Effects of Visual Advertising on Self-Referencing and Empathy Towards Health Conditions

Christine Cao and Jennifer Ball

University of Minnesota
Abstract

In regards to advertising, advertisers seek to not only draw the viewer’s attention, but also to allow the viewer to connect with the product. However, a major obstacle in affecting a viewer’s connection with a product is the existing prejudices a viewer may have. A way to resolve this obstacle is by increasing empathy and self-referencing. This study looks at whether presenting a typical user in an advertisement can bring about such feelings of empathy and self-referencing. Participants view an advertisement for an anti-depressant medication with either a typical user or a plain color background. After viewing the advertisement participants take a survey assessing self-referencing, empathy, social distance, and behavior towards depression in response to the advertisement viewed. The results of the study find that presenting a typical user in an ad is beneficial in inducing self-referencing over presenting a plain background. However, the advertisement did not encourage empathy or whether or not someone would buy the product. With all these things in mind, including the typical user in the advertisement is found to be beneficial but may not have long lasting effects.
Effects of Visual Advertising on Self-Referencing and Empathy Towards Health Conditions

When creating advertisements, it is not only important to draw the viewer’s attention, but also to allow the viewer to connect with the product. However, a major obstacle in affecting a viewer’s connection with a product is the existing prejudices a viewer may have. These stereotypes and assumptions affect attitudes towards many disabilities and social issues.

According to Fine and Asch (1988), five assumptions are often made about disabilities: (a) disabilities are located solely in biology, (b) problems of the disabled are due to disability-produced impairment, (c) disabled persons are “victims”, (d) disability is central to a disabled person’s self-concept, and (e) having a disability goes hand-in-hand with needing help and support. Issues like attitudes towards physical disabilities, mental illness, or perceived differences in abilities between sexes, etc. can be affected by prejudice. When individuals are prejudiced, the information presented to them is processed differently. As outlined by Forester, Higgins, and Werth (2004), individuals that are prejudiced produce a self-defense threat response when presented with information incongruent with their beliefs. These inconsistencies can be dealt with by either being ignored or by resolving the inconsistency with logical fallacies. In the case of the second option, increasing attention during encoding produces better memory of incongruent information.

These defense mechanisms are important in advertising because they can affect the impact of the message. Advertisers look to not only attract the audience’s attention, but also to empathize or relate to some aspect of the product. In addition, these prejudices have real life consequences. Stigma towards individuals with disabilities involves status loss, structural discrimina-
tion, and affects the efforts of people to cope with stigma due to untoward consequences (Link & Phelan, 2001). Increasing empathy is a way to address stigma towards individuals with disabilities. Because of this, it is important for advertisers to understand what methods can be used to reduce stigma and increase empathy.

One way to increase empathy is through self-referencing. Self-referencing can allow the viewer to connect with the product in the advertisement by encouraging empathy and understanding. It has also been found that the more an individual self-referenced an ad or product, the more positive their feelings were expected to be (Debevec & Romeo, 1992). Self-referencing can be induced in a few ways. For one, it can be induced by using second person language (e.g. words like “you” instead of “I”). Another potential way to encourage self-referencing is by employing an image of a person or typical user in the advertisement. Advertisers will often display a character relatable to the target audience in order to connect the viewer to a product that will fit into their own lifestyle. However, it is unclear the extent that a character will encourage these feelings. The purpose of this study is to examine the effect of including a visual of a person in an advertisement on reducing stigma and increasing empathy and self-referencing towards the disability as a whole.

**Method**

**Participants**

The sample included university students from a large Midwestern university. Participants (N=33-39) were recruited through posts on Facebook groups affiliated with the university. The participants were on average 20.75 years in age. 20 participants identified as males, 38 partici-
pants identified as females, and one participant preferred not to answer. 62.9% of participants identified as white, 0% identified as African American, 4.8% identified as American Indian, 24.1% identified as Asian, 1% identified as Hispanic, and the remainder identified as other or chose not to answer.

Materials and Procedure

**Antidepressant advertisements.** In order to assess the effects of a typical user in comparison to only using words, the study compared two advertisements for antidepressants. The contents of the advertisements were essentially the same. The advertisements used the same words in both cases, but one of the advertisements included a background image of a typical user. Keeping the words the same will allowed the differences to be more likely due to seeing, or not seeing, the typical user. The control advertisement had a plain color background.

**Questionnaire.** A questionnaire was developed in order to survey self-referencing, empathy, social distance, and behavior towards depression in response to the advertisement viewed. To look at empathy, a list of emotional adjectives was presented. Participants rated how much of the emotion they experienced while viewing the ad on a scale of 0 (not at all) to 7 (extremely). Examples of emotional adjectives used are “sympathetic”, “angry”, “cheerful”, and “embarrassed”. Social distance was measured by asking participants to rate how comfortable they would feel engaging with individuals with depression on a scale of 1 (very uncomfortable) to 7 (very comfortable). Participants were asked how comfortable they would be engaging with a person with depression in a range of activities from “having a conversation” to “having the person take care of your children when you are away”. Self-referencing was measured by asking partic-
participants to indicate the extent to which certain statements described what they were thinking while viewing the ad for antidepressants. The participants rated each on a scale of 1 (strongly disagree) to 7 (strongly agree). An example statement includes “The ad seemed to relate to me personally”. Behavior intentions were also measured by asking participants about their opinion of the brand based on the advertisement they saw. Participants rated their likeliness of behavior on a scale of 0 (not at all) to 7 (extremely). For example, participants were asked how important it would be to use the advertised drug when suffering from depression. Lastly, participants were asked to list traits they thought best described people with depression in order to look at how the use of a typical user in the ad affected the stereotypes associated with depression. Additionally, participants rated their attitudes towards people who suffer from migraines and allergies in order to make the purpose of the study somewhat less obvious. Alpha values showed good internal consistency, ranging between .85-.87.

Procedure

The advertisements and questionnaire were created through Qualtrics. Participants were randomly assigned to view either the advertisement with the typical user or the advertisement with a plain background. The participant was instructed to view the advertisement as they would view any other advertisement and to go to the next page when he or she was done looking at the advertisement. The participant was then instructed to go to the next page to complete a survey that assessed how visual aspects of an advertisement can affect ad effectiveness. Halfway through the survey, the advertisement was presented again to refresh the participant’s memory.
before answering more questions. After completing the survey, participants were asked what they believed the purpose of the study was and were thanked for their time.

For stereotype coding, words that were stereotypic of people with depression were assigned one point, stereotype synonyms were given half a point, and emotion question words were given a quarter of a point. For example, the word “unpredictable” is considered a stereotypic word and is given one point. Words such as “weak” or “unstable” are considered stereotype synonyms and are given half a point.

Results

The analyses aimed to determine whether there were any differences in the measures for participants who viewed the ad with the typical user and those who did not. Mean values, standard deviations, and alpha scores were calculated for each measure. A series of t-tests were run to see if the means significantly differed. Overall, all the measures were in the right direction; in that participants who viewed the ad with the typical user scored higher on self-referencing, empathy, social distance and behavioral measures. In addition, less stereotypical words were used to describe people with depression for those who viewed the ad with the typical user. However, in comparing the two groups, measures of empathy, social distance, stereotype activation, and behavior were not significantly different from each other (see Table 1). Analyses showed that participants who viewed the typical user ad ($M = 4.52$, $SD = 1.61$) scored significantly higher on self-referencing than participants who viewed an ad with a plain background ($M = 3.67$, $SD = 1.68$), $t(58) = 1.97$, $p = .05$.

Discussion
The analyses show that self-referencing was the only measure that significantly differed between the ads. This suggests that presenting a typical user in an ad is beneficial in inducing self-referencing over presenting a plain background. However, none of the other measures were significantly different. The advertisement did not encourage empathy or whether or not someone would buy the product. With all these things in mind, including the typical user in the advertisement is beneficial (and at the very least not harmful), but future studies may explore how to further encourage empathy and understanding.

A potential limitation in the study was the small sample size. A larger sample size might yield stronger results. In addition, inducing self-referencing does not necessarily mean that the stigma towards depression was reduced, and furthermore does not suggest a lasting change. For example, even though there was a significant difference in self-referencing between the two conditions, the mean values assigned to the stereotype coding did not significantly differ. In this study, even though self-referencing was significantly different, the participants still used the same amount of stereotypical words to describe people with depression. This suggests that using a typical user in advertisements may not have long term, stereotype reducing effects.
References


## Appendix

### Table 1

**Means and Standard Deviations of Ad Conditions by Language Group and T-Test Comparisons between Groups**

<table>
<thead>
<tr>
<th>Measure</th>
<th>With Typical User</th>
<th>Without Typical User</th>
<th>t</th>
<th>df</th>
<th>p-value</th>
<th>95% CI Lower</th>
<th>95% CI Upper</th>
<th>α</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-referencing</td>
<td>Mean 4.52 SD 1.61</td>
<td>Mean 3.67 SD 1.68</td>
<td>1.97</td>
<td>58</td>
<td>.05*</td>
<td>-.08</td>
<td>11.88</td>
<td>.86</td>
</tr>
<tr>
<td>Empathy</td>
<td>Mean 3.35 SD 1.37</td>
<td>Mean 3.07 SD 1.52</td>
<td>.83</td>
<td>71</td>
<td>.40</td>
<td>-2.35</td>
<td>5.73</td>
<td>.86</td>
</tr>
<tr>
<td>Social Distance</td>
<td>Mean 3.59 SD .88</td>
<td>Mean 3.37 SD .84</td>
<td>.99</td>
<td>64</td>
<td>.32</td>
<td>-1.29</td>
<td>3.83</td>
<td>.87</td>
</tr>
<tr>
<td>Behavioral</td>
<td>Mean 4.05 SD 1.27</td>
<td>Mean 3.58 SD 1.68</td>
<td>1.24</td>
<td>59</td>
<td>.21</td>
<td>-1.13</td>
<td>4.89</td>
<td>.85</td>
</tr>
<tr>
<td>Stereotype Coding</td>
<td>Mean .35 SD .34</td>
<td>Mean .44 SD .40</td>
<td>0.95</td>
<td>70.8</td>
<td>.34</td>
<td>-.09</td>
<td>.26</td>
<td>-</td>
</tr>
</tbody>
</table>

*Note. *Significant at $p<0.05$ level