

How Are Female Politicians Impacted by the Gendered Double Bind during Presidential Debates?

by Anna Callahan

Background

Since the 2016 U.S. Presidential Election, I have become interested in studying the unique obstacles faced by female politicians due to their gender. While Hillary Clinton was by no means a perfect candidate, the coverage and evaluation of her electoral race was mired in sexism. I want to use pre and post debate survey data to analyze how Americans perceived Hillary Clinton's competence and character.

Dataset Information

Title: [Emotional Reactions to the 2016 General Election Debates](#) via [openicpsr.org](#)

Attribution: Fridkin, Kim, and Gershon, Sarah Allen. Emotional Reactions to the 2016 General Election Debates. Ann Arbor, MI: Inter-university Consortium for Political and Social Research [distributor], 2020-05-18.

License: Distributed through a public access repository under a Creative Commons Attribution 4.0 International (CC BY 4.0) License. Compliance requirements include: citing data in any publications, agreeing not to intentionally identify any survey participants, and assuming responsibility for the implications of data usage.

Documentation: No codebook is included, but the study includes PDF documents of the pre and post-debate surveys.

Summary: This study employed a survey method to examine American students' emotional reactions to the first and third presidential debates leading up to the 2016 election. The study used pre and post-test questionnaires as well as facial recognition software that tracked viewers' expressions in real time during and after the debate. Survey metrics include: subject demographic characteristics, political attitudes, feelings towards the candidates, and tracking of emotional reactions.

Data Cleaning

To clean this data, I first read the .sav file into RStudio and examined it before determining my plan of action. I was interested in examining how perceptions of the two candidates changed following the debate, so I disregarded the survey responses from the control group participants who did not view the debate. Some of the survey data (such as questions about participants' opinions on specific policy issues) was irrelevant to my research question, so I dropped those columns. I then created my own codebook by cross referencing the survey questions with the variable names. The same questions were asked in the pre and post surveys, but they were numbered differently in each, so I had to manually renumber them. I then gave the resulting variables more intuitive names so that the data wrangling process would be more straightforward. To answer my research question, I needed to examine how perceptions of the two candidates differed by gender, and if and how these responses changed in the pre and post debate surveys. To do this, I began with 44 specific variables, which I am unable to list here due to lack of space but can be viewed in my R script. In conducting my exploratory data analysis, I came across several obstacles that I needed to address using data cleaning techniques. Specifically, when calculating the standard deviation of the perception of warmth, one of the outputs was NA, so I examined the data more closely and realized that one poll participant did not answer any of the post-debate poll questions. I chose to drop this row to maintain the integrity of my data, because if I left the respondent's pre-debate but not post-debate responses, it would skew my analysis. There was also one cell in the post_tone_clinton column (a categorical factor variable) where the pollsters had mistakenly entered "9" instead of the correct response, so I directly indexed into this cell to fix the error.

Exploratory Data Analysis

Mean perceptions of candidate "warmth" by gender

	gender_identity	survey_num	candidate_col	mean_warmth_rating	median_warmth_ratings	stdev_warmth_ratings
1	male	pre	clinton	39.10	42.5	25.04
2	female	pre	clinton	47.33	50.0	24.28
3	male	pre	trump	28.76	17.5	27.06
4	female	pre	trump	16.57	4.5	23.32
5	male	post	clinton	47.21	47.5	27.60
6	female	post	clinton	59.24	60.0	23.03
7	male	post	trump	33.88	30.0	29.09
8	female	post	trump	24.67	21.5	25.35

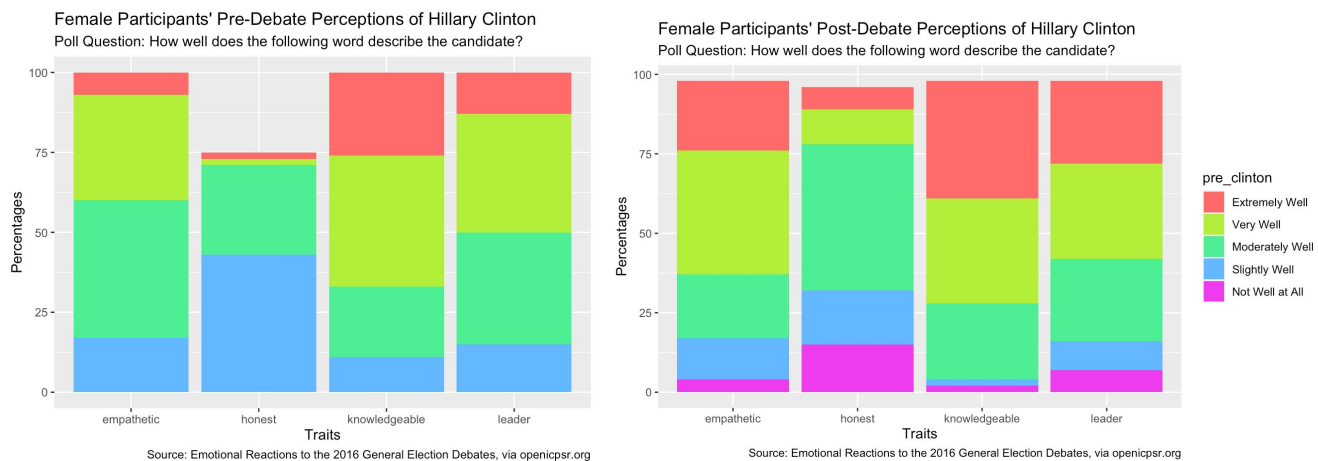
Change in mean perceptions of candidate “warmth” by gender

	gender_id	change_trump_warmth	change_clinton_warmth
1	male	5.12	8.11
2	female	8.10	11.91

For this part of the project, I wanted to examine perceptions of candidate “warmth,” because this personality characteristic is cited in the Weger study as one that is often weaponized as a double standard facing female candidates for electoral positions. Weger calls this phenomenon the “Gendered Double-Bind” of politics, stating that “women who assume traditionally male leadership positions must take on masculine traits to be accepted as leaders. At the same time, power seeking women must also behave consistently with their historical and culturally sanctioned roles as mother, nurturer, caregiver, and so forth” (Weger & Seiter, p.3). From my exploratory data analysis, I learned that the average participant’s perception of both candidates, regardless of participant gender identity, increased between the pre- and post debate surveys. The average female participant’s perceptions of both candidates “warmth” increased more than the average male’s. The degree to which females’ warmth perceptions fluctuated compared to their male counterparts can be attributed to a number of factors, but is a significant and interesting distinction regardless.

Data Visualization

For the data visualization component of this assignment, I chose to examine the ways that female participants’ perceptions of candidate’s honesty, empathy, knowledge, and leadership changed between the pre- and post-debate surveys.



To create this visualization, I used the piping method to group and summarize the pre- and post-debate statistics from my sub-data frame of female survey participants, then mutated the results into a tibble breaking down responses into percentage proportions. I then merged these data frames together and graphed them using a stacked bar chart, and did the same for the post-survey responses. I found this chart really fascinating, because it demonstrates that the sample of students surveyed for this poll found Hillary Clinton significantly less “honest” than the other traits they were asked about. I also found it interesting that many more participants felt that the chosen traits more accurately described

Clinton *following* the debate. This leads me to believe that despite her flaws as a candidate, Clinton had an overall good debate performance that bolstered her perception as a capable candidate in the eyes of women across the board.

Hypothesis Test

For the hypothesis test section of this assignment, I chose one of the numerical variables I had already explored in a previous section: perceptions of candidate warmth before and after the debate. From the table on page two, we can clearly tell that the average woman's perception of Clinton's warmth increased by around 11.9% after viewing the debate. I have a hypothesis that the average *republican* woman participant's perception of Clinton's warmth actually went up less than 11.9%, given that their ideological views likely contrast with Clinton's views, and this may have influenced their perception of her character. In order to test this, I set up my t.test as follows:

H1: Republican women's perception of Clinton's "warmth" went up $< 11.9\%$ following the debate.

H0: Women's perception of Clinton's "warmth" did NOT go up any less than 11.9% following the debate.

The p-value that resulted from my t.test was 0.4861, meaning that this relationship is not statistically significant and indicates strong evidence for the null hypothesis. This is not the outcome I was expecting, so I decided to take a closer look at the data. To my surprise, I discovered that the average republican woman's perception of Clinton's warmth actually increased by 15.4% after watching the debate, which is greater than the 11.9% mean change that I calculated for all women. This could be attributed to a number of scenarios, such as the possibility that these republican women may receive their news coverage from right-leaning media outlets that are more likely to produce negative coverage of Hillary Clinton, making it more likely that their initial, preconceived notions of Clinton were lower than those of democratic women before watching the debate.

Conclusion

After conducting this analysis, I have come to a few interesting conclusions that have helped advanced my research goals, however, I wouldn't necessarily say that my research question has been definitely answered. In terms of perception of candidate warmth, I think it is interesting to note that on average, male respondents perceived Hillary Clinton as significantly less "warm" of a candidate than female respondents. While the average male surveyed did perceive Clinton as warmer following the debate, this increase was smaller within the male respondents than the female respondents. I think this opens many questions as to why men perceive female politicians to be less appealing and approachable figures than women evaluating the same candidates. While I do not yet have evidence to support this claim, I do think it is possible that implicit or explicit gender-based biases could be at play here. In terms of the additional variables I evaluated – how women perceived Clinton's honesty, knowledge, empathy, and leadership qualities before and after the debates – I was especially interested in the pre- and post-debate comparisons of perceived honesty. Clinton's electoral campaign was mired in controversies ranging from contentious decisions she made as Secretary of State, to her husband's impeachment trial, to her email scandal, and based on my contextual understanding of the campaign, all of these factors compounded and made her appear as a less honest candidate, which is apparent in this visualization. If I had more time and space for this assignment, I would choose to create additional visualizations including the male respondents, and see if there are any interesting differences between the way Clinton's honesty was perceived by men and women who responded to the poll.

Sources:

[Emotional Reactions to the 2016 General Election Debates](#)

[Exploring Gendered Nonverbal Behavior in the 2016 US Presidential Debates](#)

["I Just Don't Think She Has a Presidential Look": Sexism and Vote Choice in the 2016 Election](#)