person used in marketing, a wealth of information about that other person is instantly derived. Consequently, depictions of people used in marketing can easily impose imagery on consumers that may negatively affect their responses to the marketing and their cognitive processing of it.

Several examples of this theme emerged in the findings of this dissertation. In Article 1 and Article 2, cropping out the heads and faces of female models in product pictures meant removing many defining characteristics of the models. The cropped product pictures, containing less information, made self-referencing for the products easier for female consumers, resulting in more positive attitudes and higher purchase intentions towards the products. In Article 3, the mannequins without heads resulted in more envisioning and higher purchase intentions among expert consumers. As the headless mannequin had less anthropomorphic features, providing less information to process, expert consumers were also able to take in more detail from the scene. In this example, the ability to process more information was manifested as the experts' greater visual attention to the accessory items when exposed to the headless mannequins. Previous examples from the marketing literature of depictions of people in marketing acting as imposed imagery include the negative reactions observed by Bower (2001) to marketing with highly attractive female models among female consumers. Note that not all consumers exposed to the same depictions responded to them similarly. Men and novice consumers benefited from more elaborate depictions. The processing of the depictions depended on the characteristics of the consumers, such as the lower threshold of female consumers for elaboration (Meyers-Levy and Sternthal, 1991) and the differences in cognitive processing of stimuli between experts and novices (Alba and Hutchinson, 1987).

For practitioners, less elaborate depictions can be less costly to produce (Considine, 2011). They are also a convenient way to avoid using the stereotypical depictions of people in marketing, which are often criticized, with-

out the need to include a more diverse group of decorative models (Bissell and Rask, 2010). However, the ethical aspects of using cropped depictions, for example, must also be considered. As mentioned, the effects on society of long-term exposure to cropped depictions of people are as yet unknown but could potentially be harmful. Furthermore, although cropping renders the depictions more neutral, it does not remove enough defining features of the models to eliminate the need for using less stereotypical decorative models entirely. Cropping out the heads of models in pictures will, for example, not disguise the skin color or body shape of the models.

Theme 2: "The self matters"

Consumer characteristics affect not only the way in which consumers respond to depictions of people in marketing, but also the degree to which they can relate the depictions to their self-concepts. The self plays an important role in how consumers respond to depictions of people in marketing. Depending on how depictions of people in marketing can be related to consumer self-concepts, they can either help or hinder consumers in relating their selves to the marketing in which they are featured. The self-concept is central to the processing of visual stimuli. High consumer self-referencing for visual stimuli in marketing has positive effects on consumers' attitudes and intentions towards the marketing (Debevec and Romeo, 1992). Whether we perceive marketing to be intended for us or not matters, and so do the people whom we perceive the marketing to be meant for or associated with (Escalas and Bettman, 2003). Examples of this can be found in Article 1 and Article 2, in which consumer self-referencing for the products mediated the effects of the cropped model pictures on product attitudes and purchase intentions. In Article 3, the ability of consumers to envision themselves in the clothing displayed on the mannequins mediated the effects of the mannequins on the purchase intentions towards the products. That removing faces, thereby leaving a less detailed depiction of a person, can lead to higher self-referencing is an interesting theoretical contribution. The importance of perceived similarity between the consumer and the model, as well as the consumer ability to identify with the model, has been demonstrated previously (Martin et al., 2004). These findings,

however, still place the emphasis on the person characteristics of the depicted models and their congruence (or incongruence) with the person characteristics of the consumers. In other words, identifying with people depicted in marketing helps consumers to identify with the target group for the marketing featuring the depictions and consequently with the target group for the marketed products. The findings of this dissertation demonstrate that a depiction characteristic, the absence of heads and faces of decorative models, can also affect self-referencing. Contrary to what could be assumed, given the previous findings and the ubiquity of depictions of faces in modern marketing, the presence of a face is not always beneficial. In fact, as most decorative models are rather dissimilar to most female consumers in terms of person characteristics (Dittmar and Howard, 2004a), showing faces of people depicted in marketing can make it difficult for female consumers to relate the marketing and the marketed products to themselves.

Theme 3: "More than meets the eye"

The third and last theme relates to the agency of consumers in reacting and responding to depictions of people in marketing. The responses to depictions of people in marketing are not only determined passively by perceptive processes or by any other automatic, "hard-wired" response mechanisms, but rather by more complex cognitive, social, and emotional processes directing our responses and actions. In other words, the difference is often not in what we see, or how we see it, but in what we make of it. Consumers' responses are determined not only by their perception, or any other mechanisms based on their biological functions, but also by their interpretations of the depictions, employing cognitive, higher-order processes. As consumers, we are not determined by our own biology. We are sentient, moral beings able to rise above our base instincts. As the studies show, we often manage to do just this, even in our capacity as consumers, engaging in such an ordinary, mundane, and low-effort activity as responding to the marketing that continually surrounds us. Examples of this theme in the articles can be found in the differences in elaboration between different consumers viewing the same depictions of people in marketing in Arti-

cle 2 and Article 3. In both examples, the level of elaboration determined the responses to the marketing. As demonstrated in Article 3, the differences did not manifest themselves in visual attention to the focal products. Although the consumers viewed the same mannequins in the same manner, their purchase intentions still depended on the different cognitive processing strategies employed by expert and novice consumers. Consumers' ability to identify with the people depicted in marketing also determined their responses to it in Article 1 and Article 2, particularly when identification was difficult.

In a sense, this theme is hardly controversial or revolutionary. In fact, it is squarely in line with most of the classical theories about persuasion and attitude formation, such as the theory of reasoned action (Fishbein and Ajzen, 1975) and the persuasion knowledge model (Friestad and Wright, 1994). Still, when it comes to explaining the consumer responses to depictions of people used in marketing, much recent research has tended to emphasize the role of more deterministic theoretical foundations, such as theories based on interpersonal attraction or evolutionary-based psychology. One example of this comes from a prominent article by Saad (2004), in which he defended the use of stereotypical depictions of women in advertisements based on arguments derived from evolutionary psychology. For example, the frequent use of pictures of young attractive women in advertising is explained by mating strategies, in which assumptions about the high fertility and other evolutionary advantages of attractive young women make them attractive partners. Some recent research findings from psychology also indicate that the responses to depictions of people used in persuasion attempts are often based on stereotypes and objectification, rather than on cognitive processes demanding more elaboration and reasoning. For example, Heflick and Goldenberg (2009) demonstrated that focusing on the appearance of the American politician Sarah Palin reduced intentions to vote for her in the US presidential election of 2008.

There are also examples from other research supporting this theme. One example concerns how people who are in relationships relate to images of attractive potential other partners with implicit avoidance strategies, such as judging the potential other partners as less attractive. In a study by Maner, Gailliot, and Miller (2009), single participants paid more attention to

pictures of physically attractive potential partners than people who were already in committed romantic relationships did. Another example of research supporting the theme is a study by Sengupta and Dahl (2008), showing that the initial responses of both male and female consumers to sexual images in advertising were negative. With an increased cognitive load, the responses of men, as well as women with more liberal attitudes towards sex, were more positive, indicating that their initial responses had been guided by perceptions of the sexual images as unethical and manipulative. In another example, this time from marketing practice rather than from academia, a recent commercial research study reported by Advertising Age (Neff, 2015) showed that a highly sexualized TV ad (featuring a seemingly naked female model) during Superbowl 2015 by the hamburger chain Carl's Jr. performed significantly worse than comparable industry ads. In fact, 51 percent of the tested consumers found the advertisement irritating and annoying, and 52 percent even found it offensive. As this and the findings of this dissertation show, when it comes to depictions of people in marketing, it is important to avoid too simplistic analyses of the mechanisms behind the consumer responses to them.

Limitations and suggestions for further research

As this dissertation takes a consumer perspective, the responses to depictions of people in marketing included in the dissertation are limited to consumer responses. This means that the people viewing the depictions are studied exclusively in their role as consumers. Other types of reactions to the depictions of people in marketing, like psychological responses to them, are only included if they are considered to affect the consumer responses. The consumer perspective of the dissertation also means that the corporate perspective on depictions of people in marketing is not included in the dissertation. In some of the articles, aspects of a corporate perspective are considered in the provision of managerial implications of the findings. The primary unit of analysis in all of the studies is, however, the consumer. Another limitation of this dissertation is that all the depicted people in the studies are anonymous, and no celebrity or other endorser depictions are included. The research studies reported in the articles used pictures of ei-

ther anonymous decorative models or mannequins. In the studies reported in Article 4, all the pictures were even purposefully manipulated to resemble anonymous stock photos. As this dissertation constitutes the first attempt to approach the research area, it remains for future studies to examine whether the findings also apply to depictions of celebrities and other endorsers used in marketing.

The people in the depictions studied in this dissertation also all shared many common person characteristics. Although their gender varied, the depicted people were all white and had slim or athletic body types and no visible disabilities. In other words, the pictures used were very representative of the stereotypical beauty ideal often portrayed in visual marketing. Many previous studies have, however, demonstrated that the consumer responses to depictions of people in marketing are affected by person characteristics such as the ethnicity (Green, 1999; Martin et al., 2004) and body type (Halliwell and Dittmar, 2004) of the depicted people. Future research should therefore aim to examine the effects of combinations of depiction characteristics and person characteristics. In this way, the inherent intersectionality of the research area can be fully captured (Shields, 2008).

The types of depictions of people in marketing included in this dissertation and the depiction characteristics covered in the articles should be seen as examples to illustrate the phenomenon rather than as an exhaustive list of the existing depictions of people in marketing. Many possible types of depictions of people are used in marketing. Future researchers may want to examine more types of depictions, such as the avatars used by some online retailers as a form of online salespeople (Mull et al., 2015) and the holograms used in fashion marketing (*The Independent*, 2011). One important methodological limitation of this dissertation is that it does not include moving depictions, only static depictions, such as photos and mannequins. Contexts in which moving depictions of people can frequently be found include TV ads, digital screen (moving) billboards, and Internet banners with integrated films. Future studies may therefore examine the consumer responses to moving depictions.

Finally, another important conceptual limitation of this dissertation is that only the short-term marketing effects of the depictions of people in marketing were studied. Future research should also endeavor to include

the long-term effects of the depictions. For example, and as previously mentioned, the long-term effects of exposure to cropped, "headless" depictions of people in marketing are as yet unknown and could be negative. In terms of depictions of smiling people, the short-term effects were positive, not only in terms of more positive attitudes, but also in terms of increased consumer joy. Hopefully, prolonged exposure to depictions of smiling facial expressions in marketing also has positive long-term effects, perhaps even contributing to a more lasting increase of joy in consumers and society in general.

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The first six chapters of this dissertation defined the research problem, provided the theoretical framework for the dissertation, and discussed the research methodology of the empirical studies. The four research articles of this dissertation were also introduced, and their findings and contributions were discussed. Chapter 6 focused on the conclusions of the dissertation, including three tentative themes, as well as on the limitations of the dissertation and some suggestions for future research. The following four chapters (Chapter 7 to Chapter 10) contain the research articles in full.

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