

Born to Care (or Not Care): How Gender Role Attitudes Affect Occupation Choice

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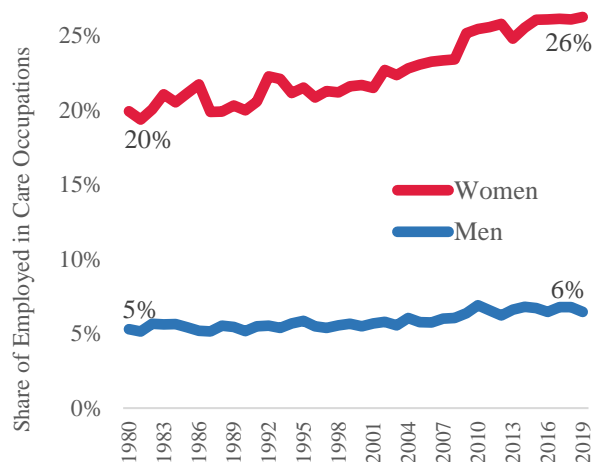
Occupation segregation explains a significant portion of the gender wage gap with women sorting into lower paid female-dominated occupations, especially care occupations. Economic theory posits women optimally trade off earnings for flexibility - suggesting discrimination does not play a large role. We assess this by modeling how gender role attitudes in a person's birth state ("background sexism") affect occupation choice, considering educational attainment and major. We find traditional gender attitudes, which view women's role as caretakers, influence women and men's occupation choice and increase the gender care occupation gap.

I. The Gender Care Occupation Gap

Occupation segregation with women sorting into lower paid female-dominated occupations explains about half of the gender wage gap (Blau and Kahn, 2017). Women's occupation choice is traditionally viewed through the lens of optimality rather than discrimination;

women choose lower paying occupations that offer more flexibility or fewer hours to accommodate unpaid family care work (Goldin, 2014). Yet, this contrasts with evidence that women determine their career path before marriage (Goldin, 2006).

The gender wage gap has narrowed as occupation segregation has declined. While women are increasingly entering male-dominated fields (notably business and finance), more women are choosing female-dominated care occupations; however, men still avoid these occupations (Figure 1).



Source: IPUMS Census/ACS

FIGURE 1. DESPITE DECREASING OCCUPATION SEGREGATION, WOMEN ARE INCREASINGLY ENTERING INTO CARE OCCUPATIONS

This presents a puzzle about why the gender gap in paid care work is increasing as occupation segregation is decreasing. In fact,

the gender gap in unpaid care work has been stubbornly persistent over time (Sullivan, 2013); and widened dramatically during the coronavirus pandemic (Heggeness, 2020).

Fortin (2015) suggests that, beginning in the 1990s, the U.S. saw a reversion to more traditional gender role attitudes. Traditional gender attitudes that assign care work (both inside and outside the home) exclusively to women can differentially act as a perceived constraint on the “acceptable” options available to women and men.¹ At the same time, female-dominated care work occupations are de-valued, all else equal, because of the same underlying cultural ideas on gender roles (England, Budig, and Folbre, 2002).

To unlock the puzzle of how gender role attitudes are affecting occupation choice, we examine how traditional gender role attitudes, that define care work as “women’s work,” affect both women’s and men’s occupation choice. We use an empirical method developed by Arcidiacono and Koedel (2014) to determine the specific pathways by which gender role attitudes in the place of birth affect future labor market decisions, including the higher education decision and the choice of major.

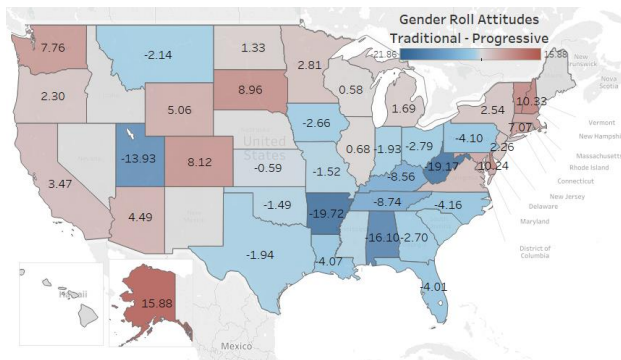
We find childhood exposure to more progressive gender attitudes reduces the gender care occupation gap. If individuals exposed to traditional gender role attitudes chose a major like those in progressive places (conditional on individual characteristics), the occupation gap would be smaller for younger cohorts. Among older cohorts, we find that childhood exposure to traditional gender attitudes contributes to fewer people sorting into care occupations, likely a response to care work being de-valued as more women enter into paid care work. In both cohorts, our decomposition indicates college major choice as the primary channel. Our results suggest a role for occupation choice and major choice as a mechanism underlying Charles, Guryan, and Pan’s (2018) findings that women born in states with more traditional gender role attitudes (“background sexism”) have lower labor force participation and wages.

II. Gender Role Attitudes

We use the General Social Survey (GSS) to create a state-level gender role attitude index, where higher values indicate more progressive gender role attitudes (Figure 2).²

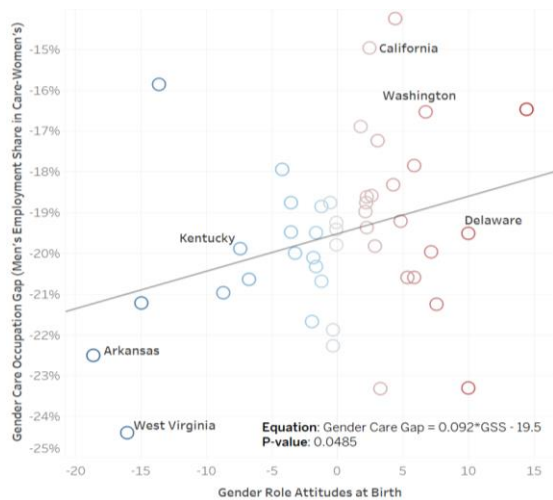
¹ For example, traditional gender role attitudes deter women from engaging in entrepreneurial activities (Patrick, Stephens, and Weinstein, 2016).

² From the GSS, we use fework, fehome, fepres, fepol, fechld, fepresch, fehelf, fefam, questions about attitudes toward women’s roles in the home, in the workplaces and society. We rescale them so



Source: General Social Survey
 FIGURE 2. BACKGROUND SEXISM ACROSS THE U.S.

The share of employed women in care occupations is lower for women born in states with more progressive gender role attitudes. Thus, the gender care occupation gap (the difference between the share of employed men in care occupations and the share of employed women in care occupations) is smaller for individuals born in states with more progressive gender role attitudes (Figure 3).³



Source: General Social Survey, ACS 2000-2018
 FIGURE 3. PROGRESSIVE GENDER ROLE ATTITUDES DECREASE THE GENDER GAP

higher is more progressive and construct an index that is based on the sum of the z-scores for each state.

³ Care occupations generally include any occupation in healthcare and education.

Results using American Community Survey (ACS) data show that childhood exposure to progressive gender role attitudes decreases the gender occupation gap (Table 1).

[Insert Table 1 Here]

III. Decomposing the Gender Care Occupation Gap

To decompose the gender care occupation gap and more precisely estimate the mechanisms leading to the gap, we use confidential geocoded data from the National Longitudinal Surveys of Youth from 1979 and 1997 (NLSY79 and NLSY97).⁴ The two surveys provide detailed information on individuals, their occupations, work history, education, and college major (if applicable).

We use Arcidiacono and Koedel's (2014) methodology to define the probability that an individual of gender g with individual characteristics x chooses a care occupation as

$$\begin{aligned}
 \Pr(y = 1|g, a) &= \sum_{x \in X} \sum_{m \in M} \sum_{c \in C} \Pr(y = 1|c, m, x, g, a) \Pr(c, m, x, g, a) \\
 &= \sum_{x \in X} \sum_{m \in M} \sum_{c \in C} \Pr(y = 1|c, m, x, g, a) \Pr(c|m, x, g, a) \Pr(m|x, g, a) \Pr(x|g, a),
 \end{aligned}$$

This This suggests a natural way to decompose the effects of individual characteristics (x), post-secondary education

⁴ NLSY79 includes individuals born between 1957 and 1964; the NLSY97 includes individuals born between 1980 and 1984.

(c), and college major (m) on the occupational choices of individuals, where a is a binary measure of gender attitudes (high or low) in the location of birth. We predict counterfactual occupational choices for individuals with childhood exposure to more traditional gender role attitudes based upon the (conditional) choices of those individuals with childhood exposure to more progressive gender role attitudes (conditional on individual characteristics).

The results in Table 2 show that our model does a good job of predicting the actual occupational choice of individuals. It also presents an interesting story. For the 1979 cohort, if those born in places with more traditional gender role attitudes choose post-secondary education levels and majors (conditional on individual background) like people born in more progressive locations, then more men and women enter care occupations. The increase is much greater for men, resulting in an overall decrease in the care occupation gap of 6.6%. The decomposition suggests this is almost entirely attributable to changes in majors. However, for the 1997 cohort, the story is the opposite. In this case, we see evidence that more progressive gender role attitudes lead to much fewer men entering care professions (especially when conditioning on both major and post-secondary choice), a small decrease in

the number of women entering care, and an increase in the gender occupation gap in care.

[Insert Table 2 Here]

To examine the mechanisms further, we use a similar model to consider the choice to go into non-care occupations versus care occupations or not participating in the labor force (Table 3). For the 1979 cohort, re-sorting into post-secondary education and majors like people born in places with more progressive gender attitudes has little effect on non-care occupational choices. While the results for men are similar with the 1997 cohort, they are quite different for women. There is a small increase in the share of women born in traditional places choosing care occupations after resorting (into post-secondary education conditional on major) like women born in progressive places that is more than offset by the decrease after also resorting into majors.

[Insert Table 3 Here]

IV. Discussion

As gender role attitudes have become more progressive, women's labor force participation has increased. However, in recent years, women's labor force participation and the closing of the gender wage gap have stalled. We find evidence that one reason for this is that

the gender occupation gap in care appears to be widening over time. While for those close to retirement age, more progressive gender role attitudes led to more men in care occupations and a smaller gender occupation gap, these trends have reversed. Younger men and women experiencing more childhood exposure to progressive gender role attitudes are less likely to work in a care occupation, but the effect is much more pronounced for men. Our results suggest that traditional gender attitudes played a substantial role in the care occupational segregation that some researchers attribute to the devaluing of care work. Lower relative wages then make educational attainment higher but care occupational choice less likely (conditional on individual characteristics) for people, especially men, born in traditional places after resorting into post-secondary education and major choices like those born in more progressive places. This prevents the closing of the gender wage gap.

In January 2020, women's non-farm payroll employment exceeded men's for only the second time in history. However, the recent coronavirus pandemic quickly reversed these labor market trends. Shutdowns have decreased the demand for childcare workers, and other women have been forced out of the workforce to accommodate unpaid care work at home. With labor demand and labor force

participation of women falling, this is likely to further contribute to the gender wage gap.

Our results should concern men and women. As the number of manufacturing jobs have waned, the number of care jobs has increased. Yet, the labor force participation of older working age men without a college degree has decreased. We find evidence that background sexism may be preventing these men from entering care occupations, leading them to drop out of the labor force. Furthermore, the incentive for men to transition to care work decreases when care work is valued less than other, traditionally male, occupations.

Additionally, as care occupations are increasingly female-dominated, this further devalues these occupations, keeping wages low. For example, inflation adjusted wages for pediatricians and internal medicine doctors (female-dominated) have declined while wages of surgeons (heavily male-dominated) have increased (Hughes, 2020).

Interestingly, men appear to benefit the most from more progressive gender role attitudes as our data show that both men and women who were born in states with more progressive gender role attitudes have higher AFQT

scores,⁵ but even more so for men. Over time, this has led men to increasingly choose non-care occupations which may have contributed to the continuing gender wage gap. Thus, it appears that men seem to differentially benefit from progressive gender role attitudes even more than women.

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⁵ Armed Forces Qualifying Test (or equivalent) is a measure used to proxy for ability.

TABLE 1— MARGINAL EFFECTS OF PROGRESSIVE GENDER ROLE ATTITUDES AT BIRTH ON OCCUPATION CHOICE

	2018	
	Men	Women
	623,507	629,487
CARE Occupation	0.0003*** (0.0001)	-0.0004*** (0.0001)
NON-CARE Occupation	0.0017*** (0.0001)	0.0036*** (0.0001)
Not Employed	-0.0020*** (0.0001)	-0.0032*** (0.0001)

SOURCE: AMERICAN COMMUNITY SURVEY (ACS) DATA.

Note: Results are marginal effects of childhood exposure to progressive state-level gender role attitudes from multinomial logit models of the occupation choice estimated separately for women and men.

*** SIGNIFICANT AT THE 1 PERCENT LEVEL.

TABLE 2— PROGRESSIVE GENDER ROLE ATTITUDES IN THE PLACE OF BIRTH AND THE CARE OCCUPATION CHOICE

	1979			1997		
	Men	Women	Gap	Men	Women	Gap
	3,084	3,072		1,704	1,593	
Actual CARE occupational choice	0.034	0.160	-0.126	0.039	0.151	-0.111
Predicted CARE occupational choice	0.036	0.159	-0.123	0.037	0.150	-0.114
Predicted counterfactual CARE occupational choices with alternative post-secondary sorting	0.036	0.157	-0.121	0.021	0.138	-0.117
Predicted - Counterfactual	0.000	0.002	-0.002	0.015	0.012	0.003
Predicted counterfactual CARE occupational choices with alternative post-secondary and major sorting	0.129	0.186	-0.057	0.007	0.144	-0.137
Predicted - Counterfactual	-0.093	-0.027	-0.066	0.030	0.006	0.023

Note: Predicted counterfactual occupational choices are from base model. Predicted counterfactual occupational choices with alternative post-secondary (and major) sorting refers to the base model predicted occupational choices for individuals born in traditional gender attitude locations after resorting them into the post-secondary education (and major) choices in progressive places conditional on their background.

TABLE 3— PROGRESSIVE GENDER ROLE ATTITUDES IN THE PLACE OF BIRTH AND THE NON-CARE OCCUPATION CHOICE

	1979			1997		
	Men	Women	Gap	Men	Women	Gap
	3,084	3,072		1,704	1,593	
Actual NON-CARE occupational choice	0.925	0.788	0.137	0.798	0.684	0.114
Predicted NON-CARE occupational choice	0.921	0.786	0.136	0.793	0.671	0.122
Predicted counterfactual NON-CARE occupational choices with alternative post-secondary sorting	0.923	0.786	0.137	0.793	0.685	0.108
Predicted - Counterfactual	-0.001	0.000	-0.001	0.000	-0.014	0.014
Predicted counterfactual NON-CARE occupational choices with alternative post-secondary and major sorting	0.925	0.791	0.134	0.796	0.657	0.139
Predicted - Counterfactual	-0.004	-0.006	0.002	-0.002	0.015	-0.017

Note: Predicted counterfactual occupational choices are from base model. Predicted counterfactual occupational choices with alternative post-secondary (and major) sorting refers to the base model predicted occupational choices for individuals born in traditional gender attitude locations after resorting them into the post-secondary education (and major) choices in progressive places conditional on their background.