

Too hot or not? Consumer responses to different levels of eroticism in advertisements depending on consumer and model gender

Stefan Thomas, Heribert Gierl

Angaben zur Veröffentlichung / Publication details:

Thomas, Stefan, and Heribert Gierl. 2015. "Too hot or not? Consumer responses to different levels of eroticism in advertisements depending on consumer and model gender." *Marketing: ZFP* 37 (1): 24–41. <https://doi.org/10.15358/0344-1369-2015-1-24>.



Too Hot or Not? Consumer Responses to Different Levels of Eroticism in Advertisements Depending on Consumer and Model Gender

By Stefan Thomas and Heribert Gierl

We investigate the effect of the level of eroticism of models shown in advertisements on evaluations of the promoted product and assume that eroticism influences evaluations via two mediating variables: the feelings induced in consumers and the beliefs of the consumers about the inappropriate use of these models for advertising purposes. We posit that these mediating variables are influenced by the combination of the consumer gender and the model gender. Thereby, we hypothesize that the consumer/model gender combination has a twofold role in the relation between model eroticism and product evaluations. We find support for these roles of the gender combinations. We deduce the optimum level of eroticism in advertising depending on the consumer and model gender and provide evidence for our predictions.

1. Introduction

In a large-scale survey conducted in 2013, approximately 3.3 percent of the German population aged 14 years or older reported having consumed beer of the Schöfferhofer brand within the last four weeks ($N = 23,093$, AVM 2014). Among the wheat beer brands, the Schöfferhofer brand has the highest market share at present. Schöfferhofer is



Stefan Thomas, Research Associate at the Chair of Marketing, University of Augsburg, Universitätsstrasse 16, 86159 Augsburg, Germany, phone: 0049 821 598 4048, E-Mail: stefan.thomas@wiwi.uni-augsburg.de



Heribert Gierl, Professor of Marketing, University of Augsburg, Universitätsstrasse 16, 86159 Augsburg, Germany, phone: 0049 821 598 4052, E-Mail: heribert.gierl@wiwi.uni-augsburg.de

famous for the sex appeal in its advertising campaigns. In a typical commercial of this brand, a female voice with a French accent from the telephone answering machine whispers that the beer beautifully tingled in her belly button the night before and the woman expresses the desire to meet her mate “Harald” again. In the print ads, the torso of a female body in sexy underwear is shown beneath the bottle of the beer. This brand is associated with a considerable amount of eroticism and, at the same time, is one of the most economically successful beer brands in Germany that effectively resists the decrease of sales in the total beer market. Another famous example of erotic advertising was the use of the actress Eva Longoria, known from the *Desperate Housewives* TV-series, to promote the Magnum Temptation ice cream through the means of eroticism. It is reported that this campaign increased sales in 2008 in the U.K. “despite the miserable summer weather” by 10 percent (*The Free Library* 2009). Images of the ads for these brands are shown in *Fig. 1*.

Academic authors in the field of advertising research regard eroticism as a perceptual concept and frequently use the definition of *Reichert/Heckler/Jackson* (2001, p. 13). These authors define sexual appeals as messages “that are associated with sexual information” which “evoke sexual thoughts and/or feelings in the viewer.” There is no doubt that the campaigns used to promote the Schöfferhofer beer and the Magnum Temptation ice cream fit this definition. The economic success of such campaigns indicates that “sex sells.”

With such cases from practice in mind, it is understandable why eroticism in advertisements in Western cultures has increased over time. *Piron/Young* (1996, p. 222) investigated the use of erotic cues in ads in the United States and in Germany; they found “a shift from the use of partially to suggestively clad models” in both countries, indicating “an increase over time in the portrayal of women in advertising as alluring objects.” *Reichert/Carpenter-Childers/Reid* (2012) evaluated the contents of ads in six major consumer magazines in the United States from 1983 to 2003 and analyzed the sexual explicitness of the models depicted in the ads. Overall, erotic advertising increased from 15 % to 27 %. The authors found that the proportion of images of suggestively dressed female models in ads compared to all ads showing female models increased from 12 % to 30 %.

Surprisingly, findings regarding positive effects of eroticism on product evaluations are rare within the large

Ad promoting Schoeffelhofer beer



Ad promoting Magnum Temptation ice cream



Fig. 1: Examples of effective erotic ads

body of academic literature on erotic advertising. Most studies reported a null or a negative overall effect on the attitudes toward the promoted brand or purchase intent throughout a broad range of goods and services. These findings resulted independently of the experimental designs the authors applied.

Some researchers compared product evaluations depending on whether an erotic cue or a different type of ad execution cue was included in the advertisement. *De Pelsmaker/Geuens* (1996) compared humorous to erotic advertising and found higher purchase intent for beverages in the case of the humorous advertising. *Jones/Standaland/Gelb* (1998) found that the use of a landscape scene resulted in higher evaluations of a bicycle compared to the use of an erotic cue. The same finding was reported by *Dahl/Segupta/Vohs* (2009) who used a premium watch as the test object. *Hyllegard/Ogle/Yan* (2009) showed that the evaluations of an apparel retailer were more positive when the ad emphasized the retailer's activities related to corporate social responsibility than when showing erotic models. Other researchers compared product evaluations depending on whether an erotic model was presented in the ad or was absent and not substituted by another ad cue. No effect was found by *Severn/Belch/Belch* (1990) for shoes, *Dudley* (1999) for sun tan lotion, and *De Pelsmaker/Geuens* (1996) for beverages. A positive effect was reported by *Reichert/LaTour/Ford* (2011) for erotic models in perfume ads. Moreover, there is research that compares product evaluations depending on the level of nudity of the model. Most frequently, this research either found an overall null effect (e.g., *Dudley* 1999 for sun tan lotion; *Jones/Standaland/Gelb* 1998 for bicycles; *Putrevu* 2008 and *Putrevu/Swimberghek* 2013 for apparel retail stores; *Reichert/Heckler/Jackson* 2001 for public service announcements; *Reichert/LaTour/Ford* 2011 for perfume) or an overall negative effect (e.g., *Peterson/Kerin* 1977 for body oil and ratchet wrench sets; *Liu/Cheng/Li* 2009 for a bakery store; *Black/Organ/Morton* 2010 for a range of products). *Simpson/Horton/Brown* (1996) found an overall positive effect for body oil and a negative effect for ratchet wrench sets. Rarely, Ω -shaped or even U-shaped relations were reported (*Reidenbach/McCleary* 1983 for cologne and frying pans; *Grazer/Keesling* 1995 for jeans and liquor).

Taken together, we can conclude from these findings that erotic advertising is not advantageous *per se*. Prior academic research also has gone into more detail and evaluated whether erotic ads might be beneficial for promoting products with a natural fit to eroticism (e.g., *Kassem/St. John* 1973; *LaTour et al.* 1990; *Reichert* 2002) or when the targeted consumers are prone to respond favorably toward eroticism due to culture (*Liu/Cheng/Li* 2009), a low level of sexual guilt (*Smith et al.* 1995), or low religiosity (*Putrevu/Swimberghek* 2013). We do not doubt that these factors are relevant moderators for the effectiveness of erotic advertising. However, the consumption of beer or ice cream has little natural fit to eroticism. It is unlikely that consumers of Schöffelhofer beer or Magnum Temptation ice cream are particularly sex-oriented or comparatively low in religiosity.

In this paper, we analyze whether product evaluations in response to different levels of eroticism in advertising depend on the consumer's gender and on the erotic model's gender, and why. We analyze these relations for products with a high fit to eroticism and a low fit to eroticism. We focus on visual erotic cues in print advertisements. The visual cue consists of an image of a single model, female or male, that differs regarding the source of eroticism (i.e., nudity or erotic pose). We do not consider erotic ads with more than one model, for example couples or a group of people (e.g., *Huang* 2004; *LaTour/Henthorne* 1994; *Vohs/Sengupta/Dahl* 2014).

Authors who reported a null effect of eroticism may have averaged out the effect of eroticism by aggregating the data across consumer/model gender combinations or different levels of eroticism. Academic research on the effect of the level of eroticism depending on the consumer-gender/model-gender interaction, while holding additional model characteristics constant, is scarce thus far, partly contradictory, and does not cover all gender combinations (we will summarize these findings in *Section 2.4*). We contribute to this research by exploring the reasons why the relationship between eroticism and product evaluations depends on gender combinations. In brief, we hypothesize the influence of two different moderating effects of the gender combinations. We posit that there is a gender-dependent effect of eroticism on feelings induced. Additionally, we posit that eroticism in advertising evokes beliefs about the inappropriate use of eroti-

cism that are contingent on the gender combination of the model and the consumer as well. If we find support for these presumptions, we gain deeper insight into the effect of eroticism in advertising on product evaluations and can find an answer why previous academic research frequently found a null or negative effect on the aggregate level. Practitioners can benefit from our approach because it highlights conditions where eroticism is associated with unpleasant feelings or with beliefs about the inappropriate use of eroticism in advertising.

2. Theoretical background and prior research

This section is organized as follows. First, we consider feelings elicited in the consumer through the contact with erotic portrayals of models and her/his beliefs about the inappropriate use of these models for advertising purposes. We do this because we need insights into the processes that are potentially affected by the consumer's and the model's gender. Second, we discuss gender effects on these mediating variables. Numerous authors considered the natural fit of the product category to eroticism as an additionally important moderator of the eroticism-evaluation relationship; however, as indicated above, the findings were mixed. We presume that the effect of the consumer/model gender combinations on the beliefs about the inappropriate use of erotic models for advertising purposes is contingent on the natural fit of the promoted product to eroticism. Fig. 2 shows the model that underlies our analysis.

2.1. Mediating variables

Feelings: Literature suggests that there are different paths through which environmental cues induce feelings in individuals, depending on the individual's amount of invested cognitive effort to deal with these cues. On the one side of the continuum, there are cues that require intense cognitive elaboration before they may elicit feelings (e.g., a complex humorous scene). The opposite side of the continuum is represented by cues that automatically evoke feelings. Plutchik (2001, p. 346) counts cues that signal "threats, attacks, poisonous substances or the sighting of a potential mate" to the latter type of cues and posits that they have their roots in the evolution of mankind. In different streams of research, the latter type of

cues is denoted as unconditioned stimuli (Byrne 1982, p. 228), biologically prepared cues, or primary reinforcers (Rolls 2011, p. 18). Biological preparedness denotes inherent predispositions in the individual to respond independently "whether we want it or not and whether the stimulus has been represented in consciousness" (Öhman/Mineka 2001, p. 485). For the case of erotic cues, Byrne (1982) states that stimuli such as the presence of a potential sexual partner elicit immediate unconditioned responses. The term "biological preparedness" which was originally created by Seligman (1971) to describe causes of phobias was also adopted for describing automatic responses to erotic cues (Frijda 1987, p. 272; Janssen et al. 2000, p. 9). Rolls (2011, p. 18), a neuroscientist, considers the cues to be primary reinforcers. In this sense, individuals respond to eroticism independent of the culture the individual belongs to [1]. For the special case of erotic ad cues, Dahl/Sengupta/Vohs (2009, p. 216) state that the consumers' responses in the domain of sex-based advertising are partly "spontaneous, noncontrolled and different from more carefully considered responses." Sengupta/Dahl (2008, p. 63) posit that "examining reactions to sexbased advertising" under cognitive load "provides insights into immediate, nondeliberative affective reactions." Reichert (2002, p. 259) argues that erotic ad cues are generally "emotionally charged." In summation of the prevalent opinion in literature, it can be presumed that erotic ad cues are stimuli that produce immediate and predominantly predetermined feelings [2]. The feelings that arise are not preceded by intense prior cognitive processing of the meaning of the respective cue and can hardly be suppressed while evaluating the promoted product.

Beliefs about the inappropriate use of erotic models: Friestad/Wright (1994) argue that adults are generally aware of the fact that advertisers use tactics to influence targeted consumers. Individuals could wish to protect themselves from being influenced by the feelings caused by ad execution elements that are not logically connected to the benefits of the advertised product (Campbell/Kirmani 2008, p. 556). Campbell (1995, p. 227) presumes that consumers include the use of erotic ad cues to these tactics. If the consumers arrive to the conclusion that the use of an erotic cue is inappropriate, for example if they consider the stimulus to be too sexually explicit or not adequate to promote the product due to the product's low

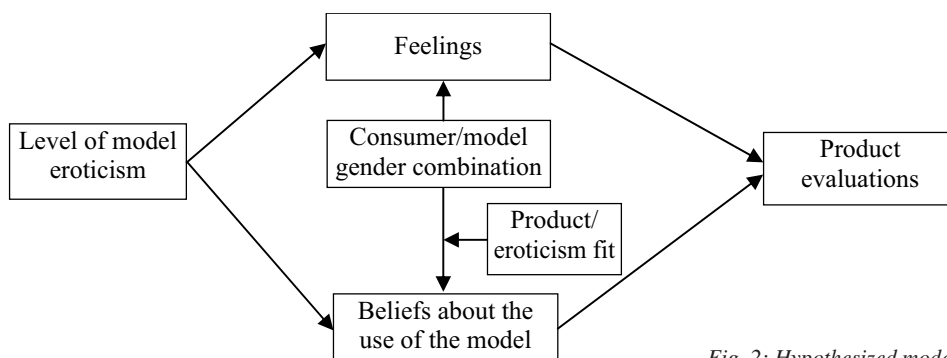


Fig. 2: Hypothesized moderating effects of gender combinations

natural fit to eroticism, the result can be inferences of manipulative intent (Henthorne/LaTour 1995, p. 564; Mittal/Lassar 2000, p. 118; Sengupta/Dahl 2008, p. 63).

2.2. Gender effects on the feelings

There are several theories that predict effects of eroticism on positive and negative feelings, depending on the consumer's and the model's gender. These effects are denoted as opposite-sex and same-sex effects.

Positive opposite-sex effect: Individuals are likely to see opposite-gender individuals as desirable "objects." Thus, contact to or seeing portrayals of people of the opposite gender may be found as pleasant (Reichert/McRee-Walker 2005). This process is denoted as objectification (Money/Ehrhardt 1972). The main argument in favor of this presumption is grounded in the theory that people regard individuals of the opposite gender as potential sexual mates (Maner et al. 2007).

Weaker opposite-sex effect for females: Evolutionary theory is used to predict a weaker opposite-sex effect for female compared to male individuals. Based on the fact that women spend more resources to raise and educate children than men, women have to be more careful regarding the selection of their partners and their sexual activities in general. Conversely, the rate at which men reproduce is higher if they strive to have sexual contact with a higher number of female partners (Buss 1989; Buss 1998; Trivers 1972). This presumption is in line with the observation that female individuals' sex drive is weaker compared to male individuals' (Baldwin/Baldwin 1997). A more detailed discussion of the weaker opposite-sex effect for females can be found in the sexual exchange theory (Baumeister/Catanese/Vohs 2001; Baumeister/Vohs 2004; Vohs/Sengupta/Dahl 2014). These theories lead to the conclusion that pleasant feelings evoked by intense erotic cues are lower in female consumers when they are in contact with erotic male models compared to male consumers who are in contact with erotic female models (Wyllie/Carlson/Rosenberger 2014).

Positive same-sex effect for females: There are some theories that predict a positive same-sex effect for female individuals. First, in contrast to men, women are presumed to be capable of putting themselves into the position of an erotic same-gender model, i.e., into the position of a desired "object" who can choose among numerous desirable male mates (Money/Ehrhardt 1972). This capability is denoted as a "projection." The terms self-referencing (Jones/Stanaland/Gelb 1998, p. 40) and ease of identification (Judd/Alexander 1983, p. 157; Symons 1979) are used to paraphrase the process of projection. Second, we can refer to the theory of female sexual plasticity that was developed by Baumeister (2000). This theory surmises a greater sexual flexibility of women compared to men with regard to same-gender and opposite-gender mates. This theory describes female sexuality as more malleable than male sexuality. For instance, it presumes that heterosexuality is a less defining element

for the female gender role than for the male gender role (Hyde/Durik 2000, p. 378). In other words, females are supposed to be more flexible with regard to their sexual preferences than males. Diamond (2008, p. 3) denotes this distinct female characteristic as sexual fluidity. Third, we can add the observation that it is easy to find erotic print ads in advertising practice that contain autoerotic female motifs such as images showing female people kissing their reflection in the mirror or intimately embracing a person who is identical with this individual; but one hardly finds this type of motifs of male models. Evidently, advertisers rely on a stronger autoerotic component in female sexuality compared to men. This practice may be grounded in the assumption that women are more concerned with their body compared to men (Grover/Keel/Mitchell 2003). In this sense, higher autoerotic dispositions in female individuals could be an additional reason why females appreciate same-gender erotic stimuli to a certain extent. Fourth, authors who analyzed bodily responses that are highly correlated with feelings report that heterosexual male individuals are only stimulated by the exposure to erotic female persons (e.g., when shown in a film) while heterosexual female individuals are stimulated by erotic stimuli of both sexes (e.g., Chivers/Seto/Blanchard 2007; Laan/Janssen 2007). Chivers (2005, p. 308) denotes the reaction patterns of males as "category specific" and the reactions of females as "non-category specific."

Negative same-sex effect for men: Chivers et al. (2007, p. 1118) refers to stronger homophobia in heterosexual men compared to heterosexual women. Elliot et al. (1995, p. 207) presumes that there is even a distinct need in heterosexual men to define themselves as heterosexuals and to protect themselves from any suspicion of homosexuality (for details see Kite/Whitley 1996; Oliver/Hyde 1993; Peterson/Hyde 2010).

The hypothesized relationships between the level of eroticism and feelings depending on consumer/model gender combinations are detailed in the upper part of Fig. 3.

Evidence from prior research: We looked for studies in the academic literature that examined the effect of the levels of the models' eroticism on the recipients' affective responses and who did not use advertising stimulus material. The affective responses to erotic advertisements such as self-reported data on liking the ad would be concurrently influenced (i.e., biased) by beliefs of whether the use of eroticism was appropriate. The study of Sciglimpaglia/Belch/Cain (1978, p. 63) matches these prerequisites. These authors considered images that could be used in real-world advertisements and asked test participants to indicate the degree of how appealing the images were. For the male-consumer/male-model condition, the hypothesized negative effect of eroticism on liking the motifs was observed. For the remaining gender combinations, the authors reported mixed results (U-shaped and Ω -shaped effects) that may have resulted from the use of different persons as models for the low-,

moderate-, and high-eroticism conditions. Moreover, there is research in the field of neuroscience. In general, according to *Damasio* (1999 p. 42, 51), emotions “are complicated collections of chemical and neural responses, forming a pattern” of activations of certain areas of one’s brain and feelings are the mental experience of these emotions. This position is prevalent in the field of neuroscience (e.g., *Phan et al.* 2002; *Rolls* 2011). *Redouté et al.* (2000) applied the fMRI-technique [3] to heterosexual men and found that the activation of the caudate nucleus (a part of the ventral striatum which is considered an important component of the neurological reward circuit of the brain; see *Schott et al.* 2008; *Schultz/Tremblay/Hollerman* 2000) increased when the men were exposed to moderate-erotic or high-erotic female images compared to low-erotic images of female models which is in line with our presumption. It should be added that some researchers exposed test participants to pornographic material that could not be used for advertising purposes (e.g., scenes showing masturbating same-gender and opposite-gender persons) and assessed feelings (*Costa/Braun/Birbaumer* 2003; *Kelley* 1985; *Schmidt* 1975). These authors found that the feelings of pleasantness were comparatively strongest in the male-recipient/female-model condition compared to the remaining three gender combinations. However, the design of these studies does not clarify the effect due to the level of eroticism because there is no information on the feelings in the conditions of lower model eroticism. In summation, the findings from prior research neither clearly confirm nor contradict the presumptions shown in *Fig. 3*.

2.3. Gender effects on the beliefs about the inappropriate use of models

Origin of these beliefs: Individuals may like to see an erotic model, but might dislike seeing this person exploited or commercialized for advertising purposes. People may enjoy watching a nude actress or actor in a movie scene, but may develop beliefs about the inappropriate use of this person when the same scene is presented in a commercial. The reason for this difference can be attributed to the phenomenon that sex appeal naturally initiates and enhances intimate interpersonal relationships and, thus, the use of sex appeal in advertising for selling products might be regarded as a misappropriation. The literature suggests that the intent to follow social conventions is a major driving force for developing beliefs about what is appropriate versus what is inappropriate in the use of erotic models in advertising. First, literature argues that peers and the media promote male sexuality as long as it is directed toward female mates and undermine female sexuality in general (e.g., *Sengupta/Dahl* 2008, p. 64). When erotic models are used as ad-execution elements, socialization-related attitudes toward sexuality are activated in consumers. Second, also from the perspective of consumer socialization, parents, peers, media, and institutions such as schools affect the development of one’s general attitudes toward erotic advertis-

ing (*Griffitt/Kaiser* 1978; *Moore et al.* 2002). As a consequence, consumers may believe that highly erotic cues are misused by marketers for persuading them to buy the promoted product, especially when the product category and eroticism are incongruent. Combining these arguments, female consumers are expected to develop negative thoughts (“I should not think so much about sexuality.” “This marketer aims to affect my product decisions with the help of eroticism.”) in cases where high eroticism is used. In line with the arguments used to predict a negative same-sex effect for heterosexual male individuals, these consumers are also likely to generate negative thoughts when they are exposed to highly erotic male models in advertisements (“I should have nothing to do with sexual-related interactions with male mates.” “This marketer aims to influence my behavior by the means of a male model’s eroticism.”). For the male-consumer/female-model condition, we expect no effect of the level of eroticism because the positive effect due to the promotion of male sexuality by society could counterbalance the negative effect resulting from the knowledge that one is being advertised to and persuaded. The hypothesized relationships between the level of eroticism and beliefs about the appropriateness of the use of models in advertising depending on consumer/model gender combinations are visualized in the middle part of *Fig. 3* for products with a high fit to eroticism. *Zajonc* (1960, p. 287) posits that sensations of congruity feel comfortable and presumes that these feelings are likely to spill over positively on product evaluations. Hence, for low-fit-products, these beliefs may be more negative in the moderate- and high-eroticism conditions.

Evidence from prior research: Some authors asked consumers to report their attitudes toward sex appeal in advertising without presenting stimulus material. For instance, *Wise/King/Merenski* (1974, p. 15) asked test participants to agree or disagree to the statement “Advertisers make too much use of sex appeal in their advertisements” and found that women agreed to this statement to a higher extent than men. The same result was reported by *Lundstrom/Sciglimpaglia* (1977, p. 73). These findings are in line with our presumptions if the respondents mainly recalled erotic advertising showing female models. *Jones/Reid* (2011) exposed test participants to highly erotic ads showing female models and asked them to indicate the degree to which they perceived the ads to be offensive. They found that female consumers reported to be more offended compared to male consumers. *Reichert et al.* (2007) showed erotic female models in an ad and investigated whether information about the objectification of women in media that was presented prior to the ad affected purchase intent of the promoted product. They found a null effect for male consumers and a negative effect for female consumers; this finding indicates that there is a gender difference regarding how easily beliefs about the inappropriate use of erotic female models can be triggered. In a more detailed study, *Belch et al.* (1982) considered three levels of eroticism of female and male

models depicted in advertisements and assessed the degree to which female and male consumers regarded the erotic image as offensive. When the case of high eroticism is compared with that of low eroticism, the findings were congruent with our presumptions. The authors found that perceptions of offensiveness were partly even weaker in the moderate- compared to the low-eroticism condition. We surmise that these findings resulted from the fact that the authors did not use the same models for different levels of eroticism. Again, we conclude that prior research neither clearly supports nor contradicts our presumptions.

2.4. Overall moderating gender effect on product evaluations

When we combine the postulated effects of the level of model eroticism on the feelings and on the beliefs of the

consumer and assume that both variables spill over onto the evaluation of products, we arrive at hypotheses for how the products will be evaluated. We expect a negative relation between eroticism and evaluations in the male-consumer/male-model condition, a positive relation in the male-consumer/female-model condition, and Ω -shaped relations in the female-consumer/male-model and the female-consumer/female-model conditions. These relations are detailed in the lower part of Fig. 3.

We looked at studies in the field of advertising research that examined the relationship between model eroticism and product evaluations depending on the interaction of consumer and model gender and used the same model for different levels of eroticism. Studies that meet all of these requirements and did not focus on extremely erotic ads (e.g., *Dianoux/Linhart 2010; Reichert/LaTour/Ford*

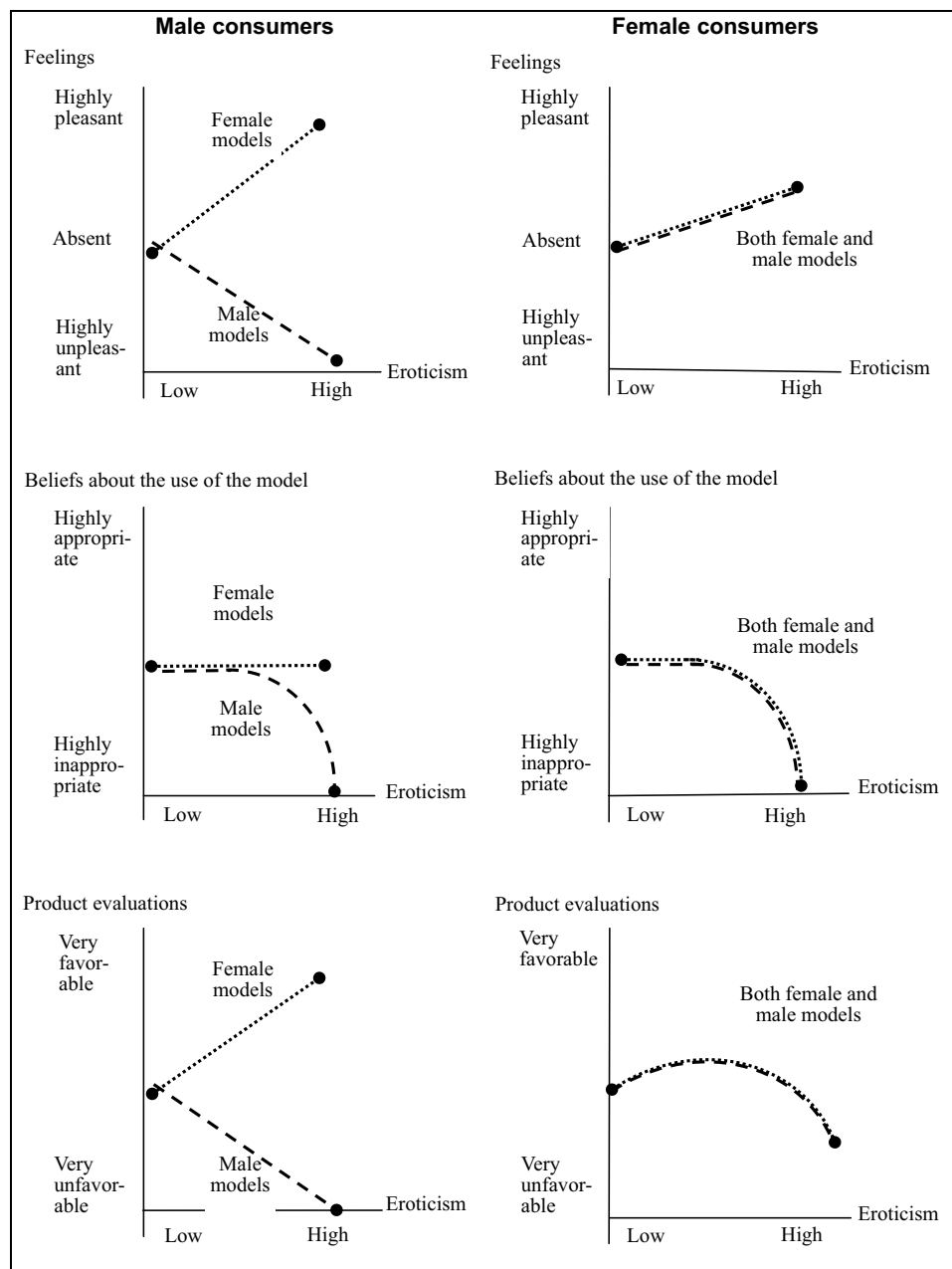


Fig. 3: Hypothesized shapes of gender-dependent responses to eroticism

2011) or even scandalous advertising (e.g., *Bello et al.* 1983) are scarce. The experiments conducted by *LaTour/Henthorne* (1993), *Liu/Li/Cheng* (2006), *Patzer* (1980), and *Simpson/Horton/Brown* (1996) meet these conditions.

Patzer (1980) compared two levels of model eroticism in the male-consumer/female-model condition and found a positive effect of eroticism on the purchase intent of body soap. *LaTour/Henthorne* (1993) reported a positive effect on brand attitudes for the male-consumer/female-model condition and a negative effect for the female-consumer/female-model condition for perfume (the latter finding contradicts our presumptions). *Simpson/Horton/Brown* (1996) manipulated a male model's eroticism and tested the relationship between eroticism and the purchase intent of the promoted body oil and of a ratchet wrench set depending on the consumer gender. In line with our predictions, the intent to purchase these items decreased with increasing model eroticism in the male-consumers/male-model condition. For the female-consumer/male-model condition, the authors observed an Ω -shaped relation. However, this relation was not found when the attitudes toward the brand were used as the dependent variable. *Liu/Li/Cheng* (2006) included either an image of a female or an image of a male model that differed regarding her/his nudity (fully dressed versus dressed in a bra/vest) in an ad for a bakery and asked female and male Chinese consumers to evaluate this shop. They found a negative effect of eroticism in the female-consumer/male-model condition and no effects in the remaining consumer-gender/model-gender conditions. These findings contradict our presumptions. The authors argue that there are special Chinese cultural norms regarding male nudity. For the female-consumer/female-model condition, we were not able to find experimental studies that manipulated the level of eroticism while holding the model constant. We conclude that research neither clearly supports nor contradicts our presumptions.

3. Study

In the first step, we identify motifs of male and female models that differ regarding the level of eroticism and assess feelings induced by these motifs. As described above, the authors in the field of erotic advertising presume that consumers scrutinize the appropriateness of the use of erotic models for advertising purposes to a higher extent when there is no natural fit between the product and eroticism. Thus, in the second step, we identify products that are congruent or incongruent with eroticism. In the third step, we investigate the moderating role of the gender combinations for the effect of eroticism on the beliefs about the appropriate use of models and on the evaluations of high-fit-products. In the fourth step, we carry out this examination for low-fit-products.

This procedure implies that we investigated effects of eroticism on feelings and effects of eroticism on beliefs

about the inappropriate use of models and on product evaluations in different experiments. By doing so, we wanted to avoid prematurely activating beliefs in the test participants about the inappropriate use of the motifs for advertising purposes when they were asked to indicate their feelings. Clearly, our study design does not allow for comparing the effects of feelings and beliefs on product evaluations. Because our focus is to show the differential role of gender aspects and because the effect of the feelings and the beliefs would not be doubted in literature, we decided to use this procedure [4].

Data collection took place among students at universities located in Germany within four years between 2011 and 2014. The test participants could voluntarily report their sexual orientation. Students who indicated a homosexual orientation were excluded from data analyses.

3.1. Selection of the motifs and assessment of induced feelings

Experimental design: The design is a 2 (model: male, female) \times 2 (source of the model's eroticism: nudity or pose) \times 3 (level of model eroticism: low, moderate, and high) \times 2 (consumer: female and male) factorial design. The source-of-eroticism factor served only as a replicate factor to subsequently enable us to prove the stability of the findings.

Test stimuli: We bought the rights to use motifs of different models from photo agencies for the purpose of our experiment. We removed the background of the portrayals, modified the images of the models with the means of picture editing, and showed the models in front of a neutral grey background. While nudity can be easily manipulated, adding a variation of the eroticism through the model's pose is more difficult. In the case of the moderately erotic image of the male model we used, the person touches his pubic region in an explicit way; in the highly erotic motif, he additionally pulls down his jeans and reveals a larger part of this abdomen. The eroticism of the female model's pose is modified by different forms of self-touch and opening of her legs. The motifs are shown in *Fig. 4*.

Sample, procedure, and measures: We asked a sample of our students who collected data from their fellow students for their diploma theses and independent studies to present one of the motifs shown in *Fig. 4* to the participants of their experiments at the beginning of their surveys and to include the measures necessary for assessing perceptions of eroticism and feelings into their questionnaires. This procedure required a longer period of time for data collection. By doing so, we cannot assure that each test person did only provide one single observation to our study. Instead, there may be some test participants who reported data for different motifs at different times (e.g., evaluated motif X at the end of 2011 and motif Y in the summer of 2013). In total, we received data contained in 840 questionnaires (age of the participants: $M_{\text{age}} = 23.75$ years, $SD = 3.73$, 50.7 % female). First, the

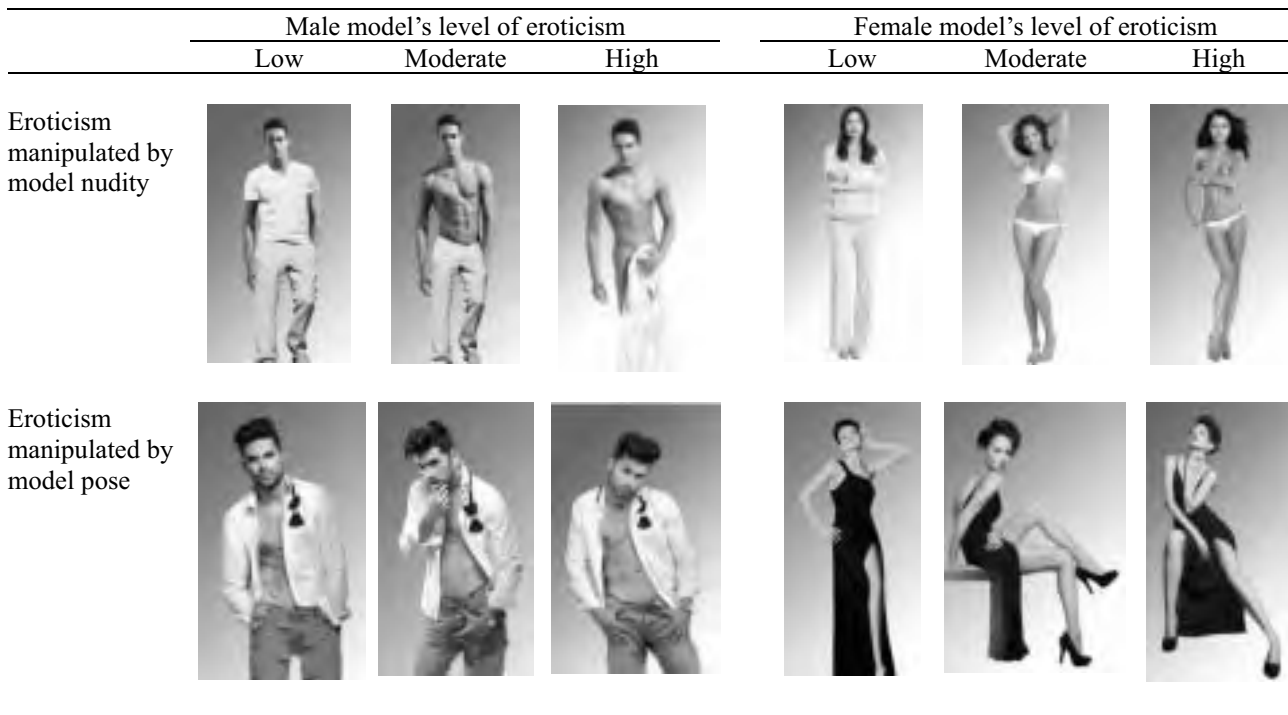


Fig. 4: Test stimuli used in Part 1 of the experiment

test participants were asked to indicate the degree to which they described their feelings about the motif as “pleasant” or “unpleasant,” “comfortable” or “uncomfortable,” and “positive” or “negative” ($\alpha = .858$). To assess perceptions of eroticism, they subsequently agreed or disagreed to “This motif is strongly sexually-related” and “This motif is very erotic” ($\alpha = .759$). These latter statements have been adopted from Reichert/Fosu (2005, p. 148) and Sengupta/Dahl (2008, p. 65). All scales were seven-point scales. After having completed the questionnaire, the test participants were informed that they contributed to an experiment conducted to test the suitability of portrayals for advertising purposes.

Results: We used the data to verify whether we successfully manipulated the level of eroticism and to analyze whether the feelings induced by the erotic motifs depend on the gender combinations. The underlying data are shown in Tab. 1. First, we assessed whether the perceptions of eroticism depended on the presented motifs. Overall, the perceptions of eroticism increased with the manipulated level ($M_{\text{low}} = 2.38$, $M_{\text{moderate}} = 4.07$, $M_{\text{high}} = 5.26$, $F(2, 837) = 353.003$, $p < .001$). Because these perceptions also increased with the level of eroticism shown in the motifs in all consumer-gender, model-gender, and source-of-eroticism conditions, we concluded that our manipulation was successful.

Second, we investigated the relationship between the level of eroticism and the feelings. A detailed inspection of Tab. 1 shows that the type of relationships between the level of eroticism and the feelings did not systematically depend on the source of eroticism. Thus, we focus on the findings that are based on the aggregated data as

shown in Fig. 5. For the male-consumer/male-model condition, we observed a negative effect ($F(2, 210) = 6.481$, $p < .01$) when the low- and the moderate-eroticism conditions are compared to the high-eroticism condition. For the male-consumer/female-model condition, we revealed a positive effect ($F(2, 198) = 28.047$, $p < .001$). For the female-consumer/male-model condition, the data also indicated a positive effect ($F(2, 219) = 24.356$, $p < .001$). The same pattern of results was found for the female-consumer/female-model condition ($F(2, 201) = 6.869$, $p < .001$).

Interpretation: The signs of the effect of eroticism on the feelings are in line with our expectations. Moreover, the observed opposite-sex effects are as expected because we found a lower opposite-sex effect for females compared to males. Only the absence of a difference between the feelings in the low- and the moderate-eroticism conditions for the male consumer/male model combination contradicted our expectations. In Section 2.2, we argued that homophobia may be a cause for a negative same-sex effect for men. Probably, sensations of homophobia are not triggered until strongly erotic male models are shown to male consumers.

3.2. Identification of product categories with a high versus low fit to eroticism

Experimental design: We conducted an experiment to evaluate the congruity of different product categories with eroticism. The design was a 4 (products) \times 2 (consumer: male, female) factorial design.

Sample, procedure, and measures: We asked a sample of 278 students ($M_{\text{age}} = 23.60$ years, $SD = 3.827$, 48.3 % fe-

Consumer gender	Source of eroticism	Male model's level of eroticism			Female model's level of eroticism		
		Low	Moderate	High	Low	Moderate	High
<i>Perceptions of eroticism (1 = very low, 7 = very high):</i>							
Male	Nudity	2.49 (1.45)	3.96 (1.28)	4.60 (1.46)	2.24 (1.19)	4.24 (.94)	5.97 (1.11)
	Pose	2.42 (1.15)	3.97 (1.31)	4.64 (1.53)	2.75 (1.09)	3.62 (1.36)	5.18 (1.32)
	Overall	2.45 (1.30)	3.97 (1.29)	4.62 (1.49)	2.47 (1.17)	3.96 (1.18)	5.62 (1.26)
Female	Nudity	2.54 (1.11)	4.36 (1.31)	5.37 (1.02)	1.96 (.76)	4.14 (.96)	5.71 (.99)
	Pose	2.22 (1.31)	4.27 (1.43)	5.09 (1.44)	2.50 (1.50)	3.89 (1.55)	5.52 (1.43)
	Overall	2.37 (1.22)	4.31 (1.37)	5.22 (1.26)	2.21 (1.19)	4.02 (1.27)	5.62 (1.21)
<i>Feelings (1 = highly unpleasant, 7 = highly pleasant):</i>							
Male	Nudity	4.10 (1.45)	3.89 (1.35)	3.17 (1.38)	3.92 (1.25)	5.36 (1.14)	5.78 (1.03)
	Pose	3.40 (1.03)	2.96 (1.38)	2.69 (1.30)	3.31 (1.27)	3.60 (1.34)	4.88 (1.23)
	Overall	3.75 (1.29)	3.42 (1.43)	2.93 (1.35)	3.65 (1.28)	4.57 (1.51)	5.38 (1.20)
Female	Nudity	4.09 (1.02)	4.63 (.90)	4.86 (1.04)	4.00 (1.36)	4.39 (.89)	4.69 (1.05)
	Pose	3.35 (.88)	4.36 (1.32)	4.83 (.76)	3.70 (1.18)	4.31 (1.37)	4.58 (1.56)
	Overall	3.70 (1.01)	4.49 (1.14)	4.84 (.90)	3.86 (1.28)	4.35 (1.31)	4.64 (1.30)

Note: Figures indicate the mean value and the standard deviation (in parentheses).

Tab. 1: Manipulation check and the gender-dependent effect of eroticism on feelings

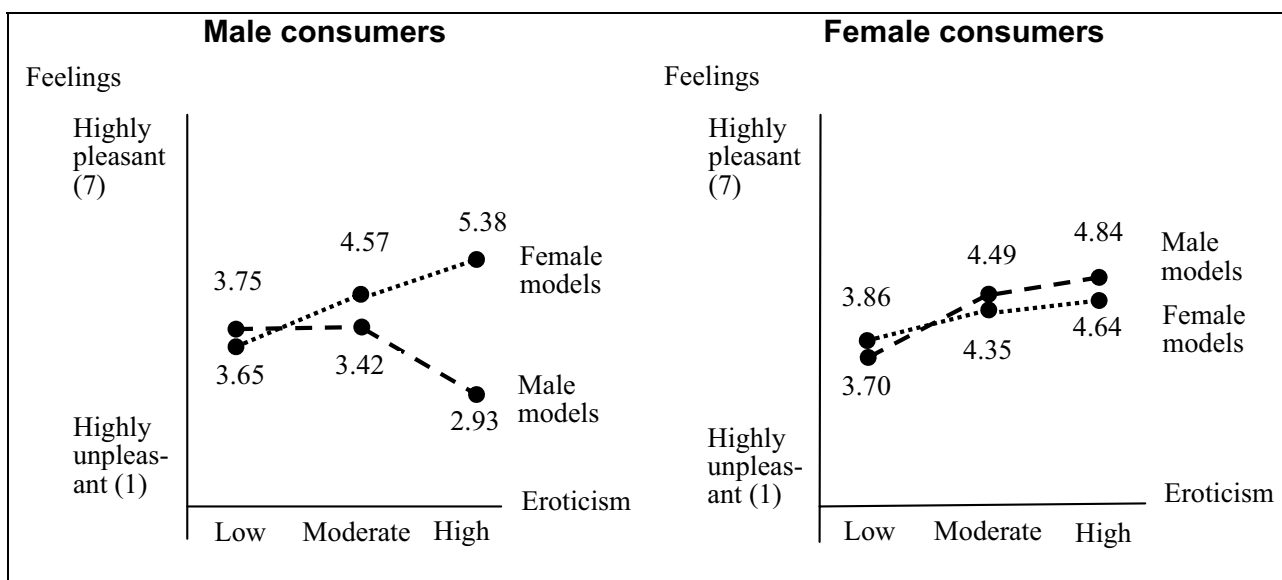


Fig. 5: Gender-dependent effects of eroticism on feelings

male) to evaluate the categories of premium wristwatches, deodorants, cereal bars, and mineral waters regarding the fit to eroticism. The data were collected via face-to-face interviews. Each test person rated only one product category. We utilized the following statements to assess the fit of product categories to eroticism: "Products from this category help to attract desirable sexual partners" (adopted from Gould 1995, p. 404), "By using certain products from this category I can become more sexually attractive," "I would expect to see nudity in an advert for this category" (adopted from Sherman/Quester 2005, p. 69), and "The use of sexual motifs in advertisements fits to this category" ($\alpha = .904$). The test partici-

pants agreed or disagreed to these statements on a seven-point scale.

Results: The results that are shown in Tab. 2 indicate that the test persons found premium wristwatches and deodorants highly congruent with eroticism and cereal bars and mineral waters as incongruent.

Based on these findings, we decided to use a premium wristwatch and a deodorant to analyze the moderating role of the consumer/model gender combination on the effects of eroticism for high-fit-products and a cereal bar and a mineral water to investigate this role for low-fit-products.

Product category	Consumer gender		Overall	t-Test against the scale's midpoint 4
	Male	Female		
Premium wristwatch	4.63 (.94)	4.68 (.88)	4.65 (.91)	$t(68) = 5.968, p < .001$
Deodorant	5.73 (1.06)	5.34 (1.40)	5.54 (1.25)	$t(69) = 10.274, p < .001$
Cereal bar	2.15 (.87)	2.16 (.85)	2.15 (.85)	$t(66) = -17.729, p < .001$
Mineral water	1.42 (.54)	1.79 (1.06)	1.60 (.86)	$t(69) = -23.393, p < .001$

Notes: Scale ranges from 1 (low fit to eroticism) to 7 (high fit to eroticism).

Figures indicate the mean value and the standard deviation (in parentheses).

Tab. 2: Fit of different product categories to eroticism

3.3. The moderating role of gender in the case of promoting high-fit-products

Experimental design: We used a 2 (model: male, female) × 2 (source of the model's eroticism: nudity or pose) × 3 (level of model eroticism: low, moderate, and high) × 2 (advertised product: wristwatch and deodorant) × 2 (consumer: female and male) factorial design. The level of eroticism, the consumer gender, and the model gender are the experimental factors. The source of eroticism and the product served as replicate factors to gain insights into the stability of the relations.

Test stimuli: We combined the motifs of the models (see Fig. 4) with a picture of a sailing yacht and included either a picture of a wristwatch or a picture of a deodorant. This procedure resulted in 24 advertisements (12 motifs × 2 products). For the wristwatches, we used a fictitious brand name (Vade). For the deodorant, we chose a brand name that is unknown in Germany (Malizia). We tested brand knowledge in a pretest. In the ads promoting the deodorants, a "deodorant for men" was shown to male consumers and a "deodorant for women" was presented to female consumers. In the case of the ads promoting the wristwatch, both a watch for males and a watch for females were depicted and the model was wearing the respective version. For the purposes of illustrating what the ads looked like, there is an example in Fig. 6. It shows the version of the ads designed to advertise the deodorant for male consumers by using a female model in different poses.

Sample, procedure, and measures: We used the same procedure as explained in Section 3.1 and received data con-

tained in 1,653 questionnaires. The students ($M_{age} = 23.55$ years, $SD = 3.96$, 48.3 % female) were asked to look at one ad version as long as they wanted and then to fill out the questionnaire. The test participants indicated the degree to which they evaluated the advertised product as "appealing," "attractive," "likeable," and "good" ($\alpha = .861$). We expected that participants would find the model inappropriate if the model either elicited thoughts about sexuality that the recipient does not wish to be elicited by advertising or if the use of the model evoked thoughts about the manipulative intent of the advertiser. To assess these beliefs, the test participants had to judge the advertiser by agreeing or disagreeing to the statements: "The ad is designed to distract the viewers' attention from the product," "The ad is designed to entice the viewer to focus on the depicted person," "The ad is designed to affect the viewers' product evaluation by the means of the depicted person," and "The ad is designed to induce feelings that are not logically connected with the product" ($\alpha = .763$). We refrained from using terms such as "inappropriate" or "erotic" to prevent the test participants from elaborating intensely on the purpose of the experiment. All scales were seven-point scales.

Results: In Tab. 3, we show the effect of model eroticism that was varied in three levels (low, moderate, and high) on the beliefs about the inappropriate use of the model for advertising purposes and on the product evaluations depending on the consumer and the model gender. Because the findings did not systematically vary with regard to the source of eroticism and the product factor, we collapsed the data across these factors and visualized the relations in Fig. 7.



Fig. 6: Examples of the created advertisements

Consumer gender	Source of eroticism	Product	Male model's level of eroticism			Female model's level of eroticism		
			Low	Moderate	High	Low	Moderate	High
<i>Beliefs about the use of the model (1 = highly inappropriate, 7 = highly appropriate):</i>								
Male	Nudity	Deodorant	4.26 (.91)	3.94 (.95)	2.71 (1.23)	3.59 (.76)	3.84 (.71)	3.84 (.78)
		Watch	3.86 (1.00)	3.89 (1.37)	3.05 (1.05)	3.68 (.75)	3.46 (.96)	3.66 (1.14)
	Pose	Deodorant	3.86 (1.49)	3.32 (1.08)	2.03 (1.00)	3.69 (1.03)	3.87 (1.35)	3.88 (1.19)
		Watch	3.83 (1.46)	3.77 (1.11)	2.68 (1.51)	3.25 (1.29)	3.43 (1.47)	3.34 (1.12)
	<i>Overall</i>			<i>3.97 (1.20)</i>	<i>3.75 (1.08)</i>	<i>2.61 (1.26)</i>	<i>3.56 (.98)</i>	<i>3.66 (1.16)</i>
Female	Nudity	Deodorant	3.60 (.77)	3.70 (.72)	3.38 (.81)	3.59 (.99)	3.64 (1.50)	3.21 (1.21)
		Watch	3.88 (1.27)	3.81 (1.35)	2.98 (1.41)	4.22 (.87)	3.90 (.88)	3.30 (1.29)
	Pose	Deodorant	3.27 (.70)	3.43 (1.05)	2.73 (1.12)	3.43 (.77)	3.43 (.86)	2.88 (.86)
		Watch	3.82 (1.03)	4.09 (1.06)	3.24 (1.37)	3.96 (1.00)	4.18 (.83)	3.64 (.98)
	<i>Overall</i>			<i>3.64 (.98)</i>	<i>3.76 (1.08)</i>	<i>3.10 (1.19)</i>	<i>3.80 (.96)</i>	<i>3.79 (1.08)</i>
<i>Product evaluations (1 = very unfavorable, 7 = very favorable):</i>								
Male	Nudity	Deodorant	3.31 (1.04)	3.16 (1.21)	2.56 (1.07)	3.12 (1.22)	3.75 (.85)	4.19 (1.28)
		Watch	3.33 (1.15)	3.49 (1.61)	2.43 (1.03)	2.77 (1.06)	3.69 (1.56)	3.68 (1.53)
	Pose	Deodorant	3.21 (1.38)	2.76 (1.42)	1.89 (1.09)	3.19 (1.18)	3.35 (1.00)	3.92 (1.36)
		Watch	3.22 (1.56)	3.26 (1.53)	2.49 (1.20)	2.75 (1.34)	3.37 (1.55)	3.63 (1.55)
	<i>Overall</i>			<i>3.28 (1.25)</i>	<i>3.19 (1.46)</i>	<i>2.34 (1.12)</i>	<i>2.96 (1.20)</i>	<i>3.55 (1.27)</i>
Female	Nudity	Deodorant	3.54 (1.74)	4.51 (1.54)	4.16 (1.49)	3.25 (1.38)	4.22 (1.28)	3.08 (1.21)
		Watch	3.85 (1.61)	4.27 (1.64)	3.11 (1.64)	3.66 (1.23)	3.87 (1.03)	3.35 (1.23)
	Pose	Deodorant	3.03 (1.44)	4.04 (1.09)	2.94 (1.28)	3.22 (1.23)	3.55 (1.41)	3.05 (1.45)
		Watch	3.53 (1.17)	4.52 (1.01)	3.69 (1.44)	3.62 (1.49)	3.86 (1.76)	3.88 (1.66)
	<i>Overall</i>			<i>3.50 (1.52)</i>	<i>4.34 (1.36)</i>	<i>3.52 (1.54)</i>	<i>3.44 (1.34)</i>	<i>3.88 (1.39)</i>

Note: Figures indicate the mean value and the standard deviation (in parentheses).

Tab. 3: Effects of eroticism on the beliefs and the product evaluations for high-fit-products

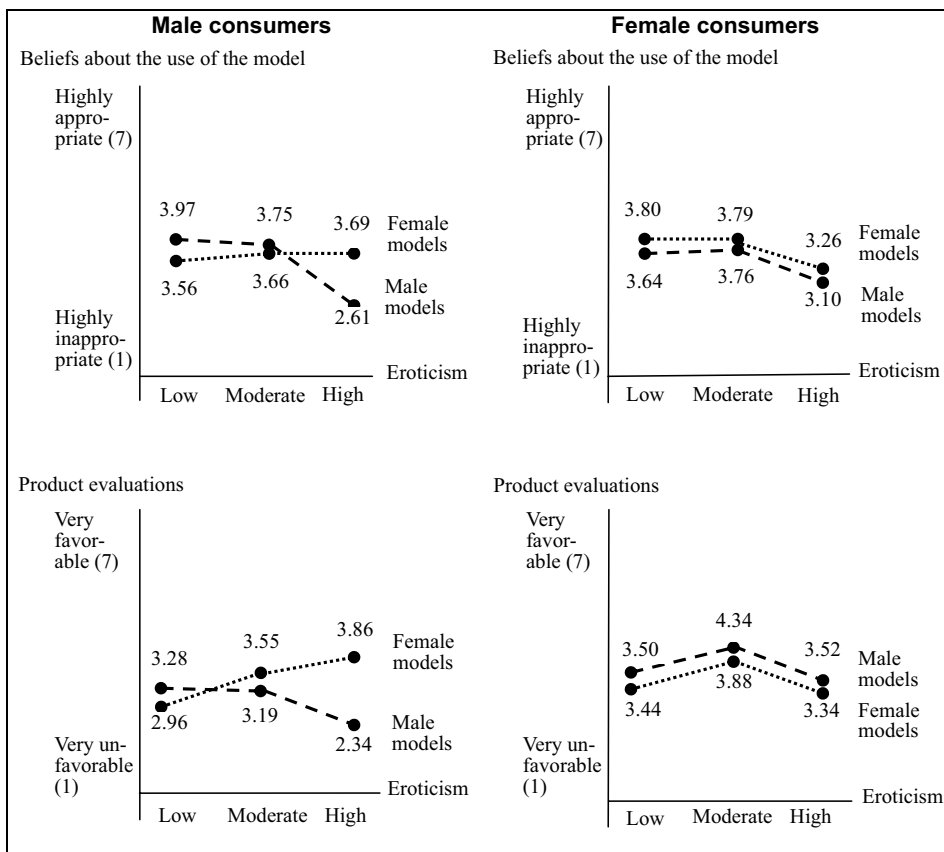


Fig. 7: Effects of eroticism on the beliefs and the product evaluations for high-fit-products

First, we focus the findings regarding the effect of eroticism on the beliefs about the inappropriate use of the models for advertising purposes. For the male-consumer/male-model condition, we found a negative effect ($F(2, 455) = 54.273, p < .01$) when the low- and the moderate-eroticism conditions are compared to the high-eroticism condition. For the male-consumer/female-model condition, we observed a null effect ($F(2, 393) = .500, NS$). For the female-consumer/male-model condition, the data indicated a negative effect for the high-eroticism condition compared to the low- and moderate-eroticism conditions ($F(2, 384) = 13.424, p < .001$). The same pattern of results was found for the female-consumer/female-model condition ($F(2, 409) = 11.954, p < .001$).

Second, we look at the findings regarding the effect of eroticism on the product evaluations. Based on the findings from prior research on the effectiveness of erotic advertising, we expected an overall null effect or an overall negative effect of the level of eroticism on product evaluations. Combined across the consumer/model gender combinations, the products, and the source of eroticism, our findings fit these expectations to a certain extent. We found an overall Ω -shaped relation ($M_{low} = 3.29, M_{moderate} = 3.70, M_{high} = 3.24, F(2, 1650) = 17.400, p < .001$), but the size of the overall effect of the level of eroticism on the product evaluations turned out to be marginal ($\eta = .056$). For the male-consumer/male-model condition, we found a negative effect ($F(2, 455) = 23.693, p < .001$) when the low- and the moderate-eroticism conditions are compared to the high-eroticism condition. For the male-consumer/female-model condition, we observed a positive effect ($F(2, 393) = 16.197, p < .001$). For the female-consumer/male-model condition, the data indicated an Ω -shaped relation ($F(2, 384) = 13.483, p < .001$). The same pattern of results was revealed for the female-consumer/female-model condition ($F(2, 409) = 6.009, p < .01$).

Interpretation: We found that the optimum levels of eroticism in advertising depend on the consumer/model gender combinations. As a result, we conclude that the overall effect of eroticism is partly averaged out when data are combined across consumer/model gender combinations which can explain numerous findings in prior research.

Supplementary analysis: We also investigated whether erotic advertising is advantageous compared to advertising that does not show any model. We created ad versions for the deodorant that did not contain the picture of a model and assessed product evaluations in an additional sample consisting of 60 students ($M = 3.03$ for male consumers, $M = 2.90$ for female consumers). If we, for example, compare these findings to the findings resulting in the condition in which the portrayal of the female model dressed in the bikini is shown ($M = 3.75$ for male consumers, $M = 4.22$ for female consumers), the use of eroticism turns to be advantageous ($F(1, 128) = 18.577, p < .001$). This finding was also replicated for the promoted wristwatch.

3.4. The moderating role of gender in the case of promoting low-fit-products

Experimental design: We replicated this experiment by considering products with a lower fit to eroticism with minor changes. We used a 2 (model: male, female) \times 3 (level of model eroticism: low, moderate, and high) \times 2 (product: mineral water, cereal bar) \times 2 (consumer: male, female) factorial design. We refrained from additionally considering the model's pose because the experiment described above had shown that the effects of eroticism do not depend systematically on the way used to manipulate perceptions of eroticism.

Test stimuli, sample, procedure, and measures: We adopted the advertisements that differed regarding the model's nudity to create the test stimuli. The brand names of the mineral water (Passion Quell) and the cereal bar (Trope) were fictitious names. In total, 815 students ($M_{age} = 24.30$ years, $SD = 4.95$, 50.7 % female) were assigned to the 24 test conditions. The procedure and the measures were adopted from the study explained above. Cronbach's Alpha was .906 for the product evaluations and .895 for the beliefs about the appropriate use of the model.

Results: In Tab. 4, we describe the findings for the beliefs about the model's inappropriateness and the product evaluations depending on the manipulated factors. Because the results did not systematically depend on the product factor, we collapsed the data across this factor. We visualize these findings in Fig. 8. In the following, we compare the results for the low-fit-products to the findings for the high-fit-products to reveal the role of the consumer/model gender combinations under these conditions.

The main difference between the low-fit- and the high-fit-products can be found for the beliefs about the inappropriateness of the use of moderately erotic models. For the high-fit-products, we found no significant differences between the moderate- and the low-eroticism conditions in all consumer-gender/model-gender conditions (male consumer/male model: $M_{low} = 3.97, M_{moderate} = 3.75$; male consumer/female model: $M_{low} = 3.56, M_{moderate} = 3.66$; female consumer/male model: $M_{low} = 3.64, M_{moderate} = 3.76$; female consumer/female model: $M_{low} = 3.80, M_{moderate} = 3.79$). On the contrary, for the low-fit-products, differences in these beliefs could be revealed in three consumer-gender/model-gender combinations (male consumer/male model: $M_{low} = 3.70, M_{moderate} = 2.87, F(1, 135) = 13.618, p < .001$; male consumer/female model: $M_{low} = 3.90, M_{moderate} = 4.04, F(1, 130) = .460, NS$; female consumer/male model: $M_{low} = 3.92, M_{moderate} = 3.21, F(1, 135) = 10.093, p < .01$; female consumer/female model: $M_{low} = 3.90, M_{moderate} = 3.43, F(1, 135) = 3.596, p < .10$). These findings indicate that consumers are "less offended" by moderately erotic models in advertisements when these models are used to promote products with a high fit to eroticism compared to low-fit-products.

Consumer gender	Product	Male model's level of eroticism			Female model's level of eroticism		
		Low	Moderate	High	Low	Moderate	High
<i>Beliefs about the use of the model (1 = highly inappropriate, 7 = highly appropriate):</i>							
Male	Mineral water	3.77 (1.32)	3.40 (1.39)	2.48 (1.60)	3.92 (1.44)	4.12 (1.25)	4.26 (1.35)
	Cereal bar	3.63 (.90)	2.29 (1.40)	1.98 (1.09)	3.89 (.74)	3.98 (1.31)	4.13 (.94)
	<i>Overall</i>	<i>3.70 (1.12)</i>	<i>2.87 (1.49)</i>	<i>2.24 (1.39)</i>	<i>3.90 (1.11)</i>	<i>4.04 (1.27)</i>	<i>4.19 (1.14)</i>
Female	Mineral water	3.86 (1.37)	3.52 (1.32)	2.42 (1.15)	3.86 (1.03)	3.45 (1.64)	2.18 (1.05)
	Cereal bar	3.98 (.74)	2.89 (1.54)	1.91 (.91)	3.94 (1.51)	3.40 (1.61)	2.36 (1.05)
	<i>Overall</i>	<i>3.92 (1.11)</i>	<i>3.21 (1.46)</i>	<i>2.16 (1.06)</i>	<i>3.90 (1.29)</i>	<i>3.43 (1.61)</i>	<i>2.27 (1.05)</i>
<i>Product evaluations (1 = very unfavorable, 7 = very favorable):</i>							
Male	Mineral water	3.71 (1.62)	3.81 (1.33)	3.04 (1.36)	3.88 (1.41)	4.23 (1.20)	4.65 (1.34)
	Cereal bar	3.44 (1.34)	2.37 (1.14)	2.12 (.97)	3.80 (1.14)	4.24 (1.14)	4.91 (1.40)
	<i>Overall</i>	<i>3.58 (1.48)</i>	<i>3.12 (1.43)</i>	<i>2.60 (1.27)</i>	<i>3.83 (1.26)</i>	<i>4.23 (1.16)</i>	<i>4.78 (1.36)</i>
Female	Mineral water	3.57 (1.36)	3.52 (1.21)	2.81 (1.33)	3.32 (1.51)	3.40 (1.71)	2.21 (1.38)
	Cereal bar	2.89 (1.17)	3.04 (1.30)	2.43 (1.08)	3.13 (1.37)	3.05 (1.38)	2.26 (1.04)
	<i>Overall</i>	<i>3.25 (1.31)</i>	<i>3.28 (1.27)</i>	<i>2.62 (1.22)</i>	<i>3.22 (1.44)</i>	<i>3.22 (1.54)</i>	<i>2.24 (1.21)</i>

Note: Figures indicate the mean value and the standard deviation (in parentheses).

Tab. 4: Effects of eroticism on the beliefs and the product evaluations for low-fit-products

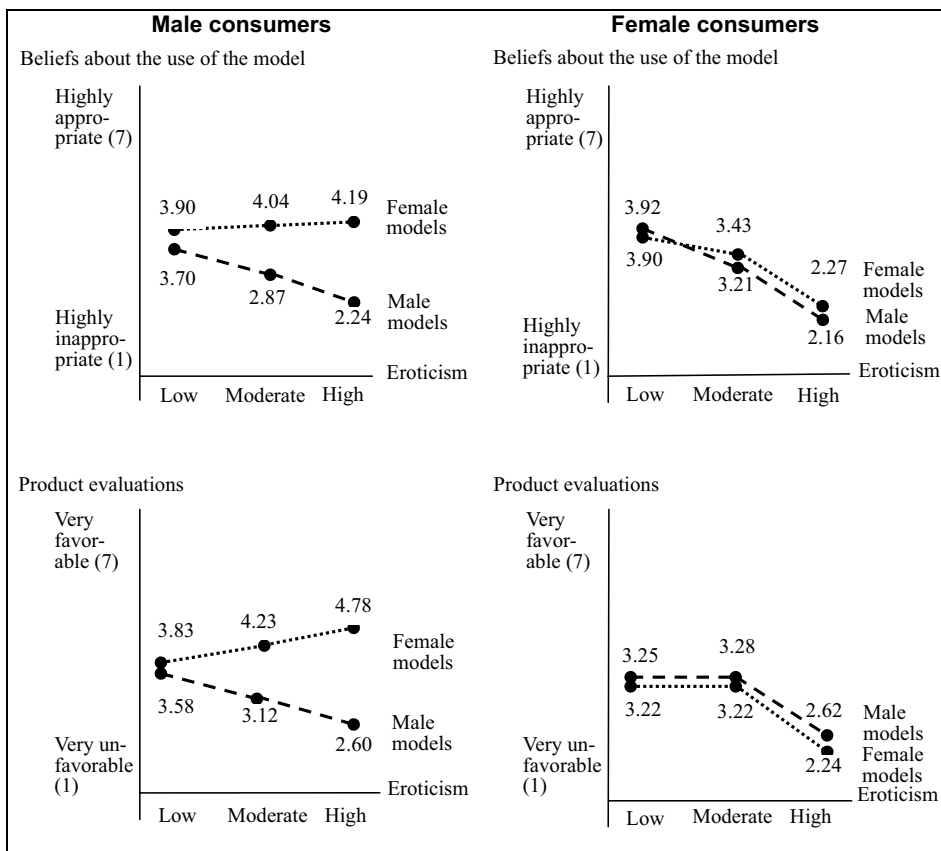


Fig. 8: Effects of eroticism on the beliefs and the product evaluations for low-fit-products

Regarding the product evaluations, the high-eroticism condition turned out to be disadvantageous when data are collapsed across the product and the gender factors ($M_{low} = 3.47$, $M_{moderate} = 3.46$, $M_{high} = 3.04$, $F(2, 812) = 7.347$, $p < .001$). The different effects of eroticism depending on

the product/eroticism fit were also reflected in the product evaluations. In the male-consumer/male-model condition, moderately erotic male models deteriorated product evaluations compared to male models with a low degree of eroticism. For female consumers, the relation be-

tween eroticism and product evaluations that was Ω -shaped for the high-fit-products turned out to be different for the low-fit-products because no significant increase from the low-eroticism to the moderate-eroticism condition could be observed.

Interpretation: The results about the moderating role of gender combinations on the relationship between model eroticism and product evaluations are contingent on the fit of the product to eroticism. The use of moderately erotic models is less advantageous to promote low-fit-products compared to high-fit-products. This finding can be explained by the reduced beliefs about the appropriate use of moderately erotic models for promoting low-fit-products. In summation, the results depicted in the lower parts of *Fig. 7* and *Fig. 8* indicate that there is no generally valid optimum level of model eroticism. Instead, the optimum level depends on the consumer gender, the model gender, and the fit of the promoted product to eroticism. Because these optimum levels can also be derived from comparing the feelings to the beliefs about the inappropriate use of models for advertising purposes, we can provide indirect evidence for the relevance of these mediating variables.

Supplementary analysis: Additionally, we looked at the product evaluations when the ad did not contain a picture of a model. An additional sample consisting of 63 students was exposed to these ads promoting mineral water and evaluated this product ($M = 3.71$ for male consumers, $M = 3.26$ for female consumers). For male consumers, the use of the highly erotic female models resulted in more favorable product evaluations ($M = 4.65$, $F(1, 59) = 6.696$, $p < .05$). For female consumers, we did not find a level of model eroticism that turned out to be superior to the model-absent condition. The same results were found for the cereal bar.

4. Implications for advertising practice

Our investigations show that erotic cues contained in advertisements elicit feelings and activate beliefs about the inappropriate use of erotic models for advertising purposes. However, the strength and the sign of the feelings and the strength of these beliefs depend on consumer/model gender combinations and on the fit of the promoted product to eroticism. Thereby, divergent results regarding the optimum level of eroticism emerge (*Tab. 5*). Hence, marketers are recommended to consider these factors when they decide about the level of eroticism. We

Consumer gender	Model gender	Optimum level of model eroticism	
		High-fit-products	Low-fit-products
Male	Male	Low or moderate	Low
Male	Female	High	High
Female	Male	Moderate	Low or moderate
Female	Female	Moderate	Low or moderate

Tab. 5: Optimum level of model eroticism

return to the question about the most beneficial level of eroticism to advertise the Schöfferhofer beer and the Magnum Temptation ice cream. Here, the condition of a low fit to eroticism is likely to exist. Across consumer gender, our data indicate that a moderate level of a female model's eroticism seems to be advantageous.

Moreover, we found that the responses to erotic images of models did not systematically differ with regard to whether the degree of the model's nudity or the model's pose was used to link the product to eroticism. When the pose and additional execution cues are considered as sources of eroticism, a variety of additional opportunities for advertisers exist for creating ads that are highly unique for the brand. Female models can be shown lying on a sofa or in a bed in an alluring pose. Her facial expression can be rather special (e.g., calm, longing, or playful). Activities such as playing with her hair, touching her body, and turning the front of her body toward the viewer can be interpreted as signals of sexual interest. Moreover, she could present her body in a seductive way. The fabric could cover her body to a certain degree which induces curiosity and fantasies and the fabric itself could also have romantic or sexual connotations. She can be shown in a neutral or meaningful environment such as sitting in a bar or standing in front of a mirror while reapplying lipstick. Male models may look like antique statues such as Michelangelo's David or may be presented in erotic poses such as showing the chest while holding the arms above the head or showing the hands covering his pubic region. The use of special colors such as black and white to signal a scene at night or red light may enhance the degree of eroticism. Erotic models can be lifelike or presented in the style of a piece of fine art. Parts of the body could be omitted so that the model is shown as a torso from the neck to the lower body. Moreover, models could express very specific types of eroticism such as autoerotic poses. Even in print advertisements, dynamic elements could be included. For instance, the model can be shown while undressing. Additional types of poses and presentations are described by *Reichert/Ramirez* (2000). When combining such aspects in a meaningful way, the resulting image of the erotic model can be highly characteristic for the promoted brand. We did not consider erotic portrayals of couples and arrangements of two or more people in this paper. However, when motifs showing couples and groups of persons come into consideration for the use in advertisements, numerous additional possibilities result to produce moderately erotic ads that are highly distinctive for the promoted brand.

5. Limitations of the study

Evidently, there are several aspects that limit the validity of our study. First, a limitation results from the use of a student sample, i.e., the use of people who are rather homogeneous regarding their age and their cultural background. Thus, our sample may represent consumers with beliefs toward the use of erotic cues in ads that may dif-

fer systematically from these beliefs held by older consumers or held by consumers living in less permissive societies. For instance, *Pope/Voges/Brown* (2004, p. 72) refer to consumers living in the U.S. and hypothesizes that female consumers become more “offended by mild erotica in advertisement than would men.” This statement predicts a relation between eroticism and beliefs about the inappropriate use of an erotic model that is different from our results. *Liu/Li/Cheng* (2006) found that female consumers living in China disliked a bakery when a half-naked male person was depicted in the bakery’s ad. It is probable that Chinese female consumers regard portrayals of even moderately erotic models (or the nudity as a source of eroticism) as inappropriate. Second, we considered only few ways to manipulate eroticism. However, as explained above, there are manifold opportunities to manipulate the eroticism expressed by the pose of the model. It is likely that unfavorable beliefs held about the inappropriate use of a highly erotic model in advertising would be reduced if the erotic pose is presented in the style of a piece of fine art or is combined with humorous elements. Third, a limitation of the viewing time of the motifs may reduce the intensity of negative beliefs about the inappropriate use of the model for advertising purposes. Fourth, another shortcoming of our study lies in the fact that we did not collect data for feelings, beliefs, and product evaluations within the same sample which prevents us from conducting a statistical mediation analysis.

Probably, different procedures could be applied in future research for collecting the data. For instance, test persons initially could be exposed to a set of motifs (e.g., landscapes, buildings, and people) containing a motif showing the erotic model; in this step, feelings could be assessed. After a distraction task, a set of advertisements containing the ad that jointly presents the erotic model and the product could be shown; in this step, product evaluations and beliefs could be assessed. In any case, we recommend presenting different stimuli for assessing the feelings and the beliefs to avoid biased measures of the feelings.

Eroticism is an important aspect in human life in general and eroticism in advertising, thus, is a highly interesting marketing tool. We hope that we were able to increase the knowledge to a significant extent, despite the number of limitations of our study, about why different levels of eroticism in advertising are optimal for promoting products depending on consumer and model gender. Admittedly, the theories we used are known in literature. However, we combined these theories to develop presumptions about how eroticism influences feelings and beliefs and combined these presumptions to derive and successfully test hypotheses about the shape of the gender-specific relationships between eroticism of models in advertising and product evaluations.

Notes

- [1] The position that affective responses of individuals to biologically prepared cues are not cognitively controlled does not mean that cognitions are entirely absent. For instance, *Lazarus* (1984, p. 124) states that cognitive comprehension of the cue – at least to a certain extent – is a necessary precondition of any cue-induced feeling. *Ekman* (1999, p. 51) explicates this argument and states that the cognitive processing of the cues that happens prior to the generation of feelings sometimes “must be capable of operating with great speed, (...) and sometimes (the process) is slow, deliberate and conscious.” *Rupp/Wallen* (2008, p. 207) describes the development of feelings due to visual erotic cues as an iteration process that runs through a cognition-arousal-feeling loop several times.
- [2] The feelings due to erotic cues shown in advertisements may be accompanied by mild and subtle forms of arousal, i.e., bodily changes such as the galvanic skin response that can be assessed with the means of apparatus-based techniques. Results are reported by *Belch et al.* (1982, p. 425). More intense bodily reactions due to erotic cues in advertisements are unlikely to happen. For instance, there is intense research on the antecedents of genital arousal (*Chivers/Seto/Blanchard* 2007). This stream of research found that genital arousal only occurs if highly pornographic material which could not be used for advertising purposes is presented for at least three minutes.
- [3] We briefly explain the fMRI-technique that is often used for analyzing the activation of the reward and punishment circuits of the human brain. It is based on the assumptions that perceptions of external cues elicit neural activities in several brain areas which can be measured about five seconds later. If the neural activities occur, they are associated with oxygen consumption in these areas. This consumption leads to an immediate increase of deoxygenated hemoglobin in one’s blood in this brain area. Subsequently, there is increased blood flow to this area with oxygenated hemoglobin in order to replace the deoxygenated blood by oxygenated blood. The temporal change in the oxy/deoxy-hemoglobin-ratio can be measured by the fMRI-technique because oxygenated hemoglobin is more magnetic than deoxygenated hemoglobin (*Ogawa et al.* 1990; *Amaro/Barker* 2006, p. 223).
- [4] Basically, the model shown in *Fig. 2* calls for a moderated mediation model. However, it is difficult to assess both feelings and beliefs about the appropriate use of the erotic model for advertising purposes within the same sample without risking a biased assessment of feelings due to demand effects. Test persons are unlikely to reveal their true feelings due to the erotic motif when the motif is contained in an advertisement. Thus, we do not test the full model and focus on analyzing the moderating effects of the consumer/model gender combinations.

References

- Amaro Jr., E./Barker, G. J.* (2006): Study design in fMRI: Basic principles, in: *Brain and Cognition*, Vol. 60, No. 3, pp. 220–232.
- AVM* (2014): *Verbrauchs- und Medienanalyse*. Available at: <http://www.vuma.de>.
- Baldwin, J. D./Baldwin, J. I.* (1997): Gender differences in sexual interest, in: *Archives of Sexual Behavior*, Vol. 25, No. 2, pp. 181–210.
- Baumeister, R. F.* (2000): Gender differences in erotic plasticity: The female sex drive as socially flexible and responsive, in: *Psychological Bulletin*, Vol. 126, No. 3, pp. 347–374.
- Baumeister, R. F./Catanese, K. R./Vohs, K. D.* (2001): Is there a gender difference in strength of sex drive? Theoretical views, conceptual distinctions, and a review of relevant evidence, in: *Personality and Social Psychology Review*, Vol. 5, No. 3, pp. 242–273.
- Baumeister, R. F./Vohs, K. D.* (2004): Sexual economics: Sex as female resource for social exchange in heterosexual interac-

- tions, in: *Personality and Social Psychology Review*, Vol. 8, No. 4, pp. 339–363.
- Belch, M. A./Holgerson, B. E./Belch, G. E./Koppman, J. (1982): Psychophysiological and cognitive responses to sex in advertising, in: Mitchell, A. (Ed.): *Advances in consumer research*, Vol. 9, Ann Arbor, MI: Association for Consumer Research, pp. 424–427.
- Bello, D. C./Pitts, R. E./Etzel, M. J./Pitts, R. W. (1983): The communication effects of controversial sexual content in television programs and commercials, in: *Journal of Advertising*, Vol. 12, No. 3, pp. 32–42.
- Black, I. R./Organ, G. C./Morton, P. (2010): The effect of personality on response to sexual appeals, in: *European Journal of Marketing*, Vol. 44, No. 9, pp. 1453–1477.
- Buss, D. M. (1989): Conflict between the sexes: Strategic interference and the evocation of anger and upset, in: *Journal of Personality and Social Psychology*, Vol. 56, No. 5, pp. 735–747.
- Buss, D. M. (1998): Sexual strategies theory: Historical origins and current status, in: *The Journal of Sex Research*, Vol. 35, No. 1, pp. 19–31.
- Byrne, D. (1982): Predicting human sexual behavior, in: Kraut, A. G. (Ed.): *The G. Stanley Hall lecture series*, Vol. 2, Washington, DC: American Psychological Association, pp. 207–254.
- Campbell, M. C. (1995): When attention-getting advertising tactics elicit consumer inferences of manipulative intent: The importance of balancing benefits and investments, in: *Journal of Consumer Psychology*, Vol. 4, No. 3, pp. 225–254.
- Campbell, M. C./Kirmani, A. (2008): I know what you're doing and why you're doing it: The use of the persuasion knowledge model in consumer research, in: Haugtvedt, C. P./Herr, P. M./Kardes, F. R. (Eds.): *Handbook of consumer psychology*, New York: Psychology Press, pp. 549–573.
- Chan, K./Li, L./Diehl, S./Terlutter, R. (2007): Consumers' response to offensive advertising: A cross cultural study, in: *International Marketing Review*, Vol. 24, No. 5, pp. 606–628.
- Chivers, M. L. (2005): A brief review and discussion of sex differences in the specificity of sexual arousal, in: *Sexual and Relationship Therapy*, Vol. 20, No. 4, pp. 377–390.
- Chivers, M. L./Seto, M. C./Blanchard, R. (2007): Gender and sexual orientation differences in sexual response to sexual activities versus gender of actors in sexual films, in: *Journal of Personality and Social Psychology*, Vol. 93, No. 6, pp. 1108–1121.
- Costa, M./Braun, C./Birbaumer, N. (2003): Gender differences in response to pictures of nudes: A magnetoencephalographic study, in: *Biological Psychology*, Vol. 63, No. 2, pp. 129–147.
- Dahl, D./Sengupta, J./Vohs, K. D. (2009): Sex in advertising: Gender differences and the role of relationship commitment, in: *Journal of Consumer Research*, Vol. 36, No. 2, pp. 215–231.
- Damasio, A. R. (1999): *The feeling of what happens: Body and emotion in the making of consciousness*, New York: Harcourt Brace & Company.
- De Pelsmacker, P./Geuens, M. (1996): The communication effects of warmth, eroticism and humor in alcohol advertisements, in: *Journal of Marketing Communications*, Vol. 2, No. 4, pp. 247–262.
- Diamond, L. M. (2008): *Sexual fluidity: Understanding women's love and desire*, Cambridge, MA: Harvard University Press.
- Dianoux, C./Linhart, Z. (2010): The effectiveness of female nudity in advertising in three European countries, in: *International Marketing Review*, Vol. 27, No. 5, pp. 562–578.
- Dudley, S. C. (1999): Consumer attitudes toward nudity in advertising, in: *Journal of Marketing Theory and Practice*, Vol. 79, No. 4, pp. 89–96.
- Ekman, P. (1999): Basic emotion, in: Dalglish, T./Power, M. (Eds.): *Handbook of cognition and emotion*, New York: John Wiley, pp. 45–60.
- Elliot, R./Jones, A./Benfield, A./Barlow, M. (1995): Overt sexuality in advertising: A discourse analysis of gender responses, in: *Journal of Consumer Policy*, Vol. 18, No. 2/3, pp. 187–217.
- Friestad, M./Wright, P. (1994): The persuasion knowledge model: How people cope with persuasion knowledge, in: *Journal of Consumer Research*, Vol. 21, No. 1, pp. 1–31.
- Frijda, N. H. (1987): *The emotions*. Cambridge: Cambridge University Press.
- Gould, S. J. (1995): Sexualized aspects of consumer behavior: An empirical investigation of consumer lovemaps, in: *Psychology & Marketing*, Vol. 12, No. 5, pp. 395–413.
- Grazer, W. F./Keesling, G. (1995): The effect of print advertising's use of sexual themes on brand recall and purchase intention: A product specific investigation of male responses, in: *Journal of Applied Business Research*, Vol. 11, No. 3, pp. 47–57.
- Griffitt, W./Kaiser, D. L. (1978): Affect, sex guilt, gender, and the rewarding-punishing effects of erotic stimuli, in: *Journal of Personality and Social Psychology*, Vol. 36, No. 8, pp. 850–858.
- Grover, V. P./Keel, P. K./Mitchell, J. P. (2003): Gender differences in implicit weight identity, in: *International Journal of Eating Disorders*, Vol. 34, No. 1, pp. 125–135.
- Henthorne, T. L./LaTour, M. S. (1995): A model to explore the ethics of erotic stimuli in print advertising, in: *Journal of Business Ethics*, Vol. 14, No. 7, pp. 561–569.
- Huang, M.-H. (2004): Romantic love and sex: Their relationship and impacts on ad attitudes, in: *Psychology & Marketing*, Vol. 21, No. 1, pp. 53–73.
- Hyde, J. S./Durik, A. M. (2000): Gender differences in erotic plasticity: Evolutionary or sociocultural forces? Comment on Baumeister (2000), in: *Psychological Bulletin*, Vol. 126, No. 3, pp. 375–379.
- Hyllegard, K./Ogle, J. P./Yan, R.-N. (2009): The impact of advertising message strategy – Fair labour v. sexual appeal – Upon gen Y consumers' intent to patronize an apparel retailer, in: *Journal of Fashion Marketing and Management*, Vol. 13, No. 1, pp. 109–127.
- Janssen, E./Everaerd, W./Spiering, M./Janssen, J. (2000): Automatic processes and the appraisal of sexual stimuli: Toward an information processing model of sexual arousal, in: *The Journal of Sex Research*, Vol. 37, No. 1, pp. 8–23.
- Jones, M. Y./Stanaland, A. J./Gelb, B. D. (1998): Beefcake and cheesecake: Insights for advertisers, in: *Journal of Advertising*, Vol. 27, No. 2, pp. 33–51.
- Jones, S. C./Reid, A. (2011): Sex and sexism in Australian alcohol advertising: (Why) are women more offended than men? in: *Contemporary Management Research*, Vol. 7, No. 3, pp. 211–230.
- Judd, B. B./Alexander, M. W. (1983): On the reduced effectiveness of some sexually suggestive ads, in: *Journal of the Academy of Marketing Science*, Vol. 11, No. 2, pp. 156–168.
- Kassem, S./St. John, D. (1973): Sex in advertising: Its relevance, use, and effects, in: *Management Decision*, Vol. 11, No. 3, pp. 145–158.
- Kelley, K. (1985): Sex, sex guilt, and authoritarianism: Differences in responses to explicit heterosexual and masturbatory slides, in: *The Journal of Sex Research*, Vol. 21, No. 1, pp. 68–85.
- Kite, M. E./Whitley, B. E. Jr. (1996): Sex differences in attitudes toward homosexual persons, behaviors, and civil rights: A meta-analysis, in: *Personality and Social Psychology Bulletin*, Vol. 22, No. 4, pp. 336–353.
- Laan, E./Janssen, E. (2007): How do men and women feel? Determinants of subjective experience of sexual arousal, in: Janssen, E. (Ed.): *The psychophysiology of sex*, Bloomington: Indiana University Press, pp. 278–290.
- LaTour, M. S./Henthorne, T. L. (1993): Female nudity: Attitudes towards the ad and the brand, and implications for advertising strategy, in: *Journal of Consumer Marketing*, Vol. 10, No. 3, pp. 25–32.
- LaTour, M. S./Henthorne, T. L. (1994): Ethical judgments of sexual appeals in print advertising, in: *Journal of Advertising*, Vol. 23, No. 3, pp. 81–90.
- LaTour, M. S./Pitts, R. E./Snook-Luther, D. C. (1990): Female nudity, arousal, and ad response: An experimental investigation, in: *Journal of Advertising*, Vol. 19, No. 4, pp. 51–62.

- Lazarus, R. S. (1984): On the primacy of cognition, in: *American Psychologist*, Vol. 39, No. 2, pp. 124–129.
- Liu, F./Cheng, H./Li, J. (2009): Consumer responses to sex appeal advertising: A cross-cultural study, in: *International Marketing Review*, Vol. 26, No. 4, pp. 501–520.
- Liu, F./Li, J./Cheng, H. (2006): Sex appeal advertising: Gender differences in Chinese consumers' responses, in: *Asia Pacific Journal of Marketing and Logistics*, Vol. 18, No. 1, pp. 19–28.
- Lundstrom, W. J./Sciglimpaglia, D. (1977): Sex role portrayals in advertising, in: *Journal of Marketing*, Vol. 41, No. 3, pp. 72–79.
- Maner, J. K./Gailliot, M. T./Rouby, D. A./Miller, S. L. (2007): Can't take my eyes off you: Attentional adhesion to mates and rivals, in: *Journal of Personality and Social Psychology*, Vol. 93, No. 3, pp. 389–401.
- Mittal, B./Lassar, W. M. (2000): Sexual liberalism as a determinant of consumer response to sex in advertising, in: *Journal of Business and Psychology*, Vol. 15, No. 1, pp. 111–127.
- Money, J./Ehrhardt, A. A. (1972): Postpuberty and erotic dimorphism of brain and behavior, in: *Money, J./Ehrhardt, A. A. (Eds.): Man & woman, boy & girl – The differentiation and dimorphism of gender identity from conception to maturity*, Baltimore: John Hopkins University Press, pp. 236–293.
- Moore, J. N./Raymond, M. A./Mittelstaedt, J. D./Tanner, J. F. (2002): Age and consumer socialization agent influences on adolescents' sexual knowledge, attitudes, and behavior: Implications for social marketing initiatives and public policy, in: *Journal of Public Policy & Marketing*, Vol. 21, No. 1, pp. 37–52.
- Ogawa, S./Lee, T. M./Kay, A. R./Tank, D. W. (1990): Brain magnetic resonance imaging with contrast dependent on blood oxygenation, in: *Proceedings of the National Academy of Sciences*, Vol. 87, No. 24, pp. 9868–9872.
- Öhman, A./Mineka, S. (2001): Fears, phobias, and preparedness: Toward an evolved module of fear and fear learning, in: *Psychological Review*, Vol. 108, No. 3, pp. 483–522.
- Oliver, N. B./Hyde, J. S. (1993): Gender differences in sexuality: A meta-analysis, in: *Psychological Bulletin*, Vol. 114, No. 1, pp. 29–51.
- Patzer, G. L. (1980): A comparison of advertisement effects: Sexy female communicator vs. non-sexy female communicator, in: *Olson, J. C. (Ed.): Advances in consumer research*, Vol. 7, Ann Arbor, MI: Association for Consumer Research, pp. 359–364.
- Peterson, J. L./Hyde, J. S. (2010): A meta-analytic review of research on gender differences in sexuality, 1993–2007, in: *Psychological Bulletin*, Vol. 136, No. 1, pp. 21–38.
- Peterson, R. A./Kerin, R. A. (1977): The female role in advertisements: Some experimental evidence, in: *Journal of Marketing*, Vol. 41, No. 3, pp. 59–63.
- Phan, K. L./Wagner, P./Taylor, S. F./Liberzon, I. (2002): Functional neuroanatomy of emotion: A meta-analysis of emotion activation studies in PET and fMRI, in: *NeuroImage*, Vol. 16, No. 2, pp. 331–148.
- Piron, F./Young, M. (1996): Consumer advertising in Germany and the United States: A study of sexual explicitness and cross-gender contact, in: *Journal of International Consumer Marketing*, Vol. 8, No. 3/4, pp. 211–228.
- Plutchik, R. (2001): The nature of emotions, in: *American Scientist*, Vol. 89, No. 4, pp. 344–350.
- Pope, N. K. LL./Voges, K. E./Brown, M. R. (2004): The effect of provocation in the form of mild erotica on attitude to the ad and corporate image: Differences between cause-related and product-based advertising, in: *Journal of Advertising*, Vol. 33, No. 1, pp. 69–82.
- Putrevu, S. (2008): Consumer responses toward sexual and non-sexual appeals – The influence of involvement, need for cognition (NFC), and gender, in: *Journal of Advertising*, Vol. 37, No. 2, pp. 57–69.
- Putrevu, S./Swimberghek, K. (2013): The influence of religiosity on consumer ethical judgments and responses toward sexual appeals, in: *Journal of Business Ethics*, Vol. 115, No. 2, pp. 351–365.
- Redouté, J./Stoléru, S./Grégoire, M.-C./Costes, N./Cinotti, L./Lavenne, F./Le Bars, D./Forest, M. G./Pujol, J.-F. (2007): Brain processing of visual sexual stimuli in human males, in: *Human Brain Mapping*, Vol. 11, No. 3, pp. 162–177.
- Reichert, T. (2002): Sex in advertising research: A review of content, effects, and functions of sexual information in consumer advertising, in: *Annual Review of Sex Research*, Vol. 13, pp. 241–273.
- Reichert, T./Carpenter Childers, C./Reid, L. N. (2012): How sex in advertising varies by product category: An analysis of three decades of visual sexual imagery in magazine advertising, in: *Journal of Current Issues and Research in Advertising*, Vol. 33, No. 1, pp. 1–19.
- Reichert, T./Fosu, I. (2005): Women's responses to sex in advertising: Examining the effect of women's sexual self-schema on responses to sexual content in commercials, in: *Journal of Promotion Management*, Vol. 11, No. 2/3, pp. 143–153.
- Reichert, T./Heckler, S. E./Jackson, S. (2001): The effects of sexual social marketing appeals on cognitive processing and persuasion, in: *Journal of Advertising*, Vol. 30, No. 1, pp. 13–27.
- Reichert, T./LaTour, M. S./Ford, J. B. (2011): The naked truth – Revealing the affinity for graphic sexual appeals in advertising, in: *Journal of Advertising Research*, Vol. 51, No. 2, pp. 436–448.
- Reichert, T./LaTour, M. S./Lambiase, J. J./Adkins, M. (2007): A test of media literacy effects and sexual objectification in advertising, in: *Journal of Current Issues in Research in Advertising*, Vol. 29, No. 1, pp. 81–92.
- Reichert, T./McRee-Walker, K. (2005): Sex and magazine promotion: The effects of sexualized subscription cards on magazine attitudes, interest, and purchase intention, in: *Journal of Promotion Management*, Vol. 11, No. 2/3, pp. 131–141.
- Reichert, T./Ramirez, A. (2000): Defining sexually oriented appeals in advertising: A grounded theory investigation, in: *Hoch, J. C./Meyer, R. J. (Eds.): Advances in consumer research*, Vol. 27, Provo, UT: Association for Consumer Research, pp. 267–273.
- Reidenbach, E. R./McCleary, K. W. (1983): Advertising and male nudity: An experimental investigation, in: *Journal of the Academy of Marketing Science*, Vol. 11, No. 4, pp. 444–454.
- Rolls, E. T. (2011): *Emotion explained*, 2nd ed., Oxford: Oxford University Press.
- Rupp, H. A./Wallen, K. (2008): Sex differences in response to visual sexual stimuli: A review, in: *Archives of Sexual Behavior*, Vol. 37, No. 2, pp. 206–218.
- Schmidt, G. (1975): Male-female differences in sexual arousal and behavior during and after exposure to sexually explicit stimuli, in: *Archives of Sexual Behavior*, Vol. 4, No. 4, pp. 353–365.
- Schott, B. H./Minuzzi, L./Krebs, R. M./Elmenhorst, B./Lang, M./Winz, O. H./Seidenbecher, C. I./Coenen, H. H./Heinze, H.-J./Zilles, K./Düzel, E./Bauer, A. (2008): Mesolimbic functional magnetic resonance imaging activations during reward anticipation correlate with reward-related ventral striatal dopamine release, in: *The Journal of Neuroscience*, Vol. 28, No. 52, pp. 14311–14319.
- Schultz, W./Tremblay, L./Hollerman, J. R. (2000): Reward processing in primate orbitofrontal cortex and basal ganglia, in: *Cerebral Cortex*, Vol. 10, No. 3, pp. 272–283.
- Sciglimpaglia, D./Belch, M. A./Cain, R. F. Jr. (1978): Demographic and cognitive factors influencing viewers' evaluations of "sexy" advertisements, in: *Wilkie, R. J. (Ed.): Advances in consumer research*, Vol. 6, Ann Arbor, MI: Association for Consumer Research, pp. 62–65.
- Seligman, M. E. P. (1971): Phobias and preparedness, in: *Behavior Therapy*, Vol. 2, No. 3, pp. 307–320.
- Sengupta, J./Dahl, D. W. (2008): Gender-related reactions to gratuitous sex appeals in advertising, in: *Journal of Consumer Psychology*, Vol. 18, No. 1, pp. 62–78.
- Severn, J./Belch, G. E./Belch, M. A. (1990): The effects of sexual and non-sexual advertising Appeals and information level on

- cognitive processing and communication effectiveness, in: *Journal of Advertising*, Vol. 19, No. 1, pp. 14–22.
- Sherman, C. B./Quester, B.* (2005): The influence of product/nudity congruence on advertising effectiveness, in: *Journal of Promotion Management*, Vol. 11, No. 2–3, pp. 61–89.
- Simpson, P. M./Horton, S./Brown, G.* (1996): Male nudity in advertisements: A modified replication and extension of gender and product effects, in: *Journal of the Academy of Marketing Science*, Vol. 24, No. 3, pp. 257–262.
- Smith, S. M./Haugtvedt, C. P./Jadrich, J. M./Anton, M. R.* (1995): Understanding responses to sex appeals in advertising: An individual difference approach, in: *Kardes, F. R./Sujan, M.* (Eds.): *Advances in consumer research*, Vol. 22, Provo, UT: Association for Consumer Research. pp. 735–739.
- Symons, D.* (1979): *The evolution of human sexuality*. New York: Oxford Press.
- The Free Library* (2009): Britain's 100 biggest brands. William Reed Ltd. Available at: <http://www.thefreelibrary.com/Britain's+100+biggest+brands.-a0197854563>.
- Trivers, R. L.* (1972): Parental investment and sexual selection, in: *Campbell, B.* (Ed.): *Sexual selection and the descent of man 1871–1971*, Chicago: Aldine Publishing, pp. 136–179.
- Vohs, K. D./Sengupta, J./Dahl, D. W.* (2014): The price had better be right: Women's reactions to sexual stimuli vary with market factors, in: *Psychological Science*, Vol. 25, No. 1, pp. 278–283.
- Wise, G. L./King, A. L./Merenski, J. P.* (1974): Reactions to sexy ads vary with age, in: *Journal of Advertising Research*, Vol. 14, No. 4, pp. 11–16.
- Wyllie, J./Carlson, J./Rosenberger, P. J.* (2014): Examining the influence of different levels of sexual-stimuli intensity by gender on advertising effectiveness, in: *Journal of Marketing Management*, Vol. 30, No. 7/8, pp. 697–718.
- Zajonc, R. B.* (1960): The concepts of balance, congruity, and dissonance, in: *The Public Opinion Quarterly*, Special Issue: *Attitude Change*, Vol. 24, No. 2, pp. 280–296.

Keywords

Erotic advertising; product evaluations; consumer gender; model gender