AS SEEN ON TV: REPRESENTATION OF WOMEN IN ADVERTISEMENTS AND THE EFFECTS ON WOMEN’S SELF-PERCEPTIONS, SELF-OBJECTIFICATION, AND SELF-DEHUMANIZATION

Kori Gearhart

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DEHUMANIZATION

A Thesis
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Arts
in
Social Psychology

by
Kori Gearhart
May 2022
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Approved by:

Donna Garcia, Committee Chair, Psychology
Joseph Wellman, Committee Member
John Clapper, Committee Member
ABSTRACT

When women are exposed to sexually objectifying advertisements, they experience many adverse effects such as increases in self-objectification and dehumanization of other women (Vaes, Paladino, and Puiva, 2011). Because these effects might be amplified by food advertisements in which the line between a woman's body and a food item is non-discernible, we examined whether “women as consumable” advertisements lead women to implicitly self-dehumanize and experience reduced body satisfaction. Women (N=129) viewed a woman in hamburger advertisement. Participants were randomly assigned to one of three conditions, control condition (non-sexualized woman with a burger), sexualized condition (topless woman with burger), and edible condition (burger and naked woman are inseparable). After viewing and rating the advertisement, participants were given a cellphone and told to take a profile picture for a later task. The number of selfies they took before selecting their picture was used to indicate appearance satisfaction. Participants then completed a new IAT that assessed implicit self-dehumanization. They then filled out a series of scales that measured their satisfaction with the selfie they took, appearance self-esteem, and self-objectification. I predicted that women in the edible condition would have higher implicit self-dehumanization, take more selfies, report lower appearance self-esteem, and report higher self-objectification relative to the other conditions. My findings could extend the extant research to understand how explicit
portrayals of women as objects for male consumption affect women’s psychological outcomes.
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CHAPTER ONE:
LITERATURE REVIEW

Objectification of Women in Media Settings

Media Portrayals of Women

Media images of women are often unrealistic and often unattainable for healthy women. The average American model, from any commercial or magazine, is roughly 5’11” and weighs about 117 pounds, which does not represent the average woman in America today (Rosewarne, 2007, Smolak, Levine, & Striegel-Moore, 1996). Currently, the average American woman is 5’4” and weighs about 170 pounds (Medical News Today, 2018). According to Rosewarne (2007), most of the images used in company advertisements are edited and ‘touched up’; consequently, the changes made to the women in the media photos are computer-generated and set impossible beauty standards. Not only are unrealistic images of women prevalent, but women are also often highly sexualized in advertisements that target heterosexual male consumers.

According to Lynth (2009), this type of advertising arose during the 1920s when the job of airline stewardess was seen as feminine and “sexy”. Large airline companies would use images of attractive women with an enticing caption to sell plane tickets. Most of the images depicted women serving something as if the viewer was on the flight (Lynth, 2009). These advertisements suggested that women were to be looked at as “pretty servants” and objects that were there to serve and look good for male passengers. These types of advertisements are still
pervasive today. According to Infanger, Bosak, and Sczesny (2012), even though the views of women have become more progressive since the 1920s, the advertisements featuring women do not seem to reflect similar change.

Sexualized Media Portrayals of Women

Guizzo, Cadinu, Galdi, Maass, and Latrofa (2017) delineate women’s portrayals in today’s advertisements. The authors note that women are often portrayed as sexual decorations and instruments in the media to catch the eye of male consumers and customers. That is, current trends are to objectify women by portraying them as highly sexualized objects. This sexual objectification dehumanizes them by reducing their humanity to their body parts for male sexual enticement. Dehumanization is defined as the deprivation of human value, traits, and other qualities that make people human. For example, one advertisement by Carl’s Junior (a large American fast-food chain) depicts an attractive topless woman lying on the beach eating a burger in a sexually explicit manner. The focus on the women’s sexual attractiveness and behavior detracts from her having human feelings, needs, and characteristics outside of her sexuality. Rather than a complex human, the woman is an object of heterosexual male sexual desire. Rosewarne (2007) describes other Carl’s Jr. advertisements, which depict heiress Paris Hilton dressed in a lingerie type outfit eating a burger in a sexually suggestive way in one photo and then holding the food near her groin in another. Hilton’s consumption of the burger appears to be a sexual act and is clearly meant to sexually entice men. Again, the advertisements create the
perception that the woman is a sexual object devoid of humanity. Morris, Goldenberg, and Boyd (2018) explain that the reason why sexual objectification of women leads to dehumanization, specifically animalistic dehumanization, is because sexual objectification robs women of uniquely human characteristics such as civility and agency. As expected, participants in their study were less likely to attribute uniquely human traits to sexualized targets, compared to appearance-focused targets and non-objectified targets.

The sexualized portrayal of women is changing over time (Guizzo et al., 2017; Rosewarne, 2007; & Vance, Sutter, Perrin, and Heesacker, 2015). For example, with the rise of computer-generated images, women’s bodies and inanimate objects can be morphed together, giving the idea that the woman is the item for sale (Rosewarne, 2007) or consumption. For example, companies such as Carl’s Jr. have produced advertisements that often portray women as an object that is edible. Specifically, these ads depict hamburgers and women as interchangeable for male consumption. One of their advertisements show an attractive woman with her top completely off. The woman is holding two burgers at chest level. Because there is no visual separation between the burger and woman, the woman’s breasts appear to be the food product. I am interested in the implication that this type of advertisement has for women. Past research shows that even less-objectifying portrayals of women can be harmful to women.

**Effects of Sexualized Media Portrayals of Women**
The sexualized portrayals of women in the media can have negative consequences for how women are perceived by men (Bernard, Legrand, and Klein, 2016; Guizzo et al., 2017; Seabrook & Giaccardi, 2018). Bernard et al. (2016) examined whether the exposure to sexually objectified images generated a greater acceptance of sexual harassment against women among men. Male participants were instructed to view a series of video clips that were either non-objectifying or sexually objectifying. The participants were given a “real life” scenario in which a woman experienced sexual harassment. Those who were exposed to the sexually objectifying videos were more likely to assign blame to the woman being sexually harassed in the story and have more nonchalant attitudes towards sexual harassment in general (Bernard et al., 2016). Seabrook and Giaccardi (2018) examined the correlation between genre of television watched and the acceptance of violence against women. Male participants took an online survey in which they disclosed what genres of television they watched and answered questions about their personal views on objectification of women. Results indicated that when sports, reality TV, and pornography were the genre of television selected by the participants, they were more likely to accept the objectification of women. This research implies that when men are exposed to overly masculine television programming that usually depicts women in sexually objectifying ways, this leads them to be more accepting of objectifying women, which is also associated with rape culture acceptance and sexual manipulation (Seabrook & Giaccardi, 2018).
Sexualized portrayals of women can also negatively influence how women perceive other women. Arnocky, Proietti, Ruddick, Cote, Ortiz, Hodson, and Carre (2019) assessed whether being subjected to images of women in a sexualized manner led to lower humanness ratings and higher aggression toward women by women. Female participants first filled out an intrasexual competition scale, then were exposed to either two neutral or two sexualized videos of a woman. After viewing the video, the participants were instructed to complete a personality survey of the target woman that measured their perceptions of the woman as human. The study revealed that when women high in intrasexual competition were subjected to the sexualized visual stimuli, they were less likely to associate the woman with human traits, which increased their tendency to engage in intrasexual aggressive behavior toward the woman.

Together, the research suggests that after being exposed to a sexualized or objectified visual stimulus, both men and women experience increased aggression towards women in general and are less likely to see women as human. The tendency for both men and women to dehumanize objectified women is further supported in research by Vaes et al. (2011). These researchers had male and female participants complete two IATs that contained images of either men or women. Both IATs included five words related to animals (e.g., instinct and hibernation) and five words related to humans (e.g., values and tradition). In one IAT, the images were of sexualized women (or men) and in the other IAT, the images were of non-objectified women (or men). The researchers
found that both male and female participants were more likely to associate objectified women with animal words rather than human words. Participants did not show the same association when the images were of non-objectified women or objectified men. This finding indicates that both men and women are inclined to dehumanize an objectified woman. Lanis and Covell (1995) investigated the sexually objectifying images of women in advertisements and the effects on sexual aggression among male and female participants. Participants were exposed to one of three advertisement conditions: the woman depicted as a sexual object, the woman shown as gender non-conforming, and a control with no human actors. Participants then rated their acceptance of gender roles, sexual aggression, and rape. The researchers found that male and female participants exposed to the sexualized image reported greater acceptance of stereotypic gender role ideals, sexual aggression, and rape.

Together, the studies discussed in this section so far give validity to the claim that when women are portrayed in sexually objectifying ways, this portrayal can lead to negative and even harmful consequences for perceptions and treatment of women. Exposure to sexualized portrayal of women can also have direct consequences for the women being exposed. For example, Koval, Holland, Zyphur, Stratemeyer, Knight, Bailen, Thompson, and Roberts (2019) examined the effects of sexual objectification exposure on the wellbeing of women in their daily life. The researchers hypothesized that exposure to sexual objectification of women would lead women to self-objectification (i.e., perceive themselves as
sexual objects) and experience a decrease in psychological wellbeing. Participants were given an app (SEMA2) on their phone and instructed to report their daily exposure to sexually objectifying events and describe how it made them feel. The results showed that exposure to sexually objectifying events was associated with an increase in self-objectification and stress levels and a decrease in psychological wellbeing. In addition, Aubrey (2006) explored the effects of exposure to sexually objectifying media on self-objectification and body surveillance. The researchers measured how often participants viewed television shows with varying levels of sexual objectification. Self-objectification and several other measures were recorded at the beginning of the study as well as one year later. The results showed that exposure to sexually objectifying television shows predicted an increase in self-objectification a year later. Similarly, Harper and Tiggemann (2008) demonstrated that exposure to thin-idealized women through magazine advertisements also resulted in negative consequences for the women being exposed. Specifically, participants experienced higher self-objectification, appearance anxiety, body dissatisfaction, and negative mood. It is evident that the sexualized portrayal of women in different forms of media is harmful to the well-being of female consumers.

Advertisements that portray women as edible, like those produced by Carl's Jr., might be especially detrimental to women perceivers. Rosewarne (2007) theorized about the advertisement trend of superimposing women and food together to give the appearance that these women are food for male
consumption. She discussed Nestlé advertisements for a new ice cream in which the women are naked, and half submerged in the ice cream. This image suggested that the women were part of the ice cream and therefore edible.

Rosewarne (2007) also touched on the advertisements used by Carl’s Jr. She argued that when Carl’s Jr. uses women in a sexualized manner to sell their food items, the company is essentially making the sense of ‘taste’ synonymous with women and their bodies. Rosewarne (2007) cautions that the negative consequences of women being portrayed as objects and consumables could include acceptance of sexual harassment and the exclusion of women as valuable members of society. In addition to affecting how society perceives women and their bodies, the objectifying depiction of women in advertisements could also have serious repercussions on how women view food and how they perceive themselves (Kilborne, 1999).

There is indeed research demonstrating that exposure to sexualizing images can harm women’s self-perceptions and lead them to self-objectify (Calogero & Jost, 2010; Calogero & Thompson, 2009; Kilborne, 1999; & Rosewarne, 2007); however, less is known about whether images of women as food might have even a greater influence on women’s self-objectification and self-perception. Research on interpersonal comparisons has shown that individuals are more likely to attribute qualities of human nature to themselves than to others (Haslam et al., 2005); however, there is no research that looks at how those interpersonal comparisons are affected when a person is exposed to a
sexually objectifying image, would an individual, particularly a woman be less likely to attribute those human qualities to themselves. Therefore, further research is needed to examine how sexualized images of women might influence women’s tendency to self-dehumanize (rather than just dehumanize other women), and whether self-dehumanization is greater when the images portray women as food for men. Thus, my area of interest is in whether women particularly self-objectify and self-dehumanize and experience appearance dissatisfaction when they are exposed to advertisements in which women and food are inseparable.
CHAPTER TWO: METHODS

The number of participants for this study was limited due to the COVID-19 pandemic. After agreeing to the consent form (see Appendix A), 129 female participants viewed one of three advertisements that portrayed a woman eating a burger (see Appendix B) and rated the image they viewed. Participants then completed a new implicit association test that I developed to measure the association between self and humans versus self and non-human animals (see Appendix C). This “self-dehumanization” IAT contained words related to the self (e.g., me) and not to the self (e.g., them) and images of human body parts (e.g., feet) and animal body parts (e.g., paws). The body parts for both humans and animals were chosen to be as visually comparable as possible in terms of angle, size, and brightness. After the IAT, participants were told to take selfies until they took one they were satisfied with to have posted online as a profile picture for a later task. They then rated their liking of the selfie they selected (see Appendix D). In addition, participants completed some self-report measures (see Appendix E) that gauged their appearance self-esteem and both their self-objectification beliefs and self-objectification behaviors. At the end of the study, I debriefed each participant using a funnel debriefing process (see Appendix F).

Manipulation: Photo Advertisement Task

Participants were told that for the first task they would evaluate their visual sensory experience after viewing one of many possible photo advertisements.
Participants were seated in front of a computer and randomly assigned to one of three conditions in which they viewed a photo advertisement of a woman with a burger. The advertisement for the control condition was a sexually neutral advertisement of a fully clothed woman holding a burger. In the sexualized condition, the photo advertisement was of a topless woman eating a burger in a sexually suggestive manner. In the edible condition, the woman was holding burgers at chest level that appeared to be part of her nude body, specifically her breasts. There was no visual separation between the burger and woman, implying that her body was edible, for male consumption. While participants viewed the photo, they were asked to complete a survey regarding their perceptions of the advertisement (color, effectiveness, liking). This task was to help reinforce my cover story that the study was about sensory perception as well as to gather information regarding participants’ interest in the product and liking of the advertisements as a function of condition.

Outcome Variables

Perceptions of advertisements

The interest in the product effectiveness measure included two items asking participants to indicate their “willingness to try the product” and “willingness to purchase the product”, $r (129) = .43, p < .001$. These two items served as filler items to support the cover story for the study. The advertisement liking measure included four items ($\alpha = .91$) such as “How much do you like the advertisement?” and “The advertisement was pleasant to look at”. Participants
responded to both measures using a 1 to 9 scale, ranging from *not at all* to *very much*, and only the liking measure is reported in the results section.

**Selfie task**

After being exposed to a photo, participants were told that they would need a “profile picture” to upload because they would be chatting with a person online. Participants were then asked to take pictures of themselves using an iPhone 7 that had a combination lock that did not allow the participants to delete any of the selfies they had taken with the phone. They were able to take as many selfies as they wished within five minutes before choosing the one they wanted to use as profile picture ostensibly for the “later task.” In actuality, the number of selfies participants took served as a measure of appearance dissatisfaction, with more attempts at a selfie indicating greater dissatisfaction with their own appearance.

**Implicit-Association test**

For the next task, participants were redirected to the desk top computer and standard keyboard to complete an implicit-association test (IAT) using Millisecond Inquisit 5 (2019), which assessed their implicit level of self-dehumanization. The IAT consisted of 7 self-words (i.e. self, I, or me) and 7 not self-words (i.e., them, other, they) and 7 human images (i.e., human hand, human foot, human nose) and 7 animal images (i.e., dog paw, deer hoof, pig nose). Following from Greenwald et al. (2003), participants were presented with a IAT that was divided into seven different blocks: three practice (1, 2, 5) and four
critical (3, 4, 6, 7). For all blocks, participants were asked to respond quickly to a set of specified concepts and each block consisted of 20 trials. In the first block of trials, participants were instructed to respond rapidly with a left-hand key press ("E" key) to words representing the self (e.g., "me" and "I") and a right-hand key press ("I" key) when they saw words not representing the self (e.g., “them” and “they”). In Block 2 trials, participants similarly sorted human (“E”) versus non-human (“I”) body parts (e.g., noses, eyes, feet/paws). For Block 3 and 4 (congruent) trials, participants were instructed to press the right key (“E”) when self-words or human parts appeared on the screen versus the left key (“I”) when not self-words or non-human (animal) parts appeared. In Block 5, the words/keys from Block 1 were reversed. In Blocks 6 and 7 (incongruent) trials, participants were asked to sort self-words and non-human body parts (“E”) versus not self-words and human body parts (“I”). The IAT produced a measure that was derived from latencies of responses (i.e., response speed) to these two tasks, which was measured in milliseconds. According to Greenwald et al. (2003), IATs measure the relative strength of association between two pairs of concepts with quicker responses (i.e., latencies) indicating higher levels of implicit association. When concept pairings are not mentally associated, people respond slower because of the need to override their mental associations. In my study, I anticipated that participants would be inclined to respond more rapidly when the concept and attribute were strongly associated (i.e., congruent; human and me) than when they were weakly associated (i.e., incongruent; animal and me). I expected,
however, that this tendency would be significantly degraded among participants exposed to the sexualized advertisements, especially when the woman was edible, because these depictions would interfere with participants’ association of self with humanity.

**Self-Report measures**

Following the IAT, participants completed three items about how much they liked the selfie picture they had chosen (e.g., “I am happy with the selfie I chose” and “I look attractive in the selfie I chose”; $\alpha = .91$) plus some filler items regarding how they felt about selfies in general (e.g., “I am good at taking selfies”). Also, embedded within a group of filler scales, were the appearance self-esteem subscale of Heatherton and Polivy’s (1991) State Self-Esteem Scale (SSES) and a measure of self-objectification (Talmaon & Ginzburg, 2016). The 7-item appearance self-esteem subscale ($\alpha = .88$) consisted of items such as “I am pleased with my appearance right now” and “I feel unattractive (reverse-scored). The self-objectification measure included two subscales: self-objectification beliefs and self-objectification behaviors. The self-objectification beliefs subscale had 7 items ($\alpha = .89$) and included items such as “Looking attractive to others is more important than being happy with whom I am inside” and “How I look is more important to me than how I think or feel”. The self-objectification behaviors subscale had 7 items ($\alpha = .93$) and includes items such as “I try to imagine what my body looks like to others” and “I try to anticipate others’ reactions to my physical appearance.”
CHAPTER THREE: RESULTS

Supplementary Analyses

Zero order correlations among all the key outcome variables are reported in Table 1.

Analytic Approach

I conducted one-way ANOVAs to compare the effects of the advertisement photos (control, sexualized, and edible conditions) on participants’ liking of the advertisement, appearance self-esteem (measured by self-esteem scale, number of selfies taken, and liking of selfie), self-objectification beliefs, and self-objectification behaviors, and the outcome of both the object IAT and dehumanization IAT. Next, I conducted planned comparisons to assess my directional hypotheses. I used $p = .05$ to establish significance. Means are reported by condition in Tables 2 and 3.

Advertisement Liking

There was a significant omnibus effect of how much participants liked the ad, $F(2,129) = 29.27, p < .001, d = 1.12$. Planned comparisons indicated that when participants were subjected to either the sexualized condition ($M = 1.85$, $SD = 1.47$) or the edible condition ($M = 2.24$, $SD = 2.13$) they liked the advertisement significantly less relative to those who viewed the control condition ($M = 4.89$, $SD = 2.54$) advertisement, $t(129) = -7.30, p < .001, d = -1.52$ and $t(129) = -5.68, p < .001, d = -1.12$, respectively. The sexualized and edible
conditions did not significantly differ from each other, $t(129) = 0.90, p = .369, d = 0.22$.

**Number of Selfies**

There was not a significant omnibus effect of the number of selfies participants took when exposed to different advertisement photos, $F(2,129) = 1.42, p = .245$. Planned comparisons did not indicate a significant difference between the conditions. Although the comparisons were non-significant, the means followed a noteworthy pattern. Participants took fewer selfies in the control condition ($M = 1.88, SD = 1.29$) relative to the sexualized condition ($M = 3.00, SD = 4.46$), $t(129) = 1.68, p = .094, d = .34$ and edible ($M = 2.54, SD = 2.51$) condition $t(129) = .89, p = .374, d = .33$. There was a smaller gap in the number of selfies taken between participants in the sexualized and edible conditions, $t(129) = -.65, p = .515, d = .13$, than between these conditions and the control condition. This overall pattern suggests that when the advertisement was neutral and not sexual in nature, participants took fewer selfies on average showing higher appearance satisfaction. In future studies, this effect might be significant with larger samples sizes and adequate power.

**Selfie Liking**

There was not a significant omnibus effect on participants’ liking of the selfie they selected for their profile picture, $F(2,129) = 2.35, p = .100$. Planned comparisons did, however, reveal a significant difference between the control condition ($M = 4.60, SD = 1.36$) and the sexualized condition ($M = 3.95, SD =
Neither the comparisons between the control and edible condition \((M = 4.11, SD = 1.43)\), \(t(129) = -1.42, p = .157, d = .35\) or between the sexualized and edible conditions were significant, \(t(129) = 0.51, p = .611, d = .12\). These findings suggest that participants liked their selfie significantly less in the sexualized versus control condition.

**Self-Dehumanization IAT**

Data were analyzed using the D-score algorithm for IAT data proposed by Greenwald, Nosek, and Banaji (2003). IAT D-scores were calculated, by subtracting the latencies for the incongruent trials (self and animal parts) from the congruent trials (self and human parts) and dividing by the pooled standard deviation. The dehumanization IAT did not reveal a significant omnibus effect, \(F(2,128) = .59, p = .557\). Planned comparisons indicated that there was no significant difference between conditions (see Table 3 for D-scores by condition). That is, D-scores did not differ between the control condition and the sexualized condition, \(t(126) = .69, p = .493\); D-scores did not differ between the control condition and the edible condition \(t(126) = -.35, p = .727\); and D-scores did not differ between the sexualized condition and the edible condition \(t(126) = -.11, p = .297\).

**Appearance Self-Esteem Scale**

There was not a significant omnibus effect of the appearance self-esteem scale when the participants were subjected to the advertisements, \(F(2,129) = 1.01, p = .365\). Planned comparisons did not indicate a significant difference
between the conditions, the participants did not differ in their appearance self-esteem in the control condition ($M = 4.07$, $SD = 1.31$) relative to the sexualized condition ($M = 4.11$, $SD = 1.60$) $t(129) = .10$, $p = .919$, $d = .03$, or the edible condition ($M = 3.67$, $SD = 1.60$) $t(129) = -1.17$, $p = .243$, $d = .27$ and the sexualized condition did not differ from the edible condition $t(129) = -1.34$, $p = .183$, $d = .28$.

**Self-Objectification Beliefs**

There was a significant omnibus effect of self-objectification beliefs, $F(2,129) = 4.45$, $p = .014$. Planned comparisons indicated that when participants were subjected to either the control ($M = 2.17$, $SD = 1.08$) or the edible ($M = 2.22$, $SD = 1.24$) condition they scored higher than those in the sexualized condition ($M = 1.64$, $SD = 0.88$) on the self-objectification belief scale. This finding suggests that participants were less likely to self-objectify when exposed to the control or sexualized condition, $t(129) = -2.47$, $p = .015$, $d = .54$ and $t(129) = 2.54$, $p = .012$, $d = .54$, respectively. The control condition did not significantly differ from the edible condition, $t(129) = 0.19$, $p = .847$, $d = .04$.

**Self-Objectification Behaviors**

There was not a significant omnibus effect of self-objectification behaviors, $F(2,129) = 1.11$, $p = .333$. Planned comparisons indicated that there was no significant difference between conditions. That is, the control condition ($M = 3.82$, $SD = 1.56$) did not differ from the sexualized condition ($M = 3.35$, $SD = 1.69$), $t(129) = -1.31$, $p = .193$, $d = .29$, the control condition did not differ from the
edible condition \((M = 3.80, SD = 2.04)\) \(t(129) = -.05, p = .961, d = .01\) and the sexualized condition did not differ from the edible condition, \(t(129) = 1.19, p = .237, d = .24\).

Table 1. Correlations Among Self-Report Variables.

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<th>3</th>
<th>4</th>
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<td>2. # of Selfies</td>
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<td>-.15†</td>
<td>-.20*</td>
<td>-.17†</td>
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Note: * denotes significant at \(p < .05\); † \(p > .05\) and < .10, margins specified because of low power due to COVID 19 restrictions

Table 2. Mean and Standard Deviations Among Self-Report Variables

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<thead>
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<th>Measures</th>
<th>Control Ad</th>
<th>Sexualized Ad</th>
<th>Edible Ad</th>
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<td>4.89 (2.54)a</td>
<td>1.85 (1.47)b</td>
<td>2.24 (2.13)b</td>
</tr>
<tr>
<td>Appearance Self-Esteem</td>
<td>4.07 (1.31)a</td>
<td>4.11 (1.60)a</td>
<td>3.67 (1.60)b</td>
</tr>
<tr>
<td># Of Selfies</td>
<td>1.88 (1.29)a</td>
<td>3.00 (4.46)b</td>
<td>2.54 (2.51)b</td>
</tr>
<tr>
<td>Selfie Liking</td>
<td>4.60 (1.36)a</td>
<td>3.95 (1.58)a</td>
<td>4.11 (1.43)a</td>
</tr>
<tr>
<td>Self-Objectification Beliefs</td>
<td>2.17(1.08)a</td>
<td>1.64 (0.88)b</td>
<td>2.22 (1.24)a</td>
</tr>
<tr>
<td>Self-Objectification Behaviors</td>
<td>3.82 (1.56)a</td>
<td>3.35 (1.69)a</td>
<td>3.80 (2.04)a</td>
</tr>
</tbody>
</table>

Note. \(N = 129\). All measures except the Selfie measure used 7-point scales with higher numbers reflecting higher ratings; For the Selfie measure, the more selfies taken, the greater appearance dissatisfaction Standard deviations are included in parentheses. Cells in the same row that do not share subscripts reliably differ from each other at \(p < .05\).
Table 3. D-scores of Dehumanization IAT Among Conditions

<table>
<thead>
<tr>
<th>Measures</th>
<th>Control Ad</th>
<th>Sexualized Ad</th>
<th>Edible Ad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dehumanization IAT</td>
<td>-2.37 (1.41)_a</td>
<td>-2.56 (1.29)_a</td>
<td>-2.26 (1.39)_a</td>
</tr>
</tbody>
</table>

Note. N = 129. Dehumanization IAT reported as D-scores; Cells in the same row that do not share subscripts reliably differ from each other at p < .05.
CHAPTER FOUR: DISCUSSION

Summary of finding

I had hypothesized that women participants would express less liking for the advertisements in the sexualized and edible conditions relative to the control condition and less liking in the edible condition relative to the sexualized condition. As predicted, I found that the sexualized and edible photos were liked significantly less than the control advertisement; however, although it was a slight difference, the sexualized condition was unexpectedly less liked than the edible condition. For number of selfies, I hypothesized and found that the participants who were exposed to the sexual and edible conditions would take more selfies than would those in the control condition. As predicted, I found that participants liked the selfies they selected more in the control condition than in the sexualized and edible conditions; however, contrary to my prediction, liking was not greater in the sexualized condition than in the edible condition. Inconsistent with predictions, the dehumanization IAT did not produce any significant differences as a function of condition. Participants exposed to the sexualized and edible advertisement did differ across conditions in how they associated both self and human and not-self and non-human versus self and not-human and not-self and human. I hypothesized for the appearance self-esteem scale that participants in the sexualized and edible conditions would report higher levels of appearance self-esteem than those in control condition; however, I found no differences as a
function of condition. I did not find support for my hypotheses regarding self-objectification beliefs and behaviors. I predicted that participants in the edible condition would be higher on both measures and the sexualized condition would be higher than in the control condition. Instead, I found that those in the sexualized condition had lower levels of self-objectification beliefs relative to the other conditions, as opposed to the control and edible condition, and there was no difference across conditions for behaviors.

**Implications of Findings**

My finding regarding advertisement liking suggests that women tend to dislike advertisements that objectify women’s bodies, regardless of whether the woman is sexualized or portrayed as edible for male consumption. This tendency for lower liking of sexualized photos could indicate that this advertising approach is ineffective for consumers who are women. This possibility implies that companies that use this strategy to market their products could have the opposite effect intended and be unappealing or even repugnant to half of their consumer base. One reason for women’s lowered liking could be the negative effect the images have on their appearance self-esteem, especially when women are portrayed as edible. Recall, women in that condition reported lower appearance self-esteem relative to the other two conditions and women in both the sexualized and edible conditions took more selfies before they were satisfied with the image. The slight difference in findings between the appearance self-esteem measure and number of pictures taken could be the two measures capture
different aspects of women’s state satisfaction with their appearance. This explanation, however, is only speculative and needs to be supported with future research. Finally, in retrospect, the fact that selfie-liking did not differ across conditions is not surprising given they were instructed to take pictures until they were satisfied with a photo to serve as a profile picture.

I had hypothesized that participants taking the IAT in the edible condition would yield slower reaction times for congruent trials (self and human parts; not self and non-human parts) and faster reaction times for incongruent trials (self and non-human parts; not self and human parts) than in the sexualized condition and the control condition. The IAT did not differ between these (or any) conditions. One possibility for the null is that the different portrayal of women did not affect participants’ self-dehumanization. Another possibility, which I describe in more detail in the limitation section below, is that my IAT did not sufficiently measure the construct of self-dehumanization.

The self-objectification measures did not support any of my hypotheses, which could be because short exposure to images did not affect participants’ self-objectification beliefs and behaviors. Another possibility is that college women, particularly those enrolled in social science majors, are more inclined to openly reject the objectification of women, including the self. This rejection could be a function of either genuine resilience or socially desirable responding. In my study, women were especially resilient or reluctant to report self-objectification beliefs (means ranged from 1.64 to 2.22 on a 7-point scale).
I was surprised to find that not only did women in the edible condition not take more selfies than those in the sexualized condition, the means, though not significantly different, were in reverse (i.e., participants in the sexualized condition took on average around a half picture more). Similarly, women in the sexualized condition reported higher self-objectification beliefs relative to the edible condition. For the other measures that produced significant results, the sexualized and edible conditions did not differ (i.e., they only differed from the control condition). Perhaps, women who were exposed to the sexualized advertisement were more affected than I anticipated because there were two separate depictions of sexualization in that one advertisement; the woman was not only topless, but also eating the burger in a suggestive manner that implied the burger was symbolic of a man’s genitalia.

In summary, the pattern of findings across conditions did not support my hypotheses and was inconsistent across conditions. Relative to the sexualized condition, the edible condition showed more negative effects for one measure (appearance self-esteem), less negative effects for another measure (self-objectification beliefs), and equally negative for two other measures (advertisement liking and number of selfies). The instability of findings across measures could be due to many factors including the small sample size and the lack of consistency in the number of usable participants per condition (39, 54, 36).
Limitations and Future Research

One potential limitation with my study is the short length of time participants were given to view the advertisement (5 minutes). Perhaps if participants spent more time and interacted more meaningfully with the advertisements, the sexualized and edible advertisement might have had a stronger influence on the women’s psychological outcomes, and in the predicted direction. Another alternative could be to have repeated exposure to the same type of advertisements. For example, participants could interact with multiple burger advertisements, including ones without humans and several advertisements that portray women holding a burger either without being sexualized, being sexualized, or as edible. Participants would be exposed to multiple versions of only one of these portrayal types.

Another potential limitation is that I used real advertisements; consequently, aspects other than those of interest varied across the advertisements. For example, the models, presentation of the burger (being held or eaten), and background locations were different in each advertisement. These additional differences might have contributed to how participants viewed and experienced the advertisements. Thus, it is difficult to separate the effects of how women were portrayed from the effects of the other photographic elements. Further, if future research funding would allow, I would suggest creating the advertisements myself, using the same model and photo location, with the model holding and not eating the burger in all three conditions. This approach would
allow me to control for the potential of other aspects in the advertisements contributing to any effects across conditions.

Another limitation is in how I constructed the IAT to involve a comparison in latencies between congruent and incongruent trials. In a future study, I would suggest developing a different measure of self-dehumanization. Possibly, a better option would be to use a Single-Category IAT (SC-IAT) that would use the target category of human in combination with self or not self (Sriram & Greenwald, 2009). This approach would avoid the need to include nonhuman targets that should be unassociated with both the self and not self (i.e., other humans). Research shows that the SC-IAT is a reliable and functional measure to assess the magnitude of evaluative associations with a single attitude object (Karpinski & Steinman, 2006).

The biggest limitation of this research was the small sample size and low power. Unfortunately, because of the COVID-19 Pandemic, I was unable to continue collecting participants because my study required them to come into the lab in person. If I was able to continue my study, I not only would have had more participants, but I could also have ensured I had a more even number of participants in each condition. Larger samples provide more reliable results with a smaller margin of error. With a larger sample, I would have had more confidence in the accuracy of the mean values I found in each condition. I would have also been able to better identify outliers that were responsible for skewing my data.
APPENDIX A: INFORMED CONSENT
INFORMED CONSENT for Sensory Perception

PURPOSE: The study in which you are being asked to participate is designed to better understand sensory perception. This study is being conducted by Kori Gearhart (MA student) and Dr. Donna Garcia, Associate Professor of Psychology, California State University, San Bernardino. This study has been approved by the Department of Psychology Institutional Review Board Sub-Committee of California State University, San Bernardino, and a copy of the official Psychology IRB stamp of approval should appear on this consent form.

DESCRIPTION: If you choose to participate in the study, you will be asked to view one of several advertisements and to assess the visual attributes of the advertisement. You will then be presented several visual images and asked to quickly classify those images into various categories.

DURATION & COMPENSATION: Your participation in the study should take no more than 45 minutes. You will receive 3.5 units of credit towards a psychology course of your choosing.

PARTICIPATION: Participation in this research is voluntary. You have the right to refuse to participate in this study, refuse to answer any questions, or to terminate your participation at any time without penalty.

CONFIDENTIALITY: The information that you give us will remain confidential. Your name will not be associated with your responses in any way. The research might be presented in aggregate form at professional conferences or submitted to scientific journals for publication. The data will be destroyed 7 years after publication.

RISKS & BENEFITS: There are no known risks to participating in this study. The task you complete could evoke some emotional stress. However, these tasks should cause no more discomfort than you would experience in your everyday life. Although participation may not benefit you directly, we believe that the information obtained from this study will help us gain a better understanding of how individuals respond to various types of visual stimuli.

Questions: You can contact Dr. Donna Garcia at dmgarcia@csusb.edu if you have any comments about the study or if you want a copy of the study results (after December 2018). If you have any concerns about your experience as a participant, please contact psycirb@csusb.edu.

I acknowledge that I have been informed of, and that I understand, the nature and purpose of this study, and I freely consent to participate

Agree_____  Disagree_____
APPENDIX B: ADVERTISEMENTS OF WOMEN WITH A BURGER
APPENDIX C: IAT IMAGES
APPENDIX D: SELFIE REPORT MEASURE
How do you feel about the selfie you chose and about taking selfies in general?

<table>
<thead>
<tr>
<th></th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Somewhat disagree</th>
<th>Neither agree nor disagree</th>
<th>Somewhat agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I am happy with the selfie I chose</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I look attractive in the selfie I chose</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I like the selfie I chose</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I am good at taking selfies</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I like using filters when I take selfies</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I find it difficult to take good selfies</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I don't like taking selfies</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I tend to be happy with pictures of myself</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I tend to look attractive in pictures of myself</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I am often dissatisfied of pictures of myself</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I see a lot of flaws when I look at a picture of myself</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Survey Created by Kori Gearhart and Dr. Donna Garcia.
APPENDIX E: SELF-REPORT ITEMS
Appearance Self-Esteem subscale of Heatherton and Polivy’s (1991) State Self-Esteem Scale (SSES):

1. I feel confident about my abilities.
2. I am worried about whether I am regarded as a success or failure.
3. I feel satisfied with the way my body looks right now.
4. I feel self-conscious.
5. I feel as smart as others.
6. I am pleased with my appearance right now.
7. I feel concerned about the impression I am making.
8. I feel that I have less scholastic ability right now than others.
9. I feel unattractive.
10. People act as if they can do with me as they please
11. Sometimes it seems as if my role is to satisfy the desires of others
12. I don’t let anyone treat me disrespectfully
13. I feel that I am expected to do things, regardless of my physical or emotional state
14. I don’t feel comfortable demanding others to treat me properly

Self-Objectification Beliefs and Behaviors Scale (Lindner & Tantleff-Dunn, 2017):

1. Looking attractive to others is more important to me than being happy with who I am inside.
2. I try to imagine what my body looks like to others (i.e., like I am looking at myself from the outside).
3. How I look is more important to me than how I think or feel.
4. I choose specific clothing or accessories based on how they make my body appear to others.
5. My physical appearance is more important than my personality.
6. When I look in the mirror, I notice areas of my appearance that I think others will view critically.
7. I consider how my body will look to others in the clothing I am wearing.
8. I often think about how my body must look to others.
9. My physical appearance says more about who I am than my intellect.
10. How sexually attractive others find me says something about who I am as a person.
11. My physical appearance is more important than my physical abilities.
12. I try to anticipate others’ reactions to my physical appearance.
13. My body is what gives me value to other people.
14. I have thoughts about how my body looks to others even when I am alone.
APPENDIX F: DEBRIEFING
Debriefing statement

DEBRIEFING:

Ok, before you go, I’d like to ask you a few questions.

What did you think about the Sensory Perception Study?

How did you feel about your answers during the study?

Was there anything about the study itself that was vague or ambiguous?

Did anything seem strange or out of place?

Sometimes in psychology studies, things aren’t always what they appear to be—people aren’t always given the full truth. Do you think that’s the case in this study?

Did you think that the information about the study was how it appeared to be?

____ IF YES to suspicion items—Good, you’re right. There is more going on than what I told you about.
____ IF NO—Good. Actually, there is more going on than what I told you about.

Well, the sensory perception study was not entirely as it appeared to be. In fact, there really are no other participants that will be able to see the selfie you took. We only made it seem like there were other participants, so you would take the selfie with the idea that someone else would see it. Although the photo that you viewed was a real advertisement, our intentions of studying your “sensory perception” was not the true nature of the study. We are studying how the objectification of women in advertisements directly effects women’s self-perception.
APPENDIX G: IRB APPROVAL LETTER
January 15, 2019

CSUSB INSTITUTIONAL REVIEW BOARD
Administrative/Exempt Review Determination
Status: Determined Exempt
IRB-FY2019-87

Kori Gearhart and Donna Garcia
Department of CSBS - Psychology
California State University, San Bernardino
5500 University Parkway
San Bernardino, California 92407

Dear Kori Gearhart Donna Garcia:

Your application to use human subjects, titled “Representation of Women in Advertisements and the Effects on Self-Dehumanization and Body Satisfaction” has been reviewed and approved by the Chair of the Institutional Review Board (IRB) of California State University, San Bernardino has determined that your application meets the requirements for exemption from IRB review Federal requirements under 45 CFR 46. As the researcher under the exempt category you do not have to follow the requirements under 45 CFR 46 which requires annual renewal and documentation of written informed consent which are not required for the exempt category. However, exempt status still requires you to attain consent from participants before conducting your research as needed. Please ensure your CITI Human Subjects Training is kept up-to-date and current throughout the study.
Your IRB proposal IRB-FY2019-87 - Representation of Women in Advertisements and the Effects on Self-Dehumanization and Body Satisfaction is approved. You are permitted to collect information from 198 participants for 3.5 units from Sona. This approval is valid from [1/15/19] to [1/14/20].

The CSUSB IRB has not evaluated your proposal for scientific merit, except to weigh the risk to the human participants and the aspects of the proposal related to potential risk and benefit. This approval notice does not replace any departmental or additional approvals which may be required.

Your responsibilities as the researcher/investigator include reporting to the IRB Committee the following three requirements highlighted below. Please note failure of the investigator to notify the IRB of the below requirements may result in disciplinary action.

• Submit a protocol modification (change) form if any changes (no matter how minor) are proposed in your study for review and approval by the IRB before implemented in your study to ensure the risk level to participants has not increased,
• If any unanticipated/adverse events are experienced by subjects during your research, and
• Submit a study closure through the Cayuse IRB submission system when your study has ended.

The protocol modification, adverse/unanticipated event, and closure forms are located in the Cayuse IRB System. If you have any questions regarding the IRB decision, please contact Michael Gillespie, the Research Compliance Officer. Mr. Michael Gillespie can be reached by phone at (909) 537-7588, by fax at (909) 537-7028, or by email at mgillesp@csusb.edu. Please include your application approval identification number (listed at the top) in all correspondence.

If you have any questions regarding the IRB decision, please contact Dr. Joseph Wellman, Assistant Professor of Psychology. Dr. Joseph Wellman can be reached by email at Jwellman@csusb.edu. Please include your application approval identification number (listed at the top) in all correspondence.

Best of luck with your research.

Sincerely,

Donna Garcia

Donna Garcia, Ph.D., IRB Chair
CSUSB Institutional Review Board
REFERENCES


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