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## The Implications of Marriage Structure for Men's Workplace Attitudes, Beliefs, and Behaviors toward Women

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# The Implications of Marriage Structure for Men's Workplace Attitudes, Beliefs, and Behaviors toward Women

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#### **Abstract**

Based on five studies with a total of 993 married, heterosexual male participants, we found that marriage structure has important implications for attitudes, beliefs, and behaviors related to gender among heterosexual married men in the workplace. Specifically, men in traditional marriages—married to women who are not employed—disfavor women in the workplace and are more likely than the average of all married men to make decisions that prevent the advancement of qualified women. Results show that employed men in traditional marriages tend to (a) view the presence of women in the workplace unfavorably, (b) perceive that organizations with higher numbers of female employees are operating less smoothly, (c) perceive organizations with female leaders as relatively unattractive, and (d) deny qualified female employees opportunities for promotions more frequently than do other married male employees. Moreover, our final study suggests that men who are single and then marry women who are not employed may change their attitudes toward women in the workplace, becoming less positive. The consistent pattern of results across multiple studies employing multiple methods (lab, longitudinal, archival) and samples (U.S., U.K., undergraduates, managers) demonstrates the robustness of our findings that the structure of a man's marriage influences his gender ideology in the workplace, presenting an important challenge to workplace egalitarianism.

**Keywords:** marriage structure, gender ideology, egalitarianism, attitudes toward women

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Every marriage has a division of labor, which serves as a critical social structure (Brown, 1970; Becker, 1985; Mukhopadhyay and Higgins, 1988). In some marriages, gender still determines the division of labor: the man's primary responsibility is to earn wages that provide for the family's well-being while the woman's primary responsibility is to carry out the family- and home-oriented tasks that facilitate the husband's wage-earning (Greenstein, 2000; Abbott, Wallace, and Tyler, 2005; Fletcher and Bailyn, 2005). The traditional marriage structure, in which the wife is not employed outside the home, is found in 20 percent of married couples in the United States (Bureau of Labor Statistics. 2012). But in society as a whole, the division of labor between men and women has been undergoing profound change. For example, in the U.S., since 1967, labor participation by women has increased by nearly half to 60 percent of adult women; three-quarters of women in the workforce (approximately 51 million women) work full time; women's educational attainment has surpassed that of men; women constitute 45 percent of union membership; the percentage of mothers working continues to rise; and families have a growing dependence on wives' incomes (Maloney and Schumer, 2010).

As a result of such changes, men in today's workforce are more likely than ever to work with, around, and perhaps for women. A 2011 study of over 60,000 working adults found that only 21 percent of men had never worked for a female boss (Elsesser and Lever, 2011). As these dramatic societal changes have occurred, the workplace has become a domain in which the treatment of women is under scrutiny. Many organizations have invested considerable resources in facilitating fair treatment within the workplace. Gender discrimination, whether it exists as an individual case or as a large-scale systemic pattern, is solid cause for a lawsuit. These claims focus on differential treatment in pay, promotion, hiring, termination, or other employment decisions. Therefore today's worker is not only likely to work with, around, or for women but also to work in an environment with considerable external and legal pressure to ensure that all individuals, including women, are treated equally and equitably.

In this context, attitudes, beliefs, and behaviors related to gender in the workplace are important to understand, especially when those attitudes may diverge significantly between the work and home environments. The attitudes, beliefs, and behaviors of heterosexual men toward the women they encounter at work and toward the workplace itself may be influenced by the marriage structure they have at home. Chugh and Brief (2008: 332) considered this possibility in their proposed research agenda for the study of diversity in organizations, wondering if "a domestic traditionalist can also be an organizational egalitarian." In this paper, we put this question to the empirical test and examine how the structure of traditional marriages affects the attitudes, beliefs, and behaviors of men toward women in the workplace. We report the findings of five studies (with a total of 993 married, male participants across all five studies) in which we test hypotheses using secondary data, laboratory data, and longitudinal data from students and managers and from both the U.S. and the U.K.

## IMPLICATIONS OF MARRIAGE STRUCTURES FOR WORKPLACE ATTITUDES

Historically, work and family domains have been gendered, such that men have traditionally been the breadwinners and women have been in charge of the

home and family. Even while women have started to participate more in the workforce (Bureau of Labor Statistics, 2012), many people continue to endorse traditional gender roles (e.g., Hochschild and Machung, 1989; Thompson, 1993; Belsky and Kelly, 1994; Erickson, 2005; Sayer et al., 2009). Gender-role orientation refers to an attitudinal identification with a gendered role and the degree of compliance with role expectations, with traditionalism and egalitarianism at the opposite ends of the continuum (Larsen and Long, 1988; Hochschild and Machung, 1989; Harris and Firestone, 1998; Livingston and Judge, 2008). Traditional conceptions of gender roles are that women ought to fulfill family or private roles and men ought to fulfill work or public roles. Traditionalism is a mindset in which men are expected to have goals consistent with work centrality whereas women are expected to align themselves with family centrality (Lucke, 1998; McCarthy, 1999; Fortin, 2005). Women are thus expected to excel in socially facilitative activities whereas men are expected to excel in task-oriented activities (Eagly and Karau, 1991; Williams et al., 2009). In stark contrast, egalitarianism is a mindset in which gender is unrelated to role centrality, such that men and women can aspire equally to both roles (Gerson, 2004; Fletcher and Bailyn, 2005; Maume, 2006). Within employees' private lives, these gender-role orientations relate to the division of labor that distinguishes traditional marriages, in which the wife is not employed, and dualearner marriages, in which the husband and wife both work full time and share financial responsibility for the family's well-being.

The gender roles that exist in a man's private life may affect his attitudes and behavior toward women in his workplace. According to open-systems theory, organizations are reciprocally interdependent with their environments (in both directions), and thus home environments can shape how we behave at work (Kahn et al., 1964; Katz and Kahn, 1978; Gutek and Cohen, 1987). In other words, the theory questions the assumption that organizations are the primary actors shaping employees' workplace attitudes and behaviors and instead suggests that professional and organizational concerns may possibly have their roots in the deeply personal.

One concept from open-systems theory, the spillover hypothesis (Staines, 1980), elaborates some of the mechanisms through which home environments shape how we behave at work. It suggests that the thoughts, attitudes, and emotions generated at home may carry over to the workplace (Williams and Alliger, 1994; Edwards and Rothbard, 2000). This perspective aligns with research that has shown that people often bring their emotional and attitudinal baggage to the workplace (Scott, 1995; Brief, 1998). For example, religious identity, emerging from the domain of home, can influence the behavior of individuals in organizations in a variety of ways (Chan-Serafin, Brief, and George, 2013; Weaver and Stansbury, 2014). Fittingly, Clark (2000) described employees as daily "border-crossers" between the domains of work and family. Thus, when viewed as an open system, an organization is prone to the influence of structures outside it, and attitudes within an organization are related to attitudes outside it. Based on this open-systems perspective, expectations about gender roles within a marriage should relate to expectations about gender roles within an organization.

Several literatures capture how social structures shape people's thoughts and behaviors, and thus how social structures at home could relate to attitudes at work. Status construction theory (Ridgeway, 2006, 2011) proposes that

routine interpersonal interactions facilitate the emergence of group-based status beliefs through a set of processes that are capable of creating general status beliefs and spreading them widely in a population (Webster and Hysom, 1998; Ridgeway, 2006; Brashears, 2008). These interactions occur after groups have already differentiated themselves based on sex, and thus in traditional marriages, the observations of husbands and wives will be "repeatedly juxtaposed" (Ridgeway, 2011: 47) with one group observed to be earning more money and carrying greater status in the external world. These observations will then shape the expectations that both the husband and the wife form about their respective groups—males and females—and their subsequent assessments of their relative esteem, influence, and competence. Ridgeway (2006) referred to relational contexts that are ripe with status and power differences as the setting in which these expectations are formed. Marriage is not a relational context per se, but it is one with power and status differences among participants. Based on status construction theory, men who observe their wives at home to be in lower-status roles (e.g., non-earning) will also be more likely to view women generally as having lower status than men, which has the potential to influence their attitudes toward women in the workplace.

Social role theory also contributes to understanding the impact of social structures at home on gender ideology at work (e.g., Wood and Eagly, 2002; Eagly and Wood, 2011). Anthropological research (Murdock and Provost, 1973) shows that the division of labor in a society is often sex-typed but that the specific distribution of tasks between the sexes varies considerably across societies based on a variety of factors unique to their culture and geography (Boyd, 1988; Gneezy, Leonard, and List, 2009). Further, from this biosocial perspective, gender ideology reflects the fit between the biological specialization of the sexes and the activities that yield status within a society. For example, a patriarchal society emerges when the activities yielding status in that society conflict with the reproductive activities of women. Patriarchy, as a gender ideology, is neither universal nor predetermined; it emerges from the social structures of that society. Social role theory thus captures the idea that the division of labor between men and women that may exist in a home (and be normative in a culture) shapes the attitudes outside of the home about the relative status held by men versus women.

Structure can also shape the content of stereotypes. Fiske and colleagues demonstrated this phenomenon in their model of how the content of our stereotypes varies systematically along the two dimensions of warmth and competence as a function of the social structures of status and interdependence (Fiske et al., 2002; Fiske, Cuddy, and Glick, 2007). They argued that the presence or absence of these social structures shapes the social psychology of the actors within them. Building on this work, DiTomaso and colleagues (DiTomaso et al., 2007) examined the influence of these social structures on managers' performance evaluations of scientists and engineers and found that the structure of a status hierarchy predicts performance evaluations. We are proposing a similar relationship between social structure (marriage structure) and attitudes (the husband's attitudes, beliefs, and behaviors in and about the workplace).

Work on homosocial reproduction (Kanter, 1977) also supports the idea that social structures influence how people think and behave. According to this theory, trust between managers is critical. When decision makers interact with

similar individuals, trust emerges more easily, while diversifying the managerial ranks requires more effort in assessing trustworthiness and building trusting relationships. Thus the managerial ranks remain homogenous, essentially replicating homogeneously. This structural outcome leads to a self-fulfilling prophecy in which the managers view those unlike themselves as less trustworthy. Thus social structures translate into sources of opportunity (e.g., mobility prospects), and power and gender are often sorting mechanisms that account for the organizational placement of individuals (Kanter, 1976). Though the social structure referred to in this theory is embedded more broadly in society rather than in the home, nonetheless it offers broad support for how social structures may influence organizational processes and outcomes.

Further, Tracy and Rivera's (2010: 5) qualitative analysis of interviews of male executives also offers support; the authors noted that the executives' family structures were "closely connected to a generalized hesitancy about progressive work-life policy and women's participation in the public sphere" and that when asked to comment on work-life policy in the organization, participants tended to refer to their personal beliefs and marriage structures. These qualitative data offer theoretical grounding for our expectation that marriage structure will relate to husbands' attitudes toward women in the workplace. We hypothesize generally that husbands embedded in traditional marriages, compared with the average of all married men, will exhibit attitudes, beliefs, and behaviors that undermine the role of women in the workplace.

We tested our hypothesis in five studies in which we examined attitudes toward women in the workplace, perceptions of organizational efficiency as a function of the number of women in the workplace, and judgments about promotional opportunities for qualified female employees. Online Appendix A (http://asq.sagepub.com/suppl) cross-tabulates the average age, income, number of children, and education of the men in our samples by their marriage structure across all five studies. The studies rely on a variety of methodologies (archival, survey, laboratory experiment, and longitudinal analysis) with the intent of enhancing generalizability.

## STUDY 1: MARRIAGE STRUCTURES AND ATTITUDES TOWARD WORKING WOMEN

We began our investigation in Study 1 by examining whether marriage structure is correlated with attitudes toward women in the workplace. Specifically, we hypothesized:

**Hypothesis 1:** Men in traditional marriages are more likely to have negative attitudes toward women in the workplace when compared with the average of all married men.

#### Method

Data and respondents. Data were drawn from the General Social Survey (GSS), the U.S. national probability survey of non-institutionalized adults, administered most years since 1972 by the National Opinion Research Center and available through the Interuniversity Consortium of Political and Social Research (ICPSR; Davis, Smith, and Marsden, 2006). The GSS provides information on individual views and opinions spanning a variety of topics (Firebaugh

and Davis, 1988). We relied on data for the year 1996, a year that contained survey items related to our predictor and criterion variables. We included only heterosexual, married men in our sample because we were interested in the association between heterosexual marriage structures and men's attitudes toward working women. Our final sample size consisted of 282 men who were married and employed full time.

Criterion variable: Attitude toward working women. We measured attitude toward working women with five items that were averaged to yield a score (Cronbach's  $\alpha$  = .70). Items were "Women should not work" (1 = approve, 2 = disapprove), "Wife should help husband's career first" (1 = strongly agree to 4 = strongly disagree), "It is better for man to work and woman to tend to home" (1 = strongly agree to 4 = strongly disagree), "Man alone should be responsible for providing household income" (1 = yes, 2 = no), and "If a mother chooses to work, it doesn't hurt the child" (1 = strongly agree to 4 = strongly disagree). We reverse-coded the first four items so that a higher score reflected a more positive attitude toward working women. We used the average of all items as our measure of attitude toward working women.

Predictor variable: Marriage structure. We used effect coding to code three marriage structures: traditional (wife not employed), semi-traditional (wife works part time), and dual-earner marriage structure. Given that we had three categories, effect coding is the optimal coding strategy because it enables us to know how each group is doing relative to the average across all groups (Cohen and Cohen, 1983; Pedhazur and Schmelkin, 1991; Hardy, 1993; Aiken and West, 1996; DiTomaso et al., 2007). Note that the variance explained stays the same whether a researcher uses effect coding or dummy coding; however, the interpretation of the coefficients changes such that instead of comparing how a group is doing relative to the omitted group (as in the case of dummy coding), effect coding enables us to know how a group is doing relative to the average (Cohen and Cohen, 1983). In using effect coding, each categorical variable is given a value of 1 if the respondent is a member of the group, -1 if the respondent is a member of the omitted group, and 0 otherwise. We created two groups, one for dual-earner marriage structures and another for traditional marriage structures, with semi-traditional marriage structures as the omitted group.

Control variables. We included each participant's age, education, income (annual income in USD), whether the respondent's mother was a stay-at-home mother (dummy coded 1 for working mothers and 0 for stay-at-home mothers), mother's education, number of children, religion, and race to control for potential demographic effects that might be associated with attitude toward working women. We coded participants' education as a continuous variable ranging from 1 (less than high school) to 4 (graduate degree). Likewise, we coded participants' mothers' education as a continuous variable from 1 (less than high school) to 4 (graduate degree). We converted income from a categorical to

<sup>&</sup>lt;sup>1</sup> We also used the equally weighted average in our analysis to check the robustness of our findings, and our results remained unchanged.

continuous format by using the midpoints of the survey's closed categories as the appropriate scores for those categories. For the open-ended top category, we extrapolated from the next-to-last category's midpoint using the frequencies of both the next-to-last and the last open-ended categories in a formula based on the Pareto curve (Hout, 2004). We coded religion using four dummy variables for Protestantism, Judaism, Catholicism, and no religion. The omitted category included other religions such as Hinduism and Buddhism. Race was coded using two dummy variables for blacks and whites. The omitted category included other races such as Asians and Hispanics.

#### Results

To test our hypothesis that marriage structure is correlated with attitude toward working women, we conducted a regression analysis with attitude toward working women as the criterion variable, using the control variables and predictor variables: dual-earner marriage structure and traditional marriage structure. The results of the regression are provided in table 1. $^2$  Importantly, as predicted, traditional marriage structure was negatively correlated with attitude toward working women (p < .05), whereas dual-earner marriage structure was positively correlated (p < .05). In other words, compared with the average of all married men, men in traditional marriages were more likely to endorse a negative attitude about women participating in the workforce.

We used an econometric model to analyze the robustness of our results to self-selection biases. As a preliminary step, we examined the impact of

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Table I.	Regression	Anaivsis o	ot Attitude i	toward vvorkind	ı vvomen.	Stuav i

Variable	В	S.E.	t	р
Constant	2.28	0.20	11.27	0.00
Age	0.00	0.00	-0.12	0.90
Education	0.04	0.02	1.86	0.06
Income	0.00	0.00	0.96	0.34
Mother's employment	-0.04	0.03	-1.46	0.15
Mother's education	0.00	0.01	0.27	0.79
Number of children	-0.03	0.02	-1.44	0.15
Religion: Protestant	-0.16	0.15	-1.05	0.29
Religion: Catholic	-0.15	0.15	-0.96	0.34
Religion: Jewish	0.12	0.20	0.58	0.56
Religion: none	0.05	0.16	0.28	0.78
Race: white	0.07	0.11	0.63	0.53
Race: black	0.29	0.14	2.03	0.04
Dual-earner marriage structure	0.15	0.04	4.12	0.00
Traditional marriage structure	-0.16	0.05	-3.06	0.00
Model F	4.33			
$R^2$ (%)	0.18			
Adjusted R <sup>2</sup> (%)	0.14			

<sup>\*</sup> All tests of variables are two-tailed (N = 282). Beta coefficients are unstandardized.

<sup>&</sup>lt;sup>2</sup> Our results remained unchanged when we used additional control variables such as geographic location and political affiliation.

self-selection on the effect of marriage structure by estimating a treatment-effects model in which the selection equation models men's propensity to be in different marriage structures and the substantive equation models the effect of the marriage structure "treatment" on men's attitudes toward working women. The model was estimated using Heckman's (1979) two-step approach. Heckman's approach requires the application of exclusion restrictions to at least one variable, which is included in the first-stage selection model but can legitimately be excluded from the second-stage regression because it is uncorrelated with the outcome. We identified one such instrumental variable, *general happiness*, that was correlated with men's choice to be in traditional, semi-traditional, or dual-earner marriages but not with attitudes toward working women. The key result of interest was that, even after correcting for self-selection, traditional marriage structure was negatively correlated with attitude toward working women.

Table 1 also shows that black men had significantly more positive attitudes toward working women than did other minorities (p < .05). Past research on racial differences in attitudes toward women's gender roles has produced similar results (e.g., Cazenave, 1983; Blee and Tickamyer, 1995; but see Welch and Sigelman, 1989; Wilke, 1993). Past research also suggests that black men follow suit with their mothers who endorse a positive attitude about working women, an attitude that is in keeping with black mothers' larger likelihood of being employed to provide for their households (Blee and Tickamyer, 1995).

These results were obtained from people in a wide variety of organizations and jobs. Our robustness checks reduce the potential threat of omitted variables bias, but the results are subject to the shortcomings commonly associated with secondary data, and the correlations between key variables may have been inflated due to the study's reliance on self-reported data. Also, we cannot rule out reverse causality. Nonetheless, while these results must be interpreted cautiously, they offer support for hypothesis 1 by showing that marriage structures are correlated with married, heterosexual men's attitudes toward working women.

## STUDY 2: MARRIAGE STRUCTURES AND PERCEIVED SMOOTHNESS OF WORKPLACE OPERATIONS

In this study, we explored whether heterosexual, married men with different marriage structures respond differently to the presence of women in the workplace. Specifically:

**Hypothesis 2:** Men in traditional marriages perceive that their workplace operates less smoothly when more women are present in their workplace, as compared with the average of all married men.

#### Method

Data and respondents. Data were drawn from two 2002 national surveys: the GSS (Davis, Smith, and Marsden, 2006) and the National Organizations Survey (NOS; Kalleberg et al., 1996). For the NOS, the employers of some of the GSS respondents were contacted and asked about the employment practices in their firms. The combined GSS-NOS data link organization-level

information on human resource practices and organizational demographics with the individual responses of GSS respondents. In addition, we included only married, heterosexual men who worked full time. The final sample of complete observations included 89 full-time male employees from the linked 2002 GSS-NOS.

**Criterion variable:** Perceived smoothness of workplace operations. The perceived smoothness of workplace operations was measured using a single item asking respondents whether their workplace was run in a smooth manner (1 = strongly agree to 4 = strongly disagree). We reverse-coded the item so that a higher score reflected a more positive perception of the smoothness of workplace operations.

**Predictor variable:** *Marriage structure.* We used the same procedure as in Study 1 and, using effect coding, created two groups: one for dual-earner marriage structures and another for traditional marriage structures, with semitraditional marriage structures as the omitted variable. In each of these categorical variables, a value of 1 was assigned if the respondent was a member of the group, -1 if the respondent was a member of the omitted group, and 0 otherwise.

**Predictor variable:** Percentage of women in the workplace. The NOS dataset contained information about the percentage of women in the workplace.

Control variables. We included each respondent's age, education, income, whether the respondent's mother was a stay-at-home mother, and the respondent's mother's level of education in the analyses to control for potential demographic effects that might be associated with a respondent's attitude toward women in the workplace. We also controlled for the number of children, religion, and race. All of these variables were coded in the same way as in Study 1. Lastly, we also controlled for workplace-specific variables such as whether the enterprise was government owned (coded 1) or private (coded 0), whether it was for-profit (coded 1) or not (coded 0), whether the organization had any stress-relief programs for employees (coded 1 for "yes," and 0 for "no"), and also the occupational prestige (measured on a scale ranging from 1 to 100, with smaller numbers indicating more prestige).

#### Results

To test our hypothesis that marriage structure and percentage of women in the workplace will interact to influence respondents' perceptions of smoothness of workplace operations, we conducted a regression analysis with perceived smoothness of workplace operations as the criterion variable, entering the control variables, predictor variables—dual-earner marriage structure, traditional marriage structure, and percentage of women in the workplace—and their two-way interactions. The results of the regression are provided in table 2. As expected, the regression coefficient for the interaction between traditional

Table 2.	Regression	Analysis of	Perceived	Smoothness	of Workplace	Operations,	Study 2*

Variable	В	S.E.	t	р
Constant	3.16	1	3.16	0
Age	-0.02	0.01	-2.04	0.05
Education	-0.1	0.1	-1.01	0.32
Income	0	0	0.44	0.66
Mother's employment	0.01	0.12	0.06	0.95
Mother's education	0	0.07	-0.01	0.99
Percentage of women in the workplace	0.01	0	3.26	0
Number of children	0.12	0.07	1.68	0.1
Religion: Protestant	-0.42	0.63	-0.66	0.51
Religion: Catholic	-0.62	0.62	-1	0.32
Religion: Jewish	-0.3	1.05	-0.29	0.77
Religion: none	-0.33	0.63	-0.52	0.6
Race: white	-0.03	0.4	-0.06	0.95
Race: black	0.14	0.54	0.26	0.79
Enterprise: government or private	0.16	0.49	0.33	0.74
Occupational prestige	-0.01	0.01	-1.01	0.32
Organization: for-profit or not	-0.01	0.48	-0.02	0.99
Organization: stress-relief programs present or not	-0.03	0.19	-0.17	0.87
Dual-earner marriage structure	0.13	0.18	0.71	0.48
Traditional marriage structure	-0.47	0.23	-2.05	0.05
Two-way interaction (Dual-earner marriage structure × Percentage of women in the workplace)	0.01	0	1.37	0.17
Two-way interaction (Traditional marriage structure × Percentage of women in the workplace)	-0.01	0.01	-2.71	0.01
Model F	2.38			
R <sup>2</sup> (%)	0.26			
Adjusted R <sup>2</sup> (%)	0.09			

<sup>\*</sup> All tests of variables are two-tailed (N = 89). Beta coefficients are unstandardized.

marriage structure and percentage of women in the workplace was significant (p < .05). To illustrate the nature of the two-way interaction, using standardized values, we graph in figure 1 the predicted values of the dependent variable at one standard deviation above and one standard deviation below the means for the predictor variable, percentage of women in the workplace (Aiken and West, 1991). As depicted in figure 1, we observed that men in traditional marriage structures were less likely to report that their workplace was running smoothly when the percentage of women in their workplace was high versus low, thus supporting hypothesis 2.

These results were obtained from people from diverse organizations and jobs and are in keeping with the pattern of results obtained in Study 1. The use of a single item in the perception of smoothness of workplace operations measure is a limitation of this study, but the GSS does not include additional items. The results are also subject to the shortcomings usually associated with small sample size, and the study is based on self-reported data. Despite these shortcomings, the results cast a new light on how male employees' marriage structures may relate to how they react to the presence of women in their workplace.

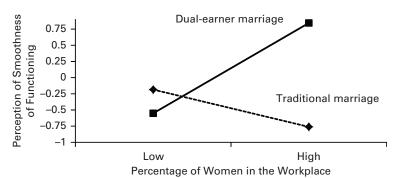


Figure 1. Marriage structure, percentage of women in the workplace, and men's perceptions of smoothness of workplace operations, Study 2.

## STUDY 3: MARRIAGE STRUCTURES AND ATTRACTIVENESS OF ORGANIZATIONS WITH WOMEN LEADERS

The results from Studies 1 and 2 indicate that marriage structures predict how egalitarian men are. Because both studies were conducted using secondary data, however, we cannot rule out reverse causality entirely. Therefore we conducted a controlled quasi-experiment using male undergraduate students who were married, working full time, and seeking new employment upon graduation. In this study, we explored whether heterosexual, married men with different marriage structures respond differently to the presence of women in the workplace. Specifically:

**Hypothesis 3:** Compared with the average of all married men, men from traditional marriages are less attracted to organizations with female leaders.

#### Method

Eighty-nine married, male undergraduate students were recruited from a large western university in the U.S. We employed a between-subjects design with one manipulated variable, *gender-diversity salience* (high vs. low), and one measured variable, *marriage structure*. Participants evaluated a recruitment letter from a fictional company named INDISCO. The letter was adapted from a recruitment letter previously used by James et al. (2001) and contained the independent variable manipulation, gender-diversity salience. Participants were told that their help was needed to evaluate the letter because individuals like them would be the intended recipients of the letter, and researchers therefore were particularly interested in their reactions to it. Their assessment of the letter included the dependent variable, *organizational attractiveness*.

The recruitment letter contained a paragraph introducing the fictional company, INDISCO, followed by a number of facts about the company and a paragraph asking those interested in the company to call and schedule an interview. The majority of the information contained in the recruitment letter was filler material to make it seem realistic and to disguise the true purpose of the study. For instance, the recruitment letter provided information regarding

INDISCO's stock ownership plan, fringe benefits programs, management participation, and education programs.

Gender-diversity salience. We manipulated gender-diversity salience in part by embedding in the letter the ostensibly male recruiters' names of Michael Drake, Christopher McBride, and Matthew Miller or the ostensibly female recruiters' names of Jennifer Drake, Amanda McBride, and Jessica Miller. Participants were assigned randomly to one of the two conditions, i.e., they either saw only female recruiters' names or only male recruiters' names.

We reinforced the gender-diversity-salience manipulation by embedding a description of INDISCO's board of directors in the letter. Participants in the manipulated condition read, "INDISCO's equal employment opportunity programs ensure that *all employees* can get ahead in our company. For example, representation of women on our board of directors far exceeds the average representation of women in Fortune 500 companies." In the control condition, they read, "INDISCO's equal employment opportunity programs ensure that *all employees* can get ahead in our company."

Organizational attractiveness. After reading the recruitment letter, participants were asked to respond to seven items, similar to those of Umphress et al. (2007), regarding the attractiveness of INDISCO as a potential employer (Cronbach's  $\alpha=.85$ ). Examples of these items are "How attractive is INDISCO as a potential employer to you?" and "Would you schedule an interview with INDISCO?" Participants responded to these items using 7-point Likert-type scales, with higher values indicating that participants were more attracted to the company. These seven items were averaged to yield an organizational attractiveness score, with larger numbers indicating a more attractive organization.

**Predictor variable:** *Marriage structure.* We used the same procedure as in Studies 1 and 2 and, using effect coding, created two groups: one for dualearner marriage structures and another for traditional marriage structures, with semi-traditional marriage structures as the omitted variable. For each of these categorical variables, we assigned a value of 1 if the respondent was a member of the group, –1 if the respondent was a member of the omitted group, and 0 otherwise.

**Independent variable:** *Gender-diversity salience.* We created a dummy variable for gender-diversity salience that was coded 1 for high and 0 for low.

Control variables. We included each participant's age, whether the respondent's mother was a stay-at-home mother (dummy coded 1 for working mothers and 0 for stay-at-home mothers), and the respondent's mother's level of education (ranging from 1 for high school education to 6 for doctoral degree) in the analyses to control for potential demographic effects that might be associated with a respondent's attitude toward women in the workplace. We also controlled for race by creating two dummy variables for white and Hispanic groups (with the omitted group comprising blacks, Native Americans, and others), and we controlled for number of children. In addition, we controlled for religion by creating two dummy variables for Christians and those without any

religious affiliation (with the omitted group comprising Hindus, Buddhists, and others).<sup>3</sup>

#### Results

The effectiveness of the gender-diversity salience manipulation was assessed with an independent sample of 35 undergraduate students enrolled in business classes. These individuals were randomly assigned to read the recruitment letter with either high or low gender-diversity salience. Afterward, they responded to the manipulation check item "INDISCO is a gender-diverse organization" using a 7-point Likert-type scale (1 = strongly disagree and 7 = strongly agree). An ANOVA indicated that the manipulation was successful, F(1,37) = 74.1, p < .01: those in the high gender-diversity-salience condition were more likely to agree that INDISCO was a gender-diverse organization (mean = 6.27) compared with those in the low gender-diversity-salience condition (mean = 4.33).

We performed regression analysis (Cohen and Cohen, 1983) to test our hypothesis that, compared with the average of all married men, those in traditional marriages would be less attracted to more gender-diverse organizations (i.e., companies with female recruiters' names as well as higher-than-average female representation on boards of directors). Specifically, we conducted a regression analysis with organizational attractiveness as our criterion variable, entering the control variables, predictor variables—dual-earner marriage structure, traditional marriage structure, and gender-diversity-salience—and their two-way interactions. The results of the regression are provided in table 3. As

Table 3. Regression Analysis of Organizational Attractiveness, Study 3\*

Variable	В	S.E.	t	р
Constant	5.21	1.32	3.95	0.00
Age	-0.04	0.05	-0.88	0.38
Mother's employment	-0.15	0.27	-0.55	0.58
Mother's education	0.03	0.08	0.32	0.75
Race: white	0.23	0.40	0.59	0.56
Race: Hispanic	0.35	0.84	0.41	0.68
Number of children	-0.01	0.17	-0.07	0.95
Religion: Christian	0.09	0.30	0.28	0.78
Religion: none	0.25	0.35	0.72	0.47
Dual-earner marriage structure	-0.36	0.23	-1.53	0.13
Traditional marriage structure	0.07	0.25	0.29	0.77
Gender-diversity salience	-0.35	0.26	-1.38	0.17
Two-way interaction (Dual-earner marriage structure × Gender-diversity salience)	1.67	0.32	5.18	0.00
Two-way interaction (Traditional marriage structure × Gender- diversity salience)	-1.84	0.42	-4.43	0.00
Model F	4.32			
$R^2$ (%)	0.44			
Adjusted R <sup>2</sup> (%)	0.38			

<sup>\*</sup>All tests of variables are two-tailed (N = 89). Beta coefficients are unstandardized.

<sup>&</sup>lt;sup>3</sup> We did not include education and income as control variables because of insufficient variance on these variables.



Figure 2. Marriage structure, gender-diversity salience in the workplace, and men's perceptions of organizational attractiveness, Study 3.

expected, the regression coefficient for the two-way interaction term between salience of gender diversity and traditional marriage structure was significant (p < .001). Moreover, the two-way interaction term for dual-earner marriage was also significant (p < .001). As depicted in figure 2, we observed that men in traditional marriages found more gender-diverse organizations less attractive.

The results from Study 3 once again demonstrate that marriage structures matter. The quasi-experimental nature of the study suggests that men in traditional marriage structures are less likely to be attracted to organizations that espouse egalitarian gender attitudes, thus supporting hypothesis 3.

## STUDY 4: MARRIAGE STRUCTURE AND PROMOTION OF FEMALE EMPLOYEES

In Study 4, we examined whether compared with the average of all married men, men in traditional marriage structures would more actively engage in behaviors that would prevent women in the organization from advancing their careers. A second goal of the study was to examine our hypothesis using a sample of men who might be accustomed to making important decisions: managers. To this end, we conducted a controlled quasi-experiment using a convenience sample of male managers who were married and working full time. In this study, we tested the following hypothesis:

**Hypothesis 4:** Compared with the average of all married men, men in traditional marriages are more likely to deny qualified female employees opportunities for promotion.

#### Method

Our convenience sample consisted of 232 married, male managers who were recruited from an accounting association in the western U.S. Participants were recruited to participate in an online study investigating how decision makers form opinions about the leadership potential of others. We adapted an online

simulation previously used by Chan-Serafin and colleagues (Chan-Serafin et al., 2005) in which we manipulated the gender of the potential leader. In this simulation, participants assumed the role of "Drew Anderson," chief financial officer (CFO) of a fictitious software company, "Infomitex." In part 1 of the simulation, the participants learned about Infomitex and the MBA program it sponsored, as well as about Drew Anderson and a candidate being considered for the MBA program. The Infomitex-sponsored MBA program was presented as a highly important and sought-after opportunity, offering full salary plus full tuition coverage at a full-time MBA program of the employee's choosing. Upon completion of the degree, the individual would receive a promotion to vice president.

Participants then viewed the resume of a candidate for this employer-sponsored MBA program. In the control condition, participants viewed a resume with the name David Blake, while in the experimental condition, participants viewed a resume with the name Diane Blake. The resumes were otherwise identical in both conditions: 25-year-old candidate with exemplary experience and award-winning leadership abilities.

In part 2, participants were told that the candidate was one of several promising nominees for the program, each of whom had been interviewed by the CEO. The CEO was now asking for the CFO's (the participant's) input. Participants were told that Drew, the CFO, had participated in and benefited from this program and that it was important to make an accurate assessment of the candidates. Furthermore, Drew was motivated to impress the CEO and felt that the future performance of the candidate would reflect on Drew. In part 3, participants completed assessments of the candidate. In part 4, they completed a demographic questionnaire.

**Dependent variable:** Recommendation. Participants responded to 14 items using a 7-point Likert scale assessing whether the candidate ought to be recommended for the company-sponsored MBA program. The items are presented in online Appendix B. Responses to the items were averaged to create a score, with higher numbers representing a stronger recommendation for the candidate (Cronbach's  $\alpha = .74$ ).

**Predictor variable:** *Marriage structure.* We used the same procedure as in Studies 1 through 3 and, using effect coding, created two groups: one for dual-earner marriage structures and another for traditional marriage structures, with semi-traditional marriage structures as the omitted variable. For each of these categorical variables, a value of 1 was assigned if the respondent was a member of the group, -1 if the respondent was a member of the omitted group, and 0 otherwise.

**Independent variable:** Gender of candidate. We created a dummy variable for the gender of the candidate that was coded 1 for female and 0 for male.

Control variables. We included each participant's age, income, whether the participant's mother was a stay-at-home mother (dummy coded 1 for working mothers and 0 for stay-at-home mothers), and the participant's mother's

level of education (ranging from 1 for high school education to 6 for doctoral degree) in the analyses to control for potential demographic effects that might be associated with a participant's attitudes toward women in the workplace. We again controlled for the number of children, but we also controlled for the number of daughters the participant had because we suspected that having daughters would liberalize the gender attitudes of fathers, in light of recent research suggesting that the birth of daughters increases fathers' support for feminist views (Warner, 1991; Washington, 2008; Oswald and Powdthavee, 2010). In addition, we controlled for religion by creating a dummy variable for Christians (with the omitted group comprising Hindus, Buddhists, those without any religious affiliation, and others).

#### Results

Manipulation check. The effectiveness of the gender manipulation was assessed with an independent sample of 33 undergraduate students enrolled in business classes. These individuals were randomly assigned to read the resume with either the name Diane or David Blake. Afterward, they responded to the manipulation check item, "Was the candidate male?" (1 = yes and 0 = no). A chi-square analysis indicated that the manipulation was successful,  $\chi^2(1, 32) = 25.48$ , p = .000: those shown the name of David were more likely to answer "yes," the candidate was male (15 out of 16) compared with those shown the name of Diane (1 out of 17). Although we had already controlled for the candidate's capability by providing participants in both conditions with the same qualification information, we nevertheless wanted to ensure that any provision of training opportunities was due to the gender manipulation, independent of participants' perceptions of the candidate's capability. Hence we asked the same group of undergraduate students to rate on a 7-point scale (1 = strongly disagree to 7 = strongly agree) the extent to which they agreed that the candidate was capable. There were no significant differences based on the gender of the candidate.

Hypothesis testing. We conducted a moderated regression analysis (Cohen and Cohen, 1983; Stone and Hollenbeck, 1989) with recommendation as our criterion variable, entering the control variables, predictor variables—gender of the candidate and dual-earner marriage structure and traditional marriage structure—and their two-way interaction terms. The results of the regression are provided in table 4. The hypothesized two-way interaction effect between gender of the candidate and traditional marriage structure on participants' recommendation was observed (p < .01) and is illustrated in figure 3. As seen in the graph, men in traditional marriages evaluated female employees more negatively than male employees. Overall, these findings are consistent with hypothesis 4 and suggest that men in traditional marriages are more likely to deny qualified women opportunities for promotion at work.

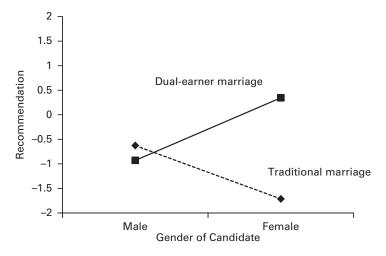
<sup>&</sup>lt;sup>4</sup> We did not include education and income as control variables because of insufficient variance in these variables across our participants.

Table 4. Regression Analysis of Recommendations, Study 4\*

Variable	В	S.E.	t	р
Constant	5.28	0.19	27.45	0.00
Age	0.00	0.01	0.35	0.73
Income	0.00	0.00	-0.29	0.77
Mother's employment	-0.08	0.13	-0.60	0.55
Mother's education	0.12	0.10	1.17	0.24
Number of children	0.01	0.03	0.28	0.78
Daughter	0.11	0.06	1.68	0.09
Religion: Christian	0.02	0.06	0.31	0.76
Gender of candidate	0.04	0.06	0.60	0.55
Dual-earner marriage structure	-0.89	0.07	-13.65	0.00
Traditional marriage structure	-0.61	0.07	-9.17	0.00
Two-way interaction (Dual-earner marriage structure × Gender of candidate)	1.63	0.09	18.62	0.00
Two-way interaction (Traditional marriage structure × Gender of candidate)	-1.38	0.09	-15.66	0.00
Model F	36.68			
R <sup>2</sup> (%)	0.37			
Adjusted R <sup>2</sup> (%)	0.35			

<sup>\*</sup> All tests of variables are two-tailed (N = 232). Beta coefficients are unstandardized.

Figure 3. Marriage structure, gender of the candidate, and recommendation, Study 4.



Additionally, men in dual-earner marriages evaluated male employees more poorly than female employees, an interesting finding that we did not hypothesize. Also, we did not obtain any significant effect of having daughters on the respondents' recommendation of a female candidate. We performed additional regression analyses by including a two-way interaction between gender of candidate and number of daughters but did not obtain any significant effect of having daughters on the respondents' recommendation of a female candidate.

## STUDY 5: LONGITUDINAL ANALYSIS OF MARRIAGE STRUCTURES AND ATTITUDES TOWARD WORKING WOMEN

The findings from Studies 1 through 4 demonstrate that marriage structure relates to attitudes toward women. But the conclusions that can be drawn from these studies are somewhat limited because they were all conducted in the U.S. and, moreover, were cross-sectional, and thus reverse causality cannot be ruled out. When there are repeat observations of the same individuals, however, it is possible to investigate potential longitudinal relationships and begin to understand how marriage structures and attitudes toward working women might co-evolve. Thus we examined a longitudinal data set in an effort to enhance external validity by using a nationally representative, non-U.S. sample and applying methods that minimize the influence of confounders. Specifically, we relied on panel data of people in the United Kingdom to examine the link between marriage structure and attitudes toward working women. We examined how becoming married to a woman who eventually stays at home or works outside the home might lead to changes in a man's attitude toward working women.

The purpose of this study was twofold. First, we wanted to examine changes in one segment of men who were single in the first wave and had become married in the next to examine their attitudes toward working women as they transitioned from being single to becoming embedded in traditional or dual-earner marriage structures. Second, we wanted to examine whether the findings obtained in Studies 1 through 4 would generalize to a non-U.S. sample. Our hypothesis was as follows:

**Hypothesis 5:** Entering a traditional marriage structure will lead men to develop less favorable attitudes toward working women.

#### Method

Data and respondents. The data were extracted from the British Household Panel Survey or BHPS, a longitudinal survey that has been conducted every year since 1991. Every other year, the BHPS also includes a "Living in Britain" survey, in which respondents are asked to complete a confidential questionnaire that includes, among other subjects, a number of statements related to gender roles. We included data for the years 1991 and 1993, two years that included survey items related to our predictor and criterion variables. We included in our sample only those heterosexual, full-time-employed men who were single in 1991, got married before the next wave of data collection, and had answered the gender-related questions in both years, because we were interested in studying the influence of the nature of marriage structure on changes in men's attitudes toward working women. Our final sample size consisted of 304 men. Of these, 87.17 percent changed their gender attitudes between the two waves.

**Criterion variable:** Attitude toward working women. Attitude toward working women was measured using a Likert scale (1 = strongly agree to 5 = strongly disagree) with five items that were averaged to yield a score (Cronbach's  $\alpha = .72$ ). The items were "Husband and wife should both

contribute to household income,""Husband should earn, wife should stay at home,""Pre-school child suffers if mother works,""Family suffers if woman works full time," and "Woman and family are happier if she works." We reverse-coded the second, third, and fourth items so that a higher score reflected a more positive attitude toward working women. We used the average of all items as our measure of attitude toward working women.

**Predictor variable:** *Marriage structure.* We created two groups, one for those single men who entered dual-earner marriage structures in the second wave and another for those who entered traditional marriage structures in the second wave, with those entering semi-traditional marriage structures as the omitted category. For each of these categorical variables, a value of 1 was assigned if the respondent was a member of the group, –1 if the respondent was a member of the omitted group, and 0 otherwise.

Control variables. As before, we included each respondent's age, education (using two dummy variables—one for the first degree or equivalent and another for other higher qualifications, with the omitted category being all other qualifications), income (gross pay per month), and whether the respondent's mother was a stay-at-home mother (coded 1 for yes) in the analyses to control for potential demographic effects that might be associated with attitude toward working women. Additionally, we controlled for number of children and for religious allegiance (using three dummy variables—one for no religion, one for Protestants, and one for Catholics, with the omitted category being all other religions).

#### Results

First, we wanted to examine whether existing attitudes toward working women would predict the kind of marriage structures the men in our sample would select. To this end, we performed a multinomial logistic regression analysis to predict marriage structure using attitude toward working women collected in the first wave as our predictor variable. The results are presented in table 5. As can be seen from the table, a test of the full model against a constant-only model was statistically significant, indicating that the predictors as a set reliably distinguished between different marriage structures. Nagelkerke's R<sup>2</sup> of .12 indicated only a weak relationship between prediction and grouping. The Wald criterion demonstrated that only age made a significant contribution to predicting whether men were in dual-earner marriages, with younger men more likely to marry working women. Education made a significant contribution to predicting whether men were in traditional marriages, with men having "other higher qualification" more likely to marry stay-at-home women. Attitude toward working women in wave A was not a significant predictor of marriage structure.<sup>5</sup>

We conducted a multiple regression analysis with change in attitude toward working women as the criterion variable, using the control variables and the

<sup>&</sup>lt;sup>5</sup> Other higher qualifications included City and Guilds Certificate (Full Technological/Part III); HNC, HND, BEC/TEC/BTEC higher certificate/diploma; university diploma; any other technical or professional qualifications.

Table 5. Multinomial Logistic Regression Examining Whether Attitude toward Working Women in Wave A Predicts Marriage Structure, Study 5

		Dual-earner Marriage Structure						Traditional Marriage Structure				
Variable	В	S.E. <i>B</i>	Wald's χ²	d.f.	р	e <sup>B</sup> (odds ratio)	В	S.E. <i>B</i>	Wald's χ²	d.f.	р	e <sup>B</sup> (odds ratio)
Constant	3.79	1.14	10.99	1.00	0.00		0.23	1.32	0.03	1.00	0.86	
Age	-0.05	0.01	10.57	1.00	0.00	0.95	0.00	0.02	0.01	1.00	0.92	1.00
Education: first degree or equivalent	-0.11	0.42	0.07	1.00	0.79	0.89	0.13	0.50	0.07	1.00	0.80	1.14
Education: other higher qualification	0.15	0.37	0.16	1.00	0.69	1.16	0.87	0.40	4.77	1.00	0.03	2.39
Income (monthly)	0.00	0.00	3.28	1.00	0.07	1.00	0.00	0.00	0.54	1.00	0.46	1.00
Mother's employment	-0.37	0.30	1.54	1.00	0.22	1.45	-0.46	0.36	1.67	1.00	0.20	1.58
Religion: none	0.26	0.55	0.22	1.00	0.64	1.29	-0.44	0.58	0.57	1.00	0.45	0.65
Religion: Protestant	0.34	0.61	0.31	1.00	0.57	1.41	-0.23	0.65	0.13	1.00	0.72	0.79
Religion: Catholic	-0.19	0.66	0.08	1.00	0.77	0.83	-1.04	0.76	1.86	1.00	0.17	0.35
Attitude toward working women in wave A	-0.42	0.26	2.62	1.00	0.11	0.66	-0.13	0.30	0.17	1.00	0.68	0.88
Goodness-of-fit test $\gamma^2$			33.96	18	0.01							
Cox and Snell R <sup>2</sup>	= 0.11											
Nagelkerke R <sup>2</sup>	= 0.12											

predictor variable, marriage structure. The results of the regression are provided in table 6. Consistent with our hypothesis, the older respondents were more likely to grow even more conservative in their attitude toward working women. More importantly, as we predicted, entry into a traditional marriage structure was negatively related to change in attitude toward working women, whereas entry into a dual-earner marriage structure had a positive impact on change in attitude toward working women. In other words, men who entered traditional marriages were likely to experience a subsequent negative change in attitude toward women participating in the workforce. Figure 4 illustrates this effect.

Additionally, we checked the validity of our analyses by using the same predictor variables and the same type of model to predict a random attitude variable—attitude toward health care—which should not, in theory, be linked to marriage. Attitude toward health care was measured using a single item, "Health care should be free," which was measured on a Likert scale (1 = strongly agree to 5 = strongly disagree). We conducted a multiple regression analysis with change in attitude toward health care as the criterion variable, using the control variables and the predictor variable, marriage structure. Importantly, entry into a traditional marriage structure was not related to change in attitude toward health care (B = 0.07, not significant), nor was entry

Table 6. Analysis of Change in Attitude toward Working Women, Study 5\*

Variable	В	S.E.	t	p
Constant	0.38	0.31	1.21	0.23
Age	-0.01	0.01	-1.72	0.09
Education: first degree or equivalent	0.12	0.15	0.78	0.44
Education: other higher qualification	-0.04	0.13	-0.32	0.75
Income	0.00	0.00	1.33	0.18
Mother's employment	0.09	0.11	0.85	0.40
Number of children	-0.08	0.06	-1.45	0.15
Religion: none	-0.23	0.19	-1.22	0.22
Religion: Protestant	0.08	0.21	0.38	0.70
Religion: Catholic	-0.24	0.24	-1.01	0.31
Dual-earner marriage structure	0.41	0.07	5.84	0.00
Traditional marriage structure	-0.32	0.08	-3.82	0.00
Model F	5.32			
$R^{2}$ (%)	0.18			
Adjusted R <sup>2</sup> (%)	0.14			

<sup>\*</sup> All tests of variables are two-tailed (N = 304). Beta coefficients are unstandardized.

Figure 4. Effect of entering into a traditional or dual-earner marriage structure on change in men's attitudes toward working women (Study 5).



into a dual-earner marriage structure positively related to change in attitude toward health care (B=0.09, not significant). Because our analysis did not yield a significant association between marriage structure and attitude toward health care (a theoretically unrelated variable), it helps validate the existing analyses, whereas if the new model had shown a significant association, it would have implied that the main finding was likely to have been an artifact.  $^6$ 

It is worth pointing out that our results stemmed from a general population study with respondents from various walks of life. Notwithstanding the

<sup>&</sup>lt;sup>6</sup> We thank an anonymous reviewer for this valuable insight.

potential of longitudinal analysis to mitigate spuriousness, the possible existence of time-varying confounders should be kept in mind. Finally, due to panel attrition, one may question the generalizability of the findings. Even so, these results offer support for hypothesis 5 by showing that entry into a traditional marriage structure (from a state of being single) influenced married heterosexual men's attitudes toward working women.

#### GENERAL DISCUSSION

The results of our five studies showed that men in traditional marriages tend to view the presence of women in the workplace unfavorably, perceive that organizations with a higher number of female employees operate less smoothly, find organizations with female leaders unattractive, and are more likely to deny qualified female employees opportunities for promotions. Importantly, we found that entry into a traditional marriage structure after having been single is related to a negative change in attitude toward working women.

Our work demonstrates the value of an open-system approach to the investigation of inequality at work by illustrating how home environments can shape work outcomes (Kahn et al., 1964; Katz and Kahn, 1978). Broadly speaking, our findings are consistent with a range of perspectives about the role of structure in shaping social psychology. Our paper provides robust evidence that marriage structures in particular play an important role in economic life beyond the four walls of the house.

#### Interest- and Exposure-based Explanations

While we have carefully built our arguments using extant research to develop a contextualized theoretical motivation for our studies, we hope to spark further research and theorizing in probing the causal mechanisms underlying our findings. The relationship between choices at home and attitudes at work may not seem initially surprising to some, but in fact, the explanation for this relationship is not self-evident upon closer examination. Borrowing from Bolzendahl and Myers' (2004) thinking, we identify two plausible explanations for why husbands embedded in traditional marriage structures may have less egalitarian gender beliefs. Bolzendahl and Myers asserted that gender-role egalitarianism may be "interest-based" or "exposure-based." An interest-based position would suggest that husbands adopt egalitarianism if they personally benefit from such attitudes, beliefs, and behaviors; conversely, their posture would be less egalitarian if egalitarianism were more costly to them (Kane and Sanchez, 1994). In this regard, wives' employment should be highly relevant to their husbands' egalitarianism (e.g., Huber and Spitze, 1981; Spitze and Waite, 1981; Davis and Robinson, 1991). But data testing this hypothesis are rather sparse (Bolzendahl and Myers, 2004). Some studies suggest that husbands whose wives are not employed earn more (e.g., Pfeffer and Ross, 1982; Schneer and Reitman, 1993; Stroh and Brett, 1996; but see Jacobsen and Rayack, 1996), suggesting that higher-earning husbands can afford to have a traditional marriage or that traditional husbands incur benefits from their marriage structure that allow them to earn more or motivate them to earn more. Although one could argue that the relationships depicted might be reversed (e.g., being married to a spouse not engaged in paid work motivates a husband to earn more),

Bolzendahl and Myers' interest-based position is not negated, as the relationship may be reciprocal. In total, therefore, it seems possible that husbands whose wives are employed part time or not at all benefit, in both material and non-material interest-based ways, from the idea that women's place is in the home.

Turning to perhaps the even more plausible "exposure-based" explanation, we begin with a definition: according to Bolzendahl and Myers (2004: 761-762), "The fundamental concept in exposure-based approaches is that individuals develop or change their understanding of women's place in society and their attitudes when they encounter ideas and situations that resonate with feminist ideals." We contend that the converse is also true; thus we suspect that experiencing a traditional marriage is associated with a husband becoming less egalitarian than the average of all married men. In fact, evidence exists that people adjust their gender-role attitudes to accommodate their family circumstances (e.g., Corrigall and Konrad, 2007). Kroska and Elman (2009) found that when individuals occupy roles inconsistent with their gender attitudes, they adjust their attitudes to match their behaviors. Such results are consistent with findings in psychology that "dissonance" (e.g., Festinger, 1957) results whenever one's behavior violates some self-standard, such as one's gender ideology (Stone and Cooper, 2001), and that such dissonance can result in attitude change (Cooper, 2011). Thus both interest-based and exposure-based explanations for the relationship between marriage structure and gender ideology appear plausible given the theories and empirical results that have been reviewed.

These findings are theoretically important because they add a distinctive dimension to social structure as addressed, for example, by Eagly and Steffen (1984). With their reasoning, we have shown that the attitudes, beliefs, and behaviors exhibited toward women are related to the structural position or social role one occupies, namely, that of male breadwinner. Moreover, consistent with Eagly and Steffen's (1984) position on exposure-based drivers of attitude change, we believe that the posture of men embedded in less egalitarian marriages is unlikely to change dramatically until the structure of their marriages changes. In fact, in Study 4 we see a hint of this possibility when men in dual-earner marriages deliver more positive evaluations of women than of men; this surprising finding presents its own non-egalitarian issues but still speaks to the possibility that roles may shape attitudes.

#### **Explicit and Implicit Gender Attitudes**

It is important to emphasize the nature of the attitudes and beliefs (and perhaps even behaviors) that have been discussed. Ample theorizing and data indicate that gender attitudes exist in both explicit (conscious) and implicit (unconscious) forms (e.g., Greenwald and Banaji, 1995; Greenwald et al., 2009). For instance, Nosek et al. (2007) documented the existence of unconscious beliefs about gender roles in the professional and family realms. Using the Implicit Association Test (IAT) originally created by Greenwald, McGhee, and Schwartz (1998), they found that 76 percent of people automatically think "male" when they are exposed to career-related words such as business, profession, and work, and they think "female" when exposed to family-related words such as domestic, home, and household. Likewise, Goodwin and Banaji (1999) found

that people are more likely to associate men with leadership positions such as boss, CEO, and director, and to associate women with aide positions such as assistant, attendant, and secretary.

Thus it is entirely possible that men in traditional marriages are unaware of their implicit gender biases, and their implicit attitudes about women in the workplace may be operating at an unconscious level. It is also possible that they may perceive their explicit biases to be privately held, and they may hold the erroneous belief that these explicit biases have no effect on attitudes or behaviors of consequence in the workplace. Either way, it is conceivable that men in traditional marriages are not intentionally being punitive toward women in the workplace (Tracy and Rivera, 2010).

Nevertheless, implicit attitudes, particularly on issues such as gender, can predict behaviors, even in the form of micro-behaviors such as eye contact and body language or in the form of how scarce time and resources are allocated toward structures that facilitate alternating between work and family demands (Chugh, 2004). Mintzberg's (1973) classic framework of what managers do outlines three primary types of activities: maintaining interpersonal relationships, information processing, and decision making. Implicit bias predicts behaviors in each of these three critical types of managerial activities (Chugh, 2004). So even in the absence of intention for harm or for behavioral leakage, negative attitudes toward women can be consequential in multiple forms.

Even explicit attitudes and beliefs that are not overtly hostile toward women in the workplace can be harmful. The gender attitudes of "benevolent sexists" (e.g., Glick and Fiske, 1996) may appear to be harmless because, compared with hostile sexism, they appear subjectively positive both at the level of individuals and institutions. For example, benevolent justifications for discriminating against women (e.g., "Women should forego a career because they excel at childcare") are more likely to be palatable than are hostile justifications (e.g., "Women should forego a career because they lack ability"). In the words of Cikara et al. (2009: 457), "Because of its subjectively positive tenor, benevolent sexism seems harmless. Yet, benevolently sexist ideals reinforce the view that women's priority should be hearth and home, as well as that men ought to excel in the competitive world of work, so that they can effectively protect and provide for their female dependents."

Our work neither studies nor speculates about the source of the bias exhibited by the traditional husband, and we want to be clear that we have no evidence that the gender attitudes expressed by husbands in traditional marriages are intentionally harmful to women. That said, we should also acknowledge the possibility that some men may hold explicit attitudes toward women in the workplace that are neither benevolent nor implicit. In other words, bias is sometimes unconscious, but it is also sometimes entirely deliberate. Some men may simply wish to have a workplace without women or with women only in support roles.

#### **Organizational Implications**

The future may bring dramatic changes in the social structure of marriage, with more dual-earner marriages than ever before, so perhaps the related attitudes toward women in the workplace are likely to undergo similarly dramatic changes. Still, a widespread change in marriage structure is an exceedingly

improbable event. The attitudes, beliefs, and corresponding behavioral tendencies that some men may bring to work likely will remain a fact of organizational life. The men we identified in traditional marriages represent a potentially influential group to consider in this regard. For instance, 75 percent of men in executive positions have a spouse or partner who is not employed (Galinsky et al., 2003). Some may find comfort in the small amount of variance explained in the dependent variables measured across our studies, thus mitigating concern about the adverse effects in the workplace. But in the gender domain, relatively small effect sizes, it has been argued persuasively, can yield practically significant results (e.g., Eagly, 1995; Martell, Lane, and Emrich, 1996). Thus the organizational implications and possible organizational responses are important to consider.

Clearly, organizations should not seek to control the marital status of their male employees, for example, by means of selection. To do so would be unjust, likely illegal, and perhaps bad for business, although some economists have argued that married men, in general, are more productive than their single counterparts (e.g., Becker, 1991; Lundberg, 2009). Brief et al. (2005) noted that research on such factors as marriage structure may not be seen as useful, for they are not within the organization's control (also see Brief and Dukerich, 1991). But Brief et al. (2005: 839) argued that this sort of research can inform how organizations respond to the realities of "potentially powerful, extraorganizational, countervailing forces."

So what is an organization to do? A critical response, according to Kalev, Dobbin, and Kelly (2006), is to establish responsibility for diversity. This advice was a product of their analyses of federal data describing the workforces of 708 private-sector establishments from 1971 to 2002, coupled with survey data on their employment practices. According to Kalev, Dobbin, and Kelly (2006), responsibility can entail (1) assigning accountability for setting diversity goals, devising means to achieve those goals, and evaluating progress; and (2) appointing full-time staff members or creating diversity committees or task forces composed of people from different departments, professional backgrounds, and management levels to oversee diversity initiatives, brainstorm to identify remedies, and monitor progress. Of course, these forms of responsibility pertain to promoting the representation of any protected class of workers, not just women, and as we have urged, they should not focus on men embedded in traditional marriages but instead reflect an awareness of where subtle prejudices and negative stereotypes may lie.

Organizations may also benefit from greater empathy for the challenging psychological position that men in traditional marriages face when alternating between their two daily realities. Organizations could leverage "structuration theory" (Giddens, 1984), which demonstrates that structures and ideologies that appear immutable are in fact continually "constituted, bolstered, and challenged" (Tracy and Rivera, 2010: 6) through the micropractices of the organization. This fluidity is an opportunity for organizations to shape men's attitudes, not about their private choices but about their organizational ones. Tracy and Rivera's (2010: 5) analysis of in-depth interviews with men about their views on gender and work-life revealed clear gender-role orientation, even in dualearner marriages, but also revealed speech "marked by uncertainty, questioning, and talk repairs [how parties in conversation deal with problems in speaking, hearing, or understanding]." Communication scholars refer to these

moments as junctures in talk that often reflect stress, anxiety, embarrassment, or emotional arousal (Tracy and Rivera, 2010) and provide insight into the awkward position of these men; their attitudes are likely in a state of flux.

This flux presents the opportunity to create stronger situations in the work-place that will elicit behaviors consistent with the egalitarian goals of the organization. Strong situations (Mischel, 1977) are those in which people know what is expected of them, akin to theatrical productions with tight scripts (Alexander and Knight, 1971). Organizations can curtail variance in behavior, especially that which is driven by individual experiences from outside the workplace, by being very explicit about the value of all employees and the importance of egalitarianism through both formal and informal structures and cultural mechanisms.

#### Limitations and Future Research

Our main argument about the organizational implications of a traditional marriage is organically problematic when it comes to measurement and causality. And, in fact, each of our five studies is limited on its own. First and foremost is the concern that men may be self-selecting simultaneously into traditional marriage structures and non-egalitarian attitudes and behaviors toward women in the workplace. Because we could not randomly assign men to marriage structures, nor could we directly observe their actions via any field studies, we need to exercise some caution in interpreting our results. While our results are consistent with the proposition that being in dual-earner marriages activates more egalitarian values in male employees, we had longitudinal data to support this hypothesis in only one of the studies. The combination of studies and range of methods we offer, rather than any one individual study or method, provides strong evidence for our proposition.

Second, it is also possible that other mechanisms might be at play. For example, a male employee's belief in a just world may be an important venue for further research, but the study of this and other mediating and moderating factors (such as benevolent sexism, gender-role orientation, and whether a man's first-born child is a daughter) must await future work. Discrimination can emerge from a range of social, cognitive, motivational, and intergroup processes in addition to the process of social structure we described here. Our work here does not preclude these other sources from also playing a role in generating the same resulting bias.

Third, we studied attitudes, beliefs, and behaviors related to women as our only dependent variables of interest. While these are important variables, there are clearly many other organizational issues of importance, such as job performance and satisfaction. Investigating the role of marriage structure on these and other outcome variables would certainly help us to better understand employee and managerial behavior and the underlying psychology of workplace interactions.

Fourth, in all of our studies, we employed a somewhat crude measure of marriage structure, i.e., the employment status of one's wife, which nevertheless yielded consistent results across rather different research designs. Future research likely will benefit from ascertaining, for example, the extent to which the wives' employment is voluntary or not and how household work is divided between husband and wife.

Fifth, we used the U.S. and U.K. as our empirical context, chiefly because of data availability. It is not clear how much our results would generalize to other countries, such as Brazil, India, China, or Russia, where explicit societal attitudes toward women and marriage are significantly different than those prevalent in the U.S. (Tu, Lin, and Chang, 2011). It is also unclear whether our findings will continue to prevail as attitudes toward gender equality continue to evolve in the face of altered governmental policies and economic reform.

It is our hope that our work will spark more systematic research on how marriage structure relates to workplace attitudes and behaviors. Such organizational research could take a variety of tacks. We are aware of only two studies that have examined gender ideology and marriage structure longitudinally. First, Kroska and Elman (2009), as we noted earlier, found in a two-wave study of continuously married individuals that men's wives' employment increased egalitarianism. Second, our Study 5, of men before and after they were married, showed that a dual-earner marriage structure increased egalitarianism. Both studies are consistent with the theoretical notion that social structure produces gender ideology. A study of gender ideology as a function of changes in marriage structure would be valuable; it is not organizational research per se, but our concern with gender attitudes here is that people carry them to work. We hope our research spurs an interest among organizational scholars in other structural features of individuals' non-work lives and their thoughts, feelings, and actions regarding egalitarianism at work.

Our results also pertain to a number of other lines of inquiry, such as labor economics. That body of work has examined how the presence of a wife influences a husband's work effort and his earnings but not how it may influence his attitudes and behaviors toward women in the workplace. Additionally, future research might explore how one's upbringing and offspring affect attitudes toward women in the workplace. In Study 4, we controlled for the gender of the offspring, but it was not significantly related to the father's attitude toward working women. Other studies, however, have demonstrated that the employees' wages of a male CEO's organization are higher if his first-born is a daughter rather than a son (Dahl, Dezső, and Ross, 2012). Based on Warner's (1991) theory, such studies suggest that men parenting daughters acquire feminine values. But it is unclear from their results why the order of birth matters and why the wages of female employees in organizations with such CEOs do not receive the raise in wages that the male employees do. Future work could explore such issues.

In addition, building on research that shows being a child of a working mother is associated with more egalitarianism (Davis and Greenstein, 2009; but see Davis, 2007), we would expect boys and girls reared by a working mother to enter the workforce with more egalitarian attitudes (e.g., with less benevolent sexist attitudes) than those reared in traditional families, and we included a control in each of our analyses for whether the respondent's mother was a working mother. Interestingly, across all five studies, we failed to find any evidence of the influence of a working mother on her son's attitudes toward working women later in life. Past research has also failed to find maternal influence on adult sons' attitudes toward women's gender roles (e.g., Blee and Tickamyer, 1995). It is possible that even though some respondents had working mothers, as boys they saw their mothers doing most of the household work, and thus their mothers' participation in the labor force did not make an

impression on them in any meaningful way. From the child's perspective, mom and dad's division of labor in a dual-earner marriage may look similar to the division of labor in a traditional marriage, whereas the division of labor in traditional versus dual-earner marriages likely looks very different from a husband's perspective.

Religion is another fruitful area for future research. We explored the role of religion in our studies and, for the most part, did not find any effects. It might be more helpful to examine instead the role of religiosity or how intensely a person identifies with a particular religion, whether he attends worship regularly, and so forth (Batson and Ventis, 1982), and how these factors affect his attitude toward women in the workplace. Because it has been found that some religions are more supportive of a traditional mindset (e.g., Davis and Greenstein, 2009; Chan-Serafin, Brief, and George, 2013), we would predict children raised in such religious households might enter the world of work with a relatively strong endorsement of the belief that women's place is in the home.

Research also could expand to examine the consequences of gender ideology beyond those studied here. Among men in America, attitudes are clearly becoming more egalitarian (Bolzendahl and Myers, 2004). Yet, importantly, while the average male attitude has shifted toward egalitarianism, the variance in male attitudes remains and perhaps is even greater today than it was in generations past. What are the implications of these shifts for organizations broadly, especially in the context of shifting economic realities (Gerson, 2010)? Zuo and Tang (2000) observed that men who earn less than their wives are more egalitarian. For instance, it has been shown that egalitarian men tend to define "success" more in terms of their relationships with their children than in terms of their financial contributions to their households or their business acumen (e.g., Hochschild and Machung, 1989; Gerson, 1993; Coltrane, 1998). Might it be that more egalitarian men (e.g., those embedded in dual-earner marriages with children) are less responsive to performance incentive compensation programs or less engaged in activities to develop their job-related knowledge, skills, and abilities? Similar questions could be posed about non-work structural effects on the outcome of diversity training (e.g., Ciabattari, 2001; Kalev, Dobbin, and Kelly, 2006; Kulik and Roberson, 2008). Might it be that diversity training is less effective with men embedded in traditional marriages than with those in dual-earner marriages?

Finally, what about women's attitudes toward women in the workplace? Exploring this question in the future will also bring clarity to the role of exposure-based versus interest-based explanations. Additional research might also explore the preferences, needs, and constraints of the women in various types of marriages. Our analyses have assumed that women have a simplified pool of preferences, a priori: they enter the marriage either intending to stay at home or intending to work outside the home. The reality is undoubtedly more complex and dynamic than our simplification allows. While our work here has focused on men and the attitudes they hold, the attitudes and stereotypes held by women are also very likely to be relevant. The mechanisms underlying exposure-based attitude formation are social psychological and thus are likely

<sup>&</sup>lt;sup>7</sup> We are grateful to an anonymous reviewer for pointing out that not only boys but also girls raised in such religious households may have the mindset that women belong in the house.

to be experienced by both men and women. In fact, women hold stronger implicit gender stereotypes about career and family than men do, with men's explicit gender stereotypes being only slightly stronger than women's (Nosek et al., 2007).

In short, we see much research to be done to better document and explain how the lives we live outside of work affect how we treat others (e.g., women, blacks, gays and lesbians, and immigrants) at work. Organizations should not seek to manipulate people's non-work lives, but as organizational scholars, we should seek to understand better how the byproduct of those non-work lives spills into the workplace.

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#### **REFERENCES**

#### Abbott, P., C. Wallace, and M. Tyler

2005 An Introduction to Sociology: Feminist Perspectives, 3rd ed. New York: Routledge.

#### Aiken, L. S., and S. G. West

1991 Multiple Regression: Testing and Interpreting Interactions. Thousand Oaks, CA: Sage.

#### Aiken, L. S., and S. G. West

1996 Multiple Regression: Testing and Interpreting Interactions. Thousand Oaks, CA: Sage.

#### Alexander, C. N., Jr., and G. W. Knight

1971 "Situated identities and social psychological experimentation." Sociometry, 34: 65–82.

#### Batson, C. D., and W. L. Ventis

1982 The Religious Experience. New York: Oxford University Press.

#### Becker, G. S.

1985 "Human capital, effort, and the sexual division of labor." Journal of Labor Economics, 3 (1): S33–S58.

#### Becker, G. S.

1991 A Treatise on the Family. Cambridge, MA: Harvard University Press.

#### Belsky, J., and J. Kelly

1994 The Transition to Parenthood: How a First Child Changes a Marriage. New York: Delacorte Press.

#### Blee, K., and A. Tickamyer

1995 "Racial differences in men's attitudes about women's gender roles." Journal of Marriage and Family, 57: 21–30.

#### Bolzendahl, C. I., and D. J. Myers

2004 "Feminist attitudes and support for gender equality: Opinion change in women and men, 1974–1998." Social Forces, 83: 759–789.

#### Bovd, R.

1988 Culture and the Evolutionary Process. Chicago: University of Chicago Press.

#### Brashears, M. E.

2008 "Sex, society, and association: A cross-national examination of status construction theory." Social Psychology Quarterly, 71: 72–85.

#### Brief, A. P.

1998 Attitudes in and around Organizations. Thousand Oaks, CA: Sage.

#### Brief, A. P., and J. M. Dukerich

1991 "Theory in organizational behavior: Can it be useful?" In B. M. Staw and L. L. Cummings (eds.), Research in Organizational Behavior, 13: 327–352. Greenwich, CT: JAI Press.

## Brief, A. P., E. E. Umphress, J. Dietz, J. W. Burrows, R. M. Butz, and L. Scholten 2005 "Community matters: Realistic group conflict theory and the impact of diversity." Academy of Management Journal, 48: 830–844.

#### Brown, J. K.

1970 "A note on the division of labor by sex." American Anthropologist, 72: 1073–1078

#### **Bureau of Labor Statistics**

2012 "Families by presence and relationship of employed members and family type, 2011–2012 annual averages." http://www.bls.gov/news.release/famee.t02.htm.

#### Cazenave, N. A.

1983 "Black male-black female relationships: The perceptions of 155 middle-class black men." Family Relations, 32: 341–350.

#### Chan-Serafin, S., J. Bradley, A. P. Brief, and M. B. Watkins

2005 "Sex as a tool: Does utilizing sexuality at work work?" Paper presented at the Annual Meeting of the Academy of Management, Honolulu, HI.

#### Chan-Serafin, S., A. P. Brief, and J. George

2013 "How does religion matter and why? Religion and the organizational sciences." Organization Science, 24: 1585–1600.

#### Chugh, D.

2004 "Societal and managerial implications of implicit social cognition: Why milliseconds matter." Social Justice Research, 17: 203–222.

#### Chugh, D., and A. P. Brief

2008 "1964 was not that long ago: A story of gateways and pathways." In A. P. Brief (ed.), Diversity at Work: 318–340. Cambridge: Cambridge University Press.

#### Ciabattari, T.

2001 "Changes in men's conservative gender ideologies: Cohort and period influences." Gender and Society, 15: 574–591.

#### Cikara, M., T. L. Lee, S. T. Fiske, and P. Glick

2009 "Ambivalent sexism at home and at work: How attitudes toward women in relationships foster exclusion in the public sphere." In J. Jost, A. Kay, and H. Thorisdottir (eds.), Social and Psychological Bases of Ideology and System Justification: 444–462. New York: Oxford University Press.

#### Clark, S. C.

2000 "Work/family border theory: A new theory of work/family balance." Human Relations, 53: 747–770.

#### Cohen, J., and P. Cohen

1983 Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences. Mahwah, NJ: Lawrence Erlbaum.

#### Coltrane, S.

1998 Gender and Families. Newbury Park, CA: Pine Forge Press.

#### Cooper, J.

2011 "Cognitive dissonance theory." In P. A. M. Van Lange, A. W. Kruglanski, and E. T. Higgins (eds.), Handbook of Theories of Social Psychology, 1: 377–398. London: Sage.

#### Corrigall, E. A., and A. M. Konrad

2007 "Gender role attitudes and careers: A longitudinal study." Sex Roles, 56: 847–855.

#### Dahl, M. S., C. L. Dezső, and D. G. Ross

2012 "Fatherhood and managerial style: How a male CEO's children affect the wages of his employees." Administrative Science Quarterly, 57: 669–693.

#### Davis, S. N.

2007 "Gender ideology construction from adolescence to young adulthood." Social Science Research, 36: 1021–1041.

#### Davis, S. N., and T. N. Greenstein

2009 "Gender ideology: Components, predictors, and consequences." Annual Review of Sociology, 35: 87–105.

#### Davis, N. J., and R. V. Robinson

1991 "Men's and women's consciousness of gender inequality: Austria, West Germany, Great Britain and the United States." American Sociological Review, 56: 72–84

#### Davis, J. A., T. W. Smith, and P. V. Marsden

2006 General Social Surveys, 1972-2006. Chicago: National Opinion Research Center

#### DiTomaso, N., C. Post, D. R. Smith, G. F. Farris, and R. Cordero

2007 "Effects of structural position on allocation and evaluation decisions for scientists and engineers in industrial R&D." Administrative Science Quarterly, 52: 175–207.

#### Eagly, A. H.

1995 "The science and politics of comparing women and men." American Psychologist, 50: 145–158.

#### Eagly, A. H., and S. J. Karau

1991 "Gender and the emergence of leaders: A meta-analysis." Journal of Personality and Social Psychology, 60: 685–710.

#### Eagly, A. H., and V. J. Steffen

1984 "Gender stereotypes stem from the distribution of women and men into social roles." Journal of Personality and Social Psychology, 46: 735–754.

#### Eagly, A. H., and W. Wood

2011 "Feminism and evolution of sex differences and similarities." Sex Roles, 64: 758–767.

#### Edwards, J. R., and N. P. Rothbard

2000 "Mechanisms linking work and family: Clarifying the relationship between work and family constructs." Academy of Management Review, 25: 178–199.

#### Elsesser, K. M., and J. Lever

2011 "Does gender bias against female leaders persist? Quantitative and qualitative data from a large-scale survey." Human Relations, 64: 1555–1578.

#### Erickson, R.

2005 "Why emotion work matters: Sex, gender and the division of household labor." Journal of Marriage and Family, 67: 337–351.

#### Festinger, L.

1957 A Theory of Cognitive Dissonance. Palo Alto, CA: Stanford University Press.

#### Firebaugh, G., and K. E. Davis

1988 "Trends in antiblack prejudice, 1972–1984: Region and cohort effects." American Journal of Sociology, 94: 251–272.

#### Fiske, S. T., A. J. Cuddy, and P. Glick

2007 "Universal dimensions of social cognition: Warmth and competence." Trends in Cognitive Sciences, 11: 77–83.

#### Fiske, S. T., A. J. Cuddy, P. Glick, and J. Xu

2002 "A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition." Journal of Personality and Social Psychology, 82: 878–902.

#### Fletcher, J. K., and L. Bailyn

2005 "The equity imperative: Redesigning work for work–family integration." In E. E. Kossek and S. J. Lambert (eds.), Work and Life Integration: Organizational, Cultural, and Individual Perspectives: 171–190. Mahwah, NJ: Lawrence Erlbaum.

#### Fortin, N. M.

2005 "Gender role attitudes and the labour-market outcomes of women across OECD countries." Oxford Review of Economic Policy, 21: 416–438.

Galinsky, E., K. Salmond, J. T. Bond, M. B. Kropf, M. Moore, and B. Harrington 2003 "Leaders in a global economy: A study of executive women and men." Families and Work Institute, Executive Summary. Retrieved from: http://familiesandwork.org/site/research/summary/globalsumm.pdf.

#### Gerson, K.

1993 No Man's Land: Men's Changing Commitments to Family and Work. New York: Basic Books.

#### Gerson, K.

2004 "Understanding work and family through a gender lens." Community, Work, and Family, 7: 163–178.

#### Gerson, K.

2010 The Unfinished Revolution: Coming of Age in a New Era of Gender, Work, and Family. New York: Oxford University Press.

#### Giddens, A.

1984 The Constitution of Society: Outline of the Theory of Structuration. Cambridge: Polity Press.

#### Glick, P., and S. T. Fiske

1996 "The ambivalent sexism inventory: Differentiating hostile and benevolent sexism." Journal of Personality and Social Psychology, 70: 491–512.

#### Gneezy, U., K. L. Leonard, and J. A. List

2009 "Gender differences in competition: Evidence from a matrilineal and a patriarchal society." Econometrica, 77: 1637–1664.

#### Goodwin, S. A., and M. R. Banaji

1999 "Gender and power: Evidence for an implicit persona/group discrimination discrepancy." Paper presented at the meeting of the Midwestern Psychological Association, Chicago.

#### Greenstein, T. N.

2000 "Economic dependence, gender, and the division of labor in the home: A replication and extension." Journal of Marriage and Family, 62: 322–335.

#### Greenwald, A. G., and M. R. Banaji

1995 "Implicit social cognition: Attitudes, self-esteem, and stereotypes." Psychological Review, 102: 4–27.

#### Greenwald, A. G., D. E. McGhee, and J. L. K. Schwartz

1998 "Measuring individual differences in implicit cognition: The implicit association test." Journal of Personality and Social Psychology, 74: 1464–1480.

#### Greenwald, A. G., T. A. Poehlman, E. L. Uhlmann, and M. R. Banaji

2009 "Understanding and using the implicit association test: Meta-analysis of predictive validity." Journal of Personality and Social Psychology, 97: 17–41.

#### Gutek, B. A., and A. Cohen

1987 "Sex ratios, sex role spillover, and sex at work: A comparison of men's and women's experiences." Human Relations, 40 (2): 97–115.

#### Hardy, M. A.

1993 Regression with Dummy Variables. Newbury Park, CA: Sage.

#### Harris, R. J., and J. F. Firestone

1998 "Changes in predictors of gender role ideologies among women: A multivariate analysis." Sex Roles, 38: 239–252.

#### Heckman, J. J.

1979 "Sample selection bias as a specification error." Econometrica, 47: 153-161.

#### Hochschild, A. R., and A. Machung

1989 The Second Shift: Working Parents and the Revolution at Home." New York: Viking.

#### Hout, M.

2004 "Getting the most out of GSS income measures." http://publicdata.norc.org: 41000/gss/documents/reports/methodological\_reports/MR101.pdf.

#### Huber, J., and G. Spitze

1981 "Wives' employment, household behaviors, and sex- role attitudes." Social Forces, 60: 150–169.

#### Jacobsen, J. P., and W. L. Rayack

1996 "Do men whose wives work really earn less?" American Economic Review, 86: 268–273.

#### James, E. H., A. P. Brief, J. Dietz, and R. R. Cohen

2001 "Prejudice matters: Understanding the reaction of Whites to affirmative action programs targeted to benefit Blacks." Journal of Applied Psychology, 86: 1120–1128.

#### Kahn, R. L., D. M. Wolfe, R. P. Quinn, J. D. Snoek, and R. A. Rosenthal

1964 Organizational Stress: Studies in Role Conflict and Ambiguity. New York: Wiley.

#### Kalleberg, A. L., D. Knoke, P. V. Marsden, and J. L. Spaeth

1996 Organizations in America: Analyzing Their Structures and Human Resource Practices. Thousand Oaks, CA: Sage.

#### Kalev, A., F. Dobbin, and E. Kelly

2006 "Best practices or best guesses? Assessing the efficacy of corporate affirmative action and diversity policies." American Sociological Review, 71: 589–617.

#### Kane, E. W., and L. Sanchez

1994 "Family status and criticism of gender inequality at home and at work." Social Forces, 72: 1079–1102.

#### Kanter, R. M.

1976 "The impact of hierarchical structures on the work behavior of men and women." Social Problems, 23: 415–430.

#### Kanter, R. M.

1977 Men and Women of the Corporation. New York: Basic Books.

#### Katz, D., and R. L. Kahn

1978 The Social Psychology of Organizations, 2d ed. New York: Wiley.

#### Kroska, A., and C. Elman

2009 "Change in attitudes about employed mothers: Exposure, interests, and gender ideology discrepancies." Social Science Research, 38: 366–382.

#### Kulik, C., and L. Roberson

2008 "Common goals and golden opportunities: Evaluation of diversity of education in academic and organizational settings." Academy of Management Learning and Education, 7: 309–331.

#### Larsen, K. S., and E. Long

1988 "Attitudes toward sex-roles: Traditional or egalitarian?" Sex Roles, 19: 1–12.

#### Livingston, B. A., and T. A. Judge

2008 "Emotional responses to work-family conflict: An examination of gender role orientation among working men and women." Journal of Applied Psychology, 93: 207–216.

#### Lucke, J. C.

1998 "Gender roles and sexual behavior among young women." Sex Roles, 39 (3): 273–297.

#### Lundberg, U.

2009 "Stress, health and illness as related to work and gender." In K. A. Lindgren (ed.), How Stress Influences Musculoskeletal Disorders: 11–15. Helsinki: Orton Foundation.

#### Maloney, C. B., and C. E. Schumer

2010 "Women and the economy 2010: 25 years of progress but challenges remain." http://www.jec.senate.gov/public/index.cfm?p=Reports1andContentRecord\_id= f5b62c08-227f-42b2-89d5-886a60f22131.

#### Martell, R. F., D. M. Lane, and C. Emrich

1996 "Male-female differences: A computer simulation." American Psychologist, 51: 157–158.

#### Maume, D. J.

2006 "Gender differences in restricting work efforts because of family responsibilities." Journal of Marriage and Family, 68: 859–869.

#### McCarthy, M.

1999 "Relationship between work–family interface model and patterns of coping behavior." Unpublished doctoral dissertation, George Mason University.

#### Mintzberg, H.

1973 The Nature of Managerial Work. New York: Harper and Row.

#### Mischel, W.

1977 "The interaction of the person and situation." In D. Magnusson and N. S. Endler (eds.), Personality at the Crossroads: Current Issues in Interactional Psychology: 333–352. Hillsdale, NJ: Lawrence Erlbaum.

#### Mukhopadhyay, C. C., and P. Higgins

1988 "Anthropological studies of women's status revisited: 1977–87." Annual Review of Anthropology, 17: 461–495.

#### Murdock, G. P., and C. Provost

1973 "Factors in the division of labor by sex: A cross-cultural analysis." Ethnology, 12: 203–225.

### Nosek, B. A., F. L. Smyth, J. J. Hansen, T. Devos, N. M. Lindner, K. A. Ranganath, C. T. Smith, K. R. Olson, D. Chugh, A. G. Greenwald, and M. R. Banaji

2007 "Pervasiveness and correlates of implicit attitudes and stereotypes." European Review of Social Psychology, 18: 36–88.

#### Oswald, A. J., and N. Powdthavee

2010 "Daughters and left-wing voting." Review of Economics and Statistics, 92: 213–227.

#### Pedhazur, E. J., and L. P. Schmelkin

1991 Measurement, Design, and Analysis: An Integrated Approach. Hillsdale, NJ: Lawrence Erlbaum.

#### Pfeffer, J., and J. Ross

1982 "The effects of marriage and a working wife on occupational and wage attainment." Administrative Science Quarterly, 27: 66–80.

#### Ridgeway, C. L.

2006 "Status construction theory." In P. J. Burke (ed.), Contemporary Social Psychological Theories: 301–323. Stanford, CA: Stanford University Press.

#### Ridgeway, C. L.

2011 Framed by Gender: How Gender Inequality Persists in the Modern World. New York: Oxford University Press.

#### Sayer, L. C., P. England, M. Bittman, and S. M. Bianchi

2009 "How long is the second (plus first) shift? Gender differences in paid, unpaid, and total work time in Australia and the United States." Journal of Comparative Family Studies, 40: 523–545.

#### Schneer, J. A., and F. Reitman

1993 "Effects of alternate family structures on managerial career paths." Academy of Management Journal, 36: 830–843.

#### Scott, W. R.

1995 Institutions and Organizations. London: Sage.

#### Spitze, G. D., and L. J. Waite

1981 "Wives' employment: The role of husbands' perceived attitudes." Journal of Marriage and Family, 43: 117–124.

#### Staines, G. L.

1980 "Spillover versus compensation: A review of the literature on the relationship between work and nonwork." Human Relations, 33: 111–129.

#### Stone, E. F., and J. R. Hollenbeck

1989 "Clarifying some controversial issues surrounding statistical procedures for detecting moderator variables: Empirical evidence and related matters." Journal of Applied Psychology, 74: 3–10.

#### Stone, J., and J. Cooper

2001 "A self-standards model of cognitive dissonance." Journal of Experimental Social Psychology, 37: 228–243.

#### Stroh, L. K., and J. M. Brett

1996 "The dual-earner dad penalty in salary progression." Human Resource Management, 35: 181–201.

#### Thompson, L.

1993 "Conceptualizing gender in marriage: The case of marital care." Journal of Marriage and Family, 55: 557–569.

#### Tracy, S. J., and K. D. Rivera

2010 "Endorsing equity and applauding stay-at-home moms: How male voices on work-life reveal aversive sexism and flickers of transformation." Management Communication Quarterly, 24: 3–43.

#### Tu, Y., S. Lin, and Y. Chang

2011 "A cross-cultural comparison by individualism/collectivism among Brazil, Russia, India and China." International Business Research, 4: 175–182.

## Umphress, E. E., K. Smith-Crowe, A. P. Brief, J. Dietz, and M. Baskerville 2007 "Do birds of a feather flock together or do opposites attract? Organizational diversity, social dominance orientation, and organizational attractiveness." Journal of

Applied Psychology, 92: 396–409.

#### Warner, R. L.

1991 "Does the sex of your child matter? Support for feminism among women and men in the United States and Canada." Journal of Marriage and Family, 53: 1051–1056.

#### Washington, E. L.

2008 "Female socialization: How daughters affect their legislator fathers' voting on women's issues." American Economic Review, 98: 311–332.

#### Weaver, G. R., and J. M. Stansbury

2014 "Religion's impact on employees in organizations: Cognition, affect, and behavior." In M. Lounsbury, N. Phillips, and P. Tracey (eds.), Research in the Sociology of Organizations, vol. 41: Religion and Organization Theory. Bingley, UK: Emerald Group (in press).

#### Webster, M., Jr., and S. J. Hysom

1998 "Creating status characteristics." American Sociological Review, 63: 351–378.

#### Welch, S., and L. Sigelman

1989 "A black gender gap?" Social Science Quarterly, 70: 120-133.

#### Wilke, J.

1993 "Changes in U.S. men's attitudes toward the family provider role, 1972–1989." Gender and Society, 7: 261–279.

#### Williams, D., M. Consalvo, S. Caplan, and N. Yee

2009 "Looking for gender: Gender roles and behaviors among online gamers." Journal of Communication, 59: 700–725.

#### Williams, K. J., and G. M. Alliger

1994 "Role stressors, mood spillover, and perceptions of work-family conflict in employed parents." Academy of Management Journal, 37: 837–868.

#### Wood, W., and A. H. Eagly

2002 "A cross-cultural analysis of the behavior of women and men: Implications for the origins of sex difference." Psychological Bulletin, 128: 699–727.

#### Zuo, J., and S. Tang

2000 "Breadwinner status and gender ideologies of men and women regarding family roles." Sociological Perspectives, 43: 29–43.

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