



# Does Sex Really Sell? Paradoxical Effects of Sexualization in Advertising on Product Attractiveness and Purchase Intentions

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## Abstract

To test the “sex sells” assumption, we examined how Italian men and women react to sexualized advertising. Women showed lower product attractiveness and purchase intentions toward products presented with sexualized female models than with neutral ads, whereas men were unaffected by ads’ sexualization (Study 1,  $n = 251$ ). Study 2 ( $n = 197$ ) replicated the overall results. Study 3 ( $n = 198$ ) tested hostile sexism as a moderator as well as negative emotions as a mediator of consumers’ responses. Especially men with higher hostile sexism showed more purchase intentions after viewing female sexualized ads than neutral ads. Moreover, women’s lower consumer responses toward sexualized female ads were due to higher negative emotions. Study 4 ( $n = 207$ ) included ads with both female and male models, replicating responses to female sexualization and showing that both women and men had lower product attractiveness and purchase intentions toward male sexualized ads than neutral ads. Replicating and extending Study 3’s results, women’s negative emotions was the mediator. The present study has practical implications for marketers because it suggests that “sex does not sell.” In addition, considering both the psychological damage and practical inefficacy of sexualized ads, our findings have important implications for public policy.

**Keywords** Sexualization · Advertising · Purchase intentions · Product attractiveness · Emotional responses

At the Cannes Lions Festival of Creativity, The Geena Davis Institute on Gender in Media (Giaccardi et al. 2019) released data on gender representation in advertising between 2006 and 2016. Notably, women in ads were displayed in sexually revealing clothes and/or sexual posture six times more than men, that is, women were sexualized (Harker et al. 2005; Soley and Kurzbard 1986; Stankiewicz and Rosselli 2008). The underlying assumption governing the use of sexualized images in advertising is that these images entice consumers to purchase the associated products. In other words, the premise that has lived on for many years is that “sex sells.” However,

advertising research has provided inconsistent results, with some studies showing that the use of sexualized ads leads to favorable responses by potential consumers (Grazer and Kessler 1995) and with other studies showing negative effects of ad sexualization (Bongiorno et al. 2013). Moreover, a recent meta-analysis by Wirtz et al. (2018) reported that men displayed more favorable attitudes toward sexualized women in ads than neutral ads whereas women showed the reverse pattern. In addition, no effects of sexualized female ads across gender were found on purchase intentions. Regarding ads with male model, the authors reported an overall negative effect of male models’ sexualization on attitudes and purchase intentions regardless of participants’ gender. Overall, given this inconsistent pattern of results, the “sex sells” assumption is only partially supported.

It is worth noting that the meta-analysis by Wirtz et al. (2018) includes a rather heterogeneous set of studies, with different methodologies and operationalizations of sexualization, which may prevent researchers from gaining a clear understanding of the cognitive and behavioral processes triggered by sexualized advertisements. The goals of the present research are to overcome previous limitations and investigate

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mechanisms underlying attitudes and purchase intentions toward sexualized ads. To address these aims, we will (a) rely on a stringent methodology in which the same products are advertised by either sexualized or neutral ads (Studies 1–4) and (b) investigate an underlying mechanism by testing the mediating role of emotional responses toward the advertised products (Studies 3 and 4). In addition, we will explore the role of the socio-cultural milieu by testing the moderating role of gender role attitudes (Study 3), and we will extend previous research by distinguishing reactions of both women and men toward both female and male sexualized models in our ads (Study 4).

The goals of the present studies are particularly important because the basic assumption that “sex sells” appears to be taken for granted in advertising, which continues to use sexualized ads to promote products (e.g., Behm-Morawitz 2017; Verhellen et al. 2016) and disregards the negative psychological consequences that sexualized advertisements may have on viewers. Crucially, this representation negatively affects girls’ and women’s psychological as well as physical well-being (see Grabe et al. 2008 for a meta-analysis), and it also increases the endorsement of gender inequality norms, tolerance toward sexual harassment, and rape myth acceptance (see Ward 2016, for a review). Hence, we argue that by investigating whether sexualized advertisements really sell, we address extremely relevant issues with regard to marketing, between gender relations (i.e., intergroup relations), intra-individual variables (e.g., gender role and sexist attitudes), and ethical and policymaking implications.

## Sexualization in Advertising

According to objectification theory (Fredrickson and Roberts 1997), sexual objectification is a form of body reductionism that occurs whenever a person is fragmented into a collection of sexual body parts or functions, is considered as a silent decoration, and is evaluated solely on the basis of his or her appearance. Objectification theory has drawn from feminist studies (Bartky 1990; Nussbaum 1995) the idea that sexual objectification especially permeates women’s versus men’s lives because of the heterosexual and patriarchal nature of western societies. Objectification theory considers mass media, such as advertising, as one of the main contexts in which women’s sexual objectification is played out.

Content analyses, indeed, have shown that women are more likely than men to be depicted in sexualized ways in advertisements (e.g., Conley and Ramsey 2011; Paek et al. 2011; Stankiewicz and Rosselli 2008; Verhellen et al. 2016). Specifically in Italy, where the present research was conducted, researchers estimate that 81.27% of women in advertising are depicted as models, sexually available or pre-orgasmic, used as decoration (or “Greek fret”), or fragmented into body

parts, whereas the sum of the corresponding categories for men is under 20% (19.95%, Italian Art Director Club report by Guastini et al. 2014). Interestingly, sexualization research has shown that these advertising images not only enact the objectification of women but also lead to negative consequences in the way women are viewed and in their physical and psychological well-being (see Loughnan and Pacilli 2014; Ward 2016, for reviews).

Although sexualization is typically discussed in terms of women’s portrayals, researchers have shown that the male body is also increasingly sexualized and hypermuscularized in the media (Dafferner et al. 2019; Pope Jr. et al. 2001; Rohlinger 2002). Moreover, advertisements portraying male models as the muscular ideal increases men’s body dissatisfaction (Leit et al. 2002; Lorenzen et al. 2004). These worrisome findings both on women’s and men’s well-being pose the crucial question of whether the use of sexualization in advertisement is a commercially useful (as well as ethical) strategy to sell products. Therefore, we will investigate whether including a sexualized female or male model in an ad affects its efficacy.

## The Efficacy of Sexualized Advertising

Previous research on attractiveness and purchase intentions toward products associated with sexualized female models has shown an inconclusive pattern of results. Some studies showed that the use of sexualized ads leads to increased positive attitudes toward them compared to neutral ads (Bello et al. 1983; Dudley 1999; Reichert et al. 2001) whereas other research found negative effects (Mittal and Lassar 2000; Peterson and Kerin 1977) especially by female viewers (Dahl et al. 2009; LaTour and Henthorne 1994; Sengupta and Dahl 2008). Similarly, inconsistent results across studies were found on purchase intentions (Bello et al. 1983; Dudley 1999; Grazer and Kessling 1995; LaTour and Henthorne 1994; Putrevu 2008).

Turning to the effects of sexualized male models, the research is very scarce and also leads to inconclusiveness. For example, Simpson et al. (1996) compared ads with different levels of male models’ sexualization (fully dressed, suggestive, nude) to a neutral (product only) condition. Findings suggested an opposite-gender effect, with women showing more favorable attitudes than men toward ads containing sexually suggestive male models. Using a similar design, Reidenbach and McCleary (1983) tested the effect of condition on purchase intentions, but found no effects of sexualization level. Moreover, Jones et al. (1998) compared ads with sexualized female and male models to neutral ads. Contrary to Simpson et al.’s (1996) findings, women’s attitudes did not differ across conditions and men reported higher positive attitudes toward female than male sexualized ads.

The literature on female and male sexualized ads poses some issues. First, the methodologies employed in these studies were not always rigorous. For example, Dudley (1999) compared ads with different levels of female model sexualization (swimsuit, topless, nude) to a neutral condition and found that the nude condition elicited more favorable attitudes, but no effects were found on purchase intentions. However, the four levels of ad sexualization were associated with different products, thus preventing clear conclusions on the unique effects of sexualization from being drawn (for similar issues see also, Belch et al. 1982; Ferguson et al. 2010; Grazer and Kessling 1995; Pan 2014; Putrevu 2008). Second, this literature is based on a large variety of methodologies, which complicates the interpretation of the unique role of female and male model sexualization in advertisements. For example, some studies used single-model ads (either female or male; Dudley 1999; Simpson et al. 1996), whereas other studies used ads portraying couples (Black and Morton 2017; LaTour and Henthorne 1994; Putrevu 2008).

In addition, although most studies were concerned with ad images, some research focused on the role of embedded sex-related text, thus making it difficult to understand whether the observed evidence was guided by the sexualized images per se (Aylesworth et al. 1999; Pan 2014). An additional element of variability is that some research was concerned with the effects of embedding a sexualized or/and violent ad in a media containing sex or/and violence (Bushman 2005; see Lull and Bushman 2015, for a meta-analysis), an issue that goes beyond the goals of the present work. Overall, given that the methodology was not always rigorous and the materials used in this area of research were heterogeneous, it is difficult to determine the unique role of female and male model sexualization in advertisement.

Based on the large and heterogeneous body of research we outlined, Wirtz and collaborators (2018) conducted an important meta-analysis on the effects of female and male sexualized ads. Concerning female model ads, the authors concluded that sexualized versus neutral ads lead to more favorable attitudes toward the ad by men, whereas women show less favorable attitudes toward sexualized versus neutral ads. In addition, the authors concluded that sexualized ads have no effects on purchase intentions compared to neutral ads. Regarding male model ads, Wirtz et al. (2018) reported an overall negative effect of male models' sexualization on attitudes and purchase intentions regardless of participants' gender. However, given the small number of studies available, they were unable to test whether a strong negative reaction from male participants drove these results (in line with Jones et al. 1998).

Overall, Wirtz et al. (2018) concluded that the heterogeneity of methodologies employed with female ads and the scarcity of research on male ads complicates the overall interpretation of the results, thus calling for future research. Moreover,

further research is necessary because the research included in the present review is somewhat dated and may not capture what contemporary consumers do. In response to these calls, the goal of the present research is to test Wirtz et al.'s (2018) findings in the context of a rigorous methodology in which the same product is presented through a sexualized or neutral ad. To do so, we will conduct a series of studies including both female and male participants' reactions toward ads with female or male models.

## Emotional Reactions to Sexualized Advertisement

In the present work we also will study emotional responses by men and women toward sexualized versus neutral ads. This aim is backed by previous findings attesting that sexualized ads are viewed as having more emotional impact (i.e., are more powerful) than non-sexualized ads (Reichert et al. 2001). Importantly, there seem to be gender differences in the emotional appraisal of sexualized ads, although this evidence needs to be empirically addressed in a methodologically robust fashion. Previous research has shown that female nudity in advertisement triggers positive arousal for men, but negative arousal for women (LaTour 1990). In addition, Aylesworth et al. (1999) found that sexually suggestive subliminal messages embedded in ads increased both positive and negative feelings for men, but only negative feelings for women. An additional study by Reichert et al. (2007) found that both men and women reported more positive affective responses and attitudes toward ads picturing sexualized models of the other gender compared to same-gender models. Overall, although the measures and methodology are heterogeneous, these few studies suggest that men and women may differ in the emotional appraisal of sexualized ads, with men showing more favorable emotions and higher arousal toward female sexualized ads and women showing more negative emotions toward the same ads. At the same time women show more positive emotions toward male versus female sexualized ads.

Inspired by these prior findings, we reasoned that emotional appraisal may be a potential mechanism underlying product attitudes and purchase intentions. This reasoning is supported by research demonstrating that emotions affect persuasion processes (Dillard and Pfau 2002; Dillard and Wilson 1993) and by preliminary results indicating that emotions predict attitudes toward the ads (Aylesworth et al. 1999; Huang 2004), with positive emotions predicting more favorable, and negative emotions less favorable, attitudes toward the ads. Based on these preliminary results, we will measure positive and negative emotions appraised by women and men toward sexualized versus neutral ads and explore their mediating role in participants' attitudes and purchase intentions toward the products (Studies 3 and 4).

## The Role of Gender-Role Attitudes in Advertising

Researchers who have focused on whether sexualized ads actually sell products (Wirtz et al. 2018, for a review) have mostly overlooked potential individual differences in terms of beliefs and attitudes that may modulate potential buyers' appraisal of the ads (but see, for example, Wyllie et al. 2015, for sexual self-schemas). In the context of stereotypical advertising research, some researchers have pointed to a possible role of traditional attitudes in gender relationships. For example, hostile sexism, as an overt hostility toward women that is composed of the drive forces of paternalism, gender differentiation, and heterosexuality (Glick and Fiske 1996), is positively related to favorable attitudes and purchase intentions toward stereotypically feminine ads (i.e., women as housewives; Zawisza et al. 2018). Moreover, attitudes toward gender roles have been studied in relation to stereotypical ads' effectiveness (Zawisza and Cinnirella 2010), but to our knowledge such a relation has been overlooked in research regarding sexualization ads' effectiveness.

Particularly relevant to the context of sexualized ads may be those attitudes in gender relationships that prescribe women to be submissive, sexy, and always available sexual partners (i.e., sexual objects), and men as dominant, sex-driven, and afraid of commitment (Ward 2002). We reasoned that these specific gender-role attitudes as well as hostile sexism may induce individuals to be more favorable toward sexualized advertising, which reflects the same traditional values. This prediction complements findings showing that chronic exposure to sexualized media increases endorsement of traditional gender role attitudes and hostile sexism (see Ward 2016, for a review), suggesting a vicious cycle between sexualized advertising and societal values. Therefore, we deem it important to investigate how traditional gender role norms and attitudes modulate buyers' reactions to sexualized advertisement.

## The Present Research

In the present set of studies, we investigate attitudes and purchase intentions toward sexualized versus neutral ads (Studies 1–4). Specifically, in Study 1 we examine women's and men's responses to products advertised by either a sexualized female model or by a neutral ad. In line with Wirtz et al.'s (2018) meta-analysis, we hypothesize that men would show higher (Hypothesis 1a), and women lower (Hypothesis 1b), product attractiveness toward the sexualized than neutral ads. Given that Wirtz et al. (2018) found no effects on purchase intentions, we simply explore the effects of sexualized ads on purchase intentions.

In Study 2 we aim to replicate Study 1's results and to also test whether gender role attitudes moderate the relation

between ad sexualization and consumers' reactions (i.e., product attractiveness, purchase intentions). We hypothesize that the more respondents, especially men, endorse a view of women as sexual objects and men as sex-driven, the higher the product attractiveness and purchase intentions in the sexualized (vs. control) ad condition (Hypothesis 2).

In Study 3 we aim at replicating Study 1's and Study 2's results and at identifying emotions as a possible mechanism underlying consumers' reactions toward female model ads. Based on previous literature (Aylesworth et al. 1999; LaTour 1990), we hypothesize that women will show higher negative emotions in the sexualized than in the control condition (Hypothesis 3a), whereas no difference is predicted on positive emotions (Prediction 3b). Most important, we hypothesize that negative emotions evoked by exposure to sexualized ads represent a possible mediating mechanism underlying women's decrement on product attractiveness and purchase intentions (Hypothesis 4). In Study 3 we will also test the moderating role of hostile sexism so that the higher hostile sexism toward women, especially by men, the higher the product attractiveness (Hypothesis 5a) and purchase intentions (Hypothesis 5b) in the sexualized than in the neutral ad condition.

Finally, in Study 4 we will extend the results of Studies 1–3 by distinguishing reactions of both women and men toward both female and male sexualized models in the ads. With regard to ads with male models, in line with Wirtz et al. (2018), we predict that both men and women will express lower product attractiveness and purchase intentions after viewing sexualized male ads than neutral ads (Hypothesis 6). Moreover, we hypothesize that participants' emotional reactions will parallel participants' responses on attractiveness and purchase intentions with lower positive emotions (Hypothesis 7a) and higher negative emotions (Hypothesis 7b) toward sexualized than neutral male ads. Concerning participants' reactions toward sexualized ads with female models, we expect to replicate the prevalent pattern of results in Studies 1–3. Furthermore, we aim to replicate Study 3's mediation results (see Hypothesis 4) and to explore an extension of the same mediation model to male model ads.

## Study 1

Study 1 focuses on female and male participants' responses to female sexualized (versus neutral) ads in terms of product attractiveness and purchase intentions.

## Method

### Participants and Design

We recruited 258 participants (153 women and 105 men). Three male and four female participants were eliminated



because they did not give their consent to use their data after the debriefing. As such, the present analyses were conducted with 251 participants: 151 (60.2%) women and 100 (39.8%) men. Due to a procedure error the sample age is not available. Concerning participants' education level, 12 (4.8%) participants received middle school diploma, 107 (42.6%) high school diploma, 82 (32.7%) Bachelor Degree, 47 (18.7%) Master Degree, and three (1.2%) PhD/Postgraduate Degree. Furthermore, the sample included 246 (98%) heterosexual participants, two lesbian women and one gay man, and one woman and one man who did not report their sexual orientation. The sensitivity power analyses ( $\alpha = .05$ , Power  $1 - \beta = .80$ ,  $n = 251$ ) showed a minimal detectable effect (MDE) Cohen's  $f = .18$ . Therefore, the smallest effect size we were able to detect with the present sample size fell in the small effect area (Cohen 1988).

### Procedure, Materials, and Measures

In addition to a snowball sampling procedure, the experimenters recruited participants via Facebook and Instagram posts and via messages to acquaintances. The experiment was described as investigating people's attitudes. Those who were interested in participating in the study were asked to access a link to the online questionnaire. The experiment was conducted via the SurveyMonkey platform, and participants volunteered to participate without monetary compensation. After accessing the link and providing informed consent, participants were randomly assigned to view either five sexualized or five neutral ads depending on the experimental condition. Respondents were instructed to focus their attention on each advertisement because they would be later asked to indicate their attitudes toward them. After the manipulation, participants completed a series of measures in the same order as they are presented in the following. At the end, participants provided their socio-demographic information, read a written debriefing, and also received the opportunity to have an additional oral debriefing. Lastly, they were asked to give final consent to use their data in an anonymous and aggregated form. The ethical committee of the University of Padova (Italy) approved the present experimental protocol including all four studies. All studies were conducted in Italian.

**Ads** Participants were exposed to either five sexualized or five neutral ads. The advertised products were: a kitchen, beer, a mattress, mozzarella, and eyeglasses. The sexualized ads were selected from the internet. Each of them depicted a woman in a highly sexual suggestive manner (i.e., in a provocative pose and revealing a substantial extent of nudity, which are the characteristics commonly used in the literature to define

sexualization; Hatton and Trautner 2011; Pacilli et al. 2016). In all studies, the ad models were White and fit the thin body ideal. Only the kitchen ad portrayed a couple in a pose suggestive of sexual activity, a material inconsistency that will be addressed in Study 2. To create the neutral ad material, Photoshop was used to modify the sexualized ads by deleting the sexualized woman. Therefore, each neutral ad portrayed the same product of the same brand as the corresponding sexualized ad with no woman included. Both sexualized and neutral ads included the original text of the real ads.

**Product Attractiveness** Participants were asked to indicate the extent to which they were attracted to each product on five items rated from 1 (*Not at all*) to 5 (*Very much*). The items were created ad-hoc for each product and therefore different from each other, an inconsistency that we addressed in Study 2. For example, the questions for the mozzarella ad were: "Does this image make you want to eat mozzarella?," "How tasty do you think this mozzarella is?," "How fresh do you think this mozzarella is?," "How real do you think this mozzarella is?," "Does this image make you want to try this mozzarella?" In all studies, we calculated an overall product attractiveness index by averaging responses across the items for each product and then across the products ( $\alpha = .93$ ).

**Purchase Intentions** Next, participants were asked to indicate their purchase intentions for each product by responding on a scale ranging from 1 (*Not at all*) to 5 (*Very much*) to the following items: "Would you buy this product?," "Would you recommend this product to others?," "Would you like to buy this product?" The scale was created ad hoc as an adaptation from previous measures (Reichert et al. 2007). In all studies, we calculated an overall index of purchase intentions by averaging responses first across the items for each product and then across the products ( $\alpha = .90$ ).

In addition, other measures were taken (i.e., Participants' habits and familiarity with the products, Likelihood to Sexually Harass and Dehumanization of women; see the [Online Supplement](#) for more information).

### Results

The product attractiveness index was  $M = 2.54$  ( $SD = .68$ ); the purchase intentions average was  $M = 2.27$  ( $SD = .69$ ). To test Hypothesis 1a and Hypothesis 1b, we conducted a MANOVA on product attractiveness and purchase intentions with condition (sexualized vs. control) and participant gender (men vs. women) as between-subjects factors. The multivariate main effects of condition, Pillai's trace = .13,  $F(2, 246) = 18.67$ ,  $p < .001$ ,  $\eta_p^2 = .13$ , and gender, Pillai's trace = .03,  $F(2, 246) = 4.13$ ,  $p = .017$ ,  $\eta_p^2 = .03$ , as well as the Condition x Gender interaction, Pillai's trace = .06,  $F(2, 246) = 8.09$ ,  $p < .001$ ,  $\eta_p^2 = .06$ , were significant.

## Product Attractiveness

Concerning univariate effects on product attractiveness, main effects of gender,  $F(1, 247) = 7.76$ ,  $p = .006$ ,  $\eta_p^2 = .03$ , and condition,  $F(1, 247) = 28.88$ ,  $p < .001$ ,  $\eta_p^2 = .10$ , were found, which were qualified by a significant interaction between condition and participants' gender,  $F(1, 247) = 15.64$ ,  $p < .001$ ,  $\eta_p^2 = .05$ . Post-hoc comparisons with Bonferroni correction revealed that, in line with Hypothesis 1b, women reported lower product attractiveness in the sexualized ( $M = 2.18$ ,  $SD = .62$ ) than in the control condition ( $M = 2.94$ ,  $SD = .47$ ;  $p < .001$ , Cohen's  $d = 1.29$ ). In addition, but contrary to Hypothesis 1a, men showed no difference between the sexualized ( $M = 2.73$ ,  $SD = .66$ ) and the control condition ( $M = 2.84$ ,  $SD = .55$ ;  $p = .329$ , Cohen's  $d = .18$ ). Moreover, men in the sexualized condition showed higher product attractiveness compared to women in the same condition ( $p < .001$ , Cohen's  $d = .87$ ). No statistically significant difference was found between men and women in the control condition ( $p = .459$ , Cohen's  $d = .21$ ).

## Purchase Intentions

Univariate effects on purchase intentions also showed significant main effects of gender,  $F(1, 247) = 7.07$ ,  $p = .006$ ,  $\eta_p^2 = .03$ , and condition,  $F(1, 247) = 4.15$ ,  $p = .002$ ,  $\eta_p^2 = .03$ , as well as a significant two-way interaction between condition and gender,  $F(1, 247) = 9.19$ ,  $p = .003$ ,  $\eta_p^2 = .03$ . Post-hoc comparisons with Bonferroni correction revealed that women reported lower purchase intentions in the sexualized ( $M = 1.98$ ,  $SD = .64$ ) than control condition ( $M = 2.53$ ,  $SD = .59$ ;  $p < .001$ , Cohen's  $d = .88$ ), whereas men showed no difference across conditions ( $M_{\text{sexualized}} = 2.49$ ,  $SD = .67$ ;  $M_{\text{control}} = 2.50$ ,  $SD = .65$ ;  $p = .919$ ). Moreover, the gender difference was statistically significant in the sexualized condition ( $p < .001$ , Cohen's  $d = .77$ ) but non-significant in the control condition, ( $p = .872$ ).

## Discussion

Study 1 showed a series of important results. First, in line with predictions (Hypothesis 1b) and previous research (Wirtz et al. 2018), women showed significantly lower attractiveness toward products advertised by sexualized female models compared to neutral ads. Second, contrary to predictions from previous research (Wirtz et al. 2018; Hypothesis 1a), men did not show higher product attractiveness after viewing female sexualized than neutral ads. The same pattern of results was found on purchase intentions, thus contradicting Wirtz et al.' (2018) conclusions regarding the lack of effects on purchase intentions. However, one limitation of Study 1 was that the ad materials were not pretested, an issue overcome in Study 2.

## Study 2

The aim of Study 2 is to replicate Study 1's results and to also test the moderating role of gender role attitudes related to the notion of women as sexual objects and men as sex-driven (see Hypothesis 2).

## Method

### Participants

Two-hundred Italian participants (108 women, and 92 men) recruited online volunteered to participate in the present study. Two male participants were eliminated because one was younger than 18 years and one older than 60 years of age, and one female participant was eliminated because she did not sign the final consent. The final sample included 197 participants, 107 women (54%) and 90 men (46%), with an age range of 18–55 ( $M = 28.47$ ,  $SD = 11.62$ ). Twenty-two (11%) participants received middle school diploma, 139 (71%) high school diploma, 12 (7%) Bachelor Degree, 18 (9%) Master Degree, and 5 (2%) Ph.D/Postgraduate Degree. Most participants ( $n = 187$ , 95%) identified as heterosexual, eight (4%) identified as gay men, lesbian women or bisexual, and two participants (1%) refrained from answering. Note that excluding non-heterosexual participants did not change results. The sensitivity power analyses ( $\alpha = .05$ , Power  $1 - \beta = .80$ ,  $n = 197$ ) showed a minimal detectable effect (MDE) Cohen's  $f = .20$ . Therefore, the smallest effect size we were able to detect with the present sample size fell in the small effect area (Cohen 1988).

### Procedure, Materials, and Measures

The procedure was the same as in Study 1. Unlike Study 1, at the end participants reported what they thought the aim of the study was. Finally, participants filled out the moderator measure (i.e., Attitudes that women are sexual objects and men are sex-driven).

**Ads** Participants were exposed to six ads depicting a sexualized woman or six neutral ads depicting only the same product. The products were: male shoes, vodka, mattress, beer, cereals, and male cologne. Importantly, all ads were real and carefully pretested (see the [Online Supplement](#) which includes an example of an ad).

**Product Attractiveness** Unlike Study 1, for each ad, two items measured product attractiveness (i.e., 'How much does this product attract you?'; 'How attractive is this product?'), on a scale ranging from 1 (*Not at all*) to 7 (*Very much*) (overall  $\alpha = .91$ ).

**Purchase Intentions** Purchase intention was measured as in Study 1 except for the addition of the item “Does this image make you want to try this product?” on a scale ranging from 1 (*Not at all*) to 7 (*Very much*) (overall  $\alpha = .94$ ).

### Attitudes that Women are Sexual Objects and Men are Sex-Driven

We measured participants’ endorsement of socially shared cultural attitudes that women are sexual objects and men are sex-driven via two subscales of the revised version of the Attitudes about Dating and Sexual Relationships scale (Ward 2002). Confirmatory factor analyses supported the structural validity of the scale (Ward 2002). The women are sexual objects subscale measures the extent to which women’s role is to be sexual objects (8 items; e.g., “Women should spend a lot of time trying to be pretty”;  $\alpha = .83$ ), the men are sex-driven subscale measures the belief that men are driven by sex needs (7 items; e.g., “It’s difficult for men to resist sexual urges and to remain monogamous”;  $\alpha = .79$ ). Scales ranged from 1 (*Not at all*) to 7 (*Very much*).

Notice that other measures were also taken (i.e., Participants’ habits and familiarity with the products, Dehumanization of women, and Enjoyment of sexualization; see the [Online Supplement](#)).

## Results

### Product Attractiveness and Purchase Intentions

The product attractiveness index was  $M = 2.90$  ( $SD = 1.23$ ); the purchase intentions overall mean was  $2.50$  ( $SD = 1.07$ ). To test a replication of Study 1’s results, we conducted a MANOVA on product attractiveness and purchase intentions with condition (sexualized vs. control) and participant gender (men vs. women) as between-subjects factors. The multivariate main effects of condition, Pillai’s trace = .05,  $F(2, 192) = 4.75$ ,  $p = .010$ ,  $\eta_p^2 = .05$ , and gender, Pillai’s trace = .17,  $F(2, 192) = 19.05$ ,  $p < .001$ ,  $\eta_p^2 = .17$ , as well as the Condition x Gender interaction, Pillai’s trace = .15,  $F(2, 192) = 16.54$ ,  $p < .001$ ,  $\eta_p^2 = .15$ , were significant.

### Product Attractiveness

Concerning the univariate effects on product attractiveness, a main effect of gender was found,  $F(1, 193) = 33.75$ ,  $p < .001$ ,  $\eta_p^2 = .15$ . Most important, the Condition x Gender interaction was significant  $F(1, 193) = 30.02$ ,  $p < .001$ ,  $\eta_p^2 = .13$ . Different from Study 1 and in line with Hypothesis 1a, post-hoc analyses (Bonferroni adjusted) showed that men indicated higher product attractiveness in the sexualized ( $M = 3.85$ ,  $SD = 1.44$ ) than in the control condition ( $M = 2.96$ ,  $SD = .98$ ;  $p < .001$ , Cohen’s  $d = .72$ ). In line with Study 1 and

Hypothesis 1b, women indicated lower product attractiveness after viewing sexualized ( $M = 2.12$ ,  $SD = .97$ ) than neutral ads ( $M = 2.91$ ,  $SD = .80$ ;  $p < .001$ , Cohen’s  $d = .88$ ). Moreover, men in the sexualized condition indicated higher product attractiveness compared to women in the same condition ( $p < .001$ , Cohen’s  $d = 1.45$ ). No statistically significant difference was found comparing male and female participants in the control condition ( $p = .821$ ).

### Purchase Intentions

Concerning the univariate effects on purchase intentions, a significant main effect of gender,  $F(1, 193) = 15.95$ ,  $p < .001$ ,  $\eta_p^2 = .08$ , was qualified by a significant interaction with condition,  $F(1, 193) = 15.00$ ,  $p < .001$ ,  $\eta_p^2 = .07$ . Men did not show different purchase intentions after exposure to sexualized ( $M = 3.02$ ,  $SD = 1.34$ ) than neutral ads ( $M = 2.65$ ,  $SD = .84$ ;  $p = .073$ , Cohen’s  $d = .33$ ). In contrast, women showed lower purchase intentions in the sexualized ( $M = 1.90$ ,  $SD = .87$ ) than in the control condition ( $M = 2.63$ ,  $SD = .83$ ;  $p < .001$ , Cohen’s  $d = .86$ ). In addition, in the sexualized condition men showed significantly higher purchase intentions than women ( $p < .001$ , Cohen’s  $d = 1.02$ ), whereas the same comparison was not significant after exposure to neutral ads ( $p = .934$ ).

### Moderation Analyses

The overall mean on the “women are sexual objects” index was  $M = 3.30$  ( $SD = 1.03$ ); the “men are sex driven” average was  $M = 3.57$  ( $SD = 1.22$ ). To test Hypothesis 2, using PROCESS (Model n.3; Hayes 2013) we entered condition (sexualized = 1, control = 0) as the independent variable, gender (women = 1, men = 0) as the first moderator and either “women are sexual objects” or “men are sex-driven” as the second moderator (continuous, centered). The Condition x Gender interactions were significant both on product attractiveness and purchase intentions, thus mimicking ANOVA effects ( $ts > 3.28$ ,  $ps < .002$ ). However, contrary to Hypothesis 2, the three-way interactions among predictors were not significant both on product attractiveness and purchase intentions ( $ts < .80$ ,  $ps > .425$ ). Thus, the moderating role of gender attitudes related to the notion that “women are sexual objects” and “men are sex-driven” was not supported in the current study.

## Discussion

In line with Hypothesis 1b and results of Study 1, Study 2 demonstrated that women showed significantly lower product attractiveness after exposure to sexualized female ads than neutral ads. In addition, in line with Hypothesis 1a, the opposite pattern was observed for men who showed higher product

attractiveness toward sexualized female ads than neutral ads. This result contradicts results of Study 1, in which men were unaffected by condition. The discrepancy between Study 1 and Study 2 calls for more research on product attractiveness, which is one of the goals of Study 3.

Regarding purchase intentions, Study 2 fully replicated Study 1's results, showing that women had lower intentions to purchase products in the sexualized than in the control condition. This overall result is important because it moves forward the research in this area by showing that women respond negatively to female sexualization. As important is the result that men's purchase intentions were not affected by ad condition, in line with Study 1. In addition, contrary to our hypothesis (Hypothesis 2), attitudes that women are sexual objects and men are sex-driven did not moderate the pattern of results, leaving the question of the role of sociocultural attitudes unanswered, an issue that will be further investigated in Study 3.

### Study 3

The first goal of Study 3 is to further investigate the effects of female model ad sexualization on product attractiveness and purchase intentions. Specifically, we will investigate emotions as a possible underlying mechanism of women's decreased responses toward sexualized female ads (see Hypothesis 3a, Prediction 3b, Hypothesis 4). Given that men's product attractiveness and purchase intentions did not consistently vary depending on ad sexualization, no effects on their emotions were hypothesized.

A second goal of Study 3 is to further explore the role of the sociocultural milieu by testing hostile sexist attitudes toward women as a potential moderator of the relation between sexualization in advertising and consumers' responses (see Hypothesis 5a and Hypothesis 5b). Although in Study 2 the gender attitudes that women are sexual objects and men are sex-driven produced no effects, we predicted that hostile sexism may function as a moderator. Indeed, although the two constructs may be related to each other, we reasoned that hostile sexism represents a construct different from gender attitudes (Chen et al. 2009; Glick and Fiske 1996).

In addition, previous research has shown that consumers' purchase intentions may be positively affected by the congruency between the gender-relevance of the product and the level of sexualization of the ad (e.g., Black and Morton 2017; Simpson et al. 1996; see also Wirtz et al. 2018 for a meta-analysis). Gender-relevant products are those products that are congruent with gender stereotypes—for example, masculine-typed liquor (Grazer and Kessling 1995), and feminine-typed fragrances (LaTour 1990; Reichert et al. 2001). Therefore, for a more complete methodology we included both gender-relevant and gender-irrelevant products

and explored whether gender relevance would modulate the results.

## Method

### Participants

Two-hundred and two participants (105 women, 97 men) recruited through advertisement in social networks voluntarily participated in the present study. Three male and one female participant were excluded because they did not sign the final consent, therefore the final sample included 198 participants: 104 (52.5%) women and 94 (47.5%) men. The sensitivity power analyses ( $\alpha = .05$ , Power  $1 - \beta = .80$ ,  $n = 198$ ) showed a minimal detectable effect (MDE) Cohen's  $f = .20$ , which fell in the small effect area (Cohen 1988). Participants' age ranged from 18 to 67 years-old ( $M = 32.11$ ,  $SD = 12.11$ ). Seventeen (8.6%) participants received middle school diploma, 101 (51.0%) high school diploma, 45 (22.7%) Bachelor Degree, 32 (16.2%) Master Degree and three (1.5%) Ph.D/Postgraduate Degree. The sample was mostly composed of heterosexual men and women ( $n = 175$ , 88.4%). Thirteen men and women (6.6%) declared to be gay or lesbian (7 women, 6 men), three bisexuals (1 woman, 2 men), one woman declared herself "queer" (2%), and five participants did not respond (3%). Please note that results did not change when non-heterosexual respondents were excluded from analyses.

### Procedure, Materials, and Measures

The procedure was similar to Study 2. Unlike Study 2, the study was a 2 (participant gender)  $\times$  2 (condition: sexualized vs. neutral ads, between-subject variable)  $\times$  2 (product's gender relevance: gender-relevant vs. gender-irrelevant product, within-subject variable) mixed design. As in Study 2 participants were randomly exposed to either six female sexualized ads or six neutral ads; however, among the six ads three included gender-relevant products (i.e., vodka, perfume, and beer) and three gender-irrelevant products (i.e., chewing gum, sneakers, and toilet paper), a classification based on previous literature (Grazer and Kessling 1995). Thus, new ads were pretested together with the ads used in Study 2 (see the [Online Supplement](#)). The presentation order of the gender-irrelevant ads was randomized. After viewing each ad participants rated its product attractiveness and indicated their purchase intentions. To make the manipulation salient again all ads were presented again in a random order and participants rated their emotions. At the end, as in Study 2, participants filled out the moderator questionnaire (i.e., hostile sexism together with a filler scale on environmentalism).

**Product Attractiveness and Purchase Intentions** Product attractiveness and purchase intentions were measured as in



Study 2. Given that participants were presented with three gender-relevant products and three gender-irrelevant products, we calculated three indexes of product attractiveness (gender-relevant product attractiveness:  $\alpha = .85$ ; gender-irrelevant product attractiveness:  $\alpha = .79$ ; product attractiveness across all six ads:  $\alpha = .89$ ) and three of purchase intentions (gender-relevant purchase intentions:  $\alpha = .92$ ; gender-irrelevant purchase intentions:  $\alpha = .90$ ; purchase intentions across all six ads:  $\alpha = .94$ ). Note that participants' habits and familiarity with the products were also measured but did not affect the results (see the [Online Supplement](#)).

**Emotions** Participants were asked to indicate the extent to which they had experienced some specific emotions after viewing the ads on a scale from 1 (*Not at all*) to 7 (*Very much*). In line with previous studies measuring emotions (Albarelo and Rubini 2012; Vaes et al. 2003), we measured eight positive emotions and nine negative emotions in mixed order (i.e., positive emotions: attraction, admiration, excitement, joy, pleasure, contentment, passion, and surprise,  $\alpha = .91$ ; negative emotions: annoyance, anger, rage, contempt, disappointment, disgust, fear, sadness, and agitation,  $\alpha = .90$ ).

**Hostile Sexism** Participants completed the 11-item Hostile Sexism (HS) subscale of the Ambivalent Sexism Inventory (ASI, Glick and Fiske 1996), validated in Italian by Manganelli Rattazzi et al. (2008). Structural validity of the Italian version of ASI was supported by both exploratory and confirmatory factor analyses and reported internal consistency for Hostile Sexism was  $\alpha = .87$  (Manganelli Rattazzi et al. 2008). Participants provided their responses to the items (e.g., "Women seek to gain power by getting control over men";  $\alpha = .91$ ) on a scale from 1 (*Not at all likely*) to 7 (*Very likely*). Scores were averaged across items such that higher scores indicate stronger endorsement of hostile sexism.

## Results

### Product attractiveness and purchase intentions

The overall mean on the product attractiveness index was  $M = 2.81$  ( $SD = 1.16$ ); the purchase intentions average was  $M = 2.59$  ( $SD = 1.07$ ). As in Study 1 and Study 2, we conducted a MANOVA on product attractiveness and purchase intentions with condition (sexualized vs. control) and participants' gender (men vs. women) as between-subjects factors. The multivariate main effects of condition, Pillai's trace = .13,  $F(2, 193) = 14.89$ ,  $p < .001$ ,  $\eta_p^2 = .13$ , and gender, Pillai's trace = .05,  $F(2, 193) = 5.22$ ,  $p = .006$ ,  $\eta_p^2 = .05$ , as well as the Condition x Gender interaction, Pillai's trace = .03,  $F(2, 193) = 3.41$ ,  $p = .035$ ,  $\eta_p^2 = .03$  were significant.

Concerning the univariate effects on product attractiveness, the main effect of gender,  $F(1, 194) = 8.42$ ,  $p = .004$ ,  $\eta_p^2 = .04$

(see Table 1 for descriptive statistics), was qualified by a significant Condition x Gender interaction  $F(1, 194) = 5.93$ ,  $p = .016$ ,  $\eta_p^2 = .03$ . In line with Study 1, Study 2, and Hypothesis 1b, as shown in Table 1, women reported lower product attractiveness after exposure to sexualized than neutral ads ( $p = .002$ , Cohen's  $d = .70$ ). In line with Study 1 and contrary to Hypothesis 1a, men did not show different product attractiveness across conditions ( $p = .727$ ). Moreover, men in the sexualized condition indicated higher product attractiveness compared to women in the same condition ( $p < .001$ , Cohen's  $d = .68$ ) whereas no gender difference was found in the control condition ( $p = .743$ ).

Concerning the univariate effects on purchase intentions significant main effects of gender,  $F(1, 194) = 4.71$ ,  $p = .031$ ,  $\eta_p^2 = .02$ , and condition,  $F(1, 194) = 13.51$ ,  $p < .001$ ,  $\eta_p^2 = .06$ , were found (see Table 1 for descriptive statistics). Importantly, the interaction between condition and gender was significant,  $F(1, 194) = 6.85$ ,  $p = .010$ ,  $\eta_p^2 = .03$ . In line with Study 1 and Study 2, as shown in Table 1, men did not show different purchase intentions after exposure to sexualized or neutral ads ( $p = .466$ ). In contrast, women showed lower purchase intentions in the sexualized than in the control condition ( $p < .001$ , Cohen's  $d = 1.04$ ). Moreover, in the sexualized condition men showed significantly higher purchase intentions than women ( $p = .001$ , Cohen's  $d = .64$ ), whereas the same comparison was not significant after exposure to neutral ads ( $p = .753$ ).

To explore the effects of product gender-relevance, we conducted repeated measure ANOVAs separately on product attractiveness and purchase intentions including condition and gender as between subjects factors and gender-relevance of the product (gender-relevant, gender-irrelevant) as the within-subjects variable. Neither the main effects of gender-relevance,  $F_s(1, 194) < 2.55$ ,  $p_s > .112$ ,  $\eta_p^2_s < .01$ , nor the three-way interactions with condition and gender,  $F_s(1, 194) < .35$ ,  $p_s > .552$ ,  $\eta_p^2_s < .002$ , were statistically significant, whereas the other effects remained statistically significant (see the [Online Supplement](#) for additional results).

### Emotions

The average negative emotions score was  $M = 2.19$  ( $SD = 1.27$ ); the positive emotions' average was  $M = 2.08$  ( $SD = 1.14$ ). To test Hypothesis 3a and Prediction 3b, we conducted a MANOVA on negative and positive emotions with condition (sexualized vs. control) and participant gender (men vs. women) as between factors. The multivariate effects of condition, Pillai's trace = .22,  $F(2, 193) = 27.60$ ,  $p < .001$ ,  $\eta_p^2 = .22$ , gender, Pillai's trace = .06,  $F(2, 193) = 6.39$ ,  $p = .002$ ,  $\eta_p^2 = .06$ , and Condition x Gender, Pillai's trace = .08,  $F(2, 193) = 8.80$ ,  $p < .001$ ,  $\eta_p^2 = .08$  were significant.

Concerning univariate effects, a main effect of gender emerged on both negative emotions,  $F(2, 194) = 8.70$ ,

**Table 1** Descriptive statistics overall and by condition and participants' gender for all dependent measures, study 3

Measures	Participants' Gender	Conditions		Total
		Control <i>M</i> ( <i>SD</i> )	Sexualized <i>M</i> ( <i>SD</i> )	
1. Product attractiveness	men	3.02 <sub>a</sub> (1.05)	3.10 <sub>a</sub> (1.43)	3.06 (1.24)
	women	2.94 <sub>a</sub> (.85)	2.25 <sub>b</sub> (1.09)	2.58 (1.04)
	Total	2.98 (.95)	2.64 (1.32)	
2. Purchase intentions	men	2.84 <sub>a</sub> (1.06)	2.69 <sub>a</sub> (1.23)	2.76 (1.15)
	women	2.90 <sub>a</sub> (.81)	2.00 <sub>b</sub> (.92)	2.43 (.98)
	Total	2.87 (.94)	2.31 (1.13)	
3. Negative emotions	men	1.68 <sub>a</sub> (.69)	2.19 <sub>b</sub> (1.27)	1.93 (1.04)
	women	1.54 <sub>a</sub> (.55)	3.23 <sub>c</sub> (1.48)	2.42 (1.41)
	Total	1.61 (.62)	2.75 (1.47)	
4. Positive emotions	men	2.11 <sub>a</sub> (1.02)	2.52 <sub>a</sub> (1.34)	2.31 (1.20)
	women	2.08 <sub>ab</sub> (.97)	1.69 <sub>b</sub> (1.08)	1.88 (1.04)
	Total	2.09 (.99)	2.07 (1.27)	

Means across each row and column within each dependent measure that do not share the same subscript are significantly different from each other at an overall  $p < .05$  level (Bonferroni-adjusted)

$p = .004$ ,  $\eta_p^2 = .04$ , and positive emotions,  $F(2,194) = 7.47$ ,  $p = .007$ ,  $\eta_p^2 = .04$ , and a significant main effect of condition was found only on negative emotions,  $F(1,194) = 51.46$ ,  $p < .001$ ,  $\eta_p^2 = .19$  (see Table 1 for descriptive statistics). Importantly, as predicted, both negative,  $F(1, 194) = 15.17$ ,  $p < .001$ ,  $\eta_p^2 = .06$ , and positive,  $F(1, 194) = 6.49$ ,  $p = .012$ ,  $\eta_p^2 = .03$ , emotions experienced by participants were affected by the interaction between condition and participants' gender. Specifically, in line with Hypothesis 3a (see Table 1), women reported significantly more negative emotions after exposure to sexualized than neutral ads ( $p < .001$ , Cohen's  $d = 1.50$ ), and a similar pattern was observed for men ( $p = .025$ , Cohen's  $d = .50$ ). Moreover, in the sexualized condition women showed significantly more negative emotions than men, ( $p < .001$ , Cohen's  $d = .76$ ) whereas the comparison was not statistically significant for the control condition ( $p = .506$ ). With reference to positive emotions and in line with Prediction 3b (see Table 1), both women's and men's levels of positive emotions did not differ across conditions ( $p > .072$ ). The only significant comparison is that women exposed to sexualized ads manifested lower positive emotions than men ( $p < .001$ , Cohen's  $d = .69$ ), whereas this difference was not significant in the control condition ( $p = .896$ ). Please notice that the correlation between positive and negative emotions was  $r(97) = -.24$ ,  $p = .018$  for men, and  $r(105) = -.29$ ,  $p = .003$  for women.

### Mediation by Emotions

To test Hypothesis 4, we computed an overall index of emotional negativity by subtracting responses on positive emotions from those on negative emotions, thus the higher the

index the higher the level of negative emotions reported by participants. A moderated mediation analysis was performed through PROCESS (Model n° 8, Hayes 2013) on product attractiveness. The model included condition (control = 0, sexualized = 1) as the independent variable, emotional negativity (continuous, centered) as the mediator, and participants' gender (men = 0, women = 1) as the moderator assessing its effects both on the mediator and on the dependent variable. The overall model was significant ( $R^2 = .51$ ),  $F(4, 193) = 49.91$ ,  $p < .001$ . Importantly, in line with Hypothesis 4, a significant indirect negative effect of condition through emotional negativity emerged specifically for women ( $b = -.91$ ,  $SE = .15$ , 95% CI [-1.21, -.63]) (with 5000 bootstrap samples). Specifically, sexualized (vs. neutral) ads increased women's negative emotions, which in turn decreased their product attractiveness scores. This was not the case for men ( $b = -.04$ ,  $SE = .16$ , 95% CI [-.35, .29]).

We conducted the same analysis on purchase intentions. The overall model was significant ( $R^2 = .47$ ),  $F(4, 193) = 42.23$ ,  $p < .001$ . Supporting Hypothesis 4, the indirect effect of condition through emotional negativity was significant specifically for women ( $b = -.77$ ,  $SE = .14$ , 95% CI [-1.06, -.51]) (with 5000 bootstrap samples). In other words, similar to product attractiveness, women reported lower purchase intentions after viewing sexualized ads than neutral ads because of their higher level of negative emotions. Again, this was not the case for men ( $b = -.03$ ,  $SE = .14$ , 95% CI [-.31, .24]).

### Moderation by Hostile Sexism

The overall mean on the hostile sexism index was  $M = 3.36$  ( $SD = 1.21$ ). Using PROCESS (Model n.3; Hayes 2013), we

tested the moderating role of hostile sexism on both product attractiveness (Hypothesis 5a) and purchase intentions (Hypothesis 5b). Specifically, we entered condition (sexualized = 1, control = 0) as the independent variable, participants' gender (women = 1, men = 0) as the first moderator and hostile sexism as the second moderator (continuous, centered). Concerning product attractiveness, although the overall model was statistically significant,  $F(7,190) = 5.26$ ,  $p < .001$ , the model including the three-way interaction of Condition x Gender x Hostile sexism ( $b = -.48$ ,  $t = -1.84$ ,  $p = .067$ , 95% CI [-1.01, .03]) did not increase the amount of variance explained ( $\Delta R^2 = .01$ ,  $R^2 = .16$ ,  $p = .067$ ), thus not supporting Hypothesis 5a regarding the moderating role of hostile sexism on product attractiveness.

With respect to purchase intentions, analysis revealed a significant two-way interaction between condition and hostile sexism ( $b = .36$ ,  $t = 2.02$ ,  $p = .044$ , 95% CI [.01, .71]) qualified by a significant three-way interaction among Condition x Gender x Hostile sexism ( $b = -.53$ ,  $t = -2.26$ ,  $p = .025$ , 95% CI [-1.021, -.07]), which significantly increased the amount of variance explained ( $\Delta R^2 = .02$ ,  $p = .025$ ; overall model:  $R^2 = .21$ ,  $F(7, 190) = 7.13$ ,  $p < .001$ ). Supporting Hypothesis 5b, the higher men's hostile sexism in the sexualized condition, the higher their purchase intentions ( $b = .45$ ,  $SE = .13$ ,  $t = 3.42$ ,  $p = .001$ , 95% CI [.19, .70]). In contrast, hostile sexism was unrelated to purchase intentions for men in the control condition ( $b = .08$ ,  $SE = .12$ ,  $t = .68$ ,  $p = .497$ , 95% CI [-.16, .33]) as well as for women in the sexualized condition ( $b = .13$ ,  $SE = .10$ ,  $t = 1.29$ ,  $p = .198$ , 95% CI [-.07, .34]). Unexpectedly, the higher the hostile sexism the higher the purchase intentions also for women in the control condition ( $b = .31$ ,  $SE = .12$ ,  $t = 2.66$ ,  $p = .008$ , 95% CI [.08, .53]).

## Discussion

In Study 3 women showed lower product attractiveness after exposure to sexualized female ads than neutral ads confirming Hypothesis 1b, whereas, contrary to Hypothesis 1a, men were unaffected by ads' sexualization. This pattern of results replicated Study 1's results as a whole and Study 2's results for women. Interestingly, the same pattern was observed on purchase intentions, which fully replicated both Study 1's and Study 2's results. Moreover, contrary to Wirtz et al. (2018), the gender relevance of the product produced no effects. Therefore, this variable was not measured in the following study.

In addition, a series of important results were found on emotions. First, in line with Hypothesis 3a, women showed higher negative emotions after exposure to sexualized than neutral ads. Moreover, in line with Prediction 3b, women's positive emotions did not differ across conditions. Second, the same pattern was found on men's emotions. Most important, in line with Hypothesis 4, emotional negativity was shown to

be the mechanism specifically underlying women's decrement in product attractiveness and purchase intentions toward sexualized female models (vs. neutral) ads. Finally, consistent with Hypothesis 5b, an interesting result was that the higher the level of hostile sexism by men, the higher their purchase intentions after viewing sexualized than neutral ads.

## Study 4

In Study 4 we sought to replicate the overall pattern of results in Studies 1–3 regarding *female* model ads. In addition, responding to Wirtz et al.'s (2018) call, we aim at investigating the effects of sexualization of *male* model ads on both men's and women's emotional reactions, product attractiveness, and purchase intentions (see Hypothesis 6, Hypotheses 7a and 7b).

## Method

### Participants

Fully 212 participants ( $n = 114$  women,  $n = 98$  men), contacted through social media, voluntarily completed the online questionnaire. Because one female and four male participants were excluded because they did not sign the final consent, the final sample included 207 participants: 113 (54.6%) women and 94 (45.4%) men. The sensitivity power analyses ( $\alpha = .05$ , Power  $1 - \beta = .80$ ) on the available sample showed a minimal detectable effect (MDE) Cohen's  $f = .19$ , which falls in the small effect area (Cohen 1988). Participants' age ranged from 19 to 63 years-old ( $M = 29.99$ ,  $SD = 10.65$ ). The sample education level was: one participant (.5%) elementary school diploma, 10 (4.8%) middle school diploma, 107 (51.7%) high school diploma, 32 (15.5%) Bachelor Degree, 51 (24.6%) Master Degree and 6 (2.9%) Ph.D/Postgraduate Degree. Furthermore, the sample was mostly heterosexual ( $n = 184$ , 88.9%), 10 (4.8%) participants identified as gay, lesbian, or bisexual, six (2.9%) declared other sexual identities, and seven (3.4%) did not respond.

### Procedure, Materials, and Measures

The procedure was similar to Study 3. The major difference was that the experimental design was 2 (participants' gender)  $\times$  2 (condition: sexualized vs. control)  $\times$  2 (targets' gender: male vs. female model) with the last variable within-subjects. Specifically, among the six presented ads, three (i.e., vodka, eyeglasses, and cologne) included male models and three (i.e., chewing gum, beer, and sneakers) included female models. Note that male and female model ads were pretested (see the [Online Supplement](#)) and presented in randomized order.

**Product Attractiveness and Purchase Intentions** The same scales as in Studies 2 and 3 were used to measure product attractiveness and purchase intentions. We calculated product attractiveness indexes by averaging responses to the two attractiveness items separately for male model ( $\alpha = .80$ ) and female model ( $\alpha = .84$ ) ads. The same procedure was followed for purchase intentions (male model ads:  $\alpha = .90$ ; female model ads:  $\alpha = .92$ ).

**Emotions** The same emotions as in Study 3 were used in the present study. The only difference was that the manipulation re-activation was done separately for male and female model ads. Participants were first presented with the manipulation re-activation of only the male ads and completed the emotions scale referring to the male ads, and then they were presented with the manipulation re-activation of the female ads and responded to the emotion scale for female ads. The presentation order was counterbalanced and produced no effect,  $F_s(1, 204) < 2.94$ ,  $p_s > .091$ . A good reliability was found both for positive (female ads:  $\alpha = .92$ ; male ads:  $\alpha = .90$ ) and negative (female ads:  $\alpha = .89$ ; male ads:  $\alpha = .89$ ) emotions.

Please notice that other measures were assessed (i.e., Participants' habits and familiarity with the products; Acceptance of the use of female and male body to sell products; Inclusion of objectified women/men in the overall gender category; see the [Online Supplement](#)).

## Results

### Product Attractiveness and Purchase Intentions

The overall mean on the product attractiveness index for female model ads was  $M = 3.01$  ( $SD = 1.31$ ), whereas for male model ads was  $M = 2.44$  ( $SD = 1.20$ ). The purchase intentions average for female model ads was  $M = 2.88$  ( $SD = 1.29$ ), whereas for male model ads was  $M = 2.33$  ( $SD = 1.15$ ). Following previous studies' statistical strategy, we conducted a MANOVA on male and female model ads' product attractiveness and purchase intentions indices with condition (sexualized vs. control) and participants' gender (men vs. women) as between-subjects factors. The multivariate main effects of condition, Pillai's trace = .18,  $F(4, 200) = 10.82$ ,  $p < .001$ ,  $\eta_p^2 = .18$ , and gender, Pillai's trace = .14,  $F(4, 200) = 7.95$ ,  $p < .001$ ,  $\eta_p^2 = .14$ , as well as the Condition x Gender interaction, Pillai's trace = .10,  $F(4, 200) = 5.67$ ,  $p < .001$ ,  $\eta_p^2 = .10$ , were significant.

Concerning product attractiveness toward female model ads, the univariate analyses revealed that the significant main effects of condition,  $F(1, 203) = 15.29$ ,  $p < .001$ ,  $\eta_p^2 = .06$ , and gender,  $F(1, 203) = 13.80$ ,  $p < .001$ ,  $\eta_p^2 = .05$ , were qualified by a significant Condition x Gender interaction,  $F(1, 203) = 15.96$ ,  $p < .001$ ,  $\eta_p^2 = .06$ . As shown in Table 2, supporting previous studies and contrary to Hypothesis 1a,

men did not show any significant difference between product attractiveness toward female sexualized versus neutral ads ( $p = .955$ ), whereas, in line with Hypothesis 1b, women reported lower product attractiveness after exposure to female sexualized than neutral ads ( $p < .001$ , Cohen's  $d = 1.12$ ). In addition, female sexualized ads elicited higher product attractiveness by men than women ( $p < .001$ , Cohen's  $d = 1.04$ ). Men's and women's product attractiveness did not differ in the control condition ( $p = .840$ ).

Regarding univariate analyses on product attractiveness toward male model ads, the interaction between condition and gender was not significant,  $F(1, 203) = .57$ ,  $p = .451$ ,  $\eta_p^2 = .002$ . The significant main effects of gender,  $F(1, 203) = 5.10$ ,  $p = .025$ ,  $\eta_p^2 = .02$ , and condition,  $F(1, 203) = 36.01$ ,  $p < .001$ ,  $\eta_p^2 = .15$ , showed that women were more attracted than men toward products advertised by male models, but that regardless their gender, participants showed lower product attractiveness toward sexualized male ads than neutral ads, in line with Hypothesis 6 (see Table 2).

As for univariate analyses on purchase intentions toward female ads, the significant main effects of condition,  $F(1, 203) = 17.64$ ,  $p < .001$ ,  $\eta_p^2 = .07$ , and gender,  $F(1, 203) = 9.03$ ,  $p = .003$ ,  $\eta_p^2 = .04$ , were qualified by a significant Condition x Gender interaction,  $F(1, 203) = 12.67$ ,  $p < .001$ ,  $\eta_p^2 = .05$ . As shown in Table 2, in line with Studies 1–3 women reported lower purchase intentions after exposure to female sexualized than neutral ads ( $p < .001$ , Cohen's  $d = 1.06$ ) whereas men were unaffected by condition ( $p = .665$ ). Moreover, men showed significantly higher purchase intentions than female participants in the sexualized condition ( $p < .001$ , Cohen's  $d = .95$ ). Men's and women's product attractiveness did not differ in the control condition ( $p = .690$ ).

Finally, concerning purchase intentions toward male model ads, similarly to product attractiveness, univariate analyses showed that the interaction between condition and gender was not significant,  $F(1, 203) = .30$ ,  $p = .582$ ,  $\eta_p^2 = .001$ . The main effect of condition was the only significant effect,  $F(1, 203) = 26.33$ ,  $p < .001$ ,  $\eta_p^2 = .11$ . In line with Hypothesis 6, regardless of their gender, participants showed lower purchase intentions toward sexualized male ads than neutral ads (see Table 2).

### Emotions

The average negative emotions score for female model ads was  $M = 1.78$  ( $SD = 1.05$ ), whereas for male model ads was  $M = 1.90$  ( $SD = 1.10$ ). The positive emotions' average for female model was  $M = 2.11$  ( $SD = 1.18$ ), whereas for male model ads was  $M = 1.96$  ( $SD = 1.07$ ). To test our predictions, we conducted a MANOVA on positive and negative emotions toward male and female models' ads with condition (sexualized vs. control) and participants' gender (men vs. women) as between-subjects factors. The multivariate main effects of



**Table 2** Descriptive statistics overall and by models' gender, condition, and participants' gender for all dependent measures, study 4

Measures	Participants' Gender	Male model			Female model		
		Control <i>M</i> ( <i>SD</i> )	Sexualized <i>M</i> ( <i>SD</i> )	Total	Control <i>M</i> ( <i>SD</i> )	Sexualized <i>M</i> ( <i>SD</i> )	Total
1. Product attractiveness	men	2.75 <sub>a</sub> (1.05)	1.71 <sub>b</sub> (.70)	2.24 (1.03)	3.32 <sub>a</sub> (1.05)	3.34 <sub>a</sub> (1.35)	3.33 (1.20)
	women	2.98 <sub>a</sub> (1.33)	2.17 <sub>c</sub> (1.33)	2.60 (1.30)	3.37 <sub>a</sub> (1.20)	2.05 <sub>b</sub> (1.14)	2.75 (1.34)
	Total	2.88 (1.21)	1.96 (.98)		3.35 (1.13)	2.65 (1.40)	
2. Purchase intentions	men	2.60 <sub>a</sub> (1.01)	1.74 <sub>b</sub> (.73)	2.18 (.98)	3.19 <sub>a</sub> (1.12)	3.08 <sub>a</sub> (1.18)	3.14 (1.14)
	women	2.77 <sub>a</sub> (1.34)	2.08 <sub>b</sub> (1.06)	2.45 (1.26)	3.28 <sub>a</sub> (1.30)	1.99 <sub>b</sub> (1.11)	2.68 (1.37)
	Total	2.70 (1.20)	1.92 (.94)		3.24 (1.21)	2.50 (1.26)	
3. Negative emotions	men	1.92 <sub>a</sub> (1.18)	2.14 <sub>a</sub> (1.13)	2.03 (1.15)	1.53 <sub>a</sub> (.80)	1.74 <sub>a</sub> (.98)	1.64 (.90)
	women	1.36 <sub>b</sub> (.62)	2.30 <sub>ab</sub> (1.20)	1.80 (1.05)	1.35 <sub>a</sub> (.48)	2.51 <sub>b</sub> (1.27)	1.89 (1.16)
	Total	1.61 (.95)	2.23 (1.16)		1.43 (.65)	2.15 (1.27)	
4. Positive emotions	men	1.87 <sub>a</sub> (.78)	1.82 <sub>a</sub> (1.03)	1.85 (.91)	2.16 <sub>a</sub> (1.10)	2.48 <sub>a</sub> (1.43)	2.32 (1.27)
	women	2.23 <sub>a</sub> (1.27)	1.87 <sub>a</sub> (1.06)	2.06 (1.19)	2.23 <sub>a</sub> (1.14)	1.59 <sub>b</sub> (.90)	1.93 (1.08)
	Total	2.07 (1.09)	1.84 (1.04)		2.20 (1.12)	2.00 (1.25)	

Means across each row and column within each dependent measure that do not share the same subscript are significantly different from each other at an overall  $p < .05$  level (Bonferroni-adjusted)

condition, Pillai trace = .12,  $F(4, 200) = 7.07$ ,  $p < .001$ ,  $\eta_p^2 = .12$ , and gender, Pillai trace = .09,  $F(4, 200) = 5.27$ ,  $p < .001$ ,  $\eta_p^2 = .09$ , as well as the Condition x Gender interaction Pillai trace = .09,  $F(4, 200) = 4.77$ ,  $p = .011$ ,  $\eta_p^2 = .09$ , were significant.

With reference to emotional reactions toward female model ads, univariate analyses showed a main effect of gender on both negative ( $F(1, 203) = 4.79$ ,  $p = .030$ ,  $\eta_p^2 = .02$ ) and positive emotions ( $F(1, 203) = 6.60$ ,  $p = .011$ ,  $\eta_p^2 = .03$ ) and a main effect of condition on negative emotions,  $F(1, 203) = 26.29$ ,  $p < .001$ ,  $\eta_p^2 = .11$  (see Table 2 for descriptive statistics). Importantly, as predicted, the interaction between condition and gender was significant both on negative,  $F(1, 203) = 12.83$ ,  $p < .001$ ,  $\eta_p^2 = .05$ , and positive,  $F(1, 203) = 9.03$ ,  $p = .003$ ,  $\eta_p^2 = .04$ , emotions. Specifically in line with Hypothesis 3a, as shown in Table 2, women reported significantly more negative emotions toward sexualized female ads than neutral ads ( $p < .001$ , Cohen's  $d = 1.15$ ) whereas men's negative emotions did not vary across conditions ( $p = .296$ ). Moreover, in the sexualized condition women showed more negative emotions than men ( $p < .001$ , Cohen's  $d = .64$ ) whereas this comparison was not significant in the control condition ( $p = .316$ ). In addition, disconfirming Prediction 3b, women showed lower positive emotions in the sexualized female ads than in the neutral ads condition ( $p = .003$ , Cohen's  $d = .62$ ) whereas men's positive emotions did not differ across conditions ( $p = .179$ ). Moreover, women exposed to sexualized female ads manifested lower positive emotions than men ( $p < .001$ , Cohen's  $d = .75$ ) whereas this difference was not significant in the control condition ( $p = .754$ ).

Concerning emotional reactions toward male model ads, univariate analyses on positive emotions showed no effects of gender, condition, or Gender x Condition interaction,  $F_s(2, 203) < 1.94$ ,  $p_s > .165$ ,  $\eta_p^2_s < .008$ , thus disconfirming Hypothesis 7a. On the contrary, as predicted by Hypothesis 7b, a main effect of condition emerged on negative emotions,  $F(1, 203) = 16.23$ ,  $p < .001$ ,  $\eta_p^2 = .07$  (see Table 2 for descriptive statistics). Importantly, this effect was qualified by a significant Gender x Condition interaction,  $F(1, 203) = 6.06$ ,  $p = .015$ ,  $\eta_p^2 = .03$ . As shown in Table 2, women reported significantly more negative emotions after exposure to sexualized male ads than neutral ads ( $p < .001$ , Cohen's  $d = 1.01$ ) whereas men's negative emotions did not differ across conditions ( $p = .290$ ). Moreover, unexpectedly, in the control condition men showed more negative emotions than women, ( $p = .006$ , Cohen's  $d = .62$ ) whereas this comparison was not significant in the sexualized condition ( $p = .450$ ).

### Mediation by Emotions

We computed two separate overall indices of emotional negativity for ads with female and male models by subtracting participants' responses on positive emotions from those on negative emotions. A series of moderated mediation analyses were performed through PROCESS (Model n° 8, Hayes 2013) to test Hypothesis 4 and replicate Study 3's results. In the first model we included condition (control = 0, sexualized = 1) as the independent variable, emotional negativity toward female ads (continuous, centered) as the mediator, participants' gender (men = 0, women = 1) as the moderator, and

product attractiveness toward female ads as the outcome. The overall model was significant, ( $R^2 = .41$ ),  $F(4, 202) = 35.07$ ,  $p < .001$ . In line with Study 3's results, a significant negative indirect effect of condition through emotional negativity emerged for women ( $b = -.70$ ,  $SE = .14$ , 95% CI  $[-1.00, -.44]$ , with 5000 bootstrap samples). Therefore, sexualized (vs. neutral) female ads increased women's negative emotions, which in turn decreased product attractiveness. This pattern was not found among men ( $b = -.04$ ,  $SE = .14$ , 95% CI  $[-.25, .31]$ ).

To further test Hypothesis 4 and replicate Study 3's results, the same analysis was conducted on purchase intentions toward female ads. The overall model was significant ( $R^2 = .40$ ),  $F(4, 202) = 33.58$ ,  $p < .001$ . Replicating Study 3's findings, the negative indirect effect of condition through emotional negativity was significant for women ( $b = -.70$ ,  $SE = .14$ , 95% CI  $[-1.00, -.44]$ , with 5000 bootstrap samples). In other words, as for product attractiveness, women reported lower purchase intentions after viewing sexualized female model ads than neutral ads because of their higher level of negative emotions. Again, this pattern was not observed among men ( $b = -.04$ ,  $SE = .13$ , 95% CI  $[-.23, .30]$ ).

Concerning reactions toward ad with male models, we ran the same analyses conducted for female ads with the difference that emotional negativity toward male model ads was the mediator and product attractiveness and purchase intentions toward male model ads were considered separately as outcome variables. The overall model on male ads' product attractiveness was significant ( $R^2 = .45$ ),  $F(4, 202) = 40.91$ ,  $p < .001$ . Importantly, a negative indirect effect of condition through emotional negativity emerged for women ( $b = -.52$ ,  $SE = .12$ , 95% CI  $[-.78, -.27]$  with 5000 bootstrap samples). Therefore, as for sexualized female model ads, exposure to sexualized (vs. neutral) male model ads increased women's negative emotions, which in turn decreased product attractiveness. This mediation was not found among male participants ( $b = -.11$ ,  $SE = .13$ , 95% CI  $[-.38, .13]$ ).

Finally, the overall model on purchase intentions in response to ads with male models was also significant ( $R^2 = .38$ ),  $F(4, 202) = 30.90$ ,  $p < .001$  and a negative indirect effect of condition through emotional negativity emerged again only for women ( $b = -.48$ ,  $SE = .12$ , 95% CI  $[-.73, -.25]$ , with 5000 bootstrap samples). In line with the results for product attractiveness, women exposed to ads with sexualized (vs. neutral) male models reported higher emotional negativity, which in turn decreased their purchase intentions. Again, this pattern did not emerge for men ( $b = -.11$ ,  $SE = .12$ , 95% CI  $[-.35, .12]$ ).

## Discussion

The current study has shown several important results that substantially extend previous research. First, in line with

Hypothesis 6 as well as Wirtz et al. (2018), both men and women reported lower attractiveness and purchase intentions toward products advertised by sexualized male models than neutral ads. Second, supporting findings of Studies 1–3 and Hypothesis 1b, women still showed significantly lower product attractiveness and purchase intentions toward sexualized (vs. neutral) female model ads. Also, in line with Study 1 and Study 3, men's product attractiveness and purchase intentions toward ads with female models did not vary across conditions, again disconfirming Hypothesis 1a.

Third, in line with Hypothesis 7b, another important result of the present study is that participants showed higher negative emotions toward male sexualized ads compared to neutral ads. Importantly, this effect was stronger for women than men participants. Fourth, extending Study 3's results, in line with Hypothesis 3a and disconfirming Prediction 3b, women showed higher negative emotions and lower positive emotions after exposure to female sexualized than neutral ads. Therefore, extending Study 3's results, female participants negatively reacted to sexualization in advertising, regardless of whether the depicted body was male or female. On the other hand, it is worth noting that, extending Study 3's results and contrary to Hypothesis 7a and Hypothesis 7b, men's emotions toward ads with male and female models did not vary across conditions.

Most importantly, mediation analyses confirmed and extended Study 3's results and Hypothesis 4 by showing that, regardless of the models' gender, sexualized (vs. neutral) ads increased women's emotional negativity, which in turn decreased attractiveness and purchase intentions toward the products. All in all, the present research shows that in advertising women overall dislike the use of sexualized images whereas men are indifferent to female sexualized models and respond negatively to male sexualized ads.

## Meta-Analysis

To further analyze how women and men reacted to female sexualization in advertising, following the procedure by Riva et al. (2015), we meta-analytically combined results of Studies 1–4. Concerning women's reactions, results were consistent across the four studies showing lower product attractiveness (in line with Hypothesis 1b) and purchase intentions after exposure to sexualized female model than neutral ads. The meta-analysis showed that the weight-combined  $Z$ -score for condition (sexualized vs. control) was statistically significant both on women's product attractiveness ( $Z = 10.08$ ,  $p < .001$ ) and purchase intentions ( $Z = 9.40$ ,  $p < .001$ ). The effect size regarding women's lower product attractiveness in the sexualized than control condition was large ( $d = 1.04$ ,  $\eta_p^2 = .21$ ); likewise, women's lower purchase intentions in the sexualized than control condition was large ( $d = .96$ ,

$\eta_p^2 = .19$ ). Concerning men's reactions, in the present four studies men were shown to be basically indifferent to exposure to sexualized female models compared to neutral ads. Strengthening our argument, contrary to Hypothesis 1a, meta-analysis results showed that for men the condition (sexualized vs. control) was not statistically significant both on product attractiveness ( $Z = 2.52, p = .064, d = .25, \eta_p^2 = .02$ ) and on purchase intentions ( $Z = 1.70, p = .243, d = .17, \eta_p^2 = .01$ ).

## General Discussion

The present research showed a series of important results. First, across the four studies we have confirmed Hypothesis 1b, namely that women were less attracted toward products and had lower purchase intentions when they were presented with sexualized female models than with neutral ads. Second, and disconfirming Hypothesis 1a, men, contrary to women, were largely unaffected by the level of female sexualization of the ads. These results are further supported by the meta-analysis, which provides a reliable and trustworthy pattern of cumulative evidence.

In addition, contrary to Hypothesis 2, in Study 2 participants' attitudes that view women as sexual objects and men as sex-driven were not related to their reactions toward the female model ads. Moreover, both in Study 3 and Study 4 and in line with Hypothesis 3a, women reported higher negative emotions after exposure to female sexualized than neutral ads. However, partially disconfirming Prediction 3b, women's positive emotions varied across conditions in Study 4 but not in Study 3. In addition, in line with the lack of effects on product attractiveness and purchase intentions, men's emotions were never affected by condition.

Most importantly, consistent with Hypothesis 4, in Study 3 women's negative emotions toward sexualized female (vs. neutral) ads were found to be one mechanism underlying their decrement on product attractiveness and purchase intentions. In addition, in line with Hypothesis 5b, Study 3 also demonstrated hostile sexism as one individual difference that moderated purchase intentions: Higher hostile sexism in men was associated with higher purchase intentions after viewing sexualized female ads than neutral ads. Moreover, hostile sexism predicted higher purchase intentions among women in the control condition.

Moreover, in line with Hypothesis 6, in Study 4 both men and women expressed lower product attractiveness and purchase intentions toward sexualized *male* model ads than neutral ads. In addition, partially confirming Hypothesis 7b, women showed higher negative emotions toward male sexualized ads compared to neutral ads, whereas men's emotions did not vary. Importantly, in Study 4 we extended the mediation analysis to male model ads by showing that women's

negative emotions were responsible for the decrement on product attractiveness and purchase intentions toward both female and male models sexualized (vs. neutral) ads.

Overall, our findings on product attractiveness and purchase intentions substantially advance Wirtz et al.'s (2018) results by showing that female sexualization in advertising has a negative effect on women's responses and has a null effect on men's responses and that the use of male sexualization is counterproductive both for women and men. Concerning male model ads, this pattern of results contributes to Wirtz et al.'s analyses because it clearly demonstrates that not only men, but also women, dislike male sexualization in advertisement, in contrast with Jones et al.'s (1998) claims. Concerning female model ads, our pattern of results is in contrast with Wirtz et al.'s conclusions regarding men's higher attractiveness toward sexualized female ads and women's lack of effect on purchase intentions. One possibility to explain this discrepancy is the fact that Wirtz et al.'s meta-analysis includes studies starting from the early 1970s and the advertising context nowadays might be different. Indeed, in the last decade, the femvertising movement for body-positive advertising has emerged and new ad campaigns using empowerment messages to women were created (Castillo 2014; Teng et al. 2020). Therefore, in the last decade people may have developed an appreciation for a variety of female and male model ads that goes beyond sexualization, a possibility that would help explain our participants' mostly negative reactions toward sexualized ads.

Another important finding of the present study is that exposure to sexualized ads significantly impacts women's emotions. These findings enrich an under-investigated area of research. Indeed, although some studies indicated that consumers who purchase new products are more likely to form preferences (favorable or unfavorable) based on affective evaluations (Muehling and McCann 1993; Reichert 2002), research that analyzes advertisement-related emotions within the context of sexualization is scarce. Therefore, a significant theoretical contribution of the present study is our moderated mediation analyses, which suggest that negative emotions can work as one mechanism that regulates women's reactions. Overall, sexualized images work against women's product attractiveness and purchase intentions *because* they elicit negative emotions.

Moreover, the present study deepens our understanding of the moderating role of individual differences in gender attitudes on the relation between female ad sexualization and purchase intentions: Especially men with higher hostile sexism showed more purchase intentions after viewing sexualized than neutral ads. This finding nicely parallels results by Zawisza et al. (2018) who showed a positive association between hostile sexism and purchase intentions toward stereotypically feminine ads. In addition, our results suggest that the endorsement of hostile sexism by men may favor the

validation of sexualized female models proposed by media. Given that the exposure to female sexualized images increases hostile sexism (Fox and Potocki 2016; Rollero 2013), our results complement this evidence and suggest a vicious circle between female sexualization and hostile sexism. Future research should further investigate this possibility and test whether it is specific to hostile sexism or it may also extend to benevolent sexism, a construct that was not measured in the present study. An additional unexpected result was that the higher women's hostile sexism, the higher their purchase intentions in the control condition. This result suggests a general relation between women's level of hostile sexism and consumerism, a possibility that should be further investigated in future research.

### Limitations and Future Research Directions

The present research presents some limitations. In line with previous literature we have tested the role of the gender-relevance of the products on product attractiveness and purchase intentions and found no significant effects. However, the products chosen were not varied in a systematic way with respect to other characteristics. For example, some products were gendered in a way that may make them less appealing to female consumers (e.g., men's shoes), thus creating a potential confound leading to the decrease in women's preferences. However, the gender of our participants did not affect the results in the control condition, which helps exclude the possibility of such a confound. Nevertheless, it would still be important for future studies to systematically vary the products' gender target. Also related to this point, future research may assess participants' relationship status, a variable that we did not assess and that may further modulate participants' responses because some products may be interesting to buy for one's partner. In addition, the economic value of the products (luxury vs. inexpensive) was not systematically varied; future research may be conducted to ascertain whether this feature may also modulate consumers' responses toward sexualized versus neutral ads.

In all four studies, we compared sexualized ads including (fe)male models in revealing clothing to neutral ads including the same product as in the sexualized condition, but devoid of the model. To have a further control condition, we suggest future studies also have the same (fe)male models but portrayed in non-sexualized ways. More generally, we think that Study 4's results on the effects of male sexualized models are promising especially because they demonstrate that the mediating role of women's negative emotions nicely parallel results obtained toward female sexualized models. However, our study did not provide any information on the reasons why men responded unfavorably to sexualized male model ads. One speculation is that male ad sexualization confronts men with their explicit or implicit homophobia. To explore this

possibility, future research may further investigate men's reactions toward male sexualized ads by also assessing homophobia and masculinity norms.

Finally, another future direction of the present study is to diversify the type of models included in the ads. The present study was conducted in Italy and all models were White and reflected the sexualized thin ideal for women and the muscular ideal for men. Therefore, we suggest more diversity in future studies.

### Practice Implications

The present study presents several practical implications. Concerning marketing, our results are at odds with current sexualizing marketing strategies, which are based on the assumption that "sex sells." Indeed, our findings suggest that, at the marketing level, the use of female sexualization in advertising is counterproductive for women and useless for men as consumers and that the use of male sexualization is counterproductive both for women and men. Put differently, our findings show that "sex does not sell," a result that questions sexualization as a useful marketing strategy.

Concerning ethical implications, the present findings complement a large amount of research based on objectification theory that has shown detrimental effects of exposure to media sexualization on women's and men's well-being (Agliata and Tantleff-Dunn 2004; Leit et al. 2002; Lorenzen et al. 2004; Ward 2016). Therefore, considering the psychological damage and the practical inefficacy of sexualized ads, we argue that sexualization in advertising should be addressed in public policy discourse. This issue is particularly relevant with respect to sexualized advertisement aimed at children (Pacilli et al. 2016), which would require even stricter regulations. Also relevant to public policy, media literacy programs may be employed to buffer the negative effects of media sexualization (see Guizzo and Cadinu 2020; Tylka and Augustus-Horvath 2011).

### Conclusions

The present set of studies substantially extends previous research by repeatedly demonstrating that the "sex sells" approach should not be taken for granted. Indeed, we have shown an overall pattern of results that strongly contradicts current sexualizing marketing strategies: Women reacted negatively to both female and male sexualized ads by expressing higher negative emotions, which in turn disinclined them to purchase these products. On the other hand, men did not show any significant increment either on product attractiveness or purchase intentions toward female sexualized compared to neutral ads, and they also reacted negatively to male sexualization in ads. Therefore, the use of sexualization in advertisement seems paradoxical because our findings



demonstrate that sexualized ads may backfire regarding their final aim, which is to sell products. These results should lead advertising agencies to wonder whether the proliferation of these ads is justified.

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**Compliance with ethical standards** This study was carried out in accordance with the recommendations of APA ethical guidelines and the ethical committee of the University of Padova. All participants signed a written informed consent.

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