Code was run on a MacBook Pro running Sonoma 14.4.1 using R version 4.3.1

Descriptive Analysis
01_analysis_descriptive_analysis.R

clean_data/top_tier_positions.csv
Each row in this data set corresponds to a Senate-confirmed position in a federal agency collected from the U.S. Government Manuals (source: https://www.govinfo.gov/app/collection/govman/1996_United%20States%20Government%20Manual/1994-95%20Edition) and the U.S. Government Policy and Supporting Positions ("Plum Book") (source: https://babel.hathitrust.org/cgi/mb?a=listis;c=1512554095).

"agency" - agency
"position" - position
"year" - year
"name_plum_first" - first name of appointee in Plumb book
"name_plum_middle" - middle name of appointee in Plumb book
"name_plum_last" - last name of appointee in Plumb book
"name_handbook_first" - first name of appointee in Handbook
"name_handbook_middle" - middle name of appointee in Handbook
"name_handbook_last" - last name of appointee in Handbook
"role_status" - categorical variable indicating whether position is active, vacant or null (nonexistent in that year)
"fem2" - Indicator for whether appointee is a woman; vacant positions coded as missing.
"fem2b" - Indicator for whether appointee is a woman; vacant positions coded as zero.
"dem" - Indicator for whether party in the White House is Democrat
"term" - Categorical number of presidential term (1 being earliest term).
"count" - take a constant value of 1; used to summarize subsets of the data
"always" - Indicator for whether position exists in every year for that agency (whether vacant or not).
"fem_ag" - Indicator for whether agency is stereotypically "feminine" according to XXX CITATION when possible.
"party" - party in power that year in the White House
"size.year" - Number of observations in the year

clean_data/rank_and_file.csv
This data set contains annual counts of the number of rank and file female employees and total rank and file employees in federal agencies for each year in our panel. Source: Office of Personnel Management (OPM).

"total_female" - count of the number of female rank and file employees
"total_emp" - count of the number of total rank and file employees
"year" - year

“agency” - agency

clean_data/workforce_gender.csv
This data set contains annual counts of the number and sex of employees in the U.S. workforce. Source: Bureau of Labor Statistics (https://www.bls.gov/opub/reports/womens-databook/2022/home.htm)

"Women.in.the.Labor.Force" - count of the number of women in U.S. labor force.
"Year" - year
"Men.in.the..Labor.Force" - count of the number of men in the U.S. labor force.
“share_women2” - share of women in the U.S. labor force.
“share_men2” - share of men in the U.S. labor force.

clean_data/cabinet_history.csv
Data on number of women who served in cabinet and cabinet-level positions over time, collected from the Miller Center U.S. President pages under “Administration” (https://millercenter.org/president) and the Center for American Women and Politics (https://cawp.rutgers.edu/facts/levels-office/federal-executive/women-appointed-presidential-cabinets). In ambiguous cases White House and presidential library websites were used to verify the number of cabinet-level posts.

"Year" - year
"Nu_cabinet_posts_miller"- count of the number of cabinet posts
"Nu_women_miller" - count of the number of women in cabinet posts
"alt_cabinet_posts" - count of the number of cabinet-level posts
"alt_women" - count of the number of women in cabinet-level posts
“pct_fem” - percent of women in cabinet posts using Nu_women_miller and Nu_cabinet_posts_miller
“pct_fem2” - percent of women in cabinet posts using alt_women and alt_cabinet_posts

clean_data/fort.csv
Data on gender of Fortune 500 CEOs over time. Source: https://quantic.edu/blog/2021/12/06/how-many-fortune-500-ceos-are-women/
"Year" - year
"Women" - count of number of women CEOs
"Men" - count of number of men CEOs
“fem” - percent of women CEOs

Pilot analysis
02_analysis_pilot_analysis.R [checked]

clean_data/pilot_analysis_data.csv
"prolific_ID" - unique respondent ID generated by Prolific
"age" - What is your age?

"gender" - What is your gender? - Selected Choice
"party" - Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent, or some other party?
"closer" - Do you consider yourself to be closer to the Democratic Party or Republican Party?
"exp_1_gender" - Randomly assigned gender for dose response experiment (“men” or “women”).
"pct_dose" - Randomly assigned percentage of employees in dose response experiment
"rank" - Randomly assigned job type mentioned in the dose response experiment (“jobs” or “top jobs.”)
"exp1_agency" - Randomly assigned agency for dose response experiment. The four agencies are: Department of Treasury, Department of Health and Human Services, Department of Education, and Department of Defense.
"exp2_agency" - Randomly assigned agency for nominee experiment. The four agencies are: Department of Treasury, Department of Health and Human Services, Department of Education, and Department of Defense.
"exp2_gender" - Randomly assigned gender for nominee experiment. This determines whether masculine or feminine pronouns are used in the press release.
"FL_174_DO" - Display order of charts in visualization experiment.
"ability_dept" - “How much confidence do you have the U.S. [Field-exp1_agency] will fulfill its mission?” (in dose response experiment)
"rep_women" - “How much confidence do you have that the U.S. [Field-exp1_agency] will represent the best interests of American women?” (dose response experiment)
"exp1_DVs_DO" - Display order for which dependent variable is shown first in dose response experiment: confidence the agency will represent women or fulfill its mission.
"exp2_dv1" - “ How much confidence do you have in Alex Smith’s ability to effectively lead the [Field-exp2_agency]?” (nominee experiment)
"exp2_dv2" - “After reading about the announcement of Alex Smith, how much confidence do you have in the president's ability to fill the government with qualified and responsive public servants?” (nominee experiment)
"exp3_dv1" - “Do you think that women have achieved an adequate level of representation in the U.S. government?” (visualization experiment, condition 1)
"exp3_dv11" - “Do you think that women have achieved an adequate level of representation in the U.S. government?” (visualization experiment, condition 2)
"exp3_dv1b" - “Do you think that women have achieved an adequate level of representation in the U.S. government?” (visualization experiment, condition 3)
"exp3_dv1c" - “Do you think that women have achieved an adequate level of representation in the U.S. government?” (visualization experiment, condition 4)
"exp3_dv1d" - “Do you think that women have achieved an adequate level of representation in the U.S. government?” (visualization experiment, condition 5)
"exp3_dv3" - “How much confidence do you have in the federal government's ability to serve the needs of the American people?” (visualization experiment, condition 1)
"exp3_dv32" - “How much confidence do you have in the federal government's ability to serve the needs of the American people?” (visualization experiment, condition 2)

"exp3_dv3b" - “How much confidence do you have in the federal government's ability to serve the needs of the American people?” (visualization experiment, condition 3)
"exp3_dv3c" - “How much confidence do you have in the federal government's ability to serve the needs of the American people?” (visualization experiment, condition 4)
"exp3_dv3d" - “How much confidence do you have in the federal government's ability to serve the needs of the American people?” (visualization experiment, condition 5)
"FL_134_DO" - Display order for experiments. FL_133 = dose response, FL_178 = job candidate (nominee), FL_169 = charts
"age2" - numeric version of the age column with ages >100 set to 100.
"female" - gender of respondent; binary column where female = 1, male = 0, and “other” = NA based on the gender column.
"party2" - respondent political party based on the party and the closer column where “Democrat” from the party column and “Democratic Party” from the closer column becomes “dem.” “Republican” from the party column and “Republican Party” from the closer column becomes “rep.” The “neither” value from the closer column becomes “ind.”
"e1_gender" - Factor version of exp_1_gender column (dose response experiment)
"pct_dose2" - Value of dosage based on the pct_dose and the e1_gender columns.
"e1_agency" - Version of exp1_agency column with shortened agency name. (dose response experiment)
"e2_agency" - Version of exp2_agency column with shortened agency name. (nominee experiment)
"e2_gender" - Version of exp2_gender, replacing “man” with “male” and replacing “woman” with “female.” (nominee experiment)
"E3_chart" - Version of FL_174_DO that makes clearer names for what each chart means. “chart1” becomes “top_jobs_levels,” “chart2” becomes “top_jobs_change_zoom,” “chart2b” becomes “top_jobs_change,” “chart3” becomes “top_rf_levels,” and “chart4” becomes “top_rf_US_levels.” (visualization experiment)
"e1_agency_confidence" - Numeric version of the ability_dept column with values rescaled from 0 to 1. “No confidence at all” becomes 0, “Not too much confidence” becomes 0.33, “Some confidence” becomes 0.66, and “A lot of confidence” becomes 1. (dose response experiment)
"e1_rep_women" - Numeric version of the rep_women column with values rescaled from 0 to 1. “No confidence at all” becomes 0, “Not too much confidence” becomes 0.33, “Some confidence” becomes 0.66, and “A lot of confidence” becomes 1. (dose response experiment)
"e2_nominee_confidence" - Numeric version of the exp2_dv1 column with values rescaled from 0 to 1. “No confidence at all” becomes 0, “Not too much confidence” becomes 0.33, “Some confidence” becomes 0.66, and “A lot of confidence” becomes 1. (nominee experiment)
"e2_pres_confidence" Numeric version of the exp2_dv2 column with values rescaled from 0 to 1. “No confidence at all” becomes 0, “Not too much confidence” becomes 0.33, “Some confidence” becomes 0.66, and “A lot of confidence” becomes 1. (nominee experiment)
"e3_women_rep" - Numeric version of the columns exp3_dv1, exp3_dv11, exp3_dv1b, exp3_dv1c, and exp3_dv1d collapsed into one column, with the values rescaled from 0 to 1. The value “Much too little representation” becomes 0, “Too little representation” becomes 0.25, “About the right amount of representation” becomes 0.5, “Too much representation” becomes 0.75, and “Much too much representation” becomes 1. (visualization experiment)

"e3_serve_US" - Numeric version of the columns exp3_dv3, exp3_dv32, exp3_dv3b, exp3_dv3c, and exp3_dv3d, collapsed into one column, with the values rescaled from 0 to 1. The value “No confidence at all” becomes 0, “Not too much confidence” becomes 0.33, “Some confidence” becomes 0.66, and “A lot of confidence” becomes 1. (visualization experiment)
"order_exp" - Indicator for which experiment appeared first in the survey for each respondent. Changes “FL_133|FL_169|FL_178" or "FL_133|FL_178|FL_169" to “dose”; changes "FL_178|FL_133|FL_169" or "FL_178|FL_169|FL_133" to “job”; changes "FL_169|FL_133|FL_178" or "FL_169|FL_178|FL_133" to “charts.”
"dose_ability_first" - Binary column based on the exp1_DVs_DO column that has a value of TRUE when exp1_DVs_DO is equal to "ability_dept|rep_women" and FALSE otherwise.
"Order_exp2" - Factor version of order_exp with the following ordering: “job,” “dose,” and “charts.”

Experimental analysis
03_analysis_experimental_analysis.R

clean_data/qualtrics.csv
"exp_1_gender_dod" - Experimental condition for if “men” or “women” was assigned for Department of Defense in dose response experiment.
"ege" - “What is your age?” (numeric)
"eloser" - “Do you consider yourself to be closer to the Democratic Party or Republican Party?”
"eod_ability_dept" - “How much confidence do you have the U.S. Department of Defense will fulfill its mission?” (dose response experiment)
"eod_rep_women" - “How much confidence do you have that the U.S. Department of Defense will represent the best interests of American women?” (dose response experiment)
"educ_ability_dept" - “How much confidence do you have that the U.S. Department of Education will fulfill its mission?” (dose response experiment)
"educ_rep_women" - “How much confidence do you have that the U.S. Department of Education will represent the best interests of American women?” (dose response experiment)
"education" - “What is the highest level of education you have completed?” (dose response experiment)
"exp_1_gender_educ" - Randomly assigned gender (“men” or “women”) for Department of Education
"exp_1_gender_hhs" - Randomly assigned gender (“men” or “women”) for Department of Health and Human Services
"exp_1_gender_treas" - Randomly assigned gender (“men” or “women”) for Department of Treasury
"exp2_agency" - The agency randomly assigned for the nominee experiment
"exp2_dv1" - “How much confidence do you have in Alex Smith’s ability to effectively lead the [Field-exp2_agency]?” (nominee experiment)
"exp2_dv2" - “After reading about the announcement of Alex Smith, how much confidence do you have in the president's ability to fill the government with qualified and responsive public servants?” (nominee experiment)

"exp2_gender" - Random assignment of masculine or feminine pronouns in nominee experiment.
"exp3_dv1" - “Do you think that women have achieved an adequate level of representation in the U.S. government?” (visualization experiment, condition 1)
"exp3_dv1b" - “Do you think that women have achieved an adequate level of representation in the U.S. government?” (visualization experiment, condition 2)
"exp3_dv1c" - “Do you think that women have achieved an adequate level of representation in the U.S. government?” (visualization experiment, condition 3)
"exp3_dv1d" - “Do you think that women have achieved an adequate level of representation in the U.S. government?” (visualization experiment, condition 4)
"Exp3_dv3" - “How much confidence do you have in the federal government's ability to serve the needs of the American people?” (visualization experiment, condition 1)
"exp3_dv3b" - “How much confidence do you have in the federal government's ability to serve the needs of the American people?” (visualization experiment, condition 2)
"exp3_dv3c" - “How much confidence do you have in the federal government's ability to serve the needs of the American people?” (visualization experiment, condition 4)
"exp3_dv3d" - “How much confidence do you have in the federal government's ability to serve the needs of the American people?” (visualization experiment, condition 5)
"FL_134_DO" - Display order for experiments. FL_133 = dose response, FL_178 = job candidate (nominee), FL_169 = charts.
"FL_174_DO" - Display order of charts in visualization experiment.
"FL_240_DO" - Display order of agencies in dose response experiment. The four agencies are: Department of Treasury, Department of Health and Human Services, Department of Education, and Department of Defense.
"gender" - “What is your gender?” - Selected Choice
"hhs_ability_dept" - “How much confidence do you have the U.S. Department of Health and Human Services will fulfill its mission?” (dose response experiment)
"hhs_rep_women" - “How much confidence do you have that the U.S. Department of Health and Human Services will represent the best interests of American women?” (dose response experiment)
"ID" - unique respondent ID
"ideo" - “When it comes to politics do you usually think of yourself as” (lib/con scale)
"party" - “Generally speaking, do you usually think of yourself as a Republican, a Democrat, an Independent, or some other party?”
"pct_dose_dod" - Randomly assigned percentage of employees of that gender in the Department of Defense (dose response experiment)
"pct_dose_educ" Randomly assigned percentage of employees of that gender in the Department of Education (dose response experiment)
"pct_dose_hhs" - Randomly assigned percentage of employees of that gender in the Department of Health and Human Services (dose response experiment)
"pct_dose_treas" - Randomly assigned percentage of employees of that gender in the Department of Treasury (dose response experiment)
"race" - “What is your race? (Check all that apply.)”
"rank" - Randomly assigned rank (either “jobs” or “top jobs”; dose response experiment)

"Trap" - People are very busy these days and many do not have time to follow what goes on in the government. We are testing whether people read questions. To show that you've read this much, answer both "extremely interested" and "very interested."
"treasury_abil_dep" - How much confidence do you have the U.S. Department of Treasury will fulfill its mission?
"treasury_rep_women" - How much confidence do you have that the U.S. Department of Treasury will represent the best interests of American women?
"age2" - numeric version of the age column with ages >100 set to 100.
"female" - respondent gender; binary column where female = 1, male = 0, and “other” = NA based on the gender column.
"hispanic" - Binary column with 1 if the value in the race column includes the word “Hispanic, ”and 0 otherwise.
"nhwhite" - Binary column with 1 if the value in the race column is “White/Caucasian” and hispanic=0; and 0 otherwise.
"nhblack" - Binary column with 1 if the value in the race column is “African American” and hispanic=0; and 0 otherwise.
"nhasian" Binary column with 1 if the value in the race column is “Asian” and hispanic=0; and 0 otherwise.
"other" - Binary column with 1 if the Hispanic, Nhwhite, nhblack, and nhasian columns are all 0, and 0 otherwise.
"hs" - Binary column with 1 if the value in the education column is above “Less than High School,” and 0 otherwise.
"ba" - Binary column with 1 if the value in the education column is BA or higher and 0 otherwise.
"ideo2" - Numeric version of the ideo column. “Very conservative” becomes 1, “Conservative” becomes 2, “Moderate” becomes 3, “Liberal” becomes 4, “Very Liberal” becomes 5, and NA remains as NA.
"party2" - respondent political party based on the party and the closer column where “Democrat” from the party column and “Democratic Party” from the closer column becomes “dem.” “republican” from the party column and “Republican Party” from the closer column becomes “rep.” The “neither” value from the closer column becomes “ind.”
"exp_1_gender_dod2" - Factor version of the exp_1_gender_dod column with the ordering: “men” and “women.”
"exp_1_gender_treas2" - Factor version of the exp_1_gender_treas column with the ordering: “men” and “women.”
"exp_1_gender_hhs2" - Factor version of the exp_1_gender_hhs column with the ordering: “men” and “women.”
"exp_1_gender_educ2" - Factor version of the exp_1_gender_educ column with the ordering: “men” and “women.”
"ag_order1" - first agency presented in dose response experiment.
"ag_order2" - second agency presented in dose response experiment.
"ag_order3" - third agency presented in dose response experiment.
"ag_order4" - fourth agency presented in dose response experiment.

"dod_ability_dept2" - numeric version of dod_ability_dept. “No confidence at all” becomes 1, “Not too much confidence” becomes 2, “Some confidence” becomes 3, and “A lot of confidence” becomes 4.
"dod_rep_women2" - numeric version of dod_rep_women. “No confidence at all” becomes 1, “Not too much confidence” becomes 2, “Some confidence” becomes 3, and “A lot of confidence” becomes 4.
"treasury_abil_dep2" - numeric version of treasury_abil_dep. “No confidence at all” becomes 1, “Not too much confidence” becomes 2, “Some confidence” becomes 3, and “A lot of confidence” becomes 4.
"treasury_rep_women2" - numeric version of treasury_rep_women. “No confidence at all” becomes 1, “Not too much confidence” becomes 2, “Some confidence” becomes 3, and “A lot of confidence” becomes 4.
"hhs_ability_dept2" - Numeric version of hhs_ability_dept. “No confidence at all” becomes 1, “Not too much confidence” becomes 2, “Some confidence” becomes 3, and “A lot of confidence” becomes 4.
"hhs_rep_women2" - Numeric version ofhhs_rep_women. “No confidence at all” becomes 1, “Not too much confidence” becomes 2, “Some confidence” becomes 3, and “A lot of confidence” becomes 4.
"educ_ability_dept2" - Numeric version ofeduc_ability_dept. “No confidence at all” becomes 1, “Not too much confidence” becomes 2, “Some confidence” becomes 3, and “A lot of confidence” becomes 4.
"educ_rep_women2" - Numeric version of educ_rep_women. “No confidence at all” becomes 1, “Not too much confidence” becomes 2, “Some confidence” becomes 3, and “A lot of confidence” becomes 4.
"order_exp" - indicates which experiment was presented first in the survey for that respondent.
"ID" - unique respondent ID.
"e2_agency" - Version of exp2_agency column with shortened agency name.
"e2_gender" - Factor version of the exp2_gender column with the ordering: “male” and “female.”
"e2_nominee_confidence" - Numeric version of the exp2_dv1 column. “No confidence at all” becomes 1, “Not too much confidence” becomes 2, “Some confidence” becomes 3, and “A lot of confidence” becomes 4.
"e2_pres_confidence" - Numeric version of the exp2_dv2 column. “No confidence at all” becomes 1, “Not too much confidence” becomes 2, “Some confidence” becomes 3, and “A lot of confidence” becomes 4.
"e3_chart" - Version of FL_174_DO that makes clearer names for what each chart means in visualization experiment. “chart1” becomes “top_jobs_levels,” “chart2b” becomes “top_jobs_change,” “chart3” becomes “top_rf_levels,” and “chart4” becomes “top_rf_US_levels.”
"e3_women_rep" - numeric version of women’s representation question in visualization experiment.
"e3_serve_US" - numeric version of confidence in U.S. gov question in visualization experiment.
"order_exp2" - factor version of order_exp with levels: “job”, “dose”, “charts

clean_data/anes.csv
"V201231x" - Political party ID. -9. Refused, -8. Don’t know, 1. Strong Democrat, 2. Not very strong Democrat, 3. Independent-Democrat, 4. Independent, 5. Independent-Republican, 6. Not very strong Republican, 7. Strong Republican.
“party7” - Clone of column V201231x

clean_data/census_2019_1year_acs.csv
"POPGROUP_LABEL" - Identifies what group is counted in the “S0201_001E” column. For example, row 2 of this column has the value “Total population” which means that row 2 of the “S0201_001E column has that number.
"S0201_001E" - Number that corresponds with the value in the “POPGROUP_LABEL” column.

clean_data/census_ba_gender.csv
"Fact" - Identifies what group is counted in the “United.States” column. For example, row 50 of this column has the value “Persons in poverty, percent” which means that row 50 of the “United.States” column has that percent.
"United.States" - Number that corresponds with the value in the “Fact” column.

clean_data/census_median_age.csv
"S0101_C01_032E" - Median age in years of US population