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Replication Report How Do Beliefs About the Gender Wage Gap Affect the Demand for Public Policy?

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November 16, 2022

Abstract

We conduct a replication of Settele (2022), a online survey experiment designed to find out how individual's beliefs about the gender wage gap affect their policy preferences. We reproduce Results 1 and 2 of the study: how prior beliefs around the wage gap are distributed among individuals and how a information treatment causally affects the policy demand. Our re-coded replication shows that the reported results are robust. **Keywords:** Replication, Gender Wage Gap, Beliefs, Perception **JEL Codes: C26, C90**

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1 Introduction

Settele (2022) studies the causal effect of beliefs on policy preferences in the United States of America in the context of the gender wage gap. A survey design is used to study how different information treatments affect the desire for government action. The experiment was carried out in two stages, with each stage featuring two waves, as explained in Table 1. The sample is representative of the US population based on observables.

Stage	Wave	Survey Period
Stage 1	A B	31.08.2019-09.10.2019 21.11.2018-02.01.2019
Stage 2	A B	17.09.2018-09.10.2018 06.12.2018-06.01.2019

Table 1: Data Subsamples and Collection Periods

This replication focuses on two of the three reported main results. The first result is descriptive and concerns itself with prior beliefs of participants surrounding the gender wage gap and whether there are systematic differences in the population. The second result is causal: a portion of the respondents receive one of two possible information treatments concerning the true extent of the gender wage gap to update their beliefs and policy preferences are then re-elicited. Participants who believe that the gender wage gap is large are more likely to demand for policies to mitigate it.

We find that Settele's (2022) results are reproducible. We do not obtain the same point estimates, but the effect sizes we find are very similar in magnitude and significance to the ones reported Settele (2022). An additional specification shows that while the treatment groups differ significantly from one another, the difference of the treatment groups to the control groups is more understated.

The remainder of the report will be structured as follows: Section 2 will outline the (re-)coding procedure and discuss possible deviations from the replication code provided

by Settele (2022). Section 3 will provide a side-by-side comparison between the point estimates reported in the paper and the replication. Additionally, we will present an alternative estimation that would also report a treatment effect.

2 Reproducibility

Settele (2022) provides both the code and necessary data files to obtain the original tables. Following an adjustment of the working directory in the master do file the code runs and delivers the reported point estimates. Additional Stata packages that were required for the analysis (e.g. ivreg2, eststo, esttab, zscore) were also available in the replication package.

The data provided in the replication package are the raw survey responses.¹ Because the data is in the initial survey form (responses are marked as strings, e.g., "A1", "A2"), we chose to do our own coding and data cleaning, following the procedures described in Settele (2022). The original code was only consulted to ensure that the recoding referenced the correct variables and questions (e.g. "RAND" was the variable describing what information treatment an individual had been assigned to). As the variable labels and the variable names were identical this was necessary.

We were able to identify minor differences between our approach and Settele (2022). Survey participants were asked how high their annual household income was, rather than selecting income brackets. This measure was to be logarithmized and used as a control variable in later analyses (compare Table 5 notes). Settele (2022) appeared to have used income brackets (an earlier survey item) to assign single values to the continuous measure, as highlighted in Figure 1. These measures were then logarithmized for the original analysis.

¹We suspect that the data sets do not contain all recorded survey responses, but a pre-specified subsample. All individuals in the available data successfully passed the attention check question. Given that this question rarely has a 100% success rate, we assume this was pre-specified but have not been able to verify this, given that the pre-analysis plan is not publicly available.

```
tab hhinc \\
gen hhinccont=. \\
replace hhinccont=6735 if hhinc==1 \\
replace hhinccont=19742 if hhinc==2 \\
replace hhinccont=36701 if hhinc==3 \\
replace hhinccont=61275 if hhinc==4 \\
replace hhinccont=86204 if hhinc==5 \\
replace hhinccont=120686 if hhinc==6 \\
replace hhinccont=170381 if hhinc==7 \\
replace hhinccont=327261 if hhinc==8 \\
gen loghhinc=log(hhinccont) \\
label var loghhinc "Log household income"
```

Figure 1: Transformation of Household Income Variable

(a) Notes: From Settele (2022) replication files (03_SurveyStageIA_cleaning.do, line 629 f.)

Our replication goal was a computational reproduction, which involved writing the code from scratch with as little copying from the original material as possible. Therefore we logarithmized the reported household income measures.² Similarly, some of the participants used decimals as a thousands separator when listing their income. Settele (2022) recodes this manually, while we chose to keep the data in its reported structure.

The analysis uses several summary indices of outcome variables to simplify the number of hypotheses that need to be tested for. Settele (2022) follows an approach by Anderson (2008) and generates her policy index using an inverse weighting procedure, the resulting means have a mean of around 0 and a standard deviation of less than one. We opt for a simpler procedure as employed by Kling et al. (2007), Resnjanskij et al. (2021), and Heller et al. (2017), where the index is simply a weighted average – rather than an inverse weighted average – of all relevant policy items. The interpretation of the two indices is the same.

 $^{^{2}}$ As ln (0) is undefined, we replaced these values with 0 for households that initially reported an income of 0.

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3 Replication Results

Our analysis should be classified as a computational reproduction. The data provided was (re-)coded, cleaned and the replication was conducted based on the procedures described in the paper rather than the replication do-files provided by Settele (2022). We include a minor robustness replicability with an alternative specification to measure the treatment effect by comparing the both treatment groups to the pure control group rather than a between-treatment comparison.

3.1 Result 1

"RESULT 1: Democrats and women hold systematically lower beliefs about females' relative wages than Republicans and men, respectively. Similarly, Democrats, women and those with more pessimistic beliefs about women's wages are more in favor of government intervention to mitigate the wage gap." (Settele, 2022, p. 486)

In the first section of the paper Settele (2022) examines the relationship between beliefs and specific demographic characteristics. As a sample only the pure control group is used which does not recieve any information treatments throughout the entire experiment. The language used in this section is descriptive and no causal claims are made (nor can the results be interpreted causally). The results are summarized in Settele (2022, Table 3). In this section participants are surveyed on their general beliefs surrounding the gender wage gap and asked whether they support additional measures to improve female labor market outcomes.

As shown in Tables 2, 3, 4, 5, 6, and 7 the estimates obtained in the computational replication are comparable in magnitude and direction to those obtained by Settele (2022). The standard errors are also within close range of one another. The controls used follow the respective table notes as in Settele (2022).

	Gender E in Wages)ifferences are Large	Gender D in Wag a Pro)ifferences ges are oblem	Gover Should Gender V	nment Mitigate Vage Gap	Perce Inc (1-3), (ption lex 1R-3R)
	(1)	(1R)	(2)	(2R)	(3)	(3R)	(4)	(4R)
Democrat	$\begin{array}{c} 0.577^{***} \\ (0.072) \end{array}$	$\begin{array}{c} 0.567^{***} \\ (0.071) \end{array}$	$\begin{array}{c} 0.683^{***} \\ (0.073) \end{array}$	$\begin{array}{c} 0.671^{***} \\ (0.072) \end{array}$	$\begin{array}{c} 0.803^{***} \\ (0.073) \end{array}$	$\begin{array}{c} 0.792^{***} \\ (0.072) \end{array}$	$\begin{array}{c} 0.691^{***} \\ (0.066) \end{array}$	$\begin{array}{c} 0.742^{***} \\ (0.071) \end{array}$
Female	$\begin{array}{c} 0.173^{***} \\ (0.064) \end{array}$	$\begin{array}{c} 0.169^{***} \\ (0.063) \end{array}$	$\begin{array}{c} 0.264^{***} \\ (0.063) \end{array}$	$\begin{array}{c} 0.267^{***} \\ (0.062) \end{array}$	0.153^{**} (0.062)	$\begin{array}{c} 0.163^{***} \\ (0.062) \end{array}$	$\begin{array}{c} 0.181^{***} \\ (0.057) \end{array}$	$\begin{array}{c} 0.219^{***} \\ (0.062) \end{array}$
Observations	921	921	921	921	921	921	921	921

Table 2: Replication of Settele (2022), Table 3, Panel A

Notes: Only the pure control group as sample, only estimates between 5th and 95th percentile. Additional controls for political orientation: Non-leaning Independents and individuals who reported "other" (Reference category: Republicans and Independents leaning Republican). A dummy for Survey Wave B was included but is not significant. Robust standard errors are reported in parentheses. * p<0.10, ** p<0.05, *** p<0.01

Table 3: Replication of Settele (2022), Table 3, Panel B

	Gender E in Wages	Differences are Large	Gender E in Waş a Pro	Differences ges are oblem	Gover Should Gender V	nment Mitigate Vage Gap	Perce Inc (1-3), (eption dex 1R-3R)
	(1)	(1R)	(2)	(2R)	(3)	(3R)	(4)	(4R)
Prior (z-scored)	-0.815^{***} (0.072)	-0.801^{***} (0.071)	-0.849^{***} (0.071)	-0.836^{***} (0.071)	-0.595^{***} (0.071)	-0.592^{***} (0.071)	-0.729^{***} (0.065)	-0.815^{***} (0.071)
Observations	921	921	921	921	921	921	921	921

Notes: Only the pure control group as sample, only estimates between 5th and 95th percentile. A dummy for Survey Wave B was included but is not significant. Robust standard errors are reported in parentheses. * p<0.10, ** p<0.05, *** p<0.01

3.2 Result 2

"RESULT 2: Beliefs about the size of the gender wage gap have a strong causal effect on people's sense of concern and unspecific policy demand. The effect of these beliefs on demand for concrete policies is meaningful but more nuanced, i.e., it depends on the specific policy. Differences in beliefs across the political spectrum causally explain between 0 and at most 6 percent of the partian difference in demand for specific policies. Similarly gender differences in beliefs causally explain up to 7 percent of the gender difference in policy demand." (Settele, 2022, p. 491)

							_		
	Gender I	Differences	Gender L	Differences	Gover	nment	Perce	eption	
	in Wages	Gender Differences n Wages are Large(1)(1R) 0.742^{***} -0.729^{***} (0.070) (0.069) $.482^{***}$ 0.475^{***} (0.067) (0.066)	in Wa	ges are	Should .	Mitigate	Index		
	in wages	are Large	a Pro	oblem	Gender V	Vage Gap	(1-3), (1R-3R)	
	(1)	(1R)	(2)	(2R)	(3)	(3R)	(4)	(4R)	
Drion (z. goorod)	-0.742***	-0.729***	-0.757***	-0.744***	-0.498***	-0.494***	-0.643***	-0.719***	
r nor (z-scored)	(0.070)	(0.069)	(0.067)	(0.067)	(0.069)	(0.069)	(0.062)	(0.068)	
Domograf	0.482^{***}	0.475^{***}	0.586^{***}	0.577^{***}	0.739^{***}	0.730^{***}	0.609^{***}	0.652^{***}	
Democrat	(0.067)	(0.066)	(0.067)	(0.066)	(0.071)	(0.071)	(0.061)	(0.066)	
Famala	0.096	0.093	0.186^{***}	0.189^{**}	0.102^{*}	0.111	0.115^{**}	0.144^{*}	
remaie	(0.059)	(0.058)	(0.058)	(0.058)	(0.060)	(0.060)	(0.053)	(0.057)	
Observations	921	921	921	921	921	921	921	921	

Table 4: Replication of Settele (2022), Table 3, Panel C

Notes: Only the pure control group as sample, only estimates between 5th and 95th percentile. Additional controls for political orientation: Non-leaning Independents and individuals who reported "other" (Reference category: Republicans and Independents leaning Republican). A dummy for Survey Wave B was included but is not significant. Robust standard errors are reported in parentheses. * p<0.10, ** p<0.05, *** p<0.01

Table 5: Replication of Settele (2022), Table 4, Panel A

	Intro Gender	oduce Quotas	State Affirr Act	itory native cion	Stri Equa Legis	cter l Pay lation	Wa Transp Within C	age parency ompanies	Intro Repo Web	oduce orting osite	Incr Subs to Chi	ease sidies ld Care	Pol Dem Inc (1)-(6), (licy 1and 1ex 1R)-(6R)
	(1)	(1R)	(2)	(2R)	(3)	(3R)	(4)	(4R)	(5)	(5R)	(6)	(6R)	(7)	(7R)
Democrat	0.688*** (0.072)	0.691*** (0.071)	0.760*** (0.072)	0.752*** (0.071)	0.684*** (0.070)	0.671*** (0.069)	0.694*** (0.102)	0.694*** (0.102)	0.542*** (0.099)	0.515*** (0.097)	0.625*** (0.073)	0.633*** (0.073)	0.669*** (0.051)	0.904*** (0.068)
Female	(0.254^{***}) (0.062)	(0.256^{***})	(0.176^{***})	(0.189^{**}) (0.062)	(0.339^{***})	(0.341^{***})	(0.378^{***})	(0.378^{***})	(0.467^{***})	(0.503^{***})	(0.225^{***})	(0.235^{***})	(0.291^{***})	(0.395^{***})
Observations	921	921	921	921	921	921	443	443	478	478	921	921	921	921

Notes: Only the pure control group as sample, only estimates between 5th and 95th percentile. Additional controls for political orientation: Non-leaning Independents and individuals who reported "other" (Reference category: Republicans and Independents leaning Republican). A dummy for Survey Wave B was included but is not significant. Robust standard errors are reported in parentheses. * p<0.10, ** p<0.05, *** p<0.01

These results are causal by nature of the research design. Participants were randomly assigned to one of three groups: the pure control group, the "low wage gap" treatment, and the "high wage gap treatment". The treatment groups were first asked for their estimate regarding the gender wage gap: how much a woman earns for every 100 USD earned by a man, when both parties are 45 years old, hold a bachelor's degree, and have a 40h work week. Afterwards they were presented with information about the true extent of the gender wage gap. There are two possible treatment arms because depending on the nationally representative dataset used the results will be different due to different underlying sampling procedures and reporting questions. If the American Community Survey (ACS) was used,

	Intro Gender	oduce Quotas	Stat Affirr Act	utory native tion	Stri Equa Legis	cter l Pay lation	Wa Transp Within C	age barency companies	Intro Repo Web	duce rting site	Incr Subs to Chil	ease sidies Id Care	Po Den Inc (1)-(6), (licy nand lex 1R)-(6R)
	(1)	(1R)	(2)	(2R)	(3)	(3R)	(4)	(4R)	(5)	(5R)	(6)	(6R)	(7)	(7R)
Prior (z-scored)	-0.234*** (0.071)	-0.240*** (0.070)	-0.363*** (0.073)	-0.368*** (0.072)	-0.292*** (0.072)	-0.299*** (0.072)	-0.396*** (0.102)	-0.399*** (0.103)	-0.296*** (0.097)	-0.313** (0.095)	-0.302*** (0.070)	-0.304*** (0.070)	-0.302*** (0.054)	-0.422*** (0.072)
Observations	921	921	921	921	921	921	443	443	478	478	921	921	921	921

Table 6: Replication of Settele (2022), Table 4, Panel B

Notes: Only the pure control group as sample, only estimates between 5th and 95th percentile. Additional controls for political orientation: Non-leaning Independents and individuals who reported "other" (Reference category: Republicans and Independents leaning Republican). A dummy for Survey Wave B was included but is not significant. Robust standard errors are reported in parentheses. * p<0.10, ** p<0.05, *** p<0.01

Table 7: Replication of Settele (2022), Table 4, Panel C

	Intro Gender	oduce Quotas	Stati Affirm Act	itory native ion	Stri- Equa Legisl	cter l Pay ation	Wa Transp Within C	ige arency ompanies	Intro Repo Web	oduce orting osite	Incr Subs to Chil	ease idies d Care	Pol Dem Inc (1)-(6)	icy and lex 1B)-(6B)
	(1)	(1R)	(2)	(2R)	(3)	(3R)	(4)	(4R)	(5)	(5R)	(6)	(6R)	(7)	(7R)
Prior (z-scored)	-0.122*	-0.127	-0.259***	-0.263***	-0.184***	-0.190**	-0.285***	-0.287**	-0.183**	-0.196*	-0.205***	-0.205**	-0.195***	-0.276***
	(0.067)	(0.066)	(0.069)	(0.068)	(0.068)	(0.067)	(0.095)	(0.096)	(0.091)	(0.090)	(0.069)	(0.069)	(0.048)	(0.065)
Democrat	0.672^{***}	0.675^{***}	0.726^{***}	0.719^{***}	0.661^{***}	0.647^{***}	0.649^{***}	0.649^{***}	0.523^{***}	0.496^{***}	0.609^{***}	0.608^{***}	0.644^{***}	0.870^{***}
	(0.072)	(0.071)	(0.072)	(0.071)	(0.071)	(0.070)	(0.102)	(0.102)	(0.100)	(0.097)	(0.073)	(0.072)	(0.051)	(0.068)
Female	0.241^{***}	0.243^{***}	0.149^{**}	0.162^{**}	0.320***	0.321^{***}	0.358^{***}	0.358^{***}	0.442^{***}	0.476^{***}	0.204^{***}	0.214^{***}	0.271^{***}	0.366^{***}
	(0.063)	(0.063)	(0.062)	(0.062)	(0.062)	(0.061)	(0.087)	(0.087)	(0.088)	(0.088)	(0.063)	(0.063)	(0.043)	(0.059)
Observations	921	921	921	921	921	921	443	443	478	478	921	921	921	921

Notes: Only the pure control group as sample, only estimates between 5th and 95th percentile. Additional controls for political orientation: Non-leaning Independents and individuals who reported "other" (Reference category: Republicans and Independents leaning Republican). A dummy for Survey Wave B was included but is not significant. Robust standard errors are reported in parentheses. * p<0.10, ** p<0.05, *** p<0.01

Settele (2022) finds that women earn 74 USD on average for every 100 USD a man earns. However, if the Current Population Survey (CPS) is the underlying data source woman earn 94 USD for every 100 USD earned by a man. This 20 USD gap between surveys can be used to "correct" wage gap perceptions up or down by randomly assigning individuals to a high gap treatment or a low gender wage gap treatment. After recieving the information treatment individuals are then asked about their policy preferences regarding possible government interventions and asked about a similar wage gap statistic that requires extrapolation from their own beliefs and information received rather than memorization.

The treatment effect measured is causal by design and in this design the treatment groups are compared with one another. The "high gap" (74 USD for every 100 USB) is compared to the "low gap" treatment (94 USD for every 100 USD). Therefore, the econometrics are an instrumental variable regression of the treatment assignment on the posterior wage gap

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beliefs, which are presumed to influence the demand for policy rather than the treatment itself. As the treatment assignment was random, it is a valid instrument to separate possible endogeneity issues stemming from individuals' own policy preferences.

Stage 1: Post.
$$Belief_i = \pi_0 + \pi_1 T_i^{74} + \Theta X_i + u_i$$
 (1)

Stage 2:
$$Policy_i = \gamma_0 + \gamma_1 \widehat{Post}. \ Belief_i + \Gamma X_i + \epsilon_i$$
 (2)

As shown in Tables 8, 9, 10, and 11, the estimates obtained in the computational replication are comparable in magnitude and direction to those obtained by Settele (2022). The standard errors are also within close range of one another. The controls used follow the respective table notes in Settele (2022).

	Post belief	erior about		
	fem	ales'		
	relative	e wages		
	(z-sc	ored)		
	(1)	(1R)		
T^{74}	-0.658***	-0.638***		
	(0.030)	(0.029)		
Observations F	$3022 \\ 41.26$	$3022 \\ 40.85$		

Table 8: Replication of Table 5 Panel A Column 2 (First Stage)

Notes: Only the treatment groups (both arms) as sample. Outcomes are z-scored using mean and standard deviation of the pure control group. Controls in all regressions were gender, census region, age group, having children, the logarithm of household income, labor force status, education, political affiliation, a dummy for survey wave B is included. Robust standard errors are reported in parentheses. * p<0.10, ** p<0.05, *** p<0.01

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3.2.1 Alternative Specification

Instead of specifying the main empirical model based on the treatment groups T^{74} and T^{94} as in Settele (2022), we consider a specification based on the initial control group as well as the treatment groups T^{74} and T^{94} . The outcome variable Y_i represents individuals' posterior beliefs about the gender pay gap and participants' perceptions of the extent of the gender pay gap. The variable *Prior* contains individuals' prior beliefs about the wage of women relative to the wage of men. The dummy variable T^{74} (T^{94}) is equal to one if participants received information treatments about the high (low) extent of the gender pay gap. The vector **X** covers the range of control variables proposed by Settele (2022).

$$Y_i = \beta_0 + \beta_1 Prior_i + \beta_2 T^{74} + \beta_3 T^{74} \times Prior_i + \beta_4 T^{94} + \beta_5 T^{94} \times Prior_i + \mathbf{X}'_i \tau + \epsilon_i$$
(3)

Column 1 of Table 12 shows a strong effect of both information treatments on participants' posterior beliefs. Figure 2 and 3 provides graphical illustrations of the adjustment in posterior beliefs based on T^{74} (see Figure 2) and T^{94} (see Figure 3) relative to the control group. The results show that the information treatment had a stronger effect on posterior beliefs, when prior beliefs deviated strongly from the information treatment. Individuals who underestimated the gender pay gap adjust their beliefs upward and vice versa.

Columns 2 to 5 of Table 12 provide the results of the same specification on participants perceptions on the extent of the gender pay gap. While the effect of the information treatments run into their expected direction, only the treatment T^{94} significantly affects participants perceptions about the extent of the gender pay gap. Informing individuals about a gender pay gap of 6% significantly reduces concerns for the gender pay gap. The results therefore indicate that the original detected treatment effect of Settele (2022) Table 5 Panel Institute for Replication

A is mainly driven by the concern reductions after revealing the relatively low gender pay gap (T^{94}) .

Figures 2 and 3 are a visual representation of the specification results in Table 12. The relationship maps how the different groups correct their perceptions for the second wage gap elicitation. Prior beliefs are charted on the x-axis, and the red dashed lines marks the information treatment that each (treatment) group received.³ Participants of the treatment group that were to the left of the line thought the gender wage gap was larger than the information they received, and participants to the right underestimated the size of the gap. The visualization shows the comparison between the treatment groups and the control groups. As the control group does not receive any additional information, both their estimates are close to one another. The treatment groups display the expected effects: those that underestimated the gap shift their beliefs upwards and those that overestimated their beliefs shift their posterior estimates downwards.

³The pure control group was only asked for two estimates. No information was provided.

	Intro gen que	oduce oder otas	State affirm act	utory native ion	Stri eq p legisl	icter ual ay lation	
	(1)	(1R)	(2)	(2R)	(3)	(3R)	
Posterior belief about female rel. wage $(z$ -scored)	-0.085 (0.054)	-0.089 (0.056)	-0.171^{***} (0.053)	-0.177^{***} (0.054)	-0.177^{***} (0.053)	-0.182^{***} (0.055)	
Observations	3022	3022	3022	3022	3022	3022	
	Wa transp wit comp	age arency hin panies	Intro repo web	oduce rting osite	Increase subsidies to child care		
	(1)	(1R)	(2)	(2R)	(3)	(3R)	
Posterior belief about female rel. wage $(z$ -scored)	$0.026 \\ (0.065)$	$0.025 \\ (0.066)$	-0.144 (0.092)	-0.158 (0.098)	-0.009 (0.053)	-0.010 (0.054)	
Observations	2003	2003	1019	1019	3022	3022	
	Poi dem 	licy aand dex (1R)					
Posterior belief about female rel. wage $(z$ -scored)	-0.087^{**} (0.038)	-0.133^{**} (0.053)					
Observations	3022	3022					

Table 9: Replication of Table 5 Panel C

Notes: Second stage of a 2SLS specification given by Table 8. Only the treatment groups (both arms) as sample. Outcomes (except (1) and (1R) are z-scored using the full follow-up sample. Controls in all regressions were gender, census region, age group, having children, the logarithm of household income, labor force status, education, political affiliation, a dummy for survey wave B is included. Robust standard errors are reported in parentheses. * p<0.05, *** p<0.01

			F	Re-elicited o	utcomes			
	Post	erior	Post	erior				
	beliefs	about	beliefs	about	Ger	nder	Gover	nment
	fema	ales'	fem	ales'	differ	ences	$_{\rm shc}$	ould
	rela	tive	rela	tive	in w	rages	miti	gate
	wa	ges	wa	ges	ar	ea	ger	ıder
	(0-2	200)	(z-scored)		pro	olem	wage	e gap
	(1)	(1R)	(2)	(2R)	(3)	(3R)	(4)	(4R)
T^{74}	-10.668***	-10.758***	-0.503^{***}	-0.508***	0.186^{***}	0.185^{***}	0.183^{***}	0.192***
Sharpened q -value	(1.177) [0.001]	(1.171) [0.001]	(0.056) [0.001]	(0.055) [0.001]	(0.057) [0.001]	(0.058) [0.003]	(0.057) [0.001]	[0.056]
Female	-2.292^{*}	-2.454^{**}	-0.108^{*}	-0.116^{**}	0.272^{***}	0.270^{***}	0.174^{***}	0.166^{***}
	(1.248)	(1.249)	(0.059)	(0.059)	(0.000)	(0.000)	(0.058)	(0.058)
Democrat	$0.554 \\ (1.319)$	6.467 (4.483)	$0.026 \\ (0.062)$	$0.305 \\ (0.212)$	0.547^{***} (0.065)	$0.115 \\ (0.223)$	0.686^{***} (0.063)	0.257 (0.188)
Observations	1089	1089	1089	1089	1105	1105	1105	1105

		Newly elicite	ed outcomes		Summa	ry index		
	Ger differ in waş a pro am high-s	nder rences ges are oblem ong skilled	Gender differences in wages are a problem among low-skilled		Perco ind (3)	eption dex -(6)		
	(5) (5R)		(6)	(6R)	(7)	(7R)	(7R)	
T^{74} Sharpened <i>q</i> -value	$\begin{array}{c} 0.124^{**} \\ (0.058) \\ [0.011] \end{array}$	$\begin{array}{c} 0.122^{**} \\ (0.058) \\ [0.027] \end{array}$	0.139^{**} (0.058) [0.007]	0.139^{**} (0.058) [0.015]	0.156^{***} (0.045)	$\begin{array}{c} 0.196^{***} \\ (0.056) \end{array}$		
Female	$\begin{array}{c} 0.188^{***} \\ (0.061) \end{array}$	$\begin{array}{c} 0.186^{***} \\ (0.061) \end{array}$	$\begin{array}{c} 0.197^{***} \\ (0.062) \end{array}$	0.199^{***} (0.062)	0.190^{***} (0.046)	$\begin{array}{c} 0.251^{***} \\ (0.059) \end{array}$		
Democrat	0.506^{***} (0.066)	$\begin{array}{c} (0.061) \\ 0.506^{***} \\ (0.066) \\ (0.217) \end{array}$		-0.071 (0.218)	$\begin{array}{c} 0.547^{***} \\ (0.050) \end{array}$	0.113 (0.236)		
Observations	1105	1105	1105	1105	1105	1105		

Notes: Only the treatment groups (both arms) as sample. Outcomes (except (1) and (1R) are z-scored using the full follow-up sample. Controls in all regressions were gender, census region, age group, having children, the logarithm of household income, labor force status, education, political affiliation, a dummy for survey wave B is included. Robust standard errors are reported in parentheses. Sharpened q-values adjust for multiple hypothesis testing of all surveyed items in columns (1)-(6) and (1R)-(6R), the interpretation is analogous to p-values. * p<0.10, ** p<0.05, *** p<0.01

	Re-elicited outcomes				Newly elicited outcomes			
	Statutory affirmative action		Stricter equal pay legislation		Supportive policy		Anti- discrimination policy	
	(1)	(1R)	(2)	(2R)	(3)	(3R)	(4)	(4R)
T^{74}	0.009	0.007	0.096	0.096	0.152***	0.154***	0.094*	0.093
	(0.078)	(0.078)	(0.079)	(0.079)	(0.057)	(0.057)	(0.057)	(0.057)
Sharpened q -value	[0.833]	[0.229]	[0.819]	[0.081]	[0.015]	[0.009]	[0.052]	[0.055]
Female	0.150^{*}	0.161**	0.197^{**}	0.202**	0.188***	0.192***	0.221***	0.219***
	(0.080)	(0.080)	(0.083)	(0.082)	(0.059)	(0.059)	(0.059)	(0.059)
Democrat	0.583***	0.363	0.642***	0.019	0.675***	0.360^{*}	0.678***	0.118
	(0.091)	(0.299)	(0.091)	(0.353)	(0.063)	(0.205)	(0.063)	(0.209)
Observations	606	606	606	606	1105	1105	1105	1105
		Summary indices			Mechanism			
	Policy demand index (1)-(2)		Policy demand index (3)-(4)					
					Women's wages are fair			
	(5)	(5R)	(6)	(6R)	(7)	(7R)		
T^{74}	0.052	0.058	0.123**	0.134**	-0.110**	-0.109**		
	(0.069)	(0.077)	(0.052)	(0.056)	(0.055)	(0.055)		
Female	0.174**	0.203**	0.205***	0.224***	-0.121**	-0.119**		
	(0.071)	(0.079)	(0.053)	(0.058)	(0.058)	(0.058)		

Notes: Only the treatment groups (both arms) as sample. Outcomes (except (1) and (1R) are z-scored using mean and standard deviation of the pure control group. Controls in all regressions were gender, census region, age group, having children, the logarithm of household income, labor force status, education, political affiliation, a dummy for survey wave B is included. Robust standard errors are reported in parentheses. Sharpened q-values adjust for multiple hypothesis testing of all surveyed items in columns (1)-(6) and (1R)-(6R), the interpretation is analogous to p-values. * p<0.10, ** p<0.05, *** p<0.01

0.260

(0.211)

1105

-0.430***

(0.065)

1105

-0.007

(0.152)

1105

0.612***

(0.077)

606

Democrat

Observations

0.213

(0.331)

606

0.677***

(0.057)

1105

	Posterior Wage Gap	Gender Differences in Wages are Large	Gender Differences in Wages are a Problem	Government Should Mitigate the Wage Gap (4)	Perception Index (5)
	(1)	(2)	(0)	(4)	(0)
Prior Wage Gap Elicitation	0.6384^{***}	-0.0145***	-0.0175***	-0.0086**	-0.0135***
	(0.0581)	(0.0043)	(0.0046)	(0.0041)	(0.0039)
Info 74	14.6376**	0.4977	0.2746	0.4637	0.4120
	(5.8979)	(0.4343)	(0.4485)	(0.4167)	(0.3965)
Prior Elicitation x Info 74	-0.2408***	0.0012	0.0018	-0.0031	-0.0000
	(0.0734)	(0.0054)	(0.0056)	(0.0051)	(0.0049)
Info 94	31.1180***	-1.0133**	-0.8967*	-0.2395	-0.7165*
	(5.6896)	(0.4550)	(0.4588)	(0.4269)	(0.4113)
Prior Elicitation x Info 94	-0.2792***	0.0021	0.0031	-0.0025	0.0009
	(0.0700)	(0.0056)	(0.0057)	(0.0052)	(0.0051)
Constant	30.4324***	7.2519***	7.7981***	7.5347***	7.5282***
	(4.9651)	(0.4182)	(0.4392)	(0.4052)	(0.3823)
Observations	3851	3863	3863	3863	3863
Adjusted \mathbb{R}^2	0.337	0.151	0.157	0.160	0.176

Table 12: Alternative Specification Table 5 Panel A

Note: Complete Sample used for estimation. Additional controls for political orientation: Non-leaning Independents and individuals who reported "other" (Reference category: Republicans and Independents leaning Republican). A dummy for Survey Wave B was included but is not significant. Robust standard errors are reported in parentheses. Standard errors in parentheses. Columns (2)-(4) are all z-scored with mean and standard deviation of the control group. Robust standard errors in parentheses. * p < 0.10, ** p < 0.05, *** p < 0.01



Figure 2: Treatment (74) and Control Comparison

Note: Margin plot of the control group and information treatment of 74. Additional controls for political orientation: Non-leaning Independents and individuals who reported "other" (Reference category: Republicans and Independents leaning Republican). A dummy for Survey Wave B was included but is not significant.

4 Conclusion

We conducted a computational replication of Settele (2022), with a re-coding of the original data. In addition, we introduce a slightly different index measure and find that the results and patterns identified replicate in this slightly different data context. The point estimates obtained by our replication are not an exact match to the ones reported, but differ only in a small magnitude. We find that our point estimates, standard errors and significance levels are close to the original article.



Figure 3: Treatment (94) and Control Comparison

Note: Margin plot of the control group and information treatment of 94 Additional controls for political orientation: Non-leaning Independents and individuals who reported "other" (Reference category: Republicans and Independents leaning Republican). A dummy for Survey Wave B was included but is not significant.

References

- Anderson, M. L. (2008). Multiple inference and gender differences in the effects of early intervention: A reevaluation of the abecedarian, perry preschool, and early training projects. *Journal of the American Statistical Association*, 103(484):1481–1495.
- Heller, S. B., Shah, A. K., Guryan, J., Ludwig, J., Mullainathan, S., and Pollack, H. A. (2017). Thinking, fast and slow? some field experiments to reduce crime and dropout in chicago. *The Quarterly Journal of Economics*, 132(1):1–54.
- Kling, J. R., Liebman, J. B., and Katz, L. F. (2007). Experimental analysis of neighborhood effects. *Econometrica*, 75(1):83–119.
- Resnjanskij, S., Ruhose, J., Wiederhold, S., and Woessmann, L. (2021). Can Mentoring Alleviate Family Disadvantage in Adolescence? A Field Experiment to Improve Labor-Market Prospects. CESifo Working Paper 8870, CESifo, Munich, Germany.
- Settele, S. (2022). How do beliefs about the gender wage gap affect the demand for public policy? *American Economic Journal: Economic Policy*, 14(2):475–508.