Administrative Science Quarterly

The organizational implications of a traditional marriage: Can a domestic traditionalist by night be an organizational egalitarian by day?

Journal:	*Administrative Science Quarterly*
Manuscript ID:	ASQ-12-0064.R3
Manuscript Type:	Original Articles
Keywords:	.....Gender, ...Work and family, ...Decision making
Methodology Keywords:	Experimental design or analysis, Regression analysis

Abstract: We provide evidence that marriage structure has important organizational implications. Specifically, heterosexual men married to wives who are not employed go to work with attitudes, beliefs, and behaviors that disfavor women in the workplace and are more likely to make decisions that prevent the advancement of qualified women (relative to the average heterosexual married man). We conducted five studies with a total of 993 married, male participants. We found that employed husbands in traditional marriages, compared to the average married man, 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, (d) deny qualified female employees opportunities for promotion more frequently. Importantly, our final study suggests that the change in attitudes towards women may occur with entry into traditional marriage structure from a state of being single. 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 the findings and suggests that self-selection into traditional marriage structures does not fully explain the effect.

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Abstract

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Every marriage has a division of labor and this division of labor serves as a critical social structure (Becker, 1985; Brown, 1970; Mukhopadhyay and Higgins, 1988). In traditional and neo-traditional marriages, the male spouse's primary responsibility is to earn wages that provide for the family's well-being while the female spouse's primary responsibility is to carry out the family- and home-oriented tasks that facilitate the husband's wage-earning (Abbott, Wallace, and Tyler, 2005; Fletcher and Bailyn, 2005; Greenstein, 2000; Hiller and Philliber, 1986; Schneer and Reitman, 1993). This traditional marriage structure is found in 20 percent of married couples in the United States (Bureau of Labor Statistics, 2012). In these marriages, gender determines division of labor.

In society as a whole, the division of labor between men and women is undergoing profound change. For example, in the United States, labor participation by women has increased to nearly 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 comprise 45 percent of union membership; the percent of mothers working continues to rise; and families have a growing dependence on wives' incomes (Maloney and Schumer, 2010).

As a result, men in today's workforce are more likely than ever to work with, around, and perhaps, for a woman. In fact, a 2011 study of over 60,000 working adults found that only 21% 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

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for a woman, but also likely to work in an environment with considerable external and legal pressure to ensure that all individuals, including the 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. To this end, we explore the attitudes of heterosexual men towards the women they encounter at work and towards the workplace itself, in light of the marriage structure they have at home. Chugh and Brief (2008) included this question in their proposed research agenda for the study of diversity in organizations, wondering if "a domestic traditionalist can also be an organizational egalitarian?" (p. 332). In this paper, we put this question to the empirical test and examine how the structure of traditional marriages (as contrasted with the average married man) predicts the attitudes, beliefs, and behaviors of men towards women in the workplace. Specifically, we test the hypothesis that men embedded in traditional marriages think about and act towards women in the workplace more negatively than the average married man.

Before going further, we alert the reader that we will not be speculating as to whether men are explicitly (intentionally) or implicitly (unintentionally) biased towards women in the workplace. We are not claiming that bias, when it exists, is necessarily hostile or intended (though it might be). In our General Discussion, we address both possibilities, and our overall intent is that the reader will remain open to the reality that either or both possibilities may be true.

The remainder of our paper unfolds as follows. First, we develop our theoretical rationale for proposing that employed husbands embedded in traditional marriages (wife not employed) are more likely to exhibit attitudes, beliefs, and behaviors harmful to women in the workplace compared to the average married male. Next, we report five studies (with a

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total of 993 married, male participants across all five studies) in which we test and find support for our hypotheses using secondary data, laboratory data, and longitudinal data from students and managers and from both the U.S. and the U.K. That is, we find that employed husbands in traditional marriages, compared to the average married man, 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) find female-led organizations to be relatively unattractive, and (d) deny, more frequently, qualified female employees opportunities for promotion. In addition, we find that entry into traditional marriage structure from a state of being single is associated with a change in attitude towards women in the workplace such that these attitudes become less positive post-marriage. We believe that the results of these studies are important to theorizing about the relationship between marriage structures and attitudes in the workplace and, more pragmatically, effectively targeting efforts aimed at enhancing gender equality in work organizations.

Marriage and Gender Roles as Structures

Scholarly literatures reflecting the public opinion that a woman's place is in the home are neither new nor sparse. For example, between 2000 and 2008, 168 articles on such attitudes were published (Davis and Greenstein, 2009). From this extensive body of work, we know that historically, work and family domains have been gendered, such that men have traditionally been in charge of the breadwinning role and women have been in charge of the family role (Abbott et al., 2005; Fletcher and Bailyn, 2005). Even while women have started to participate more in the workforce (Bureau of Labor Statistics, 2010), traditional gender roles continue to be endorsed by many (e.g., Belsky and Kelly, 1994; Erickson, 2005; Hochschild and Machung, 1989; Sayer, England, Bittman, and Bianchi, 2009; Thompson, 1993).

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Gender role orientation addresses 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 (Harris and Firestone, 1998; Hochschild and Machung, 1989; Larsen and Long, 1988; 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 (Fortin, 2005; Lucke, 1998; McCarthy, 1999). 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, Consalvo, Caplan, and Yee, 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 (Fletcher and Bailyn, 2005; Gerson, 2004; Maume, 2006). These gender role orientations relate to the division of labor that distinguishes traditional and modern marriages within employees' private lives.

The Organization as an Open System

Why might the gender roles that exist in a man's private life relate to his attitudes and behavior toward women in his workplace? Open-systems theory, with its roots in holistic and humanistic ideologies, offers a potential explanation. According to this theory, organizations are reciprocally interdependent with their environments (in both directions) and thus, home environments can shape how we behave at work (Gutek and Cohen, 1987; Kahn, Wolfe, Quinn, Snoek, and Rosenthal, 1964; Katz and Kahn, 1978). In other words, it 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.

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A branch of open-systems theory, the spillover hypothesis (Staines, 1980), elaborates some mechanisms through which home environments shape how we behave at work. Importantly, this theory suggests that the thoughts, attitudes, and emotions generated at home may carry over to the workplace (Edwards and Rothbard, 2000; Marshall, Chadwick, and Marshall, 1992; Payton-Miyazaki and Brayfield, 1976; Piotrkowski, 1979; Williams and Alliger, 1994). This perspective aligns with research that has shown that people often bring their emotional and attitudinal baggage to the workplace (Brief, 1998; Scott, 1995). 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, in press; Weaver and Stansbury, 2012). Fittingly, Clark (2000) described employees as daily "border-crossers" between the domains of work and family.

Thus, when viewed as an open system, organizations are prone to the influence of structures outside the organization, and attitudes within an organization are related to attitudes outside the organization. Based on this open systems perspective, we propose that expectations about gender roles within a marriage will relate to expectations about gender roles within an organization.

Social Structures at Home and Attitudes at Work

Several literatures capture how social structures shape people's thoughts and behaviors, which will lay the foundation for our claim that social structures at home 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 (Brashears, 2008; Ridgeway, 2006; Webster and Hysom, 1998). In the context of marriage, men and women interact in "just the goal-oriented circumstances in which interpersonal status hierarchies tend to form" (Ridgeway, 2011, p. 47). These interactions

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occur after the group difference based on sex has already occurred, and thus, in traditional marriages, observations of husbands and wives will be "repeatedly juxtaposed" (Ridgeway, 2011, p. 47) with observations of one group earning more money and carrying greater status in the external world. These observations will then shape the expectations which 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) refers 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 wives in their homes 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 his attitudes towards women in the workplace

We can also examine the impact of social structures at home on gender ideology at work using social role theory (e.g., Eagly and Wood, 2011; Wood and Eagly, 2002). 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 that 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

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normative in a culture) shapes the attitudes outside of the home regarding the relative status held by men versus women.

Structure can also shape stereotype content. Fiske and colleagues demonstrate this phenomenon in their model of how the contents of our stereotypes vary systematically along the two dimensions of warmth and competence, as a function of the social structures of status and interdependence (Fiske, Cuddy, and Glick, 2007; Fiske, Cuddy, Glick, and Xu, 2002). That is, the theory argues that the presence or absence of these social structures shapes the social psychology of the actors within them, aligning with our perspective that social structures at home can shape attitudes at work. Building on this work, DiTomaso and colleagues (DiTomaso, Post, Smith, Farris, and Cordero, 2007) examine the influence of these social structures on managers' performance evaluations of scientists and engineers, and find that the structure of status hierarchy is predictive of performance evaluations. We are proposing a similar relationship between social structure (marriage structure) and attitudes (the husband's attitudes 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. This theory argues that 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 is often a sorting mechanism that accounts for organizational placement of individuals (Kanter, 1976). Though the social structure referred to in this theory is more

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broadly embedded in society rather than the home, nonetheless offers broad support for how social structures may influence organizational processes and outcomes.

A qualitative analysis of interviews of male executives offers parallel support, noting 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" (Tracy and Rivera, 2010, p. 5) and that when asked to comment on work-life policy in the organization, participants' responses tended to refer to their personal beliefs and marriage structures. This analysis offers support for the central hypothesis of our paper.

Together, this range of independent perspectives and qualitative data converge to offer theoretical grounding for our expectation that marriage structure will relate to husbands' attitudes towards women in the workplace. Specifically, we hypothesize that husbands embedded in traditional marriages compared to the average married man, will exhibit attitudes, beliefs, and behaviors that undermine the role of women in the workplace.

We want to explicitly acknowledge that our hypotheses and the related analyses are mostly cross-sectional, while our theorizing makes a more assertive claim about causality ("social structure influences social psychology"). This paper builds a theoretical rationale for this causal relationship but does not definitively test such a relationship. That said, we conduct multiple tests, using multiple samples, and multiple analytical methods - including longitudinal analyses - which allow us to see the sequence with which marriage structure and gender attitudes shift within individuals. Our intention is to offer the reader a strong empirical argument that makes the plausibility of a causal relationship undeniable. We also recognize that marriage structure itself may reflect a choice influenced by gender ideology but, it should be noted that we could not isolate any direct empirical evidence demonstrating such.

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Next, we present studies in which we examine attitudes towards women in the workplace, perceptions of organizational efficiency as a function of the number of women in the workplace, and judgments regarding promotional opportunities for qualified female employees. Appendix A cross-tabulates the average age, income, number of children, and education of the men in our samples by their marriage structure across all 5 studies. The studies rely on a variety of methodologies (archival, survey, laboratory experiment, and longitudinal) with the intent of enhancing generalizability.

Study 1: Marriage Structures and Attitudes toward Working Women

We began our investigation by examining whether marriage structure is correlated with attitudes toward women in the workplace. Specifically, we hypothesized that men in traditional marriages are more likely to have negative attitudes toward women in the workplace as compared to the average (Hypothesis 1).

Method

Data and respondents. Data were drawn from the General Social Survey (GSS). The GSS is 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 and Smith, 2006). The GSS provides information on individual views and opinions spanning a variety of topics (Firebaugh and Davis, 1988). We relied upon data for the year 1996, a year that contained survey items related to our predictor and criterion variables. Specifically, 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. Attitude toward working women was measured with 5 items that were averaged to yield a score (*Cronbach's* α = .70). Items

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included, "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 more positive attitude toward working women. We used the average of all items as our measure of attitude toward working women[1].

Predictor variable: Marriage structure. We used effect coding to code marriage structures. Given that we have three categories for marriage structures, 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 (Aiken and West, 1996; Cohen and Cohen, 1983; DiTomaso et al., 2007; Hardy, 1993; Pedhazur and Schmelkin, 1991). 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 modern marriage structures and another for traditional marriage structures, with neo-traditional marriage structures (i.e., wife working part time) as the omitted group.

Control variables. We included participants' age, education, income (annual income in USD), whether the respondent's mother was a stay at home mom (dummy coded 1 for

[1] We also used the equally weighted average in our analysis to check the robustness of our findings. Our results remain unchanged upon doing so.

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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. Participants' education was coded as a continuous variable ranging from 1 (less than high school) to 4 (graduate degree). Likewise, participants' mothers' education was also coded as a continuous variable from 1 (less than high school) to 4 (graduate degree). Income was converted from a categorical to continuous format. Specifically, we used the midpoints of the 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 last open-ended categories in a formula based on the Pareto curve (Hout, 2004). Religion was coded using 4 dummy variables for Protestantism, Judaism, Catholicism, and no religion. The omitted category included other religions including Hinduism, Buddhism, and so forth. Race was coded using two dummy variables for Blacks and Whites. The omitted category included other races such as Asians, Hispanics, and so on.

Results and Discussion

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 – modern 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 (B = -0.16, $p < .05$) whereas modern marriage structure was positively correlated (B = 0.15, $p < .05$). In other words, compared to the average, men in traditional marriages were more likely to endorse a negative attitude about women participating in the workforce.

[2] Note that our results remain unchanged on using additional control variables such as geographic location and political affiliation.

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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 self-selection on the effect of marriage structure by estimating a treatment-effects model where 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, neo-traditional, or modern 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.

Also noteworthy is that as seen in Table 1, black men had significantly more positive attitudes toward working women compared to other minorities ($B = 0.29$, $p < .05$). Past research on racial differences in attitudes towards women's gender roles has found similar results (e.g., Blee and Tickamyer, 1995; Cazenave, 1983; but see Welch and Sigelman, 1989; Wilke, 1993). Past research also suggests that black men follow the suit of 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

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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 cautiously interpreted, 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, we hypothesized that men in traditional marriages perceive that their workplace operates less smoothly when more women are present in their workplace, as compared to the average (Hypothesis 2).

Method

Data and respondents. Data were drawn from two 2002 national surveys: the GSS(Davis and Smith, 1991) and the National Organizations Survey (NOS; Kalleberg, Knoke, Marsden, and Spaeth, 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; and, as the current study focused on the role of marriage structure in their workplaces, we included only observations for which the marriage structure was traditional, neo-traditional or modern. 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. 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

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disagree). We reverse coded the item so that a higher score reflected more positive perception of smoothness of workplace operations.

Predictor variable: Marriage structure. We used the same procedure as in Study 1, and using effect coding, we created two groups, one for modern marriage structures and another for traditional marriage structures, with neo-traditional 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 respondents' age, education, income, whether the respondent's mother was a stay at home mom, and the respondent's mother's level of education in the analyses to control for potential demographic effects that might be associated with respondents' attitude toward women in their 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 and Discussion

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 –

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modern 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 marriage structure and percentage of women in the workplace was significant (B = -0.01, $p < .05$). To illustrate the nature of the 2-way interaction, using standardized values, we exhibit 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, once again, 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.

Study 3: Marriage Structures and Attractiveness of Organizations with Women Leaders

The results from Studies 1-2 portray that marriage structures are predictive of how egalitarian men are. However, since both studies were conducted using secondary data, 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

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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, we examined if compared to the average, men from traditional marriages are less attracted to organizations with female leaders (Hypothesis 3).

Participants and Design

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).

Manipulation and Measures

Participants evaluated a recruitment letter from a fictional company named INDISCO. This recruitment letter was adapted from a recruitment letter previously used by James, Brief, Dietz, and Cohen (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 themselves 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 recruiter names of Michael Drake, Christopher

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McBride, and Matthew Miller or the ostensibly female recruiter 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 recruiter names or male recruiter names).

Additionally, 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, "INDSCO'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, "INDSCO'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, Smith-Crowe, Brief, Dietz, and Baskerville (2007) regarding the attractiveness of INDISCO as a potential employer (*Cronbach's* α =.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, we created two groups, one for modern marriage structures and another for traditional marriage structures, with neo-traditional 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.

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

Control variables. We included participants' age, whether the respondent's mother was a stay at home mom (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 respondents' attitude toward women in their workplace. We also controlled for race by creating two dummy variables for white and Hispanic groups (with the omitted group comprising of Blacks, Native Americans, and others). In addition, we controlled for religion by creating two dummy variables for Mormons and those without any religious affiliation (with the omitted group comprising of Hindus, Buddhists, and others), and number of children[3].

Results and Discussion

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 either the recruitment letter with 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 ($M = 6.27$) compared with those in the low gender diversity salience condition ($M = 4.33$).

We performed regression analysis (Cohen and Cohen, 1983) to test our hypothesis that, compared to the average married man, those in traditional marriages would be less

[3] We did not include education and income as control variables because of insufficient variance in these variables.

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attracted to more gender diverse organizations (i.e., companies with female recruiter names as well as more than average female representation in board of directors and female recruiters). Specifically, we conducted a regression analysis with organizational attractiveness as our criterion variable, entering the control variables, predictor variables – modern marriage structure, and traditional marriage structure, and gender diversity salience and their two way interactions. The results of the regression are provided in Table 3. As expected, the regression coefficient for the two way interaction term between salience of gender diversity and traditional marriage structure was significant (B = -1.84, p < .001). Moreover, the two way interaction term for modern marriage was also significant (B = 1.67, 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 to the average, 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 that were married and working full time. In this study, we examined if compared to the average, men in traditional marriages are more likely to deny qualified female employees opportunities for promotion (Hypothesis 4).

Participants

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Our convenience sample consisted of 232 married, male managers who were recruited from an accounting association in the Western US.

Procedure

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, Bradley, Brief, and Watkins, 2005) in which we manipulated the gender of the potential leader. In this simulation, participants assume 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 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. The participant was then presented with the candidate's resume.

Participants 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 input (the participant). Participants were told that Drew, the CFO, himself had participated in and benefited from this program, and that it was important to

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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 upon Drew.

In Part 3, participants completed assessments of the candidate. In Part 4, participants completed a demographic questionnaire.

Dependent Variable: Recommendation. Participants responded to fourteen 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 Appendix B. Responses to the items were averaged to create a score with higher numbers representing a stronger recommendation for the candidate (*Cronbach's* α = .74).

Predictor variable: Marriage structure. We used the same procedure as in Studies 1-3, and using effect coding, we created two groups, one for modern marriage structures and another for traditional marriage structures, with neo-traditional 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.

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

Control variables. We included participant's age, income, whether the participant's mother was a stay at home mom (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 participants' attitudes toward women in their workplace[4]. We also controlled for the number of children and number of daughters. We controlled for the number of daughters the participant had because we suspected that having

[4] We did not include education and income as control variables because of insufficient variance in these variables across our participants.

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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 (Oswald and Powdthavee, 2010; Warner, 1991; Washington, 2008). In addition, we controlled for religion by creating a dummy variable for Mormons (with the omitted group comprising of Hindus, Buddhists, those without any religious affiliation, and others).

Results and Discussion

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 either the resume with 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 already controlled for the candidate's capability by providing participants in both conditions 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 modern marriage structure and

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traditional marriage structure, and their two-way interaction terms. The results of the regression are provided in Table 4. The hypothesized 2-way interaction effect between gender of the candidate and traditional marriage structure, on participants' recommendation was observed (B =- 1.38, $p < .01$), 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.

Additionally, men in modern 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 also 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.

Given our use of a convenience sample of managers in the accounting profession for this study, future studies will benefit from use of alternate samples to test for generalizability. Nonetheless, Study 4 allows us to see the relationship between marriage structure and the advancement of women in the workplace. A seemingly unrelated and personal factor, a man and woman's division of labor in the private sphere of their home, plays a role in what should be an orthogonal issue in the workplace – the human capital decision of whether to recommend a high-potential employee for a promotion and further development opportunities.

Study 5: Marriage Structures and Attitudes toward Working Women—A Longitudinal Analysis

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The findings from Studies 1 - 4 demonstrate that marriage structure relates to attitudes towards women. However, the conclusions that can be drawn from these studies are somewhat limited since they were all conducted in the U.S., and moreover, were cross-sectional in nature 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 towards 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 marriage structure—attitudes toward working women link. We examined how becoming married to a woman who eventually stays at home or works outside the home might lead to changes in men's attitudes towards working women.

In sum, the purpose of this study was two-fold. First, we wanted to examine changes in one segment of men who were single in the first wave and became married in the next. Specifically, we wanted to examine these men's attitudes toward working women as they transitioned from being single to becoming embedded in traditional or modern marriage structures. We hypothesized that marrying into a traditional marriage structure would lead men to develop less favorable attitudes toward working women (Hypothesis 5). Second, we wanted to examine if the findings obtained in Studies 1-4 would generalize to a non-U.S. sample.

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

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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. Specifically, in our sample, we included only those heterosexual full time employed men who were single in 1991 and got married before the next wave of data collection, and who 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 5 items that were averaged to yield a score (*Cronbach's* α = .72). Items included, "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 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 modern marriage structures in the second wave and another for those who entered traditional marriage structures in the second wave, with those entering neo-traditional marriage structures as the omitted category. 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.

Control variables. As before, we included respondents' age, education (using two dummy variables—one for the first degree or equivalent and another for other higher

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qualification, with the omitted category being all other qualifications), income (gross pay per month), and whether the respondent's mother was a stay at home mom (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 religious allegiance (using three dummy variables—one for no religion, one for the Anglican church, one for Roman Catholics, with the omitted category being all other religions), and number of children.

Results and Discussion

First, we wanted to examine if 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 (chi square=33.96, $p < .05$ with df =18). Nagelkerke's R square of .12 indicated only a weak relationship between prediction and grouping. The Wald criterion demonstrated that only age made a significant contribution to predicting if men were in modern marriages, with younger men more likely to marry working women. Education made a significant contribution to predicting if men were in traditional marriages, with men having "other higher qualification[5]" more likely to marry stay at home women. Attitude toward working women in wave A was not a significant predictor of marriage structure.

We conducted a multiple regression analysis with change in attitude toward working women as the criterion variable, using the control variables, and predictor variable – marriage structure. The results of the regression are provided in Table 6. Consistent with our

[5] City and Guilds Certificate (Full Technological/Part III); HNC, HND, BEC/TEC/BTEC Higher Certificate/Diploma; University Diploma; Any other technical, professional or higher qualifications

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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 (B = -0.32, $p < .001$) whereas entry into a modern marriage structure positively impacted change in attitude toward working women (B = 0.41, $p < .001$). In other words, men who had 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 predictor variable – marriage structure. Importantly, entry into a traditional marriage structure was not related to change in attitude toward health care (B = 0.07, *n.s.*), nor was entry into a modern marriage structure positively related to change in attitude toward health care (B = 0.09, *n.s.*). Given that our analysis did not yield a significant association between marriage structure and attitude toward healthcare (a theoretically unrelated variable), it helps validate the existing analyses, whereas if the new model had showed 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. However, notwithstanding the 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

[6] We thank an anonymous reviewer for this valuable insight.

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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

Our approach opens up new territory by questioning how marriage structure relates to attitudes, beliefs and behaviors related to women in the workplace. Specifically, we argued that men embedded in traditional marriages are more likely to hold negative attitudes toward women in the workplace. We reported the results of five studies that showed that men in more traditional marriages, compared to the average married man, tend to view the presence of women in the workplace unfavorably, perceive that organizations with 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 with 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 structure has in shaping social psychology. Our paper provides robust evidence that, indeed, marriage structures play an important role in economic life beyond the four walls of the house. To our knowledge, we are the first to offer empirical support for this relationship of noteworthy concern to organizational scholars and policy makers.

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

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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, the more costly egalitarianism were to them (Kane and Sanchez, 1994). In this regard, wives' employment should be highly relevant to their husbands' egalitarianism (e.g., Davis and Robinson, 1991; Huber and Spitze, 1981; Spitze and Waite, 1981); 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 and much of our own data in this paper), 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. While we recognize 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's interest-based position is not negated, as the relationship may be reciprocal. In total, therefore, it seems possible that husbands embedded in traditionally and neo-traditionally structured marriages 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), "The fundamental concept in

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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" (pp. 761-762). We contend that the converse is also true (Davis and Greenstein, 2009); thus, we suspect that experiencing a traditional marriage is associated with husbands becoming less egalitarian than the average married man. 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 (e.g., one's gender ideology) (Stone and Cooper, 2001) and that such dissonance can result in attitude change (Cooper, 2011). In sum, 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.

Theoretically, these findings are 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 towards women are related to the structural position or social role one occupies, namely, that of male breadwinner. Moreover, consistent with Eagly and Steffen's position regarding exposure-based drivers of attitude change, we believe that the posture of these men embedded in traditional and neo-traditional 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 modern men 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 attitude.

Explicit and Implicit Gender Attitudes

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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, Poehlman, Uhlmann, and Banaji, 2009; Petty, Fazio, and Brinol, 2009). For instance, Nosek et al. (2007) and Wang and Banaji (1999) 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% of people automatically think "male" when they are exposed to career-related words such as business, profession and work, and think "female" when they are 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 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 regarding 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 towards women in the workplace (Tracy and Rivera, 2010).

However, implicit attitudes, particularly on issues such as gender, can be predictive of 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 towards structures that facilitate the toggling of work and family demands (Chugh, 2004). Henry Mintzberg's (1973) classic framework of "what managers do" outlines three primary types of activities: interpersonal

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relationship, information processing, and decision-making. Implicit bias is predictive of 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 towards women can be consequential in multiple forms.

In fact, even explicit attitudes and beliefs that are not overtly hostile towards 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 to 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 as opposed to hostile justifications (e.g., "Women should forego a career because they lack ability"). In the words of Cikara, Lee, Fiske, and Glick (2009), "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" (p. 457).

Our work neither studies nor speculates 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 towards women in the workplace that are neither benevolent nor implicit. In other words, bias is sometimes unconscious but it also sometimes entirely deliberate. Some men may simply wish to have a workplace without women, or with women in support roles alone.

Organizational implications

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The future may bring dramatic changes in the social structure of marriage, with more modern marriages than ever before, so perhaps the related attitudes towards women in the workplace are likely to undergo similarly dramatic changes. Still, a widespread change in marriage structure is an exceedingly improbable event on a large scale. 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 studied 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 Enrich, 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 business (regarding the latter, 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) have 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. argue this sort of research can inform how organizations respond to the realities of its "potentially powerful, extra-organizational, countervailing forces" (p. 839).

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

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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 et al., responsibility can entail (1) assigning accountability for setting diversity goals, devising means to achieve those goals, and evaluating progress, (2) appointing full-time staff members or creating diversity committees or task forces comprised of people from different departments, professional backgrounds and management levels to overseeing diversity initiatives, brainstorming to identify remedies, and monitoring 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 rather, 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 toggling between their two daily realities. In other words, organizations may 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, p. 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. While analysis of in-depth interviews with men regarding their views on gender and work-life did reveal clear gender role orientation, even in modern marriages, it also revealed speech "marked by uncertainty, questioning, and talk repairs" (Tracy and Rivera, 2010, p. 5). Communication scholars refer to these moments as junctures in talk which often reflect stress, anxiety, embarrassment, or emotional arousal (Tracy and Rivera, 2010) and provide insight into the awkward juncture at which these men sit; the men's attitudes are likely in a state of flux.

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This flux presents the opportunity to create stronger situations in the workplace which 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 towards 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 modern marriages activates more egalitarian values in male employees, we had longitudinal data to support this hypothesis in only one of the studies. It is the combination of studies and range of methods we offer, rather than any individual study or method, that 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 the first born is a daughter) must await future work. Discrimination can emerge from a range of processes in addition to the process of social

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structure we describe here, including social cognitive neural processes (Quadflieg, Mason, and Macrae, 2010), evolutionary processes (Schaller, Conway, and Peavy, 2010), developmental processes (Killen, Richardson, and Kelly, 2010), cognitive processes (Fiske and Russell, 2010), affective processes (Smith and Mackie, 2010), motivational processes (Yzerbyt, 2010), individual difference (Son Hing and Zanna, 2010), social identity and self-categorization processes (Abrams and Hogg, 2010), ethnocentrism (Leyens and Demoulin, 2010), and intergroup competition (Esses, Jackson, and Bennett-AbuAyyash, 2010). Our work here does not preclude these other sources from also playing a role in generating the same resulting bias.

Third, we only studied attitudes, beliefs, and behaviors related to women as our 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 US and UK 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 compared to those prevalent in the US (Tu, Lin, and Chang, 2011).

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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 tracks. 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 modern marriage structure increased egalitarianism. Both studies, therefore, 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. Indeed, we hope our research spurs an interest among organizational scholars regarding other structural features of individuals' non-work lives and their thoughts, feelings, and actions regarding egalitarianism at work.

In addition, our results 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 towards women in the workplace. Additionally, future research might explore how one's upbringing and offspring affect attitudes towards women in the workplace. Note that 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. However, other studies have demonstrated that the employee 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, they suggest that men parenting daughters acquire feminine values. However, it is unclear from

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their results why the order of birth matters and why wages of female employees in organizations with such CEOs do not receive the raise in wages that the male employees do. Future work may want to explore such issues.

In addition, building on research that shows being a child of a working mother (e.g., being the product of a modern marriage) 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. Recall that in each of our analyses, we included as a control variable whether the respondent's mother was a working mom. 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 while growing up, even though some respondents had working moms, at the home front, the boys saw their mothers doing most of the household work, and thus, their mothers' participation in the labor force did not impress upon them in any meaningful way. In other words, from the child's perspective, mom and dad's division of labor in a modern marriage may look similar to the division of labor in a traditional marriage, whereas the division of labor in traditional versus modern marriages likely looks very different from each other 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. However, 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 attitudes towards women in the workplace. Consistently, because it has been found that some religions are more supportive of a

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traditional mindset (e.g., Chan-Serafin, Brief, and George, in press; Davis and Greenstein, 2009), 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[7].

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 towards egalitarianism, the variance in male attitudes remains, and perhaps it 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 is 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., Coltrane, 1998; Gerson, 1993; Hoschild and Machung, 1989). Thus, might it be that more egalitarian men (e.g., those embedded in modern 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? Similarly questions could be posed about non-work structural effects on the outcome of diversity training (e.g., Ciabattari, 2001; Kalev et al., 2006; Kulik and Roberson, 2008). Might it be the case that diversity training is less effective with men embedded in traditional marriages than those in modern ones?

Finally, what about women's attitudes towards 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 these marriages. Our analyses have assumed the women to have

[7] We are grateful to an anonymous reviewer for pointing out that not only boys but also girls raised in such religious households may have a mindset that women belong in the house.

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a simplified pool of preferences, a priori: she enters 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 simplifications 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 in nature and thus, are likely 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. No, organizations should not seek to manipulate people's non-work lives; but we, as organizational scholars, should seek to understand better how the byproduct of those non-work lives spills into the workplace.

Conclusion

We have contributed to the theory and research attesting to the fact that marriage structure and one's position in it relates to a person's stance towards egalitarianism. Specifically, we demonstrated an association between the structure of a man's marriage and his gender ideology in the workplace. Perhaps most importantly, we provided evidence of the organizational implications of a traditional marriage, thereby unmasking an important challenge to workplace egalitarianism.

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APPENDIX A

Cross-tabulation of the average age, number of children, education, and income of the men in our samples by their marriage structure across all 5 studies.

	Study 1	Study 2	Study 3	Study 4	Study 5
TRADITIONAL MARRIAGE STRUCTURE	16.50%	24.75%	44.19%	38.80%	23.36%
Average Age (years)	48.67	43.71	23.14	33.28	45.52
Average Number of Children	2.32	2.13	0.57	1.02	0.96
Average Education[1]	1.29	1.54	4.00	5.00	NA
Average Income	$63,331/yr	$59,462/yr	NA	$95,670/yr	£1,296/mo
NEOTRADITIONAL MARRIAGE STRUCTURE	15.50%	35.05%	39.53%	25.90%	27.30%
Average Age (years)	47.46	46.53	23.65	32.13	45.00
Average Number of Children	2.63	2.26	0.59	0.92	0.69
Average Education	1.81	1.74	4.00	5.00	NA
Average Income	$62,739/yr	$58,177/yr	NA	$86,000/yr	£1,449/mo
MODERN MARRIAGE STRUCTURE	68%	40.20%	16.28%	35.30%	49.34%
Average Age (years)	41.33	40.38	23.37	31.54	40.53
Average Number of Children	1.95	1.67	0.66	0.61	0.66
Average Education	1.71	1.51	4.00	5.00	NA
Average Income	$74,408/yr	$60,159/yr	NA	$81,440/yr	£1,197/mo

[1] Higher numbers represent more education.

For Peer Review

APPENDIX B

Items used to assess the candidate (Study 4)

1. I would recommend that the candidate be selected for the MBA program.
2. The candidate has the makings of a fine leader and Vice President.
3. If given an opportunity to do an MBA, how likely would the candidate be to stay in the organization for the next five years?
4. If given an opportunity to do an MBA, how likely would the candidate be committed to Infomitex?
5. Would the candidate be a good fit for the position of a Vice President?
6. The candidate appears smart.
7. The candidate seems motivated to manage.
8. The candidate would be a successful leader.
9. The candidate has taken increasing responsibilities in his/her career.
10. The candidate has been creative in his/her work.
11. The candidate has shown initiative.
12. The candidate is a planner.
13. The candidate has successfully led others.
14. The candidate fits in at Infomitex.

For Peer Review

TABLE 1

Summary of regression analysis[a] of attitude toward working women (Study 1).

Variables of interest	*B*	*SE*	*t*	*p*
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
Modern 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^2 (%)	0.14			

Note. All tests of variables are two-tailed (N = 282).

[a]Beta coefficients are unstandardized.

For Peer Review

TABLE 2

Summary of regression analysis[a] of perceived smoothness of workplace operations (Study 2).

Variables of interest	*B*	*SE*	*t*	*p*
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
Modern Marriage Structure	0.13	0.18	0.71	0.48
Traditional Marriage Structure	-0.47	0.23	-2.05	0.05
Two-way interaction (Modern Marriage structure x Percentage of women in the workplace)	0.01	0	1.37	0.17
Two-way interaction (Traditional Marriage structure x Percentage of women in the workplace)	-0.01	0.01	-2.71	0.01
Model F	2.38			
R^2 (%)	0.26			
Adjusted R^2 (%)	0.09			

Note. All tests of variables are two-tailed (N = 89).

[a]Beta coefficients are unstandardized.

For Peer Review

TABLE 3

Summary of regression analysis[a] of organizational attractiveness (Study 3).

Variables of interest	*B*	*SE*	*t*	*p*
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: Non-Trinitarian Christians	0.09	0.30	0.28	0.78
Religion: None	0.25	0.35	0.72	0.47
Modern 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 (Modern Marriage structure x Gender diversity salience)	1.67	0.32	5.18	0.00
Two-way interaction (Traditional Marriage structure x Gender diversity salience)	-1.84	0.42	-4.43	0.00
Model F	4.32			
R^2 (%)	0.44			
Adjusted R^2 (%)	0.38			

Note. All tests of variables are two-tailed (N = 89).

[a]Beta coefficients are unstandardized.

For Peer Review

TABLE 4
Summary of regression analysis[a] of recommendation
(Study 4).

Variables of interest	*B*	*SE*	*t*	*p*
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: Non-Trinitarian Christians	0.02	0.06	0.31	0.76
Gender of Candidate	0.04	0.06	0.60	0.55
Modern Marriage structure	-0.89	0.07	-13.65	0.00
Traditional Marriage structure	-0.61	0.07	-9.17	0.00
Two-way interaction (Modern Marriage structure x Gender of candidate)	1.63	0.09	18.62	0.00
Two-way interaction (Traditional Marriage structure x Gender of candidate)	-1.38	0.09	-15.66	0.00
Model F	36.68			
R^2 (%)	0.37			
Adjusted R^2 (%)	0.35			

Note. All tests of variables are two-tailed (N = 232).

[a]Beta coefficients are unstandardized.

TABLE 5

Summary of multinomial logistic regression examining whether attitude toward working women in wave A predicts marriage structure (Study 5).

	Modern marriage structure						Traditional marriage structure					
Predictors	*B*	SE *B*	Wald's χ^2	*df*	*p*	e^B(Odds ratio)	*B*	SE *B*	Wald's χ^2	*df*	*p*	e^B(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: C. of E./Anglican	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: Roman 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			χ^2	*df*	*p*							
$\chi 2$			33.96	18	0.01							
Cox and Snell R^2	= 0.11											
Nagelkerke R^2	= 0.12											

TABLE 6

Summary of analysis of change in attitude toward working women (Study 5).

Variables of Interest	*B*	*SE*	*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: C. of E./Anglican	0.08	0.21	0.38	0.70
Religion: Roman Catholic	-0.24	0.24	-1.01	0.31
Modern 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^2 (%)	0.14			

Note. All tests of variables are two-tailed (N = 304).

[a]Beta coefficients are unstandardized.

For Peer Review

FIGURE 1

Marriage structure, Percentage of women in the workplace, and Male employees' perceptions of smoothness of workplace operations (Study 2).

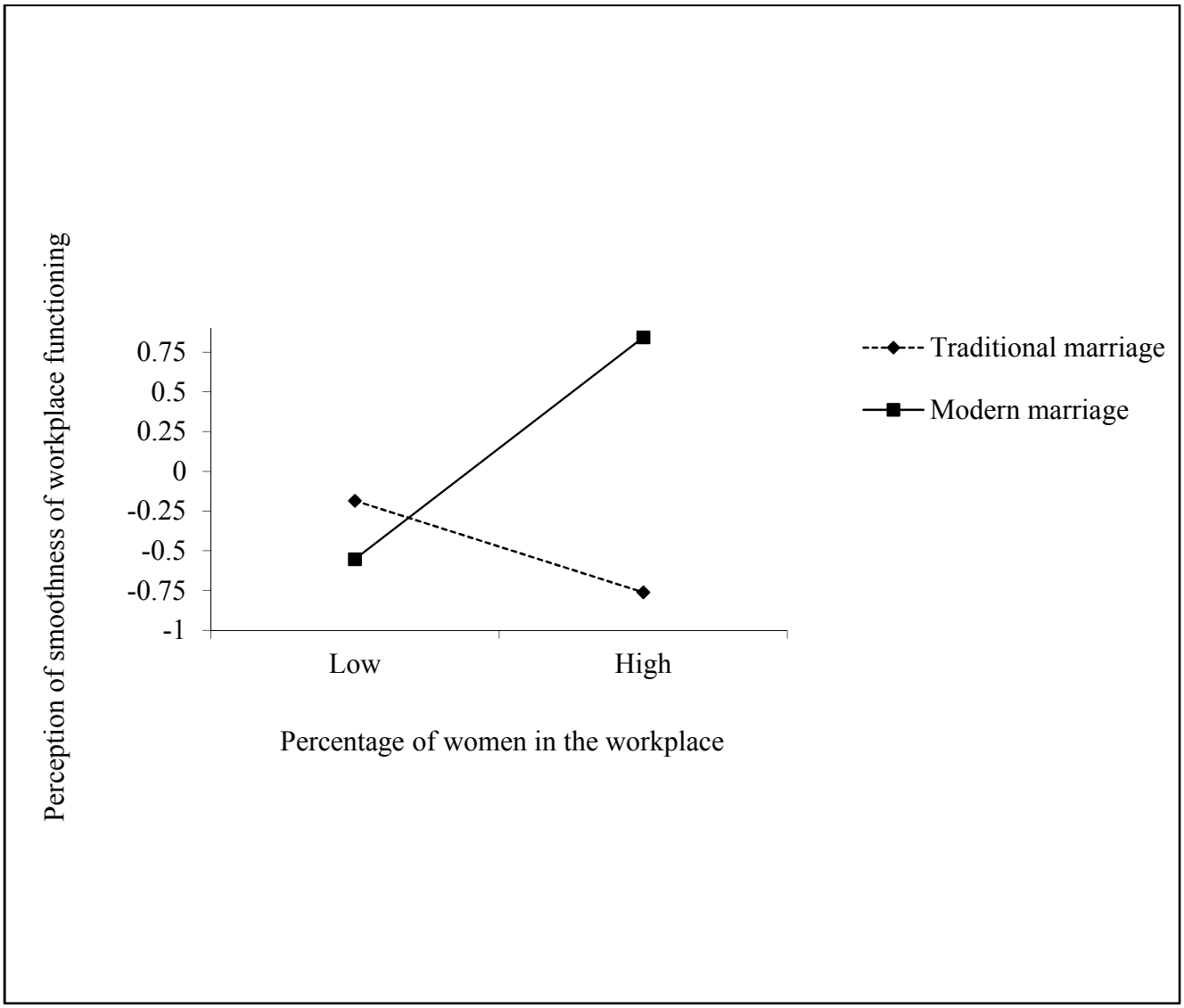
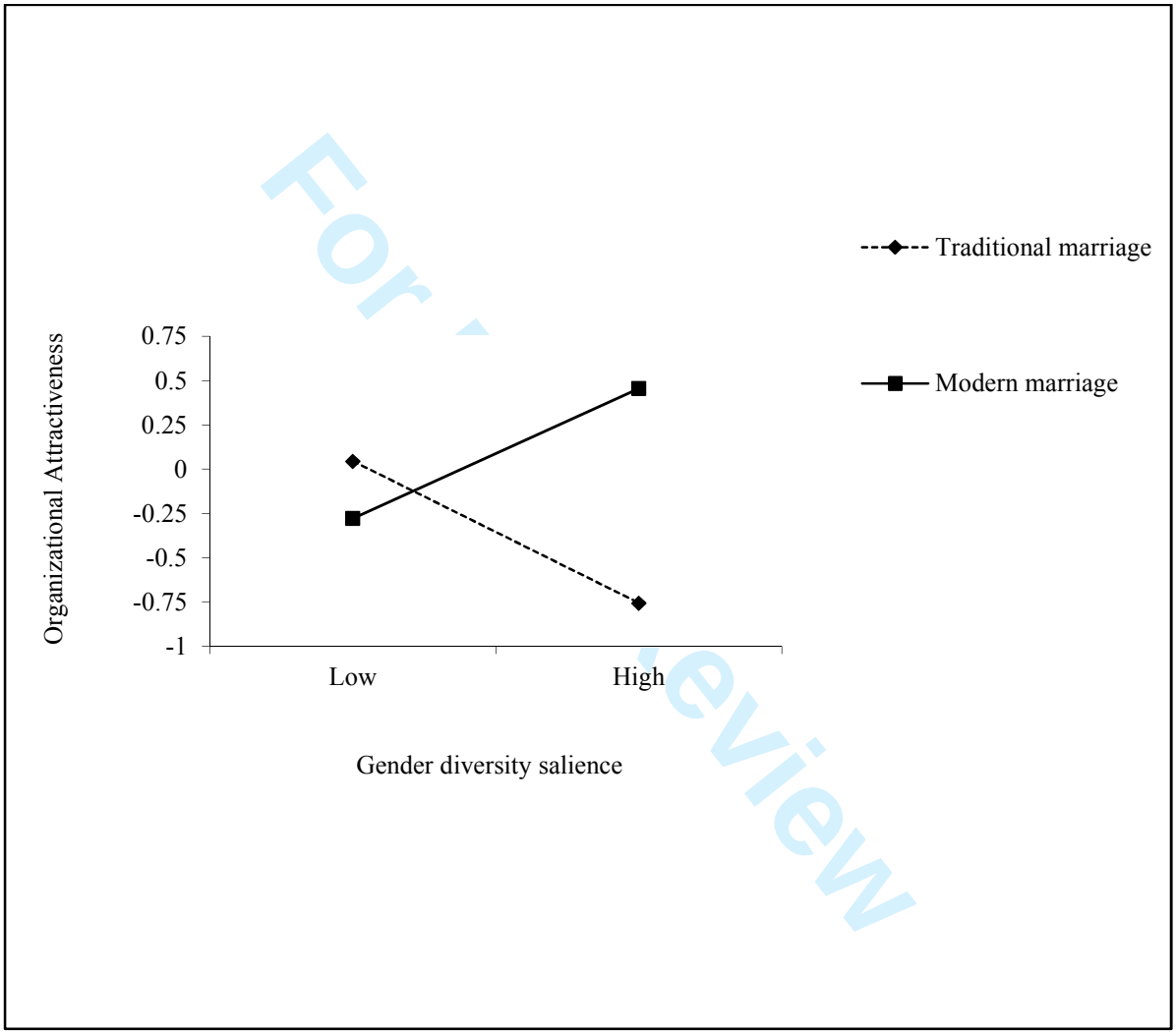


FIGURE 2

Marriage structure, gender diversity salience in the workplace, and male candidates' perceptions of organizational attractiveness (Study 3).



For Review

FIGURE 3

Marriage structure, gender of the candidate, and recommendation (Study 4).



FIGURE 4

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

