

The Effect of Eroticism in Couple Depictions in Advertisements on Brand Evaluations

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1 Introduction

Reichert and Carpenter (2004, p. 828) analyzed the content of mainstream magazine ads in the U.S. and found for 1983 that 3.7% of all ads contained motifs of couples in intimate or very intimate contact. In 2003, this portion was 7.5% and thus has doubled over the course of two decades. Obviously, in practice, this type of advertising is widely used.

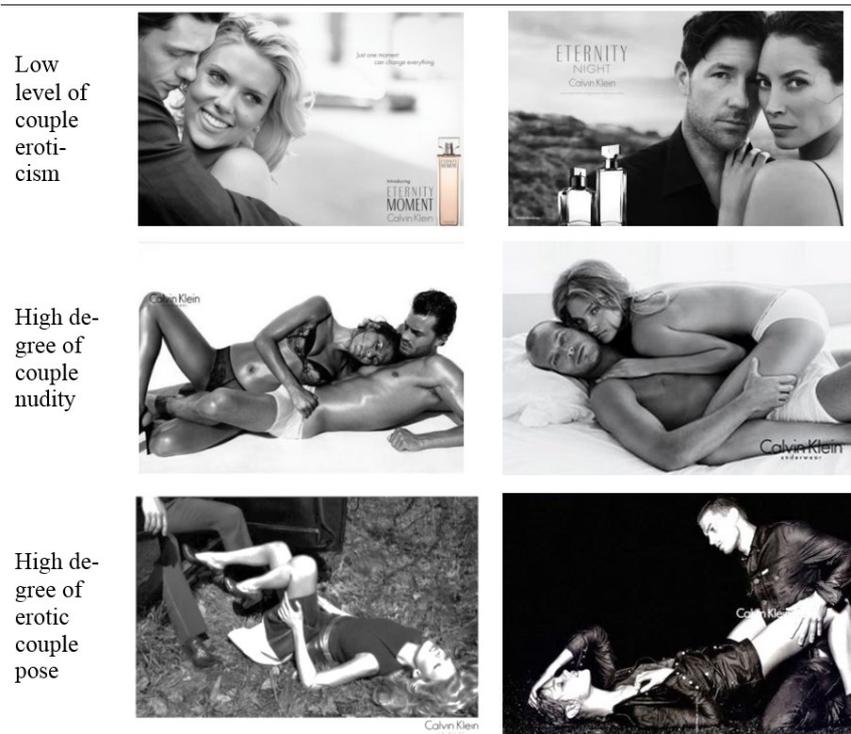


Figure 1: Sample of images of erotic couples in ads of the Calvin Klein brand

Especially, marketers of numerous apparel brands rely on this kind of market communication (Reichert et al., 2012, p. 9). But also numerous companies offering perfume, cosmetics, jewelry, and alcoholic beverages utilize this strategy. As an example, we provide some ad versions for the Calvin Klein brand containing erotic couple motifs in Figure 1. Contrarily to the use in advertising practice, academic investigations of the effectiveness of this type of ads for improving brand or product evaluations are very rare. We only found four studies that tested the effect of depictions of different degrees of couple eroticism depending on the recipients' gender, and the results of these investigations are contradictory. Thus, we contribute to research by providing results about the effectiveness of ads containing motifs of couples in different intensities of eroticism.

2 Theoretical Considerations

Sexual economics theory: Economic exchange theories are based on the assumption that people give money to get goods and services that are at least as valuable to them as the given money (i.e., the price paid). This economic principle has been adopted for explaining all kinds of interpersonal relations: Social exchange theories state that people give resources such as time, information, friendship, and social recognition, if they receive adequate resources from the exchange partner. A special variant of these theories, the "sexual economics theory," focuses on the exchange of sex-related resources (Baumeister et al., 2001; Baumeister and Vohs, 2004). Its key proposition is that "sex is the resource that women have and men want" (Vohs and Lasleta, 2008, p. 787) and, thus, sex is of greater worth for females compared to males. The authors who advanced this view provided two arguments in favor of this proposition. Vohs et al. (2014, p. 278) state that "sex is costlier for women (biologically, physically, and socially)." For instance, women have higher parental investment costs to raise children compared to men what makes "women choosier." As a second reason, the authors argue that the sex drive in men is generally higher (Oliver and Hyde, 1993). As a consequence, these authors (e.g., Vohs et al., 2014, p. 278) hypothesize that, "for a woman, sex should take place when it is worth the risk, meaning that there ought to be something that she gets of it (more than the sex itself). (...) Sex should be accompanied by gains to the women." Baumeister and Vohs (2004, p. 343) count affection and respectful attention, the promise to share wealth and earnings with the woman exclusively, a long series of compliments, material gifts, and fancy dinners to the rewards men can offer as gains to the female partner. Dahl et al. (2009) provided evidence to the sexual economics theory in

the field of advertising. These researchers analyzed the effectiveness of an image of an erotic couple on the attitudes toward an ad that promoted wristwatches for females depending on whether the wristwatches were or were not advertised as a gift from men to women. I.e., the erotic ad either contained or did not contain the text “a gift from a man to the special woman in his life” and showed a red ribbon around the watch. Females reported more favorable attitudes toward the ad when the erotic couple motif was accompanied by these relationship cues indicating gains for women.

Undoubtedly, using this kind of rational, economic-like, and cognition-based perspective is insufficient for explaining interpersonal and even intimate relationships between females and males that are primarily affect-based and, thus, one may find this perspective embarrassing. However, it sheds light on the key resources which are valued differently by female and male individuals who are engaged in intimate relations in general: Women tend to appreciate mild forms of intimate relations (warmth, tenderness, gentle embrace) from a committed partner whereas men are prone to favor more intense sexual contacts that do not necessarily involve a committed relationship.

Feelings in response to erotic couple depictions: In line with these arguments, Vohs et al. (2014, p. 278) posit that erotic couple images shown in advertisements are liked more if sex is depicted in a manner consistent with the sexual values held by females and males. We presume that low-erotic or moderately erotic depictions of couples, compared to highly erotic motifs, are liked more by females because they evoke feelings about warmth, tenderness, and affection. Moreover, we posit that highly erotic motifs of couples, compared to low and moderately erotic motifs, cause pleasant feelings and desires in male persons.

Spillover of feelings onto product evaluations: There are numerous theories in literature that are used to explain the transfer of affect (which is, for instance, associated with a peripheral cue in ads such as an erotic motif) to the target object (e.g., the promoted product). First, a fundamental principle suggests that people tend to reduce even pleasant emotions to achieve a state of homeostasis. If individuals cannot respond to the cue that elicited the emotion (e.g., the erotic cue itself), an easy possibility to regulate pleasant feelings is to respond favorably to the product or brand that is associated with the cue. Second, Reichert (2002, p. 258) posits that feelings act as “energizers.” Positive energizers put individuals into the mental state of approaching to any stimulus connected to the positive feelings (e.g., products and brands that are promoted by the images). Third, from the perspective of neuroscience, the reward circuits of the brain are activated due to appropriate erotic cues while the product is presented. Thus, the product itself is liked to a higher extent. Fourth, individuals could mistakenly consult their feelings for evaluating the product that in fact

resulted from the erotic cues (Baron, 1982, p. 429). In this case, more favorable product evaluations result from a cognitive misinterpretation of the source of the feelings. Fifth, it could be argued that individuals tend to preserve pleasant affective mental states. When, for instance, an erotic motif has put the consumer into a pleasant affective state s/he is expected to prevent herself/himself from an intense processing of information about the advertised product which otherwise could cause an end to this feeling (e.g., Isen et al., 1982, p. 246). Fredrickson (2011) provides a similar argument. She posits that pleasant emotions motivate people to “approach or continue consuming whatever stimulus is biologically useful for them at the moment.” Thereby, individuals are less likely to generate counterarguments against the product (Patzner, 1980, p. 363). We test:

H1: Compared to low and moderately erotic motifs of couples shown in advertisements, brand attitudes of female consumers are less favorable when the brand is associated with highly erotic motifs.

H2: Compared to low and moderately erotic motifs of couples shown in advertisements, brand attitudes of male consumers are more favorable when the brand is associated with highly erotic motifs.

3 Prior Research

We found four studies in prior research that investigated the effect of different levels of eroticism of couples depicted in advertisements on the attitudes of female and male consumers toward the promoted brands (Black et al., 2010) or toward the advertisement (Belch et al., 1982; LaTour and Henthorne, 1994; Pope et al., 2004), respectively.

Table 1: Effects of couple eroticism on attitudes toward the brand and the advertisement depending on consumer gender reported in prior research

Authors	Sample	Advertised products	Dependent variable	Scale	Levels of couple eroticism	Consumer gender		Effect of couple eroticism
						Female	Male	
Black, Organ, and Morton, 2010	156 students, Australia	Perfume, massage oil, Muesli, USB-stick	A _B	Unclear	Fully clothed, in embrace	7.23	7.83	Negative for both genders
					Partially nude, in embrace	6.56	7.09	
Belch et al., 1982	30 students, USA	Not reported	A _{Ad}	1-7	Fully clothed	5.44	5.02	U-shaped for females, \cap -shaped for males
					Partially nude	3.78	5.42	
					Nude	4.24	4.67	
LaTour and Henthorne, 1994	199 consumers, USA	Jeans	A _{Ad}	1-7	Fully clothed, holding hands	4.02	4.15	Negative for females
					Partially nude, in embrace	2.73	4.05	
Pope, Voges, and Brown, 2004	184 consumers, Australia	Softdrink, sunglasses	A _{Ad}	1-7	Sitting separately on a bench	2.90	3.39	Positive for females
					Both nude, in embrace	3.20	3.45	

Note: Higher values indicate more favorable attitudes toward the ad (A_{Ad}) and brand (A_B).

Detailed information about these studies is contained in Table 1. As can be seen in this table, the findings are mixed. Thus, we looked at the study details to explore the reasons for the heterogeneous findings. Unfortunately, with the exception of Black et al. (2010), the authors did only provide brief verbal descriptions of the used test material what made it impossible to find reasons for the mixed results. Thus, we focus on the findings of Black et al. (2010). These authors illustrated the images used in their experiment; according to our interpretation, they compared a low to a moderately erotic level (Figure 2). They found that the moderate level (half-naked couple) deteriorated brand evaluations compared to the low level of eroticism (fully dressed couple) for both consumer genders and for a wide range of products. However, the negative effect might have resulted from the specific mode they used to present the test stimuli: Each test person had contact to four ad versions (an ad for body oil, perfume, USB-stick, and muesli) that showed the *same* couple for each product. Watching the same half-naked couple several times for different products might have caused higher aversion against the experimental setting than viewing the same low-erotic depictions repeatedly.

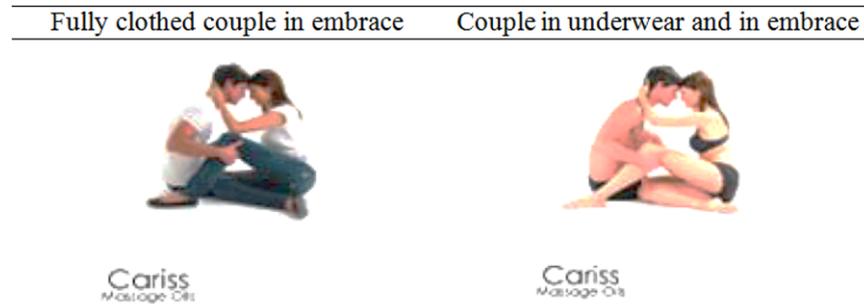


Figure 2: Test stimuli used for promoting massage oil in the study of Black et al. (2010)

Moreover, there are studies that compared different levels of eroticism without providing data separately for male and female consumers (e.g., Reichert et al., 2001; Huang, 2004; Severn et al., 1990) or that compared the effectiveness of only one level of couple eroticism to different types of ad cues (e.g., Mittal and Lassar, 2000; Sengupta and Dahl, 2008; Vohs et al. 2014). We refrain from discussing these results. In summation, we found no results in academic research that are suitable for answering the question about which level of couple eroticism is most advantageous for influencing the evaluations of the promoted product depending on the consumer gender.

4 New Experiments

4.1 Experiment 1

Pretest: We bought motifs from picture agencies showing the same couples in different degrees of nudity or erotic poses, respectively. The pretest's experimental design was a 3 (degree of eroticism: low, moderate, or high) \times 2 (source of eroticism: nudity or pose) \times 2 (consumer gender) factorial between-subjects design. A sample of 420 students (50% female, $M_{\text{age}} = 22.96$ years, $SD = 1.962$) were assigned to the resulting twelve conditions. Each test person had contact to one of the motifs and assessed the degree of eroticism by agreeing or disagreeing with "This motif is strongly sexually-related" and "This motif is very erotic" on a seven-point scale ($\alpha = .845$). The images and the results are shown in Figure 3. When the data were combined across the source of eroticism and the consumers' gender, the perceptions of eroticism are $M_{\text{low}} = 2.48$, $M_{\text{moderate}} = 4.24$, and $M_{\text{high}} = 5.69$ ($F_{2;417} = 291.445$, $p < .001$) which indicates a successful manipulation of eroticism. Similar findings resulted for the disaggregated data.

Experimental design of the main study: The study was based on a 3 (degree of eroticism: low, moderate, or high) \times 2 (source of eroticism: nudity or pose) \times 2 (consumer gender) \times 2 (products: deodorant and wristwatch) factorial between-subjects design.

Test stimuli: We used the motifs selected in the pretest to create print advertisements. The ads showed the couple on a sailing yacht and the promoted product. For the case of the deodorant, we used an unknown brand name (Malizia) and developed ad versions targeting female consumers (“Malizia for her”) and ad versions targeting male consumers (“Malizia for him”). For the wristwatch, we chose a fictitious brand name (Vade) and included a “female” and a “male” watch into the same ad. We illustrate the test stimuli for the wristwatch in Figure 4.

Sample, procedure, and measures: Data were collected in face-to-face interviews at universities located in Germany. Overall, 756 students (51.6% female, $M_{\text{age}} = 22.53$ years, $SD = 2.458$) participated in the main experiment. They were asked to watch one ad version as long as they wanted. Then, they indicated the degree to which they evaluated the advertised product as “appealing,” “attractive,” “likeable,” and “good” on a seven-point scale ($\alpha = .855$).

Results: In Table 2, we present the findings for the brand attitudes depending on the level of eroticism, source of eroticism, product, and consumer gender. For male consumers, brand attitudes increased with the level of eroticism independently of whether the couple’s nudity or the couple’s pose was used to manipulate eroticism and independently of the promoted product. For female consumers, inverted-U-shaped relations were observed. Thus, we collapsed the data across these conditions. For female consumers, we observed the following brand attitudes depending on the level of eroticism: $M_{\text{low}} = 3.43$, $M_{\text{moderate}} = 4.15$, $M_{\text{high}} = 3.13$ ($F_{2;387} = 24.139$, $p < .001$). In *H1*, we postulated that brand evaluations are lower in the high-eroticism condition compared to the low-eroticism condition ($3.13 < 3.43$, $t_{258} = -1.937$, $p < .05$) and compared to the moderate-eroticism condition ($3.13 < 4.15$, $t_{258} = -6.762$, $p < .001$). Our findings support *H1*. For male consumers, the respective mean values are $M_{\text{low}} = 3.14$, $M_{\text{moderate}} = 3.54$, and $M_{\text{high}} = 3.89$ ($F_{2;363} = 9.961$, $p < .001$). In *H2*, we presumed that the brand attitudes are higher in the high-eroticism condition compared to the low-eroticism condition ($3.89 > 3.14$, $t_{244} = 4.340$, $p < .001$) and compared to the moderate-eroticism condition ($3.89 > 3.54$, $t_{239} = 1.989$, $p < .05$) which was confirmed.

	Eroticism due to couple nudity		
	low	moderate	high
			
Male consumers	2.27	4.09	5.63
Female consumers	2.67	4.27	5.99
	Eroticism due to couple pose		
	low	moderate	high
			
Male consumers	2.37	4.39	5.43
Female consumers	2.60	4.21	5.73
Overall	2.48	4.24	5.60

Scale ranges from 1 (low perceptions of eroticism) to 7 (high perceptions of eroticism).

Figure 3: Perceptions of eroticism associated with the motifs used in Experiment 1

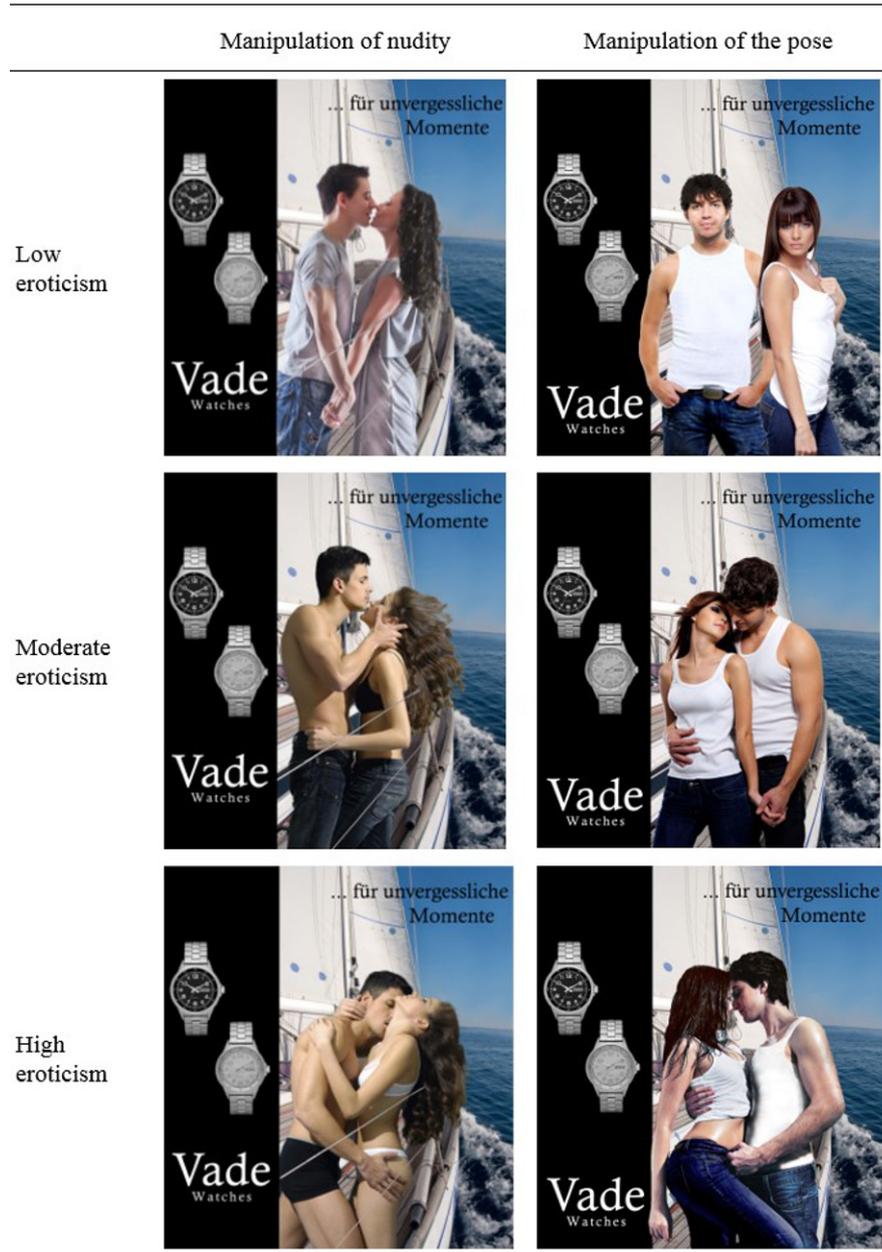


Figure 4: Test stimuli for the wristwatch used in Experiment 1

Table 2: Brand attitudes depending on the level and source of eroticism, consumer gender, and product (Experiment 1)

Consumer gender	Source of eroticism	Product	Brand attitudes		
			Low eroticism	Moderate eroticism	High eroticism
Male	Nudity	Deodorant	3.36	3.81	4.07
		Wristwatch	2.98	3.58	3.87
	Pose	Deodorant	3.26	3.49	3.76
		Wristwatch	2.93	3.27	3.87
	Overall		3.14	3.54	3.89
Female	Nudity	Deodorant	3.16	4.18	3.31
		Wristwatch	3.56	4.23	3.17
	Pose	Deodorant	3.45	4.14	3.01
		Wristwatch	3.64	4.04	2.97
	Overall		3.43	4.15	3.13

Note: Scale ranges from 1 (negative brand attitude) to 7 (positive brand attitude).

4.2 Experiment 2

In Experiment 2, we additionally considered product categories (cookies and pain pills) where erotic advertising is less common and used real brands (Armani perfume, Bahlsen cookies, and Stada pain pills). We focused on moderate and high levels of eroticism expressed by the couple's pose.

Pretest: The pretest's experimental design was a 2 (degree of eroticism: moderate or high) \times 2 (consumer gender) factorial between-subjects design. A sample of 124 students (48.4% female, $M_{\text{age}} = 23.44$ years, $SD = 1.375$) were assigned to the two levels of eroticism and assessed the degree of eroticism. The items were adopted from Experiment 1 ($\alpha = .949$).

	Moderate eroticism	High eroticism
		
Male consumers	4.20	6.27
Female consumers	3.82	6.00
Overall	4.02	6.14

Scale ranges from 1 (low perceptions of eroticism) to 7 (high perceptions of eroticism).

Figure 5: Perceptions of eroticism associated with the motifs used in Experiment 2

The motifs and the results are contained in Figure 5. Combined across the consumer gender, the perceptions of eroticism are $M_{\text{moderate}} = 4.02$ and $M_{\text{high}} = 6.14$ ($F_{1;122} = 97.739, p < .001$). Overall, the pretest shows that we successfully manipulated the level of eroticism.

Experimental design of the main study: The experiment was based on a 2 (degree of eroticism: moderate or high) \times 2 (consumer gender) \times 3 (products: perfume, cookies, and pain pills) factorial between-subjects design.

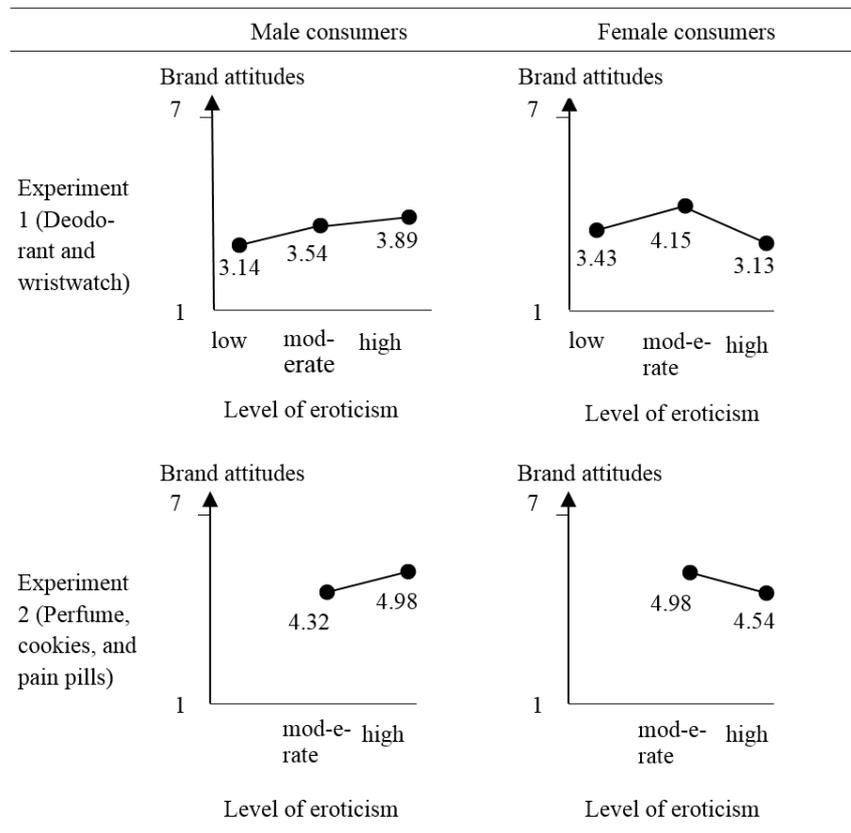
Test stimuli: Together with depictions of the promoted products, we included the motifs of the couples into print advertisements. To reduce irritations due to the use of products that are less frequently combined with erotic motifs, we additionally included product claims (for the perfume: “a new direction of sense: Armani mania”, for the cookies: “scrumptious”, and for the pain pills: “for a clear head”). In the case of the perfume, the ad versions targeting female consumers showed a perfume “for women,” and the versions targeting male consumers contained the information “for men.” Figure 6 shows how the test stimuli looked like.



Figure 6: Test stimuli used in Experiment 2

Sample, procedure, and measures: In total, 537 students (50.3% female, $M_{\text{age}} = 23.61$ years, $SD = 2.850$) took part in the main experiment. The procedure and the measures for assessing brand attitudes ($\alpha = .886$) were adopted from Experiment 1.

Results: In Table 3, we summarize the findings for the brand attitudes depending on the level of eroticism and the product. On the aggregate level, we found for female consumers, that the brand attitudes were lower in the high- than in the moderate-eroticism condition ($M_{\text{moderate}} = 4.98$ and $M_{\text{high}} = 4.54$, $t_{268} = -3.401$, $p < .001$) which is in line with *H1*. For male consumers, brand attitudes were higher in the high- than in the moderate-eroticism condition ($M_{\text{moderate}} = 4.32$ and $M_{\text{high}} = 4.98$, $t_{265} = 4.529$, $p < .001$) which supports *H2*. Figure 7 illustrates that Experiment 2 replicated the findings of Experiment 1.



Note: Scale ranges from 1 (negative brand attitude) to 7 (positive brand attitude).

Figure 7: Summary of the results of Experiment 1 and Experiment 2

Table 3: Brand attitudes depending on eroticism, gender, and product (Experiment 2)

Consumer gender	Product	Brand attitudes		
		Low eroticism	Moderate eroticism	High eroticism
Male	Perfume	-	4.20	4.74
	Cookies	-	4.58	5.48
	Pain pills	-	4.30	4.94
	Overall	-	4.32	4.98
Female	Perfume	-	5.06	4.40
	Cookies	-	5.31	4.98
	Pain pills	-	4.52	4.34
	Overall	-	4.98	4.54

Note: Scale ranges from 1 (negative brand attitude) to 7 (positive brand attitude).

4.3 Experiment 3

We replicated Experiment 2 but aimed at limiting attention to the erotic advertisement. We included the test stimulus (an ad for the om/one Bluetooth speaker set) in the middle of a sequence of additional seven advertisements (e.g., for Sixt car rental, Pedigree dog food, and Sensodyne toothpaste) that were constant across both experimental conditions. Each of the eight ads could be viewed for seven seconds within a power-point presentation. After the presentation of all ads, all products including the test product had to be evaluated (“makes me curious,” “appealing,” “interesting,” and “would buy”) on a seven-point scale ($\alpha = .929$). Then, the test ad was shown again and the test persons (60 female and 60 male students) had to rate the ad’s level of eroticism; the measures were adopted from Experiment 1. The manipulation check of the ad’s eroticism proved to be successful ($t_{118} = 7.101, p < .001$). Although distracted by other advertisements, the level of eroticism of the test ad improved product evaluations among male consumers ($t_{58} = 2.083, p < .05$) and deteriorated evaluations among female consumers ($t_{58} = 1.266, p = .105$). Thus, we conclude that couple eroticism also affects product evaluations under more realistic conditions (see Table 4).

Table 4: Brand attitudes depending on eroticism and consumer gender (Experiment 3)

Variable	Consumer gender	Moderate eroticism	High eroticism
			
Perceptions of eroticism	male	3.57	5.57
	female	3.93	5.35
Brand attitudes	male	2.98	3.79
	female	3.45	3.01

5 Implications for Practice

Our results indicate that high levels of eroticism in depictions of couples are disadvantageous if female consumers are targeted. When this finding is compared to the advertising practice of some famous brands (e.g., Calvin Klein, Abercrombie & Fitch, Gucci, and Dolce and Gabbana), we conclude that these marketers did not choose the optimum level of eroticism. However, we do not recommend to reposition these well-known brands because repositioning (e.g., reducing the current level of eroticism) would confuse consumers. Instead, we recommend avoiding the use of highly erotic couple depictions when brands enter a market consisting of female consumers. For male consumers, we found that high levels of eroticism are advantageous.

We found these effects independently of whether products with a high fit to eroticism (deodorant, wristwatch, and perfume) or a low fit to eroticism (cookies, pain pills, and speaker set) were promoted. Thus, couple eroticism could also be used for promoting products which are normally not associated with eroticism. However, marketers should pay attention to the importance of using cues that are unique for their brands. Thus, simply relying on the effectiveness of eroticism goes along with the danger that the brand's positioning is unclear and that the brand becomes interchangeable. Moreover, practitioners should consider the aspect that highly erotic advertising may be criticized in media reports and in Internet communities. Thus, this kind of response may have detrimental effects for the promoted brand.

6 References

- Baron, R. S. (1982), "Sexual Content and Advertising Effectiveness: Comments on Belch et al. (1981) and Caccavale et al. (1981)," in: A. Mitchell (ed.), *Advances in Consumer Research* (Vol. 9), 428-430. Ann Arbor, MI: Association for Consumer Research.
- Baumeister, R. F. and K. D. Vohs (2004), "Sexual Economics Theory: Sex as a Female Resource for Social Exchange in Heterosexual Interactions," in: *Personality and Social Psychology Review*, 8 (4), 339-363.
- Baumeister, R. F.; Catanese, K. R. and K. D. Vohs (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*, 5 (3), 242-273.
- Belch, M. A.; Holgerson, B. E.; Belch, G. E. and J. Koppman (1982), "Psychophysiological and Cognitive Responses to Sex in Advertising," in: A. Mitchell (ed.), *Advances in Consumer Research* (Vol. 9), Ann Arbor, MI: Association for Consumer Research, 424-427.
- Black, I. R.; Organ, G. C. and P. Morton (2010), "The Effect of Personality on Response to Sexual Appeals," in: *European Journal of Marketing*, 44 (9), 1453-1477.
- Dahl, D.; Sengupta, J. and K. D. Vohs (2009), "Sex in Advertising: Gender Differences and the Role of Relationship Commitment," in: *Journal of Consumer Research*, 36 (2), 215-231.
- Fredrickson, B. L. (2011), "The Broaden-and-Build Theory of Positive Emotions," in: *American Psychologist*, 53 (3), 218-226.
- Huang, M.-H. (2004), "Romantic Love and Sex: Their Relationship and Impacts on Ad Attitudes," in: *Psychology & Marketing*, 21 (1), 53-73.
- Isen, A. M.; Means, B.; Patrick, R. and G. P. Nowicki (1982), "Some Factors Influencing Decision-Making Strategy and Risk Taking," in: M. S. Clark and S. T. Fiske (eds.), *Affect and Cognition: The 17th Annual Carnegie Symposium on Cognition*, Hillsdale, NJ: Erlbaum, 243-261.
- LaTour, M. S. and T. L. Henthorne (1994), "Ethical Judgments of Sexual Appeals in Print Advertising," in: *Journal of Advertising*, Vol. 23 (3), 81-90.
- Mittal, B. and W. M. Lassar (2000), "Sexual Liberalism as a Determinant of Consumer Response to Sex in Advertising," in: *Journal of Business and Psychology*, 15 (1), 111-127.
- Oliver, N. B. and J. S. Hyde (1993), "Gender Differences in Sexuality: A Meta-Analysis," in: *Psychological Bulletin*, 114 (1), 29-51.
- Patzer, G. L. (1980), "A Comparison of Advertisement Effects: Sexy Female Communicator vs. Non-sexy Female Communicator," in: J. C. Olson (ed.), *Advances in Consumer Research* (Vol. 7), Ann Arbor, MI: Association for Consumer Research, 359-364.
- Pope, N. K. Ll.; K. E. Voges, K. E. and M. R. Brown (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*, 33 (1), 69-82.

- 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), 241-273.
- Reichert, T. and C. Carpenter (2004), "An Update on Sex in Magazine Advertising: 1983 to 2003," in: *Journalism & Mass Communication Quarterly*, 81 (4), 823-837.
- Reichert, T.; Carpenter, C. and L. N. Reid (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*, 33 (1), 1-19.
- Reichert, T.; Heckler, S. E. and S. Jackson (2001), "The Effects of Sexual Social Marketing Appeals on Cognitive Processing and Persuasion," in: *Journal of Advertising*, 30 (1), 13-27.
- Sengupta, J. and D. W. Dahl (2008), "Gender-Related Reactions to Gratuitous Sex Appeals in Advertising," in: *Journal of Consumer Psychology*, 18 (1), 62-78.
- Severn, J.; Belch, G. E. and M. A. Belch (1990), "The Effects of Sexual and Non-Sexual Advertising Appeals and Information Level on Cognitive Processing and Communication Effectiveness," in: *Journal of Advertising*, 19 (1), 14-22.
- Vohs, K. D. and J. Lasaleta (2008), "Heterosexual Sexual Behavior Is Governed by Social Exchange and Basic Economic Principles: Sexual Economics Theory," in: *Minnesota Journal of Law, Science, and Technology*, 9 (2), 785-802.
- Vohs, K. D.; Sengupta, J. and D. W. Dahl (2014), "The Price Had Better Be Right: Women's Reactions to Sexual Stimuli Vary with Market Factors," in: *Psychological Science*, 25 (1), 278-283.