



The Impact of Subliminal Cues on Gender-Neutral Advertisements

ALLIE CHU¹, CHRISTOPHER KOLAR², ALICE HAHN²

HENRY M. GUNN HIGH SCHOOL¹, PALO ALTO UNIFIED SCHOOL DISTRICT²

INTRODUCTION

The increasing flux of advertisements and distractions in everyday life has caused advertisers to search for a new edge in marketing that attracts customers. One potential advantage can be found in subliminal cues, or subtle signals below our threshold of recognition which may impact everyday decisions. The question is **do subliminal cues have an impact on gender-neutral advertisements?**

BACKGROUND AND SIGNIFICANCE

Research has shown that in a lab setting with few variables, subliminal advertising has an impact on subjects. However, when applied to the general public, the advertisements have little effect. Experiments conducted on the public often advertise a certain brand, leading to factors such as brand preference prior to the experiment.

An experiment done by BBC involved about 100 participants who watched a short film upon entering a theatre. Half of these people, the control group, saw a clip, and when they left, were offered water or Lipton Iced Tea. The other half was shown the same clip, but spliced throughout were split-second images of the Lipton logo. This was supposed to incentivize people, on a subliminal level, to pick the iced tea when they left the theatre. The researcher found that there was little difference between the control and test group. He acknowledged that there were factors that weren't under control, such as predisposition for or against the tea, as well as overall thirst level, which could have affected the results (Unknown, 2015).

In a survey with gender-neutral advertisements, subliminal cues advertising towards either men or women were woven into the pictures. In the survey, the person taking it marked if they were female, male, or other. The survey results will show whether they prefer the advertisements subliminally marketed towards their gender, have no preference, or prefer those marketed to the other gender when compared to the baseline of the original images.



Original

Altered



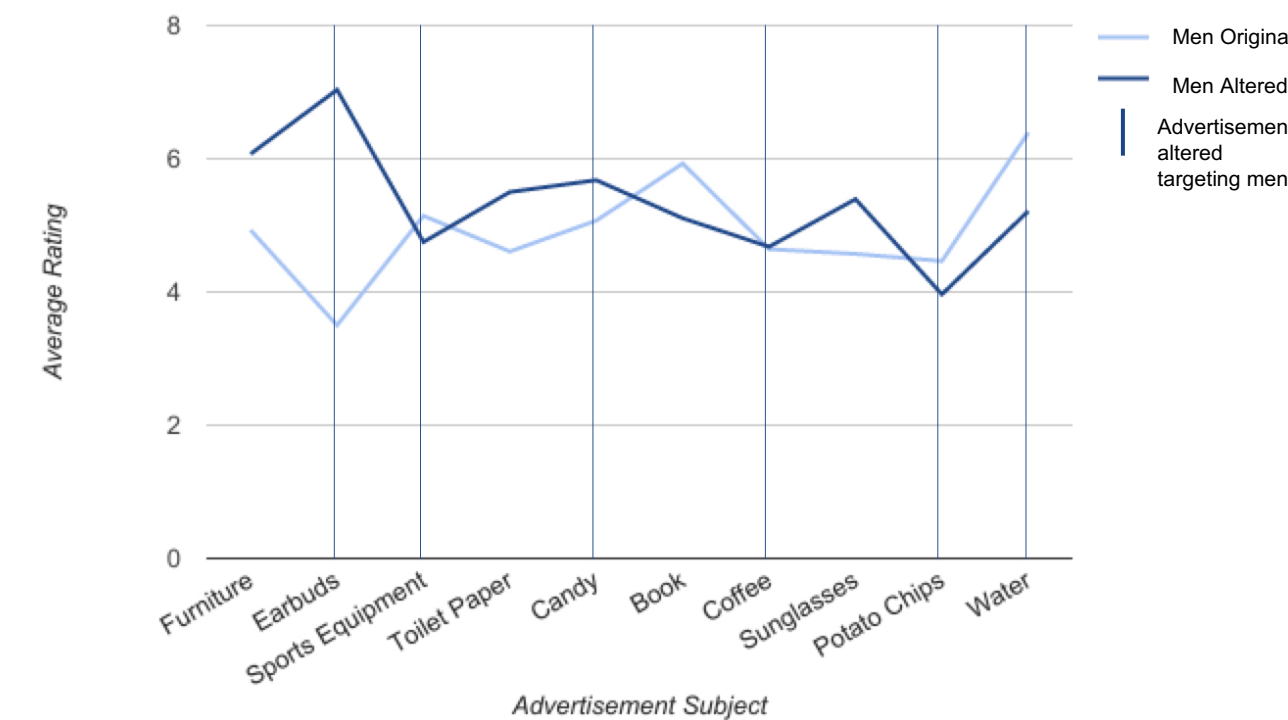
“Rude” and “Kill,” two words more commonly used by men in social media.

RESEARCH METHODOLOGIES

The survey has twenty questions about ten products. Ten of the advertisements are unaltered. The images repeat, but have subliminal cues targeting either men or women. These are the altered images. The altered and unaltered questions appear in a random order. The data is ranked on a scale from one to ten, but appear with qualitative values to the people taking the survey. To analyze the data, the value from the unaltered image is subtracted from altered image. By looking at the positive, negative, or lack of change between the scores from both images, it is possible to determine if there was a change due to the subliminal cues.

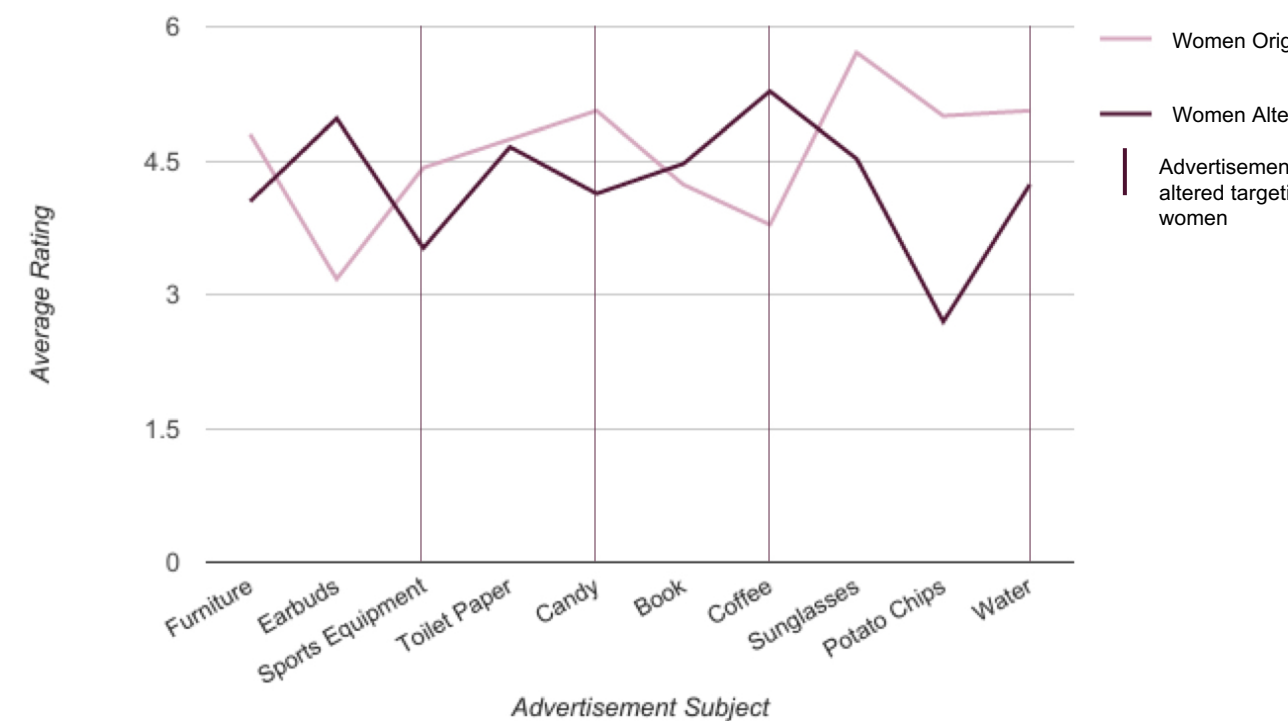
RESULTS

Figure 1: Difference Between Men's Ratings for Original and Altered Advertisements



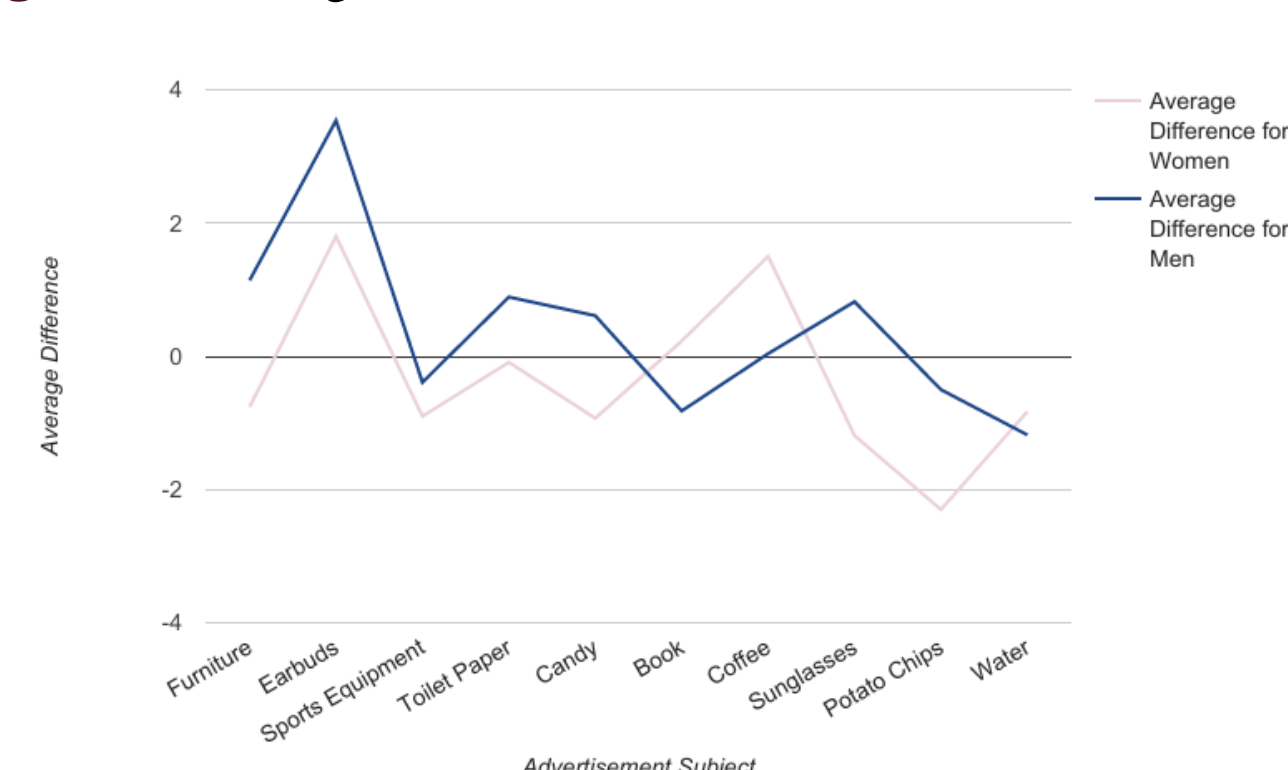
Based on this graph, it can be seen that, on average, men gave subliminally altered advertisements a higher rating.

Figure 2: Difference Between Women's Ratings for Original and Altered Advertisements



On the other hand, women were more inclined to give altered advertisements a lower rating.

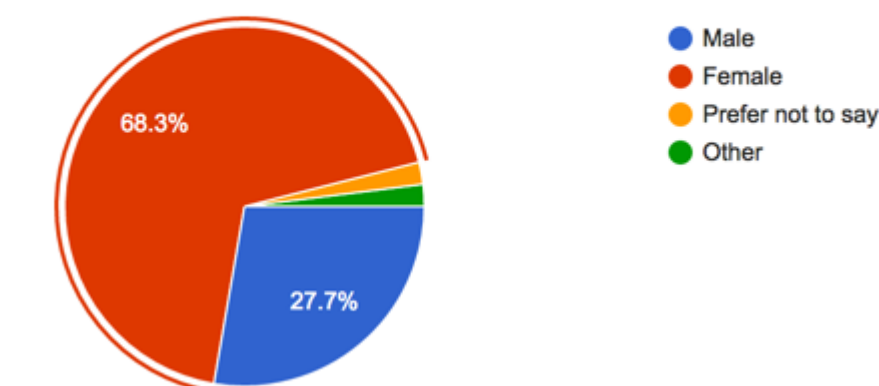
Figure 3: Average Difference for Men and Women



On average, men gave higher ratings than women.

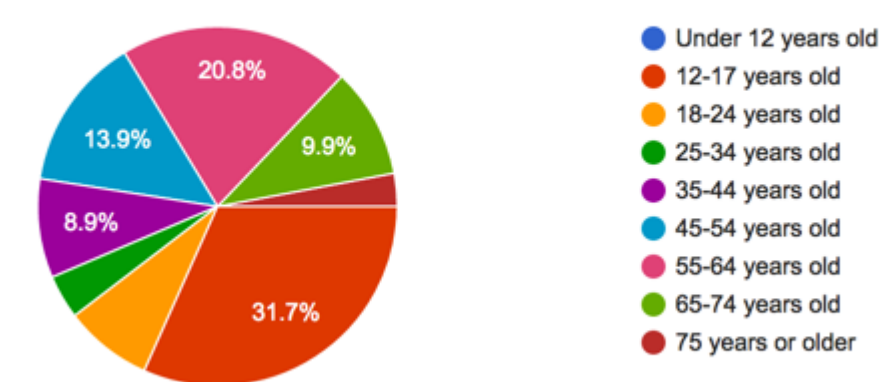
DATA ANALYSIS

Figure 4: Gender Analysis



Women accounted for roughly $\frac{3}{4}$ of the total survey participants, whereas men were closer to $\frac{1}{4}$.

Figure 5: Age Analysis

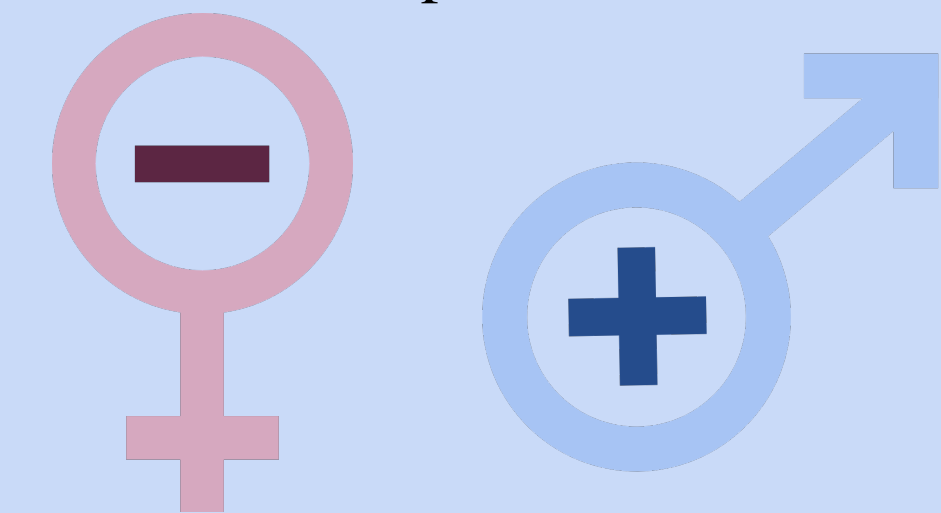


There was an even spread of age.

For the men, there was a positive correlation between the altered advertisements targeting men and the rating given. For women, there was a negative correlation.

On average, men gave four of the six objects marketed to them a positive difference of 1.6, and the other two -0.66. Of the objects marketed towards women, men gave two a positive rating and two a negative rating, with the averages being 0.33 and -0.79 respectively.

For women, three of the objects marketed towards them were given a negative difference average of -0.89 and only one a positive swing of 1.5. Similarly, with the objects marketed towards men, four were given a negative value of -1.09 and two a positive value of 1.02.



ACKNOWLEDGEMENTS / REFERENCES

Acknowledgements

I would like to thank my mentors, Christopher Kolar and Alice Hahn, for the time they have dedicated towards helping me with this research project. Also, I would like to thank Ms. Durquet and Ms. Merchant, my AAR teachers, for all their help with edits, refining my ideas, and working with me to create this culmination of my research. Finally, I would like to thank all the participants who took time to take my survey.

Works Cited

Dijksterhuis, Ap and John A. Bargh (2001). "The Perception Behavior Expressway: Automatic Effects of Social Perception on Social Behavior," in Advances in Experimental Social Psychology, Vol. 33, ed. M. P. Zanna, San Diego: Academic Press, 1-40.
"Does Subliminal Advertising Actually Work?" BBC, 20 Jan. 2015, www.bbc.com/news/magazine-30878843. Accessed 9 Oct. 2016.
Fitzsimons, Gráinne M., et al. "Automatic Effects of Brand Exposure on Motivated Behavior: How Apple Makes You 'Think Different.'" Journal of Consumer Research, vol. 35, June 2008. Duke the Fuqua School of Business. Journal of Consumer Research, doi:10.1086/527269. Accessed 4 Nov. 2016.
Lewis, David. Impulse: Why We Do What We Do without Knowing Why We Do It. Random House Business Books, 2013.
Merikle, Philip. "Subliminal Advertising." Psychologist World, www.psychologistworld.com/influence_personality/subliminalads.php. Accessed 9 Oct. 2016.
North, Adrian C., et al. "The Influence of In-Store Music on Wine Selections." PsycARTICLES, American Psychology Association, Apr. 1999, psycnet.apa.org/journals/apl/84/2/271/. Accessed 4 Nov. 2016.