Who Benefits? Experimental Evidence of Gender Differences in Aid Allocations*

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Abstract

While past work clearly demonstrates that women are rewarded less compared to men in the labor market, how do they fare when taking up government aid? Some literature suggests that women taking up aid will continue to be evaluated unfairly, because they are not perceived as having equal income-potential to men; other work suggests that benevolent sexist attitudes may disproportionately reward female applicants relative to similarly-situated men. Given the competing intuitions behind rewarding or punishing men seeking welfare, an experimental test of each hypothesis is presented. I find that, on average, male applicants earn less than female applicants with identical needs. Further, I find the amount awarded to women varies conditional on being rated a "Poor" or "Excellent" worker by a third party, while there is no difference in the amount awarded to men who are rated "Poor" workers compared to men who are rated "Excellent" workers. Thus, women's advantage over men applicants extends only so far as women are perceived as "deserving." The totality of these results suggest that people are more inclined to help poor women rather than poor men, but only deserving women, when the quality of women applicants is validated by an external source. I bolster these findings with preliminary analyses suggesting that near-identical trends hold across respondent ideologies.

^{*}The experiment reported in this paper is preregistered at EGAP Registry (https://osf.io/u5wxg/). This research was reviewed and approved by the Florida State University Institutional Review Board. All errors remain the author's own responsibility.

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When put in competition for scarce resources, are similarly situated men and women evaluated differently? We have long known that women experience discrimination in ways that men do not: Women receive different treatment in everything from applying to jobs (Quadlin 2018) to running for office (Hassell and Visalvanich 2019) to the price they pay for basic household goods in some countries (Betz, Fortunato and O'brien 2021). Economically, women earn less than their male counterparts (Mandel 2013) and comprise the overwhelming majority of those on welfare (Abramovitz 2017; Fraser 1989). Despite this, and the well-documented reality that welfare attitudes are racialized (Desante 2013; Winter 2006; Gilliam 1999), the feminization of welfare attitudes has received limited attention from scholars. Emblematic of this, much of the experimental work on welfare attitudes uses exclusively female names or images (Desante 2013; Winter 2006; Gilliam 1999; Goren 2022).

Still, there remains uncertainty about whether norms of male favoritism should carry into welfare allotment. The vast literature documenting the more favorable treatment of men relative to women primarily concerns traditionally masculine domains: salary negotiations (Castillo, Petrie, Torero and Vesterlund 2013), hiring decisions (Neumark, Bank and Van Nort 1996; Goldin and Rouse 2000), and elections (Clayton, Robinson, Johnson and Muriaas 2020). In these environments, the dimensions on which employees are being evaluated are frequently perceived as masculine qualities, incongruent with traditional feminine presentation (Koenig, Eagly, Mitchell and Ristikari 2011). Welfare is distinct from these domains in that the task of the bureaucrat evaluating candidates is to evaluate them neutrally on the basis of their economic needs and eligibility for the specific program for which they are applying. Therefore, other inherent or perceived qualities about the applicants should not affect these evaluations.

Still, it is possible that individuals evaluating public assistance applications may respond differently to a woman in need than a similarly situated man in need, either subconsciously or due to cultural norms of extra beneficence and protection toward women. That is, they may

evaluate the deservingness of male and female applicants differently, even if their objective economic needs are identical. Further, welfare is distinct from labor market domains in that it carries with it social stigma (Soss 1999) and negative stereotypes (Foster 2008; Esping-Andersen 2015). Unlike in the labor market, where men continue to out-earn their female counterparts, women are more likely than men to benefit from public aid (Fraser 1989; Lundberg-Love, Nadal and Paludi 2012). Indeed, programs such as aid to Women and Infant Children (WIC) are specifically targeted toward women. Thus, it's plausible that women, being seen as the primary target of these resources, are treated more favorably than similarly-situated men.

The central purpose of this article is to enter the debate about modern sexism, American values, and bureaucratic responsiveness to show that, when men and women are put in direct competition for scarce public resources, gender-based prejudice interacts with American perceptions of work ethic to amplify existing, harmful stereotypes about men and women. I find that, on average, male applicants earn less than female applicants with identical needs. Further, I find the amount awarded to women varies conditional on being rated a "Poor" or "Excellent" worker by a third party, while there is no difference in the amount awarded to men who are rated "Poor" workers compared to men who are rated "Excellent" workers. Thus, women's advantage over men applicants extends only so far as women are perceived as "deserving." The totality of these results suggest that people are more inclined to help poor women rather than poor men, but only deserving women, when the quality of women applicants is validated by an external source. This research provides evidence toward benevolent sexism, in which women are viewed as weak and in need of extra care (Glick and Fiske 1997, 2001). It additionally informs our understanding of gender differences in considerations of the deserving poor and the consequences of these considerations on bureaucratic responsiveness.

Theory and Hypotheses

Sexism toward women may be hostile or benevolent; while both forms of sexism share the assumption that women are inferior to men and restrict women to a lower social status, they manifest in different behavior patterns. Hostile sexism constitutes punitive behavior toward women who deviate from their prescribed role as heterosexual domestic laborers, whereas benevolent sexism manifests in protective coddling of women who stay within this role. Benevolent sexism reflects evaluations of women that are seemingly positive, but remain caustic to gender equity and restrict women's personal, professional, political, and social opportunities. Examples of benevolently sexist attitudes include the reverence of women exclusively in wife, mother, and child-caretaker roles, the romanticizing of women as objects of heterosexual affection, and the belief that men have a strict duty to protect women (Chen and Farhart 2020; Geus, Ralph-Morrow and Shorrocks 2022). Failing to remain within the confines of these traditional roles may trigger punishment in the form of hostile sexism. Examples of hostile sexism include beliefs about women as incompetent, unintelligent, overly emotional, and sexually manipulative (McThomas and Tesler 2016; Cassese and Holman 2019).

Scholarly intuition is mixed, however, regarding how gender attitudes should inform evaluations of welfare recipients. On one hand, some scholarly work suggests that a reason men's progress surpasses women's in the labor market is that men and women are evaluated along different dimensions. Traditionally feminine characteristics are often perceived as incongruent with desirable leadership characteristics (Eagly and Karau 2002). This suggests that we should expect men to be favored when applying for aid, since they may be viewed as inherently possessing better odds of getting back into the labor force. On the other hand, welfare is a distinct domain from the labor market in that impartial bureaucrats are instructed to remain neutral and make allocation decisions based on need and circumstance.

Public aid is designed to be an environment in which gendered personal characteristics should be irrelevant. If this is truly the case, then we may expect that norms of male favoritism may not hold here. Indeed, it is plausible that women in need of government assistance may trigger benevolent attitudes of protection. Specifically, a woman in need may seem more needy or more deserving of aid than an identically-situated man, who may be expected to take care of himself because he is perceived as more capable of doing so than a woman.

Americans have long believed people "ought to take care of their personal problems by themselves" without relying on the government for aid (Sniderman and Brody 1977). The feminization of welfare, combined with the perceived failure of men seeking public assistance to achieve the masculine ideal of breadwinning, may contribute to a hostility for men receiving public benefits: such policies help those who should be helping themselves (Bobocel, Son Hing, Davey, Stanley and Zanna 1998; Katz and Hass 1988; Sniderman and Tetlock 1986; Sniderman, Carmines, Layman and Carter 1996; McClosky and Zaller 1984). Building on this body of work, I hypothesize that male aid applicants will be awarded less than female applicants.

Hypothesis 1 On average, male applicants will be awarded less than female applicants.

Deservingness: Competence and Quality

Another dimension that has characterized past work and public debate on welfare allotments is deservingness (Schneider and Ingram 1993). The "deserving poor" are those whose personal financial circumstances have been devastated by structural or macroeconomic forces beyond the individual's control, rather than personal qualities of dependence and laziness (van Oorschot 2000). Thus, conditional on gender, an individual's deservingness should also affect the amount of aid they are awarded. Because notions of deservingness and undeservingness are frequently characterized by ability and willingness to work, we might think that

factors like individual competence will affect aid allocations. Specifically, high competence workers should receive more than their low-competence counterparts.

Hypothesis 2 On average, high-competence applicants will be awarded more than low-competence applicants.

Deservingness might also be signaled by an external evaluation of worker-quality. If the public truly prioritizes giving aid to good workers whose personal financial circumstances were devastated by forces outside of their control, then high-quality workers should be awarded more than low-quality workers. However, evidence suggests that external or objective proof of women's capabilities may be valuable resources in offsetting negative perceptions of women as workers, but offer lower returns for men (Abel, Burger and Piraino 2020; Dadgar and Trimble 2015; Jepsen, Troske and Coomes 2014). I therefore hypothesize:

Hypothesis 3 For male applicants, there will be no significant difference between amounts awarded to "Excellent" workers as compared to "Poor" workers.

Hypothesis 4 For female applicants, there will be a significant difference between amounts awarded to "Excellent" workers as compared to "Poor" workers.

Experimental Design and Data

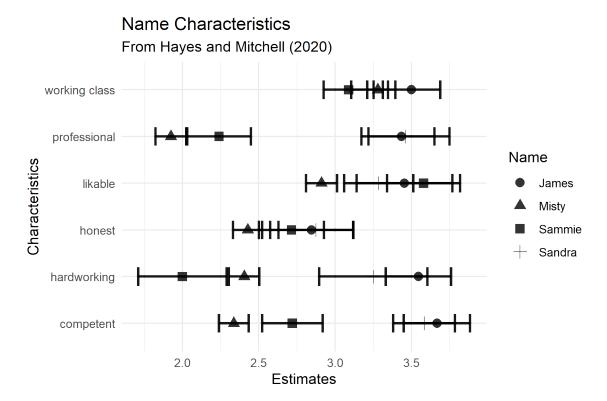
To test how gender, worker quality, and perceived work ethic shape Americans' attitudes toward welfare, I conducted a survey experiment in which participants were asked to budget money to different pairs of applicants for state assistance. Following DeSante (2013), I use hand-redacted welfare applications to manipulate targets' for assistance sex, perceived competence, and objective work-quality rating (Figure 1). To manipulate the objective quality rating, each aid target is randomly assigned a rating of "Excellent" or "Poor" on

their aid application. To manipulate sex and perceived competence, I use two male and two female names from Hayes and Mitchell's (2020) name-characteristics dataset: Sandra, James, Misty, and Sammie.¹ These names were specifically selected to minimize the likelihood that factors other than sex, objective, and perceived work ethic would affect treatment. Names are used rather than more overt cues to minimize demand effects (Quidt, Vesterlund and Wilson 2019). To mitigate concerns about the effects of race and the racialization of welfare confounding results, all four names chosen were coded as racially distinct white names in the Hayes and Mitchell (2020) names dataset.

Thirdly and finally, these names are matched on characteristics that Americans have long reported are relevant considerations when considering welfare support (Bobocel et al. 1998; Katz and Hass 1988; Sniderman and Tetlock 1986; Sniderman et al. 1996; McClosky and Zaller 1984). Sandra and James are rated highly in professionalism, competence, and work ethic, while Sammie and Misty are rated lower in all three characteristics. All names are comparable in estimates of whiteness, honesty, and likeability. Figure 1 below shows the complete breakdown of name-characteristics.

Subjects are given a budgeting task in which they are asked to allocate \$1,500 to two applicants for federal assistance, each of whom has a state-determined need of \$900. Respondents may also choose to give some (or all) of the funds to "offset the state deficit." Given the budget constraint—both applicants' full need cannot be met—I use the amount awarded to Applicant 1, Applicant 2, and the Government as a direct estimate of an applicant's deservingness. These allocations are my main variables of interest. Everything about the applicants remains identical, except for a worker quality assessment of Excellent or Poor and their name, which cues both sex (male or female) and competence (high or low). Given this, if an applicant receives a different allocation across treatments, we can infer that

¹To create the dataset, the authors obtained a list of given names among people born in the United States between the years 1955 and 1990 from the U.S. Social Security Administration (SSA). To identify the gender of the names, they used information on sex included in the SSA data.



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Figure 1: Differences in Valence Characteristics Between Treatment Names

this difference is due to experimental manipulation. As the applicant's characteristics were manipulated via random assignment, any difference in the relative importance respondents place on fiscal responsibility—illustrated by giving more to offset the budget deficit—can also be traced back to the experimental treatment. This deficit option also allows for individuals to take a principled position, a socially desirable and available option, to decide that the money would be better spent in some other way.

In order to isolate the effects of sex versus the traits people ascribe to different names, I fielded a survey experiment with YouGov (n=2150) in April 2022. Modeled after Desante (2013), respondents viewed two applications identical in appearance to the original experiment. Rather than randomizing both applications, all respondents viewed the same baseline application of "Sandra" who was rated as "Excellent" compared to a second application. I

WORK FIRST ASSISTANCE APPLICATION Applicant Name: Sandra Date of Application: Address Telephone: County: Case No.: District No.: HOUSEHOLD: List all household members for whom Assistance is being requested: (Non-Applicant household members are not required to provide a social security number, immigrant, or citizen status) Social Security No. Citizen/Eligible Birth Immigrant 05/30/2010 Son Daughter Does the household include a child who meets the Work First age rule? Yes No Is the child living with an adult who meets the Work First kinship rule? Yes No Has anyone listed on the EA application ever received EA? Yes When: Does anyone live in the home that is not listed on the EA application? \Box Yes \Box No If yes, is the individual(s) a roomer/boarder? \Box Yes \Box No \$ 900.00 Total assessed monthly need: Worker Quality Assessment (circle one): Poor Excellent Applicant Statement: I understand that it is against the law for me to make false statements and that I am

Figure 2: Example Aid Application

Applicant's/Representative's Signature

Witness's Signature

subject to prosecution if I do. I certify that the information that I have provided is a true and complete statement of facts according to my best knowledge and belief. I certify, under penalty of perjury, that all persons for whom I am applying are U.S. citizens or qualified immigrants. I declare under penalty of perjury (and being subject to prosecution under 28 U. S. C. § 1746) that the foregoing is true and correct. I give the agency permission to verify any information necessary to determine my eligibility for Emergency Assistance.

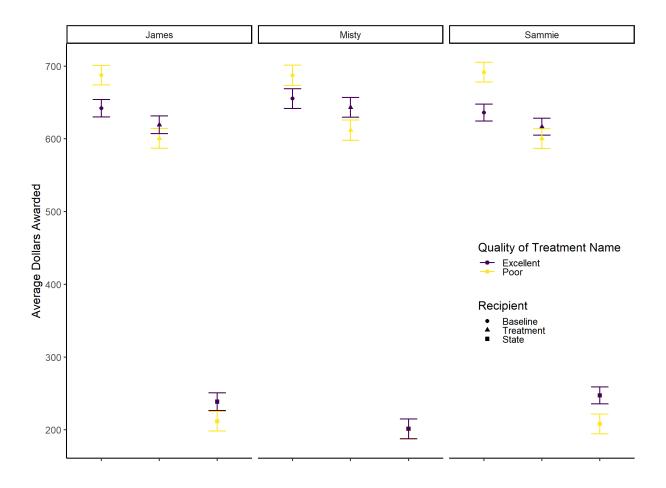
used a 2x2x2 factorial design for this second application, randomizing sex (male/female), competence (high/low), and quality assessment (excellent/poor) of the second application, using the names James, Misty, and Sammie as my cue for sex and competence. Respondents were then asked to allocate funding to the two applicants or to offset the state budgetary deficit.

Experimental Results

When men and women are put in direct competition for scarce resources, how do women fare compared to similarly-situated men? How does perceived competence and external quality ratings affect this relationship? Figure 3 presents the main results of the experiment by treatment name, with color denoting the quality rating (Excellent/Poor) of the treatment name, and point-shape denoting the amount given to each recipient. Recall that the baseline condition is an applicant named Sandra, a high-competence name, who is rated as an "Excellent" quality worker.

H1 predicts that, on average, male applicants will be awarded less than female applicants. The first panel of Figure 3 demonstrates that, when she is paired with a high-competence, "Excellent" male name, James, Sandra is awarded significantly more on average (\$642.06 vs. \$619.20, p = 0.014). Excellent Sandra also earns more on average than Sammie, a low-competence name, when he is rated "Excellent" (\$635.98 vs \$616.60, p=0.000). However, there is also no significant difference between Excellent Sandra and Excellent Misty (\$655.31 vs \$643.20, p=0.141). These results are supportive of H1, in that Excellent Misty earns no less than Excellent Sandra, while Excellent James and Excellent Sammie earn substantively and significantly less than the baseline.

Turning to competency, I consider the difference between name valence characteristics and aid amounts awarded. Recall that competence is determined by valence-characteristic scores in the Names Dataset (Hayes and Mitchell 2020). Hayes and Mitchel's findings suggest that name-characteristics have the potential to minimize differences in aid allotment due to racial prejudice; however, the mitigating effects of name-characteristics do not appear to extend to gender bias. Sandra and James are both high-competence names, while Misty and Sammie are relatively low-competence. I predicted that high competence names should receive more, on average, than low competence names. Thus, holding applicant quality constant, Sandra



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Figure 3: Gender Differences in Aid Allocated by Treatment Name

should receive more than Misty and James should receive more than Sammie, relative to the baseline. I do not find empirical support for H2. There is no statistically or substantively significant difference between the amounts awarded to Excellent Misty and Excellent Sandra (\$655.31 vs \$643.20, p=0.141), nor is there between Excellent James and Excellent Sammie (\$619.20 and \$616.60, p=0.88), and Poor James and Poor Sammie (\$600.60 and \$600.32, p=0.986). This suggests that, among whites, perceived competence matters less than when making inter-racial comparisons.

Finally, I predicted that, for male applicants, there will be no significant difference be-

tween amounts awarded to workers rated "Excellent" as compared to workers rated "Poor." Conversely, I predicted that the opposite will be true for female applicants; that is, worker quality rating will result in a significant difference in the amount awarded. To evaluate H3 and H4, I compare the difference in means for each treatment name to (James, Sammie, and Misty) when they are "Excellent" rated workers to when they are rated "Poor." Table [] shows the results of this test, which support H3 and H4. There is a statistically significant difference in the amount of aid awarded to Excellent Misty compared to Poor Misty; however, there is no such difference between Excellent Sammie or James compared to Poor Sammie or James.

The totality of these results suggest that identically-situated men and women are evaluated differently when put in competition for scarce resources in a public aid environment. Though implicit competence does not appear to play a role in aid evaluations when comparing white men and women to each other, positive third-party quality ratings affect women's earnings and do not alter men's. One possible interpretation of this result is that people think of women on average as riskier "bets" than men. Extra information, like a third-party quality rating, is therefore much more valuable. Whereas, if men are considered relatively safe, stable "bets," additional information may have limited impact.

Implications for Bureaucratic Responsiveness²

Perhaps the most immediate implication of these experimental results is for the federal bureaucracy. If these trends hold among the average member of the bureaucracy, then this suggests that men and women may receive aid at different rates, in part, due solely to their gender. Of course, this is a survey of the general public, not bureaucrats, whom we know differ from the public on relevant dimensions such as liberalism (Spenkuch, Teso and Xu

²Exploratory analysis. The following analysis was not part of my pre-registration plan, linked above.

2021), which may mitigate the gender differences I observe in the public. On the other hand, this survey utilizes names as the sole cue of an applicants' gender, while street-level bureaucrats not only see applicants' names, but conduct phone interviews with them, have access to their personal financial circumstances, and meet with them in person.

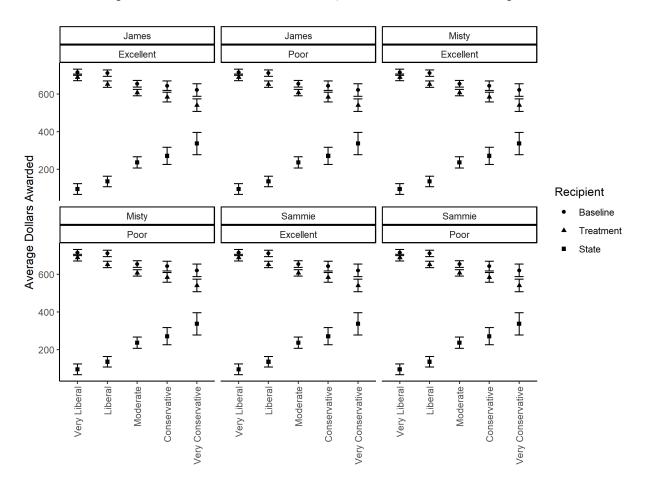


Figure 4: Average Aid Allocations by Ideology

While we cannot know from the analysis presented above how bureaucrats would respond if they participated in this experiment, we can break the analysis down by relevant dimensions. Specifically, we can look at differences in allocations by ideology. Figure 4 shows the amount given to each recipient for each treatment group broken down by ideology. The more liberal a participant, the more on average they give to applicants and the less they give to the state. However, there remain significant differences in the amounts awarded to respondents that mirror the same trends I found in the aggregated sample. This suggests that, even within liberal environments, these gender disparities may persist.

Notably, as conservatism increases, respondents give less to applicants and more to the state. Indeed, 1 shows that, controlling for each of the possible treatment conditions, for every one unit increase in conservatism on the ideology scale, respondents give approximately \$44.47 more to the state.

Table 1

	Dollars Given to State
Ideology	44.472***
	(5.673)
Treatment Female	-27.835
	(19.926)
Rated Excellent	16.169
	(16.340)
High Competence	-1.363
	(20.039)
Constant	77.193***
	(24.090)
N	1,824
\mathbb{R}^2	0.035
Adjusted R ²	0.033
Residual Std. Error	348.513 (df = 1819)
F Statistic	$16.359^{***} (df = 4; 1819)$

p < .1; p < .05; p < .01

Taken together, these results suggest that, while greater generosity to applicants is associated with liberalism, gender differences in the amount allocated persist across ideologies. Thus, if street level bureaucrats mimic the general public's behavior in this domain, we may expect these gender differences to persist. Further, more conservative respondents prefer allocating funds to the state irrespective of treatment-level factors like applicant sex, competence, or quality.

Concluding Discussion

Gender and the American value of hard work greatly influence how Americans evaluate the deserving poor. In this survey experiment, I find that both applicant gender and applicant quality effect how "deserving" the applicant is perceived by respondents. These results show how work ethic matters differently for men and women. While women receive more on average than men, women's perceived deservingness appears to be contingent on their quality-rating, but men's deservingness is not. I bolster these findings by using the data I have to speak to the most immediate implication of these findings: bureaucratic responsiveness. I find that greater generosity to applicants is associated with liberalism, while more conservative respondents prefer to allocate more funds to the state.

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