The Role of Female Sexual-Self Schema in Reactions to Non-Explicit Sexual Advertising Imagery

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Abstract

We explore females' reactions to a non-explicit, but still sexually-themed, advertisement. Specifically, we consider the role of female sexual self schema (SSS) in the identification of the level of sex present in such an advertisement, and then resultant effects on attitudes and purchase intent. We find that while SSS has no effect on the perceived level of sex present, it does influence resultant dependent variables, particularly for low-SSS females. Informed by our study and extant literature, we also offer areas for further SSS-based advertising research, particularly regarding issues of females' perceptions of advertisement and brand fit with sexual themes.

Introduction

Sexually-based appeals are more popular than ever (Gulas and Weinberger 2006). In one retrospective study, 15% of 1983 print advertisements found in *Cosmopolitan, Redbook, Esquire, Playboy, Newsweek,* and *Time* in 1983 featured sexual themes whereas in 2003 that figure increased to 27% (Reichert, Childers, and Reid 2012). However, research has generally found sex in advertising to be more effective for a male consumer audience than a female one (e.g., LaTour and Henthorne 1993). This is reflected in the disparate use of sex in advertising in targeting males versus females: Reichert et al.’s research revealed that 11% of advertisements in 1983 used female models in sex appeals, with only 3% using males; these numbers doubled proportionately for 2003 (22% included sexualized female models, 6% with males). Thus, it is safe to say that while the use of sex in advertising may be slightly on the rise in targeting a female audience, “sex sells” remains a maxim primarily in targeting males.

Why would such a small percentage of ads targeting women feature sex? Perhaps the most obvious answer is that women by and large have negative attitudes toward gratuitous sexual images in advertising (Sengupta and Dahl 2008). Indeed, early research established clear gender differences in the effectiveness of sexual advertising (e.g., LaTour and Henthorne 1993). However, in more recent research drilling down into subsamples of the female population, not all women have similar attitudes toward sex, or in evaluating its appropriateness in advertising.
Sexual self-schema (SSS), “an aspect of one’s self-view that is specific to sexuality” (Andersen, Cyranowski, and Espindle 1999, pp. 645), is one individual difference variable that has been found to dramatically impact females’ tolerance toward (or even appreciation of) sexually suggestive advertising. Females with higher SSS scores typically will have more positive evaluations toward sexually explicit stimuli, including sexually-charged advertising (Reichert and Fosu 2005).

However, as initial explorations, relevant research has largely painted in rather broad strokes. One aspect of sex in advertising that might complicate the seemingly rather straightforward relationship between SSS and sex in advertising is a potential role of SSS in the identification of the degree of “how sexual” an advertisement is. That is, not every advertisement features imagery (e.g., simulated sex or suggestively dressed model(s)) that is overtly sexual, versus less sexually-charged imagery (e.g., a demurely clothed couple kissing). We begin by reviewing the literature on women’s reaction to sex in advertising and the impact of sexual self-schema.

**LITERATURE REVIEW**

**Does Sex Sell to Women?**

The use of sexual themes in advertising has received considerable attention. The mechanism behind advertising of this type is posited to involve peripheral cues rather than effortful elaboration (Reichert, Heckler, and Jackson 2001); in other words, sexual content increases persuasion by provoking a response and detracting resources from deeper cognitive elaboration of the ad stimuli. However, there is evidence of female respondents as having a lower elaboration threshold than men and thus being more sensitive to the extent to which information presented in an advertisement is relevant, or “fits” with, the promoted product or
brand (Meyers-Levy and Maheswaran 1991, Meyers-Levy and Sternthal 1991). Two major takeaways from this research can be gleaned: first, the gender differences in consumer responses to sexual advertising should probably be attributed not only to women’s lack of appreciation of sexual themes in general as questionable content often perceived as degrading to women, but to their having a relatively easier time recognizing when such themes are used in advertising in a disingenuous way by marketers hoping that consumers’ positive reactions to the sexual theme will translate to favorable attitude toward the product or brand.

However, as previous research has pointed out, “the primary sex organ is the brain” (Reichert, La Tour and Kim 2007) and accordingly personality variables often show an interaction effect with gender, clouding the picture of such sweeping “Men are from Mars, Women are from Venus” type gender-based schisms. In the case of females’ attitudes toward sexual stimuli, sexual self schema (Anderson and Cyranowski 1994) represents one such variable.

The Interaction of Female Sexual Self-Schema with Different Levels of Sex in Advertising

Sexual self-schema, or SSS, (Anderson and Cyranowski 1994) is a self-report measure measuring “the cognitive view of the self with regard to sexuality” (Reichert, La Tour, and Kim 2007). These sexual self-perceptions are based on past experience and guide the processing of, and attitude formation regarding, sexually relevant information (Andersen and Cyranowski 1994, Reichert, La Tour, and Kim 2007, Reichert and Fosu 2005). Previous research demonstrates that higher (lower) levels of SSS in women predict an approach-based (avoidance-based) stance regarding sexual behavior and sexual information (Reichert and Fosu 2005). This connection appears to be rather far-reaching, as Reichert and Fosu describe:
Women with a positive schema tend to have liberal sexual attitudes and tend to be free of social inhibitions such as self-consciousness and embarrassment with regard to sexual topics. Similarly, these women tend to evaluate various sexual behaviors more positively, report higher levels of arousability across sexual experiences, and are more willing to engage in uncommitted sexual relations. Conversely, women with negative sexual self-views describe themselves as unromantic and behaviorally inhibited in their sexual and romantic relationships” (2005; p. 146).

As one might expect, women with higher (lower) SSS scores tend to appreciate sexual advertising more (less) than those with lower (higher) levels, with more (less) positive attitudes engendered toward the advertisement and brand for a sexual ad than a non-sexual one (Reichert and Fosu 2005).

Research to date on the relationship between SSS and sex in advertising has demonstrated the value of this personality variable in predicting females’ responses to sex in advertising. However, research into the relationship between SSS and sex in advertising, especially when focusing on a female audience, has heretofore assumed an explicit, obvious, “in-your-face” degree of sex in advertisements deemed to be sexual. In other words, when a mostly-naked model or a couple engaged in explicitly sexual activity is selling a product, the perception of strong, explicit sex themes being present in the advertisement will be nearly universal, regardless of SSS level. However, a more subtle level of sexuality is often used in advertising, and one wonders if SSS might play a role in the initial identification of an advertisement as sexual or not. When developing an advertisement, it’s doubtful that an ad agency would view the level of sex in an advertisement as truly a dichotomy (present or not) versus a continuum with “none” and “explicit” at the poles. But part of the identification of sexual themes would be in the eye of the beholder, per United Supreme Court Justice Potter Stewart’s famous “I know it when I see it” rule for obscenity.
Consider, for example, an advertisement featuring a demurely-dressed couple kissing each other. Perhaps the vast majority of females, regardless of SSS level, would simply view this advertisement as a moderate level of sex in advertising. Conversely, would higher-SSS females’ enjoyment of sexual stimuli lead them to potentially ascribe a sexual nature to such an ad? Or might it have the opposite effect, with higher-SSS females actually classifying such an ad as less sexual than lower-SSS females’ would, given their higher levels of enjoyment of sexual ads in general? After such identification, we might then logically expect a replication of the results found in Reichert and Fosu (2005), with increasing levels of SSS resulting in corresponding increases in favorable reaction to the advertisement. Thus we offer the following two hypotheses, which we test in Study 1:

\[ H_{1(a)}: \text{Consumers’ identification of the level of sex present in ambiguous advertising stimuli is} \]
\[ \text{(not) influenced by sexual self.schema.} \]

\[ H_2: \text{Given a consumer’s identification of the level of sex present in an advertisement, a direct} \]
\[ \text{relationship will be seen between women’s sexual self-schema and their responses to} \]
\[ \text{sexual advertising (attitude toward the advertisement, attitude toward the brand, and} \]
\[ \text{purchase intent).} \]

**EXPERIMENTAL STUDY**

**Method**

*Participants, Design, and Stimulus*

Our study was designed to test \( H_1 \) and \( H_2 \), exploring the potential role of SSS in the identification of the degree of “how sexual” an advertisement is, and resulting effects of that appraisal. Our sample consisted of web participants recruited by Survey Sampling International (SSI), a premier provider of sampling and data collection services and member of the
Advertising Research Foundation (ARF), American Marketing Association (AMA), and the European Society for Opinion and Market Research (ESOMAR). SSI maintains an extensive online panel of consumers (compensated through a rewards contract program).

The experimental survey was prepared utilizing Qualtrics Survey Software. Participants \( n=41 \), 100% female, min. age=18, max. age=74, mean age=35.3) completed the exercise online (median measure of time of completion=12.2 minutes). Participants first answered some basic demographic questions (e.g., current age) and then asked about the mouthwash category. They were next instructed to view “an idea that an advertising agency has for a mouthwash product advertisement” and viewed a visual purportedly advertising Close-Up brand mouthwash. This category was chosen because health and hygiene advertisements have commonly utilized sexual themes in advertising (Reichert, Childers, and Reid 2012) and we picked the Close-Up brand given its *prima facie* congruence with romantic themes (the brand’s long-time tagline is “Get Closer”).

The top of the advertisement featured copy that read “Why use CLOSE-UP®?” with a picture (obtained from freedigitalphotos.net) of an attractive, demurely dressed couple kissing. At the bottom of the advertisement was the tagline “Get Closer,” next to an image of the product (see Appendix for actual stimuli). In terms of model interactions in advertising, Soley and Reid (1988) classify kissing as a “sexual contact” (versus nonsexual contact such as holding hands), but it is clearly not as sexual as other contact types (e.g., simulated foreplay or simulated sex). We believed that given that the couple was demurely dressed, the image might cause some consumers to view the ad as a sexually-charged one, whereas others might not interpret it as such.

After viewing the ad, participants were asked to rate the measured variables and
personality scale, which were mixed with unrelated items in order to prevent hypothesis guessing. Participants were also given the opportunity to provide open-ended responses regarding the advertisement and its imagery.

**Measures**

*Independent Measures.* Sexual self-schema was measured by adapting the shortened scale from Andersen and Cyranowski (1994), which was developed specifically for female respondents. Unlike many other scales measuring sexual attitudes and/or behaviors, this scale is veiled and unobtrusive, with items that are not revealing of their true purpose, thus avoiding potential bias. The scale has exhibited strong validity and been successfully implemented in recent advertising explorations (Reichert and Fosu 2005, Reichert, LaTour, and Kim 2007).

Respondents were instructed to consider whether each of 26 adjectives “describes you” and then choose a level on a five-point scale (1=“not at all like me,” 5=“just like me”). Per Andersen and Cyranowski’s conceptualization, sexual self-schema incorporates three distinct factors—two positive (Passionate/Romantic, with 10 adjectives—*loving, stimulating, arousable, romantic, sympathetic, passionate, warm, unromantic* (reverse-coded), *revealing, feeling*)--and Open/Direct, with 9 adjectives—*uninhibited, open-minded, frank, experienced, direct, broad-minded, straightforward, casual, outspoken*) and one negative (Embarrassed/Conservative, with 7 adjectives—*cautious, timid, self-conscious, prudent, embarrassed, conservative, inexperienced*). The total SSS score is computed by subtracting the negative factor score from the sum of the two positive factor scores. In the current study, the factors proved acceptably reliable; the Passionate/Romantic Factor ($\alpha = .86$) had a mean of 37.8 (min.=24, max.=50), the Open/Direct Factor ($\alpha = .77$) had a mean of 31.76 (min.=22, max.=44) and the
Embarrassed/Conservative Factor (α = .77) had a mean of 21.41 (min=12, max=32). In total, the mean SSS score was 48.17, with a minimum score of 22, and a maximum score of 76.

For the first hypothesis, Percsex (measured as the response on a seven-point scale to the question “Did this ad relate the product to sex?”) was utilized as a dependent variable to ascertain whether or not SSS influenced how sexual participants interpreted this kissing imagery in the Close-Up advertisement to be. After that initial test, we use it as an independent variable in conjunction with SSS, to determine its potential influence on key dependent variables discussed next. The mean Percsex was 4.55 (min.=1, max=7), with a standard deviation of 1.97.

**Dependent Measures.** Attitude-toward-the-ad (A_{ad}) was a five-item seven-point semantic differential scale (“in my opinion, this advertisement is ____”: unpleasant/pleasant, unlikable/likable, bad/good, irritating/not irritating, not interesting/interesting; α = .96). Attitude-toward-the-brand (A_{brand}) was a five-item seven-point semantic differential scale (“in my opinion, this brand of mouthwash is ____”: bad/good, not nice/nice, unlikeable/likeable, unfavorable/favorable, undesirable/desirable; α = .97). Purchase intention (PI) was a four-item seven-point semantic differential scale (“how likely would you be to buy this product?”: unlikely/likely, improbable/probable, uncertain/certain, impossible/possible; α = .92). All scales were adapted from previous advertising research (Zhang and Zinkhan 2006).

**Results**

**Hypothesis Testing**

To conduct hypothesis testing, we conducted regression analysis. We first examined whether SSS level would impact the perceived sexual level of the romantic imagery (thus considering Perc_{sex} as a dependent variable). SSS had no main effect on Perc_{sex} (β = -0.016, t(40) = -0.685, p>.49); see Table 1.
Thus we reject H1a (causal relationship present between SSS and Percsex), and accept H1b (no such relationship present).

Next, we examined whether the interplay of the perceived sexual imagery (Percsex) and sexual self-schema level would influence key dependent variables. For Aad, the two-way interaction of Percsex and SSS (mean score = 48.68) was significant ($\beta = 0.03$, $t(40) = 3.00$, $p < .01$; see Figure 1). For participants one standard deviation below the mean SSS (lower-SSS, mean=34.92), Percsex had a significant negative effect on Aad (effect=-0.77, $p < .001$). However, for participants one standard deviation above the mean SSS (higher-SSS, mean=62.43), Percsex had no significant conditional effect on Aad (effect= -0.08, $p > .61$).

Analogous results were revealed for Abrand, as the two-way interaction of Percsex and SSS was significant ($\beta = 0.02$, $t(40) = 2.44$, $p < .05$). Percsex has a significant negative effect (effect=-0.59, $p < .01$) for lower-SSS participants but no significant effect for higher-SSS subjects (effect= -0.04, $p > .78$).

Finally, for purchase intent, the two-way interaction of Percsex and SSS was not significant ($\beta = 0.01$, $t(40) = 0.90$, $p > .37$). However, examining conditional effects revealed a marginally significant negative effect of Percsex on Aad (effect=-0.41, $p < .10$) for lower-SSS participants but no significant effect for higher-SSS subjects (effect= -0.15, $p > .44$; see Table 2.
DISCUSSION

Real-world advertisements often feature subtle relationship imagery. Advertising imagery might not even be considered “sexual” in nature by the advertising agency or brand managers, but if there were a direct relationship between SSS and sexual imagery identification then these stakeholders could be wary of using borderline imagery (e.g., a demurely dressed couple kissing on the couch) in advertising to audiences where increased levels of sexual might produce negative results. However, this does not appear to be the case.

When sexual ad content in an advertisement is somewhat subtle, we find that it could be interpreted very differently; there does appear to be a “Judge Potter” type phenomenon present. Though Soley and Reid (1988) identified kissing as a “sexual activity” in advertising, our advertisement featuring an attractive, young couple kissing produced a variety of responses. Overall, if one were classifying it on a dichotomy of “sexual” vs. “non-sexual,” it would probably be classified as sexual, as the mean Percsex was above the mid-point of our scale (4.55 on a 7-pt. scale), but while 35% of our female subjects appraised the “ad tried to relate the product to sex” as a top-two box rating (strongly agree, agree), 20% rated it in the bottom two-box (disagree, strongly disagree) despite the presence of that kissing couple. Thus, it appears safe to say that responses to the level of the perceived sex in our advertisement varied greatly, despite
the same imagery being shown, and that it would be disingenuous to classify it as universally “sexual” as doing so would likely lead to assumptions about a uniformity of experience that simply isn’t present. Here, sexual presence is in the eye of the beholder.

Importantly, though, that “eye of the beholder” effect was not influenced by a female’s sexual self-schema. Higher SSS females appear to be just as likely as lower SSS females to deem a non-overtly sexual ad as highly sexual or much lower in sex themes. However, what that eye of the beholder sees might then have a decidedly different effect on the resultant valenced reaction to the advertisement, depending on the sexual self-schema of the observer. In H2 we predicted that the level of sexual content identified would have a direct relationship with SSS in engendering positive or negative reactions to the advertisement and associated brand, similar to what was previously evidenced in the literature (Reichert and Fosu 2005). Part of that assertion was supported, as lower-SSS females did indeed show lower overall evaluation when the stimulus was perceived as increasingly sexual. Thus, this finding extends previous research which focuses strictly on highly sexualized imagery—if low SSS females perceive such an “eye of the beholder” type ad as very sexual, it is likely they will have exhibit a negative response. If however, they perceive it as having lower levels of sex, it will likely be effective. This seems to create a difficult situation for advertisers who want to utilize what they might believe to be a low or moderate amount of sex in an advertisement, but must worry that female consumers will interpret it as they see fit, and a significant percentage of consumers (low-SSS) will likely not appreciate the advertisement nor advertising brand should they deem it sexual.

Interestingly, the hypothesized converse effect for higher-SSS females was not supported. For these higher-SSS participants, evaluations of the advertisement, advertising brand, and purchase intent were statistically equivalent regardless of the PercSex level (though in the case of
higher levels of perceived sex, these evaluations were higher than those of lower-SSS subjects). In this setting where the models were demurely dressed and engaged in a kiss—but not having sex—higher SSS females’ Judge Potter-esque appraisal of how much the brand was using a sex sells strategy had no effect. Thus, when considering our findings with that of previous explorations of SSS in highly sexualized imagery settings, there appears to be a boundary condition of sorts regarding sexual imagery on the relationship of SSS and sex in advertising; for higher SSS subjects the “tamer” imagery did not provoke differential effects regardless of the appraisal of what level of sex was actually perceived to be present.

A key consideration here is that as Reichert, LaTour, and Kim (2007), it would be disingenuous to claim that sexual advertising is targeted equally at consumers regardless of SSS level. Rather, these advertisements are primarily targeted at high-SSS consumers (in the present study, female consumers). Thus, our findings, combined with the existing literature, suggest that if sexual themes are going to be utilized to advertise to this group (high-SSS females) of consumers that inherently appreciate sexual themes, then the advertisement should likely feature a more explicit level of sex in advertising than we did. However, if advertisers are targeting females with lower SSS-levels, not only should they avoid explicit use of sexual themes, but based on our findings, they might actually not want to even use what they might perceive to be a much lower level of sexual themes (e.g., kissing). In our study, this type of imagery caused some female consumers to find the advertisement to not be very sexual, while others found it to be rather sexual, and this identification doesn’t appear to depend on existing sexual self-schemas. However, for lower-SSS females, this perceived level of sexual theme has a direct negative effect, suggesting that keeping the imagery at a level where it’s less subject to individual appraisal (e.g., avoid even kissing imagery).
Finally, our study brings an interesting potential measurement issue to light: researchers might get a top-two box response on Percsex from some subjects in single exposures to both subtle and to more explicit sexual imagery. However, if those same subjects are shown two different advertisements, one featuring more subtle themes (e.g., our models’ pose) and one featuring more explicit themes (e.g., an ostensibly naked couple in bed with only a sheet covering them) we would consider it highly unlikely that both would be deemed equally sexual. Even if a female tends to independently classify anything of this nature as sexual after a certain individual “tipping point,” is it reasonable to expect the same reaction to an advertisement just before that tipping point as one well after it?

**Limitations and Areas for Future Research**

Our experiment is subject to several limitations that must be considered alongside the findings. The experiment featured a relatively small sample, and only one advertisement for a single brand, so extrapolating these results must be done with care.

Another limitation is that this study was conducted on American females, and an important opportunity lies in testing whether the current findings hold in consumer settings from different cultures. Research has demonstrated that what constitutes offensive advertising may vary by culture (e.g., Fam and Waller 2003). Gender-based differences in sexual advertising’s efficacy are likely to be more pronounced in some cultures than others, and differences in gender status and gender role norms are likely to be contributing factors.

In terms of a rich potential area of possible exploration, beyond the degree of sex in the advertisement, a second consideration overlooked to date in exploring SSS and sex in advertising is that of the inherent fit between the product and sexual themes. Research to date exploring this relationship largely takes as a given that the context of such an ad will be in a setting (for
example, a product category) where there is a logical *prima facie* fit between the product and sexual themes (e.g., Reichert and Fosu 2005, where the sexual advertisement was for Candies’ Perfume, a brand with a decidedly sexual positioning within a decidedly sexually congruous product category). However, sexual advertising has been used in a variety of product settings, from the obviously sexually-congruent (e.g., Victoria’s Secret intimate wear) to decidedly incongruent (e.g., Dannon Oikos Greek yogurt). The importance of this aspect—fit—is underscored by the extant literature which clearly identifies this aspect as crucial in understanding females’ responses to sex in advertising. We feel that while further exploration is merited into the phenomenon we have explored in our study (identification and resultant effects of less-explicit sexual themed advertisements), there is also rich research potential in exploring these types of “fit” perceptions in overtly sexual advertisements as well.

REFERENCES

of Personality And Social Psychology, 67 (6), 1079-1100.


Reichert, Tom, and Ignatius Fosu (2005), “Women’s Responses to Sex in Advertising: Examining the Effect of Women’s Sexual Self-Schema on Responses to Sexual Content


TABLES
### Table 1.
Lack of Fit When Regressing PercSex on SSS.

<table>
<thead>
<tr>
<th></th>
<th>Coeff</th>
<th>SE</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept $b_0$</td>
<td>5.321</td>
<td>1.169</td>
<td>4.552</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>SSS ($X$) $b_1$</td>
<td>-0.02</td>
<td>0.023</td>
<td>-0.685</td>
<td>.498</td>
</tr>
</tbody>
</table>

$R^2 = 0.012$

$F(1,38) = 0.469, p < .49$

### Table 2.
Regression Analysis Results.

<table>
<thead>
<tr>
<th></th>
<th>$Y = A_{cis}$</th>
<th></th>
<th>$Y = A_{trans}$</th>
<th></th>
<th>$Y = PI$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept $b_0$</td>
<td>12.114</td>
<td>2.402</td>
<td>5.043 &lt; .001</td>
<td>10.741</td>
<td>2.339</td>
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<tr>
<td>PercSex ($X$) $b_1$</td>
<td>-1.640</td>
<td>0.441</td>
<td>-3.717 &lt; .001</td>
<td>-1.279</td>
<td>0.430</td>
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<tr>
<td>SSS ($M$) $b_2$</td>
<td>-0.109</td>
<td>0.045</td>
<td>-2.398 .022</td>
<td>-0.086</td>
<td>0.044</td>
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<td>PercSex x SSS ($XM$) $b_3$</td>
<td>0.025</td>
<td>0.083</td>
<td>3.002 .005</td>
<td>0.020</td>
<td>0.008</td>
</tr>
</tbody>
</table>

$R^2 = 0.361$

$F(3,36) = 6.772, p = .001$

$R^2 = 0.259$

$F(3,36) = 4.185, p = .012$

$R^2 = 0.148$

$F(3,36) = 2.089, p = .119$
FIGURES
APPENDIX—EXPERIMENTAL STIMULI

Study Stimulus.
Why use CLOSE-UP?

Get Closer.