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Weighty Decisions: The Effect of Weight Bias on the Selection and Election of U.S. Senate Candidates

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ABSTRACT

Results from U.S. Senate elections and ratings of candidates' sizes were used to determine the relationship between candidate size and election outcome. Obese candidates and overweight women were unrepresented in the candidate pool and heavier candidates received a lower vote share, providing evidence of bias against overweight and obese candidates.

INTRODUCTION

Weight discrimination is well documented in employment, social, educational, and medical settings (Puhl and Heuer, 2009). However, relatively little is known about the effect of weight discrimination in the electoral process. This study uses data from 2008 and 2012 U.S. Senate elections to examine the relationship between the perceived weight of a political candidate and the election outcome.

Hypotheses:

- 1) **Heavier candidates will be underrepresented in the candidate pool.** There are three reasons for this hypothesis: 1. Negative stereotypes about overweight and obese individuals will make it less likely those individuals receive votes 2. Potential supporters without negative stereotypes may still doubt the candidate's chances of overcoming biases 3. An overweight/obese candidate's previous experience regarding weight discrimination may lead him or her to doubt their likelihood of success.
- 2) **Heavier candidates will receive a smaller percentage of votes than thinner candidates** due to weight discrimination biases.
- 3) **Weight bias** will be **less evident in the highly publicized general elections than primary elections.**
- 4) **Overweight female candidates** would **experience a greater weight penalty than male candidates.**

METHOD

Participants

Two sets of 30 Hope College undergraduate students who were members of an introductory psychology course participated as size estimators. One set for the 2008 elections and the other set for the 2012 elections.

Measure

We estimated candidate size using **the Political Candidates Size Estimation Measure (PCSEM)** (see figures on right for sample items). All Democratic and Republican candidates from the primary and general election for the U.S. Senate races in years 2008 and 2012 were eligible for the measure. The measure consists of pictures of the Democratic and Republican candidates captured from the Internet. The booklet contains 126 candidate pairs, with 190 individual candidates. **Forty-nine elections** are from **2008** and **77** are from **2012**. **Sixty-one elections** are **primaries** and **65** are **general elections**.

Participants rated on a scale of 1 to 12 their estimation of the size of the individuals in the PCSEM. Values for the scale are: underweight (1-3), normal weight (4-6), overweight (7-9) and obese (10-12). Subjects completed the PCSEM in groups of 15 subjects. The PCSEM procedure took approximately twenty minutes for participants to complete.

Sample Items on the PCSEM



Please rate the man above (circle one):

1	2	3	4	5	6	7	8	9	10	11	12
Underweight			Normal			Overweight					Obese



Please rate the man above (circle one):

1	2	3	4	5	6	7	8	9	10	11	12
Underweight			Normal			Overweight					Obese



Please rate the woman above (circle one):

1	2	3	4	5	6	7	8	9	10	11	12
Underweight			Normal			Overweight					Obese



Please rate the woman above (circle one):

1	2	3	4	5	6	7	8	9	10	11	12
Underweight			Normal			Overweight					Obese

Table 1

Percent of candidates labeled normal weight, overweight, and obese by medical professionals compared to rates of overweight and obesity among the general U.S. population in 2007-8*

	Male Candidates	Male U.S.*	Female Candidates	Female U.S.*
Normal Weight	58% (92)	22%	84% (27)	35%
Overweight	41% (64)	45%	16% (5)	27%
Obese	1% (2)	34%	0% (0)	38%

*CDC: U.S. males and females (ages 40-59)

RESULTS

1) Found **evidence** that **obese candidates** are **underrepresented among political candidates in U. S. Senate races.**

According to Flegel et al. (2010) over one-third of U.S. men and women between the ages 40 and 59 are obese, whereas only 4% of male candidates and 0% of female candidates in our study are perceived to be obese. (see Table 1).

2) Found a **significant difference in the size of the male and female candidates** ($\chi^2=8.04$, $df=2,189$, $p<.05$).

Eighty-four percent ($n=27$) of women were in the normal range, 16% were ($n=5$) were in the overweight range, and 0% were in the obese range. In contrast, 58% (92) of men were in the normal range, 41% (65) were overweight, and 1% (2) were obese.

3) An **independent sample t-test**, also **revealed a significant difference between the size of male and female candidates** ($t = 4.65$, $df = 257$, $p < .01$).

❖ These tests support our hypotheses that **overweight female candidates experience a greater weight penalty than male candidates.**

4) An **independent sample t-test revealed that candidate size is related to election outcome** ($M = 6.44$ for losing candidates and $M = 6.15$ for winning candidates) ($t[1,250] = -1.9$, $p = .05$).

5) Additionally, when controlling for related variables (e.g. incumbency, political affiliation), a **multiple regression revealed the greater the size disparity between candidates, the greater the vote share of the thinner candidate** ($\beta = -2.26$, $p < .05$).

❖ Our **regression equation did not**, however, **find that gender moderates the relationship between weight and vote share.**

❖ We also did not find support for our hypothesis that weight has a greater effect in relatively low information elections (primaries) than high-information elections.

DISCUSSION

What we discovered is as follows:

- Although about one-third of U.S. adults are over the age of 40, there is a vast **underrepresentation of obese candidates** for the U.S. Senate.
- **Heavier candidates** receive a **lower vote share**, supporting our hypothesis that weight affects voting behavior.
- Thus, **well-documented discrimination** against the overweight and obese in the areas of employment, education, and health care **can also be extended to electoral process.**
- Although we **did not find evidence** supporting our hypothesis that **bias against the overweight is more likely to occur in low information elections**, we found **partial support** for the hypothesis **that female candidates experience greater weight bias than male candidates.**
- Significant lack of overweight and obese female senators, as well as more slender ratings for female candidates than male suggests that **weight discrimination for women occurs earlier in the candidacy process and at a lower threshold.**
- **Further research is needed examining the alternative mediating processes** that link candidate weight to voting behavior **and the process underlying the culling of virtually all obese individuals** from the candidate pool.