

MZES-GESIS Pre-Registration Challenge: Pre-Registration Template for Proposals Seeking Financial Support

Study Information

1. Title

Misperceptions of Family-friendly Jobs

2. Author information

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3. Abstract

Provide a summary of your planned study (250 words max).

Despite evidence suggesting women actively seek out jobs that will minimize work-family conflict, jobs held by a high proportion of women have the lowest availability of family-friendly work accommodations. I offer an explanation for this paradox by proposing that gender “frames” women’s understanding of jobs, resulting in a misperception that jobs culturally associated with femininity will be well-suited for women by providing family-friendly accommodations. I will test this explanation using a survey experiment administered to a sample of women residing in the United States stratified to be nationally representative on dimensions of age, ethnicity, and income. Respondents will evaluate a fictional job advertisement that randomly varies job characteristics and gender composition of the workplace. First, I will assess whether jobs with characteristics culturally associated with women are perceived as providing greater family-friendly work accommodations. Second, I will test whether the gender composition of the workplace mediates this relationship. This disentangles the relationship between gendered job characteristics and gender composition. Third, I will test whether emotional support moderates perceptions of accommodations. This will provide needed information on the mechanism that drives misperceptions. Fourth, I will assess the extent to which jobs that are perceived as accommodating to family care obligations are also perceived as desirable. This is crucial to linking misperceptions of the labor market to women’s decision-making processes. The findings will contribute to research on the implications of culturally pervasive gender schemas, persisting occupational gender segregation, and subsequent wage inequality.

Theory

4. Motivation and research questions

What research question motivates your project and why is it relevant?

The U.S. labor force remains highly segregated by gender despite advances in women's educational attainment and labor force participation. Jobs with a high proportion of women are among the lowest paying, with underemployed workers who have few opportunities for upward mobility (Levanon and Grusky, 2016). Many structural and organizational processes exist that "push" women and men into different occupations, but the reasons regarding women's choice for jobs with lower economic rewards remains unclear. Neoclassical economic theories frame women's career choices as a "trade-off" in which women sacrifice higher paying jobs for those that are more family-friendly (Filer 1989; Polachek 1976, 1979). Although women in the labor force value and seek out family-friendly resources because of their family care responsibilities, there is no evidence that female-dominated jobs have greater resources to remediate work-family conflict (Glass, 1990; Glass and Camarigg, 1992; Weeden, 2005). These conflicting lines of research create a paradox of women's employment. Why are women found in occupations with few family-friendly resources despite evidence suggesting women prefer these policies to men and actively seek them out when making employment decisions?

One explanation is that misperceptions of jobs bias the decision-making process among women. Women remain overrepresented in jobs that require workers to act in ways culturally associated with femininity and motherhood (England 1992). These jobs require nurturance, warmth, sociability, and altruism and typically involve helping others in a face-to-face manner (Folbre 2012). I refer to these as *female-typed*. Alternatively, male-typed jobs refer to those that require workers to be analytical, self-reliant, and assertive. I argue that gender schemas frame women's understanding of female- and male-typed jobs and bias their understanding of typical resources offered to workers. From this perspective, the cultural association between female-typed jobs and motherhood will lead to a perception that female-typed jobs will provide greater accommodations that remediate work-family conflict compared to male-typed jobs. This study will also examine the underlying mechanisms of this association by examining the role of gender composition and perceived support.

Four research questions are used to address this paradox of women's employment. First, do women perceive female-typed jobs as providing more family care accommodations than male-typed jobs? Second, are jobs with greater perceived accommodations perceived as more desirable? Third, does gender composition of jobs partially mediate this relationship? Fourth, is the effect of gendered job characteristics and gender composition moderated by perceptions of support?

Answering these research questions will have important implications for research on gender inequality. First, the results will provide an empirically-supported explanation for persistent gender segregation among occupations and subsequent wage inequality. Second, this research adds to theories of gender schemas by showing that gender stereotypes bias women's perceptions of job resources. Most research in this area focuses on the role of stereotypes on women's earnings (Auspurg et al. 2017; Correll, Benard, and Paik 2007), but I argue that this research should extend to nonpecuniary rewards including family-friendly resources. Third, alternative explanations for women's selection into female-typed jobs focus on the internalization of their socially prescribed roles as nurturers or their desire to work with other

women, away from the potential hostility of male-dominated workplace (England 2010; Cech 2013; Correll 2001; Kanter 1977). While these processes are undoubtedly at play, this research emphasizes the need to examine women's job decision-making within a context that recognizes women's attempt to maximize wages and valued organization resources.

Theory and hypotheses

What is the theoretical background and how do you derive your hypotheses? Please state if the hypotheses are directional or non-directional. If directional, state the direction. A predicted effect is also appropriate here.

One explanation for the paradox of women's employment is that even though female-typed jobs offer few family care accommodations, these jobs allow women to minimize work-family conflict through lower work hours and greater social support from other women in the organization. Workers in female-dominated occupations work fewer hours compared to other occupations, which is correlated with lower work-family conflict (Greenhaus and Beutell 1985). Additionally, women perceive greater support in female-dominated occupations compared to male-dominated occupations (Taylor 2010). However, there is little evidence to suggest women experience lower work-family conflict when choosing female-typed jobs. In fact, Maume and Houston (2001) found that, among white-collar workers, women who worked more hours and who were surrounded by fewer women reported lower work-family conflict compared to those in female-dominated occupations. This may be due to the low authority characteristic of female-dominated jobs, as authority is important for having schedule control and worker autonomy (Brescoll, Glass, and Sedlovskaya 2013). Thus, there is no clear support that women in female-typed occupations can minimize work-family conflict without family care accommodations. I propose that women choose jobs perceived as providing family care accommodations, but that these perceptions are biased by gender schemas that frame workers' understanding of the labor market.

Ridgeway (2011) proposes a theoretical framework that attributes persistent gender inequality to society's reliance on gender as a primary framework for organizing "all spheres of social life that are carried out through social relations" (7). Gender informs the understanding of the self and others, but it also informs the understanding of the self and institutions such as work. Many researchers have studied this by examining how gender schemas affect individuals' perceptions of fit within the prospects of paid labor. Women internalize cultural stereotypes regardless of their own skills and abilities (Catsambis 1994; Correll 2001) and make employment decisions based on their perceived disposition for people-oriented work (Cech 2013).

This process also suggests that gender schemas shape individuals' evaluations of jobs. Female-typed work is perceived through schemas of women and motherhood because the required skills are similar to those culturally prescribed to mothers (England, Budig, and Folbre 2002). Thus, female-typed jobs are perceived as well-suited for women. More evidence of schemas' role in biasing perceptions of jobs is found in gender wage gap research. Female-typed jobs are evaluated as deserving lower pay compared to others because they are considered low status and "natural" for women (England, Budig, and Folbre 2002; Steinberg 1990). These perceptions of female-typed jobs follow the criteria of stereotypes because cultural beliefs impact behavior and evaluations, which acts to reproduce inequality (Correll and Ridgeway 2006).

In this study, I will test whether gender schemas have additional implications on evaluations of jobs. I propose that female-typed jobs are perceived as providing resources valuable to women because they are considered well-suited for women. This includes access to work accommodations that lower work-family conflict. This process suggests that, even though there is no evidence that female-typed jobs are accommodating to family care obligations, they are perceived as such. In my prior research, I find preliminary support for this hypothesis by finding that women perceive female-typed jobs as having greater access to schedule flexibility compared to male-typed jobs, although this is only one facet of family care accommodations (Johnson, 2018).

H1: Female-typed jobs will be perceived as having more family-friendly work accommodations compared to male-typed jobs.

I also test whether jobs that are perceived as having greater family care accommodations are considered more desirable. Family care accommodations have important consequences on workers' well-being and employment outcomes (Batt and Valcour 2003; Moen, Kelly, and Hill 2011; Muse and Pichler 2011). Those who face conflicting demands between spheres of family and work face greater stress, poorer health outcomes, and a greater likelihood of experiencing job burnout and turnover (Golden, Henly, and Lambert 2013; Amstad et al. 2011). Unsurprisingly, accommodations are popular among women (Kelly et al., 2010), and many qualitative studies show that women actively seek out jobs with greater accommodations (Blair-Loy 2003; Damaske 2011; Hochschild 1989; Hochschild 1997; Stone 2007). Thus, I expect jobs with greater perceived accommodations will be more desirable to women.

H2: Jobs with greater perceived family friendliness will be rated as more desirable net of gendered job characteristics, gender composition, and perceived support.

More information is needed to understand the relationship between gendered job characteristics and workers' perceptions of accommodations. An experimental design allows me to examine the roles of gender composition and perceived support. Gender composition may partially mediate the relationship between gendered characteristics and perceptions of accommodations because women who work with a higher proportion of men expect to face hostility in the workplace (Kanter 1977; Taylor 2010; Turco 2010). Therefore, women may expect that female-typed jobs will involve a higher proportion of women, who will be more accepting and supportive of women's family care responsibilities. Thus, misperceptions are created by two distinct pathways: (1) female-typed characteristics signal greater accommodations, and (2) female-typed characteristics signal a high proportion of women in the workplace, which signals greater family friendliness.

H3: Gender composition will partially mediate the relationship between gendered job characteristics and perceptions of family-friendly work accommodations.

Further, I expect that perceptions of social support will act as moderators in the pathways described in H3. Women in female-dominated occupations perceive greater social support compared to male-dominated occupations (Taylor, 2010), and they may also perceive greater support in female-typed jobs compared to male-typed jobs because most female-typed jobs are

also female-dominated. Further, the success of many family-friendly resources depends on supportive coworkers and supervisors (Kossek, Lewis, and Hammer 2010). I hypothesize that a higher degree of perceived support will be associated with a stronger relationship between job characteristics and accommodations and gender composition and accommodations. The experimental design will allow me to disentangle the effects of gendered characteristics and gender composition on perceptions of support, but I expect that support will moderate both pathways. This would indicate that female-typed jobs and female-dominated jobs are viewed as more accommodating because they are considered more supportive.

H4: Perceptions of support will moderate the relationship between gendered job characteristics and perceptions of family-friendly work accommodations.

H5: Perceptions of support will moderate the relationship between gender composition and perceptions of family-friendly work accommodations.

Design Plan

In this section, you will be asked to describe the overall design of your study.

Study design

Describe your study design. Examples include two-group, factorial, randomized block, and repeated measures. Is it a between (unpaired), within-subject (paired), or mixed design? Describe any counterbalancing required. Typical study designs for observation studies include cohort, cross sectional, and case-control studies.

The proposed study uses a 510-respondent Qualtrics Panel of women residing the U.S. stratified to be nationally representative on dimensions of age, ethnicity, and income. Respondents will be asked to read about a fictional worker and a job she is considering and make judgements about the job. The experiment will use a 2x3 factorial design that manipulates gendered job characteristics (female-typed, male-typed) and workplace gender composition (female-dominated, male-dominated, not manipulated). Each respondent evaluates a single job, so the proposed research uses a between-subjects design. Respondents will read the following introductory page before reading about the job:

We are interested in how people evaluate and make decisions about jobs. On the following pages you will learn about Sarah and a new job that she is considering. Please read the information carefully. After reading through the information about Sarah and the job, you will be asked to evaluate the job and determine whether Sarah should accept a job offer.

The second page of the experiment includes information about Sarah, which conveys to the respondent that she is married and the mother of two young children. The third page consists of a job advertisement excerpt for a project assistant position that Sarah is considering. The job listing contains one manipulation that randomly varies by two conditions. Respondents are either assigned to a female- or male-typed job, which is signaled through descriptors in the job advertisement. The fourth page consists of information on Sarah's job interview. The interview

page contains the workplace gender composition manipulation, which is signaled through the names of two employees that Sarah would be working with closely. Respondents are either assigned to a female-dominated workplace (two women's names), male-dominated workplace (two men's names), or the gender composition is not specified (names not provided). On the final survey page before questions begin, the respondents learn that Sarah was offered the job and must decide whether to accept the offer.

Randomization

If you are doing a randomized study, how will you randomize, and at what level?

Random assignment of the manipulations are used to ensure internal validity; each respondent has the same probability of condition assignment. Because the experiment uses a 2 (gendered job characteristics) x 3 (gender composition) factorial design, there are six possible conditions. Qualtrics offers an option in their randomization features that “evenly presents elements,” which I will use to ensure that the number of respondents who are assigned each condition is roughly equal. 510 respondents equally divided across six experimental conditions results in 85 respondents per condition.

Variables

In this section you can describe all variables (both manipulated and measured variables) that will later be used in your confirmatory analysis plan. In your analysis plan, you will have the opportunity to describe how each variable will be used. If you have variables that you are measuring for exploratory analyses, you are not required to list them, though you are encouraged to do so.

Manipulated variables

Describe all variables you plan to manipulate. For observational studies and meta-analyses, simply state that this is not applicable.

First, job descriptors in the job advertisement randomly vary to create a female- and male-typed job. Descriptors that align with cultural stereotypes of men and women are commonly used in job advertisements and have important implications in how they are perceived and whether workers decide to apply. Women are more likely to apply for jobs that use “female” descriptors and men are more likely to apply for jobs that use “male” descriptors (Castilla and Rho 2017; Gaucher, Friesen, and Kay 2011; Gorman 2005). This survey experiment recreates the gendered use of language found in job advertisements. The job position is a project assistant, which is intentionally vague to limit preexisting ideas about the job (Castilla and Rho 2017). Descriptors are chosen from a content analysis of gendered language use in job advertisements (Gaucher, Friesen, and Kay 2011). Female-typed job descriptors include: “compassionate”, “help others”, “friendly”, “cooperatively”, and “interpersonal”. Male-typed job descriptors include: “determined”, “solve problems”, “decisive”, “independently”, and “analytical”. Text from the job advertisement excerpt is included below:

Our company is looking for a **[compassionate/assertive]** new project assistant who will assist with completing a variety of projects for our clients. Some of the day-to-day responsibilities include researching topics, collecting and distributing project documents, and generating reports.

This is a full time position and a bachelor's degree is required. No experience is required, just a desire to **[help clients/solve problems]** and learn new skills.

Applicants should be organized, **[friendly/decisive]**, and comfortable working **[cooperatively/independently]** and efficiently. They should also have exceptional time management, **[interpersonal/analytical]**, and written and oral communication skills.

Second, gender composition is manipulated using names in the vignette that are easily interpreted as women or men. After reading the job listing, the respondent will read about Sarah's interview, where she is described as meeting the supervisor for the position and two additional employees that Sarah would be working closely with. To signal a female-dominated workplace, the co-workers are Megan and Julia. To signal a male-dominated workplace, the co-workers are Michael and James. Respondents will read that the co-workers hold different job positions so that this manipulation will not impact the job gendering manipulation. Respondents can also be assigned to a third category that allows gender composition to vary naturally by not providing names. This type of manipulated mediator with a naturally varying condition allows for the manipulation of workplace gender composition, while still allowing an examination of the effect of gendered characteristics on the perceptions of gender composition, which is necessary when testing a mediation pathway (Pirlott and MacKinnon 2016). Text from the job interview page is included below:

After applying for the job, Sarah is contacted by the company for an interview.

During the interview she meets with the project manager, who would be her supervisor, and two other employees, **[Michael and James/Megan and Julia/names not provided]**. The two employees are not project assistants but would be working closely with Sarah.

The manipulations have been pretested with a sample of 49 respondents using Amazon Mechanical Turk, a diverse online workforce. To test the job characteristics manipulation, respondents were asked to indicate how masculine and feminine they would rate the job that they read about, with the response categories: (1) not at all, (2) slightly, (3) moderately, and (4) very. Twenty-four respondents were randomly assigned to the female-typed job and 25 were assigned to the male-typed job. Respondents rated the female-typed job as .17 (se=.25) lower on the masculinity scale and .16 (se=.26) higher on the femininity scale compared to the male-typed job. Although these effect sizes are not significant with such a small sample size, a power analysis indicates that an effect of this size would be significant at a 95% significance level with an additional 10 respondents. Because my proposed sample consists of 510 respondents, I am confident that this manipulation check would pass when using the full sample.

The gender composition manipulation was also tested. Twenty-two respondents were assigned to a job with the female-dominated signal and 25 respondents were assigned the male-dominated signal. Respondents were asked to indicate if Sarah would typically work with: (1) mostly women, (2) mostly men, or (3) the respondent is not sure. Ninety-one percent of respondents assigned to the female-dominated group recognized that Sarah would work around mostly women compared to only 4.17% of those assigned to the male-dominated group. This difference in proportions is significant at a 95% confidence level.

Measured variables

Describe each variable that you will measure. This will include outcome measures, as well as any predictors or covariates that you will measure. While encouraged, you do not need to include any variables that you plan on collecting if they are not going to be included in the confirmatory analyses of this study.

The first dependent variable, perceptions of family-friendly work accommodations, is a scale constructed from seven items. Each item assesses a different workplace accommodation found to decrease work-family conflict and increase worker satisfaction. The items capture perceptions of paid sick child leave, paid parental leave, flextime (altering workday start and finish times), paid vacation, telework, control over setting work hours, and temporary schedule flexibility. The accommodations are described in language that is easy to understand. Respondents are asked to indicate the likelihood of the following statements if Sarah were to choose this job by choosing whether the accommodation is “very likely”, “somewhat likely”, “somewhat unlikely”, or “very unlikely”:

- Sarah will have time off from work without losing pay when a family member is sick.
- Sarah will have paid time off after the birth of a third child.
- Sarah will be able to come to work one hour early and leave one hour early every day, so she can pick her children up from school.
- Sarah will have paid vacation days.
- Sarah will be able to occasionally work from home when her children are too sick to go to school.
- Sarah will have control over setting her work hours.
- Sarah will be able to occasionally leave work for an hour or two so she can take her child to the doctor

The second dependent variable, job desirability, will be measured using a scale constructed from three items. These questions are asked at the end of the survey after respondents are asked to imagine that they are offered the job and to evaluate the job based on their own job preferences. First, respondents are asked “how attractive is this job offer to you?” with following response options: “very attractive”, “somewhat attractive”, “neither attractive nor unattractive”, “somewhat unattractive”, and “very unattractive.” Second, respondents are asked “do you consider this to be a good job?” with the following response options: “extremely good”, “very good”, “moderately good”, “slightly good”, and “not at all good.” Third, respondents are asked to rate how much they wished they had this job on a scale from one to ten.

Gender composition is measured using a manipulation-of-mediator design, however, in order to show that gendered job characteristics influences perceptions of gender composition, one condition of the manipulation allows gender composition to vary naturally. Respondents are asked “which best describes the employees that Sarah will work with on a day-to-day basis?” which the following options: “she will work with mostly men”, “she will work with mostly women”, “she will work with an even mix of men and women”, and “I don’t know”.

Perceptions of support is a measured moderator that is constructed using a scale constructed from five items. These questions are derived from the Midlife in the United States study (MIDUS). Items are reworded to that they apply to Sarah and not the respondent. Respondents are asked to indicate the likelihood of the following statements if Sarah were to choose this job on a 4-point likelihood scale with the options “very likely”, “somewhat likely”, “somewhat unlikely”, or “very unlikely”:

- Sarah's immediate supervisor will listen to her work-related problems
- Sarah will receive the information she needs from her supervisor or superiors
- Sarah will receive help and support from her immediate supervisor
- Sarah’s coworkers will help and support her
- Sarah’s coworkers will listen to her work-related problems.

Controls include age, marital status, Hispanic identity, race, educational attainment, two questions on parental status, employment status, and work hours. Age is recorded as an open-ended response. Marital status is measured through five options: married, widowed, divorced, separated, or never married. Hispanic identity is a binary variable, comparing Hispanic to non-Hispanic. Race is measured through six options: white, black or African American, American Indian or Alaskan Native, Asian, Native Hawaiian or Pacific Islander, and other. Educational attainment is measured through six responses: less than high school, high school graduate, some college, 2 year degree, 4 year degree, and beyond 4 year degree. Parental status is measured through a question asking how many children the respondent has and those who indicate at least one child are asked if they have a child under the age of five. Employment status is a binary measure indicating whether the respondent is currently working for pay. Those who work for pay are asked to indicate how many hours they typically work per week with an open-ended response box.

Indices

If any measurements are going to be combined into an index (e.g., mean, sum, factor score), what measures will you use and how will they be combined? Include either a formula or a precise description of your method. If you are using a more complicated statistical method to combine measures (e.g., factor or latent class analysis), you should note this here and describe the precise method in the analysis plan section.

This study will use three indices to increase reliability and construct validity of variables of interest. First, perceptions of family care accommodations is constructed by measuring the perceived likelihood of having seven different work accommodations that reduce work-family conflict. Second, perceptions of support is constructed using five items. These items combine a coworker support scale and a supervisor support scale used in the MIDUS study. In the MIDUS sample, the combined scales have a Cronbach's alpha of .9. Minor changes are made to the

wording of the questions so that they fit with the premise of the study. Finally, job desirability is measured using a three-item scale. The measures assess perceptions of job “goodness”, the attractiveness of the job offer, and a question asking how much the respondent would like to have that job.

These scales will be generated using the “alpha” command in Stata 15 with the “generate” and “std” options. Individual items will be standardized (mean 0, variance 1), summated across each item, and divided by the number of items. Respondents with missing responses on items can still be used with this technique. A score will be created for every observation for which there is a response for at least one item. This process is represented in the formula below. Let x_{ij} reflect the value of item i in the j th observation. $S(\)$ is the function that returns the standardized value if x_{ij} is not missing and returns zero if x_{ij} is missing. K_j is the number of nonmissing values in x_{ij} , $i = 1, \dots, k$.

$$S_j = \frac{1}{k_j} \sum_{i=1}^k S(x_{ij})$$

Sampling Plan

In this section we ask you to describe your plans for data collection, including the number of samples you plan to collect and your rationale for this decision. Please keep in mind that the data described in this section should be the actual data used for analysis, so if you are using a subset of a larger dataset, please describe the subset that will actually be used in your study.

Data collection procedures.

Please describe the process by which you will collect your data. This should include the population from which you obtain subjects, recruitment efforts, payment for participation, how subjects will be selected for eligibility from the initial pool (e.g. inclusion and exclusion rules), and your study timeline.

The proposed study uses a 510-respondent sample of women residing the U.S. stratified to be nationally representative on dimensions of age, ethnicity, and income. Data will be collected using Qualtrics, a marketing research firm that works with industry partners to build broad and targeted participant panels. Qualtrics uses nonprobability samples but will have similar attitudes and beliefs as probability samples and are considered accurate for measuring effects of manipulations on beliefs, making them ideal for survey experiments (Kennedy et al., 2016). Respondents will be paid for completing the survey, but the amount varies by respondent and Qualtrics does not publish this information. The survey will be administered in August of 2019.

Sample size

Describe the sample size of your study.

This study will use a sample of 510 completed survey experiments. Because I have six experimental conditions, I will have 85 respondents per condition.

Sample size rationale

If possible to produce for your estimand/quantity of interest, include a power analysis. What is the effect size you will be able to detect? What are your assumptions about your alpha-level and about your statistical power?

My sample size of 510 will be divided equally across six experimental conditions ($n = 85$ per condition). With this sample size, I will have enough power ($> 80\%$) to detect a change in dependent variables with a magnitude of at least .4 ($p < 0.05$). This detection assumes that conditions will have equal standard errors.

Stopping rule

If your data collection procedures do not give you full control over your exact sample size, specify how you will decide when to terminate your data collection.

N/A

Analysis Plan

You may describe one or more confirmatory analysis in this preregistration. Please remember that all analyses specified below should be reported in your final published article, and any additional analyses should be marked as exploratory or hypothesis-generating. A confirmatory analysis plan must state up-front which variables are antecedent (independent) and which are the outcomes (dependent), otherwise it is an exploratory analysis. You are allowed to describe any exploratory work here, but a clear confirmatory analysis is required.

15. Statistical models

What statistical model will you use to test each hypothesis? Please include the type of model (e.g., ANOVA, multiple regression, SEM, etc.) and the specification of the model. This includes each variable that will be included as antecedent (independent), outcomes, or covariates, as well as the parameterization implied by the model (e.g., linear or non-linear constraints). Please specify any interactions that will be tested and remember that any test not included here must be declared as an exploratory test in your final article.

H1: Female-typed jobs will be perceived as having more family-friendly work accommodations compared to male-typed jobs.

H1 will be addressed using a series of linear regression models. The dependent variable is perceptions of family-friendly work accommodations and the independent variable of interest is female-typed jobs, which is a binary variable comparing female-typed jobs to male-typed jobs. Basic demographic information, relationship statuses, and employment information will act as controls and will be added in groups across three models. The first model will include the independent variable of interests with basic demographic controls. These include age, age^2 , race (reference group is white), and Hispanic (reference group is non-Hispanic). Model 2 will add variables that measure relationship information. These include parental status (reference group is non-parents), being the parent of a child under the age of 5 (reference group with those

without a young child), and marital status (reference group is nonmarried). Model 3 will add employment characteristics. These include educational status (reference group is high school graduate), employment status (reference group is those who are employed), and hours typically worked per week.

H2: Jobs with greater perceived family friendliness will be rated as more desirable net of gendered job characteristics, gender composition, and perceived support.

H2 will be tested using a linear regression model. The dependent variable is job desirability and the independent variable of interest is perceptions of family care accommodations. The control variables outlined in H1 will also be included in this model.

H3: Gender composition will partially mediate the relationship between gendered job characteristics and perceptions of family-friendly work accommodations.

I use a series of linear regression models to test if workplace gender composition can be considered a partial mediator in the relationship between gendered job characteristics and perceptions of accommodations. Determining a mediating relationship requires several steps. The first step to testing this mediation pathway is by determining that job characteristics affect perceptions of family friendliness, which is tested in H1.

Second, I determine whether job characteristics are associated with perceptions of gender composition. Roughly one-third of my sample will be assigned to a condition that allows gender composition to vary naturally. For these respondents, I will conduct a logit regression model with perceptions of gender composition as the dependent variable, comparing a perceived female-dominated workplace (1) with a male-dominated workplace (0). Respondents who indicated that they did not know the gender composition of their assigned job will be excluded from the model. Job characteristics is the independent variable of interest, and I will include the control variables outlined in H1.

Third, I regress perceptions of accommodations on job characteristics, gender composition, and all control variables for respondents who were assigned a gender composition. I expect to see a reduction in the effect of job characteristics compared to the effect size seen in H1. Finally, I will use the Sobel test to determine if the reduced effect size is large enough to conclude that gender composition is a mediator. I will use the `sgmediation` command in Stata 15. With a sample size of 510, I will be able to detect a small to moderate effect.

H4: Perceptions of support will moderate the relationship between gendered job characteristics and perceptions of family-friendly work accommodations.

The moderating effect of support will be tested using an interaction between support and female-typed jobs. I will use the final model in H1 and add the main effect of support and an interactive effect between female-typed jobs and support.

H5: Perceptions of support will moderate the relationship between gender composition and perceptions of family-friendly work accommodations.

This moderating effect of support in the pathway between gender composition and accommodations will be tested using an interaction between support and gender composition. I will use the final model in H1 and will include the main effect of gender composition, the main effect of support, and an interactive effect between gender composition and support.

16. Transformations

If you plan on transforming, centering, recoding the data, or will require a coding scheme for categorical variables, please describe that process.

Perceptions of family friendliness, support, and job desirability will be transformed and centered during scale construction. Some control variables will be recoded for more concise models. Marital status will be recoded into a binary variable, “married”, that compares those who are currently married to those in the remaining marital status categories. These include “never married”, “divorced”, “separated”, and “widowed”. Also, based on the small group sizes of some of the races in my instrument, I expect that I will need to collapse “American Indian or Alaskan Native”, “Native Hawaiian or Pacific Islander”, and “other” into a single “other” category. This would leave four remaining racial categories: white, black or African American, Asian, and other.

17. Follow-up analyses

If not specified previously, will you be conducting any confirmatory analyses to follow up on parameters estimated by your statistical model, such as subgroup analyses, pairwise or complex contrasts, or follow-up tests from interactions? Remember that any analyses not specified in this research plan should be noted as exploratory.

I will not conduct follow-up analyses.

18. Inference criteria

What criteria will you use to make inferences? Please describe the information you will use (e.g., p -values, Bayes factors, specific model fit indices), as well as cut-off criteria, where appropriate. Will you be using one- or two-tailed tests for each of your analyses? If you plan to compare multiple conditions or test multiple hypotheses, how will you account for this?

This study will interpret t-tests for linear and logit regression models using two-tailed tests with cut-off values at $p=.05$, $p=.01$, and $p=.001$.

19. Data exclusion

How will you determine what data or samples, if any, to exclude from your analyses? How will you identify and handle outliers?

Qualtrics screens data to only include respondents that completed the survey, passed attention checks, varied answer selection, and took a reasonable time to complete the survey. Thus, I do not expect to need to exclude any respondents from the analyses. I will not exclude any outliers.

20. Missing data

How will you deal with incomplete or missing data?

Qualtrics screens my data and will eliminate respondents who did not complete the survey. That being said, respondents may still choose not to answer every question. My procedure for creating indices allows for some missing responses. As long as the respondent answered at least one item on a scale, their scores will be used. Any missing responses on the remaining control variables or missing scale scores will be handled using listwise deletion.

21. Exploratory analysis (optional)

If you plan to explore your data set to look for unexpected differences or associations, you may describe those tests here. An exploratory test is any test where a prediction is not made up-front, or where there are multiple possible tests that you will perform. A statistically significant finding in an exploratory test is a great way to form a new confirmatory hypothesis, which could be registered at a later time.

Other

If there is any additional information that you feel needs to be included in your preregistration, please include it here.

References

- Amstad, Fabienne T., Laurenz L. Meier, Ursula Fasel, Achim Elfering, and Norbert K. Semmer. 2011. "A Meta-Analysis of Work-Family Conflict and Various Outcomes With a Special Emphasis on Cross-Domain Versus Matching-Domain Relations." *Journal of Occupational Health Psychology* 16 (2): 151–69.
- Auspurg, Katrin, Thomas Hinz, and Carsten Sauer. 2017. "Why Should Women Get Less? Evidence on the Gender Pay Gap from Multifactorial Survey Experiments." *American Sociological Review* 82 (1): 179–210.
- Batt, Rosemary, and P Monique Valcour. 2003. "Human Resources Practices as Predictors of Work-Family Outcomes and Employee Turnover." *Industrial Relations* 42 (2): 189–219.
- Blair-Loy, Mary. 2003. *Competing Devotions: Career and Family Among Women Executives*. Cambridge, MA: Harvard University Press.
- Brescoll, Victoria L., Jennifer Glass, and Alexandra Sedlovskaya. 2013. "Ask and Ye Shall Receive? The Dynamics of Employer-Provided Flexible Work Options and the Need for Public Policy." *Journal of Social Issues* 69 (2): 367–388.
- Castilla, Emilio, and Hye Jin Rho. 2017. Language and Gender in the Online Job-Matching Process. Presented at the American Sociological Association Annual Meeting, Montreal, August.
- Catsambis, Sophia. 1994. "The Path to Math: Gender and Racial-Ethnic Differences in Mathematics Participation from Middle School to High School." *Sociology of Education* 67 (3): 199–215.
- Cech, Erin A. 2013. "The Self-Expressive Edge of Occupational Sex Segregation." *American Journal of Sociology* 119 (3): 747–89.
- Correll, Shelley J., and Cecilia L. Ridgeway. 2006. "Expectation States Theory." In *Handbook of Social Psychology*, edited by John DeLamater, 29–51. New York, NY: Springer.

- Correll, Shelley J. 2001. "Gender and the Career Choice Process: The Role of Biased Self-Assessments." *American Journal of Sociology* 106 (6): 1691–1730.
- Correll, Shelley J., Stephen Benard, and In Paik. 2007. "Getting a Job: Is There a Motherhood Penalty?" *American Journal of Sociology* 112 (5): 1297–1338.
- Damaske, Sarah. 2011. *For the Family?: How Class and Gender Shape Women's Work*. Oxford, UK: Oxford University Press.
- England, Paula. 1992. *Comparable Worth: Theories and Evidence*. Berlin: De Gruyter.
- England, Paula. 2010. "The Gender Revolution: Uneven and Stalled." *Gender & Society* 24 (2): 149–66.
- England, Paula, Michelle Budig, and Nancy Folbre. 2002. "Wages of Virtue: The Relative Pay of Care Work." *Social Problems* 49 (4): 455–73.
- Filer, Randall K. 1989. "Occupational Segregation, Compensating Differentials, and Comparable Worth." In *Pay Equity: Empirical Inquiries*, 153–76. Washington, DC: The National Academies Press.
- Folbre, Nancy. 2012. "Should Women Care Less? Intrinsic Motivation and Gender Inequality." *British Journal of Industrial Relations* 50 (4): 597–619.
- Gaucher, Danielle, Justin Friesen, and Aaron C. Kay. 2011. "Evidence That Gendered Wording in Job Advertisements Exists and Sustains Gender Inequality." *Journal of Personality and Social Psychology* 101 (1): 109–28.
- Glass, Jennifer. 1990. "The Impact of Occupational Segregation on Working Conditions." *Social Forces* 68 (3): 779–96.
- Glass, Jennifer, and Valerie Camarigg. 1992. "Gender, Parenthood, and Job-Family Compatibility." *American Journal of Sociology* 98 (1): 131–151.
- Golden, Lonnie, Julia Henly, and Susan Lambert. 2013. "Work Schedule Flexibility: A Contributor to Employee Happiness?" *Journal of Social Research and Policy* 4 (2): 107–35.
- Gorman, Elizabeth H. 2005. "Gender Stereotypes, Same-Gender Preferences, and Organizational Variation in the Hiring of Women: Evidence from Law Firms." *American Sociological Review* 70 (4): 702–28.
- Greenhaus, Jeffery H., and Nicholas J. Beutell. n.d. "Sources of Conflict Between Work and Family Roles | Academy of Management Review." *Academy of Management Review* 10 (1): 76–88.
- Hochschild, Arlie Russell. 1989. *The Second Shift: Working Families and the Revolution at Home*. New York: Penguin.
- . 2001. *The Time Bind: When Work Becomes Home and Home Becomes Work*. London, England: Macmillan.
- Johnson, Kaitlin. 2018. Access to Flexible Workplace Policies: Expectations and Reality. Presented at the American Sociological Association Annual Meeting, Philadelphia, August.
- Kanter, Rosabeth Moss. 1977. "Some Effects of Proportions on Group Life: Skewed Sex Ratios and Responses to Token Women." *American Journal of Sociology* 82 (5): 965–90.
- Kelly, Erin L., Samantha K. Ammons, Kelly Chermack, and Phyllis Moen. 2010. "Gendered Challenge, Gendered Response: Confronting the Ideal Worker Norm in a White-Collar Organization." *Gender & Society* 24 (3): 281–303.
- Kossek, Ellen Ernst, Suzan Lewis, and Leslie B. Hammer. 2010. "Work—life Initiatives and Organizational Change: Overcoming Mixed Messages to Move from the Margin to the Mainstream." *Human Relations* 63 (1): 3–19.
- Levanon, Asaf, and David B. Grusky. 2016. "The Persistence of Extreme Gender Segregation in the Twenty-First Century." *American Journal of Sociology* 122 (2): 573–619.

- Maume, David J., and Paula Houston. 2001. "Job Segregation and Gender Differences in Work-Family Spillover Among White-Collar Workers." *Journal of Family and Economic Issues* 22 (2): 171–89.
- Moen, Phyllis, Erin L. Kelly, and Rachel Hill. 2011. "Does Enhancing Work-Time Control and Flexibility Reduce Turnover? A Naturally Occurring Experiment." *Social Problems* 58 (1): 69–98.
- Muse, Lori A., and Shaun Pichler. 2011. "A Comparison of Types of Support for Lower-Skill Workers: Evidence for the Importance of Family Supportive Supervisors." *Journal of Vocational Behavior* 79 (3): 653–66.
- Pirlott, Angela G., and David P. MacKinnon. 2016. "Design Approaches to Experimental Mediation." *Journal of Experimental Social Psychology* 66: 29–38.
- Polachek, Solomon. 1976. "Occupational Segregation: An Alternative Hypothesis." *Journal of Contemporary Business* 5 (1): 1–12.
- . 1979. "Occupational Segregation Among Women: Theory, Evidence, and a Prognosis." In *Sex, Discrimination, and the Division of Labor*, edited by Cynthia Lloyd, Emily Andrews, and Curtis Gilroy, 137–157. New York: Columbia University Press.
- Polachek, Solomon William. 1981. "Occupational Self-Selection: A Human Capital Approach to Sex Differences in Occupational Structure." *The Review of Economics and Statistics* 63 (1): 60.
- Ridgeway, Cecilia L. 2011. *Framed by Gender: How Gender Inequality Persists in the Modern World* by Cecilia L. Ridgeway. New York, NY: Oxford University Press.
- Steinberg, Ronnie J. 1990. "Social Construction of Skill: Gender, Power, and Comparable Worth." *Work and Occupations* 17 (4): 449–82.
- Stone, Pamela. 2007. *Opting out?: Why Women Really Quit Careers and Head Home*. Berkeley, CA: University of California Press.
- Taylor, Catherine J. 2010. "Occupational Sex Composition and the Gendered Availability of Workplace Support." *Gender & Society* 24 (2): 189–212.
- Turco, Catherine J. 2010. "Cultural Foundations of Tokenism: Evidence from the Leveraged Buyout Industry." *American Sociological Review* 75 (6): 894–913.
- Weeden, Kim A. 2005. "Is There a Flexiglass Ceiling? Flexible Work Arrangements and Wages in the United States." *Social Science Research* 34 (2): 454–82.