The Cultural Divide and Changing Beliefs about Gender in the United States, 1974–2010

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Published online: 18 December 2017
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Abstract
The present paper examines claims of a growing cultural divide in the United States. We analyze social change in beliefs about gender over a period of 36 years (from 1974 to 2010) in the United States using data from the nationally representative General Social Survey (GSS). We find evidence of growing gender egalitarianism until the mid-1990s, with a reversal between 1996 and 2000, and a decline in state differences in beliefs about gender over time in our decomposition analysis and multilevel models. Although we find significant differences in gender beliefs among states in the 1970s based on their voting record on the Equal Rights Amendment and based on patterns of family formation and family life associated with the Second Demographic Transition, these differences among states decreased or disappeared entirely by the early years of the twenty-first century. We highlight the implications of our findings for the ongoing public and academic debate surrounding growing cultural differences among states.

Keywords
Gender equality · Sex role attitudes · Gender · Gender attitudes · Social change · Cohort analysis · Second demographic transition

A growing body of research in sociology and political science has focused on changes in the polarization in mass publics with respect to a range of social and policy-related attitudes and beliefs. James Davison Hunter’s (1991, p. 42) book Culture Wars and his introduction of the idea of polarization, in which he used the “cultural warfare” metaphor to describe the existence in the U.S. of “political and social hostility rooted in different systems of moral understanding,” set the stage for a substantial amount of research. Recent studies have suggested that culture may be supplanting social class as the major line of demarcation in accounting for party choice and political identities in American politics (see Alwin and Tufiş 2016; Frank 2004; Layman 2001). Despite Hunter’s (1991) argument, the emerging literature on polarization characterizes these apparent ideological conflicts as “myths” (Baldassarri and Bearman 2007; Baldassarri and Gelman 2008; Davis and Robinson 1996; DiMaggio et al. 1996; Evans 2003; Fiorina et al. 2005; Thomson 2010). Defining polarization using statistical terminology (in terms of dispersion, bimodality, constraint, and consolidation), one highly-cited study (DiMaggio et al. 1996, p. 715; see also Evans 2003) concluded that, rather than supporting the “widely held belief that Americans have become sharply polarized,” they have become more united on most issues (e.g., in their views on women’s role in the public sphere) and racial attitudes and for the most part divided on only a few issues (e.g., attitudes toward abortion). Similar arguments have been made by others, using different measures and different types of data (e.g., Davis and Robinson 1996; Fiorina et al. 2005; Thomson 2010). Thus, despite its potential appeal as a way of understanding some of the dynamics of the cultural dialogue in American society over the late 20th and early 21st centuries, the hypothesis of...
increasing social conflict between competing systems of moral understanding appears not to be supported.

At the same time, and somewhat surprisingly given the cited literatures, several scholars have argued for what we here call regional polarization—the tendency for vast differences to exist in the nature of family life and in beliefs about family issues across different regions of the country. Lesthaeghe and Neidert (2006), for example, found that gender-related indicators of the “second demographic transition” (hereafter SDT) (e.g., postponement of marriage, high rates of abortion, low levels of fertility) are unequally distributed spatially in the United States, with the so-called “Blue” (Democratic party) states being more “advanced” with respect to such indicators and the “Red” (Republican party) states being more resistant. Others have looked more specifically at differences in beliefs and attitudes about gender by region, and at least with respect to beliefs about women and politics and about the employment of women, respondents in the South report more conservative gender beliefs than do their counterparts in the North (Burris 1983; Campbell and Marsden 2012; Carter and Borch 2005; Hurlbert 1989; Rice and Coates 1995). There is some debate in the literature as to whether the regional differences observed represent the effect of a southern sub-culture on beliefs and attitudes (Hurlbert 1989; Ellison and Musick 1993) or can be explained by demographic characteristics (in particular, the percentage of religious fundamentalists in the population) (Moore and Vanneman 2003). Scholars further argue that differences in the beliefs of residents of the south and the non-south have decreased over time, once income, rurality, and religiosity are statistically controlled (Campbell and Marsden 2012; Carter and Borch 2005).

In this regard, one more recent book, titled Red Families v. Blue Families (Cahn and Carbone 2010), makes what is perhaps the strongest argument about regional heterogeneity. They argue that it is not just the demographic character of regions per se that matters, but also cultural views, harkening back to what Hunter (1991) meant by “culture war.” According to Cahn and Carbone (2010), the failure of outlooks on family issues to overlap across the spatial divide involves legal norms as well. Geared to the post-industrial economy, the Blue regions have developed norms that encourage an egalitarian family, women’s labor force participation, and delays in marriage and fertility, whereas the Red regions of American society reject these new norms and favor a more traditional emphasis on “the unity of sex, procreation, and childrearing” (p. 128), in which early marriage is encouraged, child-bearing is restricted to marital unions, and women are encouraged to adhere to gender commitments that focus on home and family rather than on work (Cahn and Carbone 2010; see also Moore and Ovadia 2006; Moore and Vanneman 2003). Although there is a plausibility to these arguments, especially given the historic link of beliefs about women’s equality to geographical location evidenced by the debates surrounding the ratification of the Equal Rights Amendment (ERA) (Soule and King 2006), the nature and extent of these potential geographic differences in beliefs about gender and the family have not been systematically examined using extant data.

In the present paper, we investigate these claims of growing differences in gender beliefs among states in the United States in order to better understand the problem of what England (2010, p. 163) referred to as the “stalling of change” towards gender egalitarianism. Using data from 23 surveys of the General Social Survey (GSS), spanning 36 years from 1974 through 2010, we seek to better understand the uneven nature of progress toward gender egalitarianism and the extent to which entrenched beliefs in particular state contexts or periods of slowing progress toward gender egalitarianism have contributed to the stalled revolution. Our analysis has three primary aims: (a) we document the nature of social change in gender beliefs in recent periods of U.S. history, examining the extent to which the data from the GSS demonstrate the “feminist backlash” evident in other narratives about the early 1990s onward; (b) we investigate the extent of variation across state contexts in gender beliefs across these same periods; and (c) we examine whether there are differences in the nature of secular changes in beliefs by state context (i.e. whether there are interactions between variables representing state context and those representing period). In other words, we analyze how the specific characteristics of different states are associated with changing beliefs (or the lack thereof) over this 36-year period, specifically whether there are differences among states in progress toward gender egalitarianism.

How and Why Have Beliefs about Gender Changed over Time?

Research demonstrating rising levels of pro-feminist beliefs about gender in the United States and Western Europe was commonplace throughout the early 1970s and early 1980s (e.g., Thornton and Freedman 1979; Cherlin and Walters 1981; Mason and Bumpass 1975). Lesthaeghe and colleagues (e.g., Lesthaeghe 1983, 1995; Lesthaeghe and Surkyn 1988) argue that cultural changes rooted in the Protestant reformation—namely increasing individualism, materialism, and secularism—have motivated changes in both the family and in beliefs about gender across the twentieth century. In Western Europe and North America in particular, fertility has declined (Morgan and Hagewen 2005), prematual cohabitation has increased, and rates of divorce and re-partnering have also increased (Cherlin 2009). The SDT refers to these changes in patterns of fertility, marriage, and divorce that have changed the nature of family life and have been associated with the increased labor force participation of women (Lesthaeghe 1983; Lesthaeghe and Meekers 1986; Lesthaeghe and Surkyn 1988; Surkyn and Lesthaeghe 2004). In Western Europe and North America, there has been a steadily increasing trend toward paid employment by married women, especially among those with young children.
These changes in the family and non-family roles of women are hypothesized to increase women’s interest in adopting egalitarian gender beliefs (Bongaarts 2002; Morgan and Hagewen 2005). As family and non-family roles change and women begin working outside the home in increasing numbers, more women seek to achieve consistency between their beliefs and behaviors. By adopting more egalitarian beliefs about gender, women reduce the cognitive dissonance that results from a mismatch between their new roles and more conservative beliefs about the appropriate roles for women.

Also associated with these changing family and non-family roles for women is an increase in educational attainment for women. In fact, women in the United States are currently more likely to complete a 4-year college degree than are men (Buchmann and DiPrete 2006). Overall, educational attainment for both women and men increased over the second half of the twentieth century. According to exposure-based models of attitude change, when individuals are exposed to more egalitarian thinking through enrollment in higher education, they are more likely to adopt more egalitarian beliefs themselves (Bolzendahl and Myers 2004; Klein 1984; Cassidy and Warren 1996). With the changes in family life associated with the SDT, increasing numbers of individuals have gained both an interest in adopting egalitarian beliefs as well as an exposure to egalitarian thinking, resulting in the widespread liberalization of gender beliefs (Bolzendahl and Myers 2004).

Although overall trends for women in the second half of the twentieth century are toward greater labor force participation and higher educational attainment, important inequalities in the population translate into different exposure and interest effects on gender beliefs for different groups. Historically, there has been less separation of domestic and public spheres in working class and African American families which have been more dependent on the earnings of women (Coontz 1992; Damaske 2011). These differences by race and class in the household division of labor have important implications for beliefs about gender (Blee and Tickamyer 1995). Political generation also influences the impact of historical context on an individual (Brown and Rohlinger 2016). Cohorts that reached young adulthood during the debate over the ERA were likely impacted differently by this historical moment than were those who were already established in their families of procreation or were children at the time. Other scholars have demonstrated how the impact of the gender revolution on beliefs and attitudes about gender and family varies across generations in the same family (Moen et al. 1997; Gerson 2011). These are just some of the many factors that likely impact exposure to, and interest in, changing beliefs about gender.

In some ways, the passage of the ERA in 1972 reflected a culmination of changes in those early decades in the direction of relatively rapid changes in declining conservative beliefs about appropriate roles for women in society and the incompatibility of occupational and maternal roles (Self 2012). However, with the ultimate failure to achieve ratification of the ERA by the states in the early 1980s, researchers pointed to a slowing of changes in beliefs about gender. By the early 1980s, there was an already nascent growing opposition, or backlash, to the feminist gains of the 1960s and 1970s and the anticipation of a “stalled revolution” (see Ehrenreich 1983; Faludi 1991). More recent work has confirmed that the trend toward increasing gender egalitarianism observed in the 1970s and 1980s plateaued in the mid-1990s (Cotter et al. 2011; Thornton and Young-DeMarco 2001).

The Mechanisms of Social Change

In addition to documenting the existence of changes in beliefs and attitudes over time, scholars have investigated how changes in beliefs and attitudes have occurred. Theories of social change highlight the intersection of history and biography (Mills 1959) in conceptualizing social change as motivated by both the changes undergone by individuals (in response to aging or period effects) and by the succession of cohorts or generations distinguished by the historical period in which they were raised and reached young adulthood (Mannheim 1952; Ryder 1965). Members of the same cohort or political generation share common experiences and are exposed to the same cultural and historical events in early adulthood that influence beliefs, attitudes, and political activism later in life (Brown and Rohlinger 2016; Schultz 2002). The cohort succession mechanism of social change is based on the assumption that beliefs are formed in youth and remain relatively stable thereafter (Alwin and McCammon 2003). Intra-cohort change, on the other hand, captures individuals’ attempts to adapt their beliefs in response to their changing socio-historical context.

Methods of decomposing social change into intra-cohort change and cohort succession, linking processes of individual and social change, have been used in previous research to examine changes in attitudes and beliefs toward women’s work and family roles in the United States and internationally (Alwin and Scott 1996; Brewster and Padavic 2000; Brooks and Bolzendahl 2004; Firebaugh 1992; Mason and Lu 1988; Neve 1995). We are interested in synthesizing the literatures addressing the SDT, the mechanisms of social change in beliefs about gender, and regional variation in social change.

The Present Analysis

In a departure from the majority of research analyzing the mechanisms of social change (e.g., Cotter et al. 2011; Pampel 2011), we are interested in measuring the effects of
state context on the nature and pace of social change in beliefs about gender. Rather than simply looking at how state of residence shapes beliefs, we investigate what state-level characteristics matter in shaping trends in gender beliefs over time. We draw on Cahn and Carbone’s (2010) conceptualization of Red states and Blue states as characterized by different cultures of family life. The Red states “marry and have children at younger ages and are most likely to see the embrace of traditional values as critical to community well-being” whereas the Blue states “have the highest average ages of family formation and demonstrate the greatest support for the mechanisms that effectively deter teen births” (p. 10). Instead of dichotomizing states as Red and Blue, however, we include three measures of state-context differences: the state’s voting record on the ERA and the state’s advancement with respect to the SDT, as well as a measure of the economic conditions in each state.

We have a particular interest in the state’s stance on the ERA as an indicator of the state’s gender climate at the start of our analysis in the 1970s. In 1972, the ERA was approved by Congress and was sent to the states for ratification within the next 7 years. An extension on the ratification deadline was issued by the Congress in 1978 but, by 1982, not enough states had ratified the amendment for it to pass. In the end, 30 states ratified the ERA, five additional states initially ratified and later rescinded their ratification, and 15 states never ratified the amendment. (A list of these states is available in an online supplement.) We are interested in looking at how the state’s ERA ratification status is related to individuals’ gender beliefs in the state at the beginning of the period of analysis in the 1970s and whether or not such between-state patterns of gender beliefs persist into the twenty-first century. Our first hypothesis is that individuals in states that ratified the ERA will report more egalitarian beliefs on average (Hypothesis 1). We hypothesize that this positive effect weakens over time (Hypothesis 1a) and that the effect is stronger for women than for men (because of the particular significance of the vote for women’s lives) (Hypothesis 1b).

Another state-level contextual effect in which we are interested is the state’s advancement on indicators of the SDT. We examine how a state’s proportion of never married women in their mid-20s to mid-30s, the abortion rate, and the rate of non-marital cohabitation, for example, are associated with the gender beliefs reported in that state. Based on the supposition that changes in beliefs about gender are connected to the SDT, our second hypothesis is that individuals in states that are further along on this measure of SDT will also report more egalitarian beliefs about gender on average (Hypothesis 2). We hypothesize that the greatest impact of the SDT is in the early periods of analysis (when such changes in fertility and marriage were most revolutionary, representing an important break from the family behaviors of the past) (Hypothesis 2a) and for women (because the changes in family behavior had the greatest impact on women’s lives) (Hypothesis 2b).

In addition to the gender climate and advancement of the SDT, we are interested in examining the association between the economic climate in a state and reported gender beliefs. Evidence is mixed regarding the effects of economic climate on beliefs about gender. Whereas some scholars have found that a strong economy is associated with greater gender egalitarianism (Olson et al. 2007), others have found that men in particular have adopted more egalitarian gender beliefs during times of economic recession (Lee et al. 2010). The present research examines a time-varying indicator of economic conditions in the state—the unemployment rate. We expect men’s beliefs to be more strongly related to economic period effects (Hypothesis 3). Because different relationships between the economy and men’s beliefs have been found in different cultural contexts, there are competing hypotheses for the direction of the effect of this contextual factor.

In the end, our analysis will document the extent of social change in gender beliefs between 1974 and 2010 and test whether or not beliefs about gender have diverged over time in different states with varying gender climates and levels of advancement of the SDT. Has there been a divergence in the beliefs of people living in different state contexts since the 1970s? Or have cultural differences between states declined as we have moved away from the contentious debates of the 1970s and early 1980s over the ratification of the ERA? These are the questions that guide our analysis.

**Method**

Data from the U.S. General Social Survey (GSS) for 1974–2010, including restricted-access state identifiers, were analyzed (Davis and Smith 1972–2010; NORC 2008). These state-identifier codes allowed us to examine state-context effects on individuals’ beliefs about gender. Beliefs about women’s social and political roles were measured by eight questions from the GSS tapping beliefs about the appropriateness of women in politics and their involvement in employment outside the home. These eight indicators are listed in Table 1.

In a confirmatory factor analysis of these eight measures, the parameters of a single common factor were estimated and a factor score based on these measures was constructed (Muthén and Muthén 1998–2012). Because of the way in which the GSS measured these variables, FEPRES, FEPOL, FEFAM, and FEWORK were treated as two-category ordinal measures of the latent continuous variable, and FECHLD, FEPRESCH, FEFAM, and FEHELP were treated as ordinal measures of this latent continuous variable with four ordered categories. The estimated standardized loadings in the model ranged from .47 (for FEWORK) to .87 (for FEHOME), suggesting that there are moderate to strong associations between the underlying factor and the indicators of beliefs about women’s roles that we used.
The estimation method (FIML) for categorical indicators in Mplus does not provide the usually reported goodness-of-fit statistics for the overall fit of the model. An exploratory factor analysis using a different estimation method for categorical outcomes (WLSMV) provides goodness-of-fit statistics with the downside of handling missing data using pairwise deletion. The analysis suggested that a two-factor solution with FECHLD and FEPRESCH loading on a second factor has a better fit to the data ($\chi^2 = 1345.212$, $df = 13$, $p < .001$, RMSEA = .057, CFI = .988, SRMR = .036) compared to the one-factor solution ($\chi^2 = 6226.459$, $df = 20$, $p < .001$, RMSEA = .099, CFI = .943, SRMR = .088). We also explored alternative confirmatory factor analysis specifications using three factors and cross-loading indicators. Although the alternative specifications using two or three factors provided a somewhat better fit to the data, the correlations between factors are strong enough (between .51 and .82) to justify collapsing the multiple factors into a single factor. In addition, given the fact that the loadings in the one factor solution are consistently high and the substantive results in our preliminary analyses from the alternative specifications were similar, for the sake of simplicity we report the results from the one-factor model.

The resulting factor score from our analysis is an unstandardized variable with a scale that is not easily interpretable. In order to make the metric of this factor score more comprehensible and the interpretation of effects in our models more meaningful, we rescaled the factor score to take on values from a minimum of 0 to a maximum of 10. Missing data due to nonresponse and to the absence of some of these indicators in certain survey years was handled using the full information maximum likelihood (FIML) estimation method. The estimation method can take into account the binary and ordinal nature of the observed indicators by calculating the relationships between indicators and the factor using logistic regressions (Muthén and Muthén 1998–2012). The factor score reflecting this latent variable will be used in subsequent analyses as our primary measure of egalitarian gender beliefs.

### Independent Variables

Several individual-level controls were included in the models estimated. In addition to year of survey and birth year, measures of the respondent’s employment status (full time, part time, or not working), schooling (less than high school, high school, or more than high school), household income (per capita, in thousands of dollars), urban residence (counties with towns or cities with at least 10,000 people), and religion (White Conservative Protestant, White Non-conservative Protestant, Black Protestant, Catholic, Jewish, other, no religion) (Steenland et al. 2000) were included as control variables. Our measure of religion combines both race and religion and therefore we cannot include a separate measure of race, due to multicollinearity. It is important for us to include these control variables and to estimate separate models by gender because (a) an individual’s social location is associated with their beliefs about gender and their interest in, and exposure to, gender egalitarianism and (b) over the course of the study period, the GSS sample became more female and less White. State-level variables were intended to capture contextual effects on social change in gender beliefs. A set of dummy variables indicate whether the state ratified, ratified then rescinded, or did not ratify the ERA (Soule and Olzak 2004) and was included as a measure of the state’s gender climate in the 1970s and early 1980s. A time-varying, state-level measure of unemployment (Bureau of Labor Statistics, 2013) indicates the economic climate in the state.
A factor score indicating the advancement of the SDT in a state was constructed as well. This indicator is time-varying and is based on the factor constructed by Lesthaeghe and Neidert (2006). One difference is that Lesthaeghe and Neidert examine both state-level and county-level measures whereas our indicators are strictly at the state level. Measures of the SDT factor in 1970, 1980, 1990, and 2000 were included in the analysis, allowing us to analyze the relationship between lagged measures of SDT and subsequent gender beliefs in a state. We used data from the following IPUMS files: 1970 Form 1 State Sample, 1980 5% sample, 1990 5% sample, 2000 5% sample (Ruggles et al. 2009), state-level abortion tables (Henshaw and Kost 2008), and Natality Detail Files 1970, 1974, 1980, 1990, 1991, 2000 (U.S. Dept. of Health and Human Services, NCHS 1970, 1974, 1980, 1990, 1991, 2000). In our analysis, the SDT factor was constructed from state-level measures of the percentage of non-Hispanic White women (age 25–29) without their own children in household, the percentage of non-Hispanic White ever-married women age 25–29 without own children in the household, the number of legal abortions per 1000 live births, the legal abortion rate per 1000 women (age 15–44), the fertility postponement ratio, the number of same-sex households per 1000 households, the total fertility rate, the fertility rate (age 15–19), the percentage of households that are “families,” and the percentage of households with cohabiters of the same or different sex. The $R^2$ values from the regressions of SDT in various years on ERA dummy variables range from .143 to .312, suggesting that although the measures are associated, they tap different dimensions. Details regarding the construction of the time-varying, state-level SDT factor and descriptive statistics for the variables included in the analysis are available in an online supplement.

Analysis Methods

We decomposed the social change in measures of gender beliefs from 1974 to 2010 into that part resulting from changing beliefs within cohorts and that due to cohort differences reflected in the succession of cohorts. All analyses were conducted separately by gender based on the results of previous research showing important differences in the beliefs of men and women and in the rate of change in such beliefs (Alwin and Scott 1996; Lee et al. 2010; Mason and Lu 1988). The linear decomposition technique (Firebaugh 1989) uses the specification of a linear regression model for the variable of interest. The original model proposed by Firebaugh (1989) used an OLS regression equation with the dependent variable being the variable of interest for which change over time is analyzed and two predictors: survey year and birth year. The regression coefficients from this model may be used to compute intra-cohort change (the amount of change due to changes within cohorts) and cohort replacement (the amount of change due to cohort succession).

In our analysis, we used clustered data (individuals within states) and therefore estimated the model in a hierarchical linear modeling (HLM) framework, in order to take into account this type of clustering in the data (Raudenbush and Bryk 2002). Our basic model is a two-level HLM model with two level 1 predictors and a random intercept. The model in equation format is as follows:

$$y_{ij} = \beta_{0j} + \beta_1 x_{1j} + \beta_2 x_{2j} + r_{ij}$$

where $x_{1j}$ and $x_{2j}$ are Level-1 predictors measuring survey year and birth year, respectively, $r_{ij}$ is a Level-1 random effect, $\gamma_{00}$, $\gamma_{10}$, and $\gamma_{20}$ are Level-2 coefficients, and $u_{0j}$ is a Level-2 random effect.

We used HLM 7.01 to estimate all HLM models (Raudenbush et al. 2011). There may be bias in the estimation of state-level effects in a multilevel model on samples of individuals that are representative at national level, but that are not representative at the state level, as is the case with the GSS data (Lucas 2013). Other authors point out that, in practice, multilevel models may be estimated on nonprobability samples within level 2 units (Hox 2010). More research is needed to be able to determine whether substantive conclusions regarding level 2 effects would be affected in a multilevel analysis on a sample, such as the GSS, that is not representative at the state level. In our multilevel models, most effects are modeled as level 1 effects, and the models should produce unbiased estimates. Technically, the only level 2 effects in our models are those involving ERA, and we will proceed with caution in the interpretation of these effects.

This equation can also contain other predictor variables in order to estimate components of change net of other factors. After first estimating this model with just survey year and birth year as level 1 predictors, we then added the individual-level demographic controls as well as the contextual variables described earlier (i.e., ERA ratification status, a time-varying, state-level measure of unemployment, and a time-varying, state-level SDT factor score). The HLM model we used is a multi-level model for change over time. The model can incorporate level 2 predictors that are constant over time (such as ERA ratification status) or level 2 predictors that are time-varying (e.g., unemployment rates and state level SDT scores). However, incorporating effects of time-varying level 2 predictors in an HLM model with a level 1 / level 2 specification is somewhat problematic. The practical solution is to include predictors that vary over time, even if they are level 2 predictors, in the level 1 equations, because these are able to capture variation over time (Singer and Willett 2003). In our models.
ERA ratification status was added as a level 2 variable in HLM but the measures of the unemployment rate and state-level SDT were added at level 1 because they are time-varying.

The level 2 coefficients from this model, \( \gamma_{10} \) and \( \gamma_{20} \), were used, along with other information, to compute the cohort replacement and intracohort change components of secular change, defined as:

Intracohort change (IC) = \( \gamma_{10} \ast (\text{SY}_{tf} - \text{SY}_{t0}) \)

Cohort replacement (CR) = \( \gamma_{20} \ast (\text{BY}_{tf} - \text{BY}_{t0}) \),

where \( \text{SY}_{tf} - \text{SY}_{t0} \) represents the amount of historical time elapsed between the first survey year \( (t_0) \) and the last survey year \( (t_f) \). \( \text{BY}_{tf} \) is the mean birth year at the first survey year, and \( \text{BY}_{t0} \) is the mean birth year at the last survey year. Note that the slopes for period and cohort were fixed in the HLM models we used in our decomposition analysis; only the intercept was treated as random. In this type of model, also known as a “random intercepts” or an “intercepts-as-outcomes” model (Luke 2004), different states may have different average gender beliefs scores (reflected in the random intercepts), but the effects of survey year and birth year on gender beliefs are the same across states (reflected in the fixed slopes).

Social change (SC) is computed as the difference between the average value of the dependent variable (the gender beliefs factor score) at the end of the period under study and at the beginning of the period under study:

Social Change (SC) = \( \bar{Y}_f - \bar{Y}_0 \),

where \( \bar{Y}_f - \bar{Y}_0 \) represents the amount of change in mean gender beliefs scores between the first survey year \( (t_0) \) and the last survey year \( (t_f) \). Social change, computed in this way, is a sum of the amount of intracohort change and change due to cohort replacement, plus an additional residual quantity. A small residual quantity in the linear decomposition model is to be expected and may arise as a result of nonlinearity and interaction effects (Firebaugh 1989, p. 253).

After estimating the different components of social change (IC and CR), we returned to an HLM analysis to investigate the period effects driving social change in beliefs about gender. This HLM analysis is a different approach than the decomposition analysis to understanding how state-context effects are associated with gender beliefs in different periods. We changed the measurement of survey year to a series of period dummy variables (survey year 1974–1983 [reference category], 1985–1994, 1996–2000, and 2002–2010). We also included cohort as a control variable and changed the measurement of birth year to a series of cohort dummy variables (birth year before 1944 [reference category], 1944–1954, 1955–1965, and born after 1965). The cohort groups were chosen in reference to the initial passing of the ERA by Congress in 1972 as a way of capturing political generation membership (Brown and Rohlinger 2016). Those who were 29 or older in 1972 (and therefore likely to have already established their families of origin) are in the first birth cohort group, those age 18–28 in 1972 are in the second cohort group, those who were minors in 1972 (ages 7–17) are in the third group, and those not yet born or too young to be influenced by the media discourse surrounding the ERA in the early 1970s are in the fourth group.

We added interactions between the period dummies and the contextual state effects variables (i.e., state ERA ratification status, unemployment rate, and SDT factor). These interactions allow us to investigate the specific state-level contextual effects on period effects. In these additional HLM models, we allowed the slopes of the indicators of period, as well as the model intercept, to vary randomly across states. In an attempt to separate out the beliefs of long-term residents of a state from those who moved to the state after reaching adulthood, we tested our hypotheses using both the full sample and also a sample restricted to just those respondents who have not moved out of the state in which they are living since they were 16 years-old. The results for both samples were largely identical and therefore we chose to present the results from the unrestricted sample.

One limitation to our analysis is our inability to establish the direction of causality between state-context variables and gender beliefs. Although we recognize that gender beliefs in a state are not only influenced by the state ERA voting record and advancement with respect to the SDT but also in part influence these state-context factors, we cannot adjudicate between these different causal explanations. Our measures of state-context variables are lagged, however, which gives us some confidence in the interpretation of our findings as representing the effect of past state-context factors on gender beliefs.

Results

Decomposition Analysis

The first step in our analysis was to conduct a decomposition analysis of social change in beliefs about gender from 1974 to 2010 based on a HLM with cohort and period as the only level 1 variables and with no level 2 variables included in the model. The results from this analysis are in Table 2 in the column labeled “no controls.” Results are presented separately for women (Table 2a) and men (Table 2b). From this initial model, we see that women experienced greater social change in beliefs about gender over the entire period than did men. When the period of analysis is broken into the shorter time spans described earlier, it becomes clear that the pace of social change was inconsistent over the span from 1974 to 2010.
Because the time periods used in our analysis are different lengths, we expected some differences by period in the amount of social change. To account for these differences in period length, we present not only the total social change per period but also the amount of social change per year in each period.

For both women and men, the greatest social change in beliefs about gender occurred in the second period (from 1985 to 1994); this was followed by a period in which beliefs became less egalitarian from 1996 to 2000, and finally a period of renewed change in beliefs about gender from 2002 to 2010 in the direction of increasing egalitarianism. These differences in the rate of change across periods can also be seen by looking at the social change per year in each period, for both women and men, wherein the greatest social change per year occurred in period 2 (1985–1994).

The decomposition of overall change into that driven by intra-cohort change and that caused by cohort replacement provides insight on why such period-to-period fluctuations exist. In period 3 (1996–2000), for example, when beliefs about gender actually became less gender-egalitarian in the population, all of the negative social change was motivated by intra-cohort change in the direction of decreasingly egalitarian beliefs (although cohort replacement also slowed during this period.)

The next decomposition model results presented in Table 2 are based on a model with demographic controls (in addition to the indicators of survey year and birth year), and the final column is based on a model with both demographic controls and state-level contextual controls. This final decomposition model, therefore, includes context indicators of the state’s ERA ratification status, of the advancement of SDT in the state, and of the unemployment rate in the state. Looking at the decomposition for the entire period across the three models reported in Table 2, we can see that, for women, adding demographic controls explains away part of the intra-cohort change in the first model and that adding contextual variables explains away the remainder of the intra-cohort change reported in the model with no controls. This suggests that when we take the period from 1974 to 2010 as a whole, we can account for all of the change that occurred for women within cohorts through a combination of changing individual characteristics such as employment status and income and changing state-level characteristics. (Men did not experience a statistically significant level of intra-cohort change in the overall decomposition analysis.) In the follow-up multilevel

### Table 2  Decomposition results

| Time periods       | SC (per year) | No controls | Controlling for individual level predictors | Controlling for all predictors |
|--------------------|---------------|-------------|---------------------------------------------|-------------------------------|
|                    | SC | IC | CR | n  | IC | CR | n  | IC | CR | n  |
| (a) Women          |    |    |    |    |    |    |    |    |    |    |
| Entire period      |    |    |    |    |    |    |    |    |    |    |
| (1974–2010)        | .036 ***  | 1.341 ***  | .269 ***  | 1.206 ***  | 17,802 | .155 **  | .924 ***  | 15,691 | .015 | .924 ***  | 15,691 |
| Period 1 (1974–1983) | .052 ***  | .469 ***  | .379 ***  | .292 ***  | 5,078  | .295 ***  | .236 ***  | 4,613  | −.026 | .236 ***  | 4,613  |
| Period 2 (1985–1994) | .079 ***  | .714 ***  | .272 ***  | .424 ***  | 5,654  | .173 *  | .324 ***  | 5,014  | .068 | .324 ***  | 5,014  |
| Period 3 (1996–2000) | −.063 **  | −.254 **  | −.341 ***  | .089 ***  | 3,467  | −.329 ***  | .067 ***  | 2,982  | −.525 ***  | .068 ***  | 2,982  |
| Period 4 (2002–2010) | .041 **  | .331 **  | .205 *  | .138 ***  | 3,603  | .255 **  | .098 ***  | 3,082  | .228 | .098 ***  | 3,082  |
| (b) Men            |    |    |    |    |    |    |    |    |    |    |
| Entire period      |    |    |    |    |    |    |    |    |    |    |
| (1974–2010)        | .023 ***  | .860 ***  | −.091 | .970 ***  | 13,871 | −.247 ***  | .834 ***  | 12,661 | −.323 **  | .833 ***  | 12,661 |
| Period 1 (1974–1983) | .055 ***  | .497 ***  | .333 ***  | .301 ***  | 4,009  | .257 **  | .233 ***  | 3,752  | −.147 | .234 ***  | 3,752  |
| Period 2 (1985–1994) | .069 ***  | .622 ***  | .289 ***  | .307 ***  | 4,282  | .229 **  | .264 ***  | 3,942  | .178 | .265 ***  | 3,942  |
| Period 3 (1996–2000) | −.055 **  | −.220 **  | −.300 ***  | .097 ***  | 2,669  | −.368 ***  | .093 ***  | 2,372  | −.591 ***  | .094 ***  | 2,372  |
| Period 4 (2002–2010) | .054 ***  | .430 ***  | .286 **  | .126 ***  | 2,911  | .315 **  | .112 ***  | 2,595  | .261 *  | .113 ***  | 2,595  |

The model with no controls only includes survey year and birth year effects. The model controlling for individual level predictors includes, in addition to survey year and birth year effects, controls for: employment status, schooling, religion, and household income per capita. The model controlling for all predictors adds controls for: second demographic transition, unemployment rate, and ERA ratification status. SC (per year) = average social change per year; SC = social change; IC = intra-cohort change; CR = cohort replacement

* p < .05. ** p < .01. *** p < .001

Because the time periods used in our analysis are different lengths, we expected some differences by period in the amount of social change. To account for these differences in period length, we present not only the total social change per period but also the amount of social change per year in each period.

For both women and men, the greatest social change in beliefs about gender occurred in the second period (from 1985 to 1994); this was followed by a period in which beliefs became less egalitarian from 1996 to 2000, and finally a period of renewed change in beliefs about gender from 2002 to 2010 in the direction of increasing egalitarianism. These differences in the rate of change across periods can also be seen by looking at the social change per year in each period, for both women and men, wherein the greatest social change per year occurred in period 2 (1985–1994).
analysis, we further investigate how different state-contextual factors are each related to period effects. With respect to cohort replacement, demographic controls explain part of the change attributable to cohort replacement, but contextual factors have no effect on the level of cohort replacement reported.

When the period of analysis is broken into shorter durations, we see that demographic and contextual controls play different roles in different time periods. For women and men, in periods 1 (1974–1983) and 2 (1985–1994), the addition of demographic controls decreases the amount of intra-cohort change. Surprisingly, for period 3 (1996–2000), when individual and contextual variables are added to the models without controls for women and men, the amount of change attributable to intra-cohort change actually increases. Most of this increase is attributable to the addition of contextual controls and can be explained by the fact that the unemployment rate is negatively related to survey year during this period but slightly positively related to the gender beliefs factor. Therefore, when unemployment rate was not included in the model, the relationship between survey year and gender beliefs was suppressed. In the fourth period (2002–2010), the amount of change attributable to intra-cohort change increases with the addition of individual controls. This is likely because indicators of the respondent’s full-time employment status and of household income are negatively associated with survey year but positively associated with the gender beliefs factor for both women and men. For women in the fourth period, an indicator of being a White non-conservative protestant also shows a similar pattern of association and could be partly responsible for the increase in intra-cohort change observed across models.

**HLM Investigation of Period Effects**

In Tables 3 (for women) and 4 (for men), the unstandardized coefficients from the HLM models that further explore period effects on social change in gender beliefs are presented. When comparisons of the size of coefficients within a model are made, standardized coefficients are used (results not shown). In Model 1, the results from an HLM model without period interactions are presented. In support of Hypothesis 1 and Hypothesis 2, the level of advancement of the SDT in a state and a state’s record of ratifying the ERA are both positively associated with liberal gender beliefs (but for men, ERA ratification status is not significant at conventional levels, in support of Hypothesis 1b). For both men and women, the unemployment rate is positively related to gender beliefs. From a comparison of standardized regression coefficients (results in Appendix Tables 3 and 4 in an online supplement), we find that the slope for the variable indicating advancement of the SDT in a state is greater in magnitude for both women and men than state ERA status and unemployment in predicting beliefs about gender.

In Models 2–4, we examine how these state-contextual factors shaped the nature and pace of social change through the inclusion of interaction terms between the contextual factors and dummy variables for period. We started the analysis with empirical predictions regarding the effect of SDT and ERA status on period effects but not regarding the effect of the unemployment rate on period effects (other than the prediction that unemployment rates would be more salient for men’s beliefs than women’s, Hypothesis 3). Unemployment rate interactions are included so that we may test the effect of state cultural context on period effects, net of the effects of economic conditions. We predicted that differences between state contexts would decline across time (Hypotheses 1a and 2a).

We expected a state’s history of ratification of the ERA would have a positive effect on beliefs about gender (Hypothesis 1), especially for women (Hypothesis 1b), and that the effect would weaken over time (Hypothesis 1a). This is what we found for women: A negative effect in period 1 (1974–1983) of living in a state that did not ratify the ERA which is cancelled out by a positive interaction with period (which is positive, statistically significant, and greater in magnitude than the direct effect of ERA status) in the fourth period (Model 2) (see Table 3). This interaction effect is depicted graphically in Fig. 1. We used a slightly modified Model 2 in order to graph the interaction effect in Fig. 1, with time measured linearly by survey year. Following the method outlined by Bauer and Curran (2005), we calculated the regions of significance for this interaction term and found that from 1995 to 2010, no statistically significant difference was found between the gender beliefs reported by residents of states that ratified the ERA and states that did not ratify, supporting Hypothesis 1a.

No statistically significant interaction with period was found for men; when interactions with period were included in the model, ERA status was not a statistically significant predictor of gender beliefs for men in any period (see Table 4). This is an important distinction between the models for women and for men and supports the predictions of Hypothesis 1b.

Similarly, we expected to find that individuals in states that were further along on the measure of SDT would report the most liberal beliefs about gender (Hypothesis 2) and that the greatest impact of the SDT would be found in the early periods of analysis (when such changes in fertility and marriage were most revolutionary, representing an important break from the family behaviors of the past) (Hypothesis 2a) and for women (because the changes in family behavior had the greatest impact on women’s lives) (Hypothesis 2b). We found that, for both women and men, there was a positive effect of the SDT in period 1 (1974–1983) on beliefs about gender which disappeared in periods 3 (1996–2000) and 4 (2002–2010) (Model 3), supporting Hypothesis 2a but not Hypothesis 2b.
| Table 3  | HLM models with period and cohort dummy variables (Unstandardized coefficients) — women |
|----------|--------------------------------------------------------------------------------------|
|          | Model 1  | Model 2  | Model 3  | Model 4  | Model 5  |
|          | ($n = 15,691$) | ($n = 15,691$) | ($n = 15,691$) | ($n = 15,691$) | ($n = 15,691$) |
| Intercept | 4.819 *** | 4.867 *** | 5.045 *** | 4.769 *** | 5.093 *** |
| Time period (ref: 1974–1983) | | | | | |
| Period 2 (1985–1994) | .400 *** | .394 *** | .220 ** | .440 *** | .185 * |
| Period 3 (1996–2000) | .282 *** | .232 * | .131 | .305 *** | .178 |
| Period 4 (2002–2010) | .220 ** | .091 | .174 * | .275 *** | .129 |
| Birth year (ref: <1944) | | | | | |
| Cohort 2 (1944–1954) | .777 *** | .778 *** | .779 *** | .778 *** | .779 *** |
| Cohort 3 (1955–1965) | .966 *** | .964 *** | 954 *** | 964 *** | 952 *** |
| Cohort 4 (1966+) | 1.107 *** | 1.104 *** | 1.096 *** | 1.105 *** | 1.095 *** |
| SDT\(^1\) | .006 * | .008 ** | .022 *** | .005 * | .025 *** |
| Unemployment rate\(^a\) | .026 ** | .022 ** | .016 * | .043 *** | .010 |
| ERA Status (ref: Ratified) | | | | | |
| Did not ratify (DNR) | −.150 ** | −.232 ** | −.145 ** | −.150 ** | −.156 * |
| Ratified & rescinded (R&R) | −.122 | .021 | −.187 | −.132 | .097 |
| Period 2*ERA(DNR) | | .029 | | | .029 |
| Period 3*ERA(DNR) | | .095 | | | −.120 |
| Period 4*ERA(DNR) | | .328 * | | | .103 |
| Period 2*ERA(R&R) | | −.292 | | | −.265 |
| Period 3*ERA(R&R) | | −.081 | | | −.392 |
| Period 4*ERA(R&R) | | −.005 | | | −.360 |
| Period 2*SDT | | | | | −.006 |
| Period 3*SDT | | | | | −.026 *** |
| Period 4*SDT | | | | | −.030 *** |
| Period 2* Unemployment rate | | | | | −.055 ** |
| Period 3* Unemployment rate | | | | | −.033 |
| Period 4* Unemployment rate | | | | | −.015 |
| Employment (ref: full time) | | | | | |
| Part time | −.257 *** | −.256 *** | −.258 *** | −.257 *** | −.255 *** |
| Not working & other employment | −.608 *** | −.608 *** | −.606 *** | −.608 *** | −.604 *** |
| Schooling (ref: high school) | | | | | |
| Less than high school | −.643 *** | −.633 *** | −.630 *** | −.641 *** | −.626 *** |
| More than high school | .390 *** | .391 *** | .390 *** | .389 *** | .387 *** |
| Religion (ref: White conservative protestant) | | | | | |
| White non-conservative protestant | .575 *** | .560 *** | .567 *** | .572 *** | .561 *** |
| Black protestant | .569 *** | .557 *** | .560 *** | .570 *** | .560 *** |
| Catholic | .468 *** | .456 *** | .463 *** | .469 *** | .463 *** |
| Jewish | 1.109 *** | 1.092 *** | 1.095 *** | 1.106 *** | 1.098 *** |
| Other | .397 *** | .397 *** | .397 *** | .394 *** | .400 *** |
| None | .896 *** | .891 *** | .898 *** | .896 *** | .896 *** |
| Household income per capita (in thousands of $)\(^a\) | .007 *** | .007 *** | .007 *** | .007 *** | .007 *** |
| Urban | .246 *** | .246 *** | .241 *** | .246 *** | .238 *** |
| Variance components, ICC and $R^2$ | | | | | |
| Level 2 variance | .014 *** | .013 | .011 *** | .012 *** | .015 * |
| Level 1 variance | 2.884 | 2.873 | 2.876 | 2.884 | 2.866 |
| Period 2 slope | .015 | | | | .019 |
| Period 3 slope | .025 | | | | .040 * |
| Period 4 slope | .052 ** | | | | .042 ** |
| ICC | .005 | .005 | .004 | .004 | .005 |
Some period-variation in the effect of unemployment was found. In Model 4, unemployment was positively related to egalitarian gender beliefs in period 1 (1974–1983) but this effect decreased or disappeared in period 2 (1985–1994) for both women and men. However, in the final model which includes all of the context and period interactions (Model 5), unemployment rate in the state is not significantly associated with gender beliefs for women but is positively and significantly associated with gender beliefs for men across all periods, in support of Hypothesis 3. For men, a higher unemployment rate was associated with more egalitarian gender beliefs, consistent with our previous research which found that men in particular adopt more egalitarian gender beliefs during economic hard times (Lee et al. 2010).

Discussion

Our analysis shows that there has been a slowdown in the liberalization of beliefs about gender in the United States starting in the mid-1990s, consistent with previous research (Cotter et al. 2011; Thornton and Young-DeMarco 2001). Our decomposition analysis sheds light on the mechanisms of change responsible for the reversal in trends toward gender egalitarianism. We determined that although cohort replacement slowed in period 3 (1996–2000), the actual reversal in trends toward increasingly liberal gender beliefs was motivated by within-cohort processes. This means that the change is not attributable to the more conservative beliefs of recent cohort groups but rather to the adoption of increasingly conservative gender beliefs within cohort groups. From the decomposition analysis, it seems that the state-context variables influenced social change in beliefs about gender as period effects and not in any consistent way as cohort effects. We further investigated the association between state context and period in the HLM analysis to see if state-context variables explained any of the variation in beliefs about gender beyond the individual-level predictors.

The HLM analysis sheds light on how state-context effects influenced social change as period effects. We found that the effects of the context variables varied by period, perhaps contributing to the fluctuation in social change observed across periods. Although living in a state that had not ratified the ERA and that was resistant to the changes in family life associated with the SDT was associated with less egalitarian beliefs about gender in 1970s, this was no longer the case in the early years of the twenty-first century.

Our paper contributes to the literature on the slowdown in beliefs about gender that occurred in the mid-1990s in the United States by examining the roles of state-context factors in influencing the mechanisms of social change from 1974 to 2010. Because this reversal in trends toward greater gender egalitarianism occurred in the 1990s, as opposed to the 1980s as predicted by feminist theorists (e.g., Faludi 1991), Cotter et al. (2011) attribute this to egalitarian essentialism; a cultural frame based on the feminist call for gender equality coupled with social support for women who choose to focus on childrearing instead of paid employment. In this way, this trend does not represent a return to traditionalism so much as growing support for women’s choice to work for pay or specialize in domestic activities. We would add to this explanation in speculating that shifting national political agendas and media reports on the hazards of being a career woman have also contributed to the observed reversal in the liberalization of beliefs about women’s political and social roles in U.S. society in the 1990s and the slowing of social change in gender beliefs in the new millennium (compared to the mid-1980s–early 1990s) (Self 2012).

Our analysis shows that individual-level explanations of changing beliefs that point to changing exposure to, or interest in, liberal gender ideology cannot fully explain the pattern of change in gender beliefs observed from 1974 to 2010. Instead, we must include contextual factors in our theories of changing beliefs. In periods 1 and 2 (1974–1996), the addition of state-context variables explained away the intra-cohort change observed in these periods. However, individual demographic and state-level contextual controls did not explain away the intra-cohort change observed during periods 3 and 4 (1996–2010). Even controlling for changing educational attainment, religion, and income in the population, as well as our measures of state context, individuals adopted more conservative beliefs about gender from 1996 to 2000 (see also Cotter et al. 2011).
### Table 4  
HLM models with period and cohort dummy variables (Unstandardized coefficients)—men

|                                | Model 1 \( (n = 12,661) \) | Model 2 \( (n = 12,661) \) | Model 3 \( (n = 12,661) \) | Model 4 \( (n = 12,661) \) | Model 5 \( (n = 12,661) \) |
|--------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| **Intercept**                  | 4.631 ***                   | 4.656 ***                   | 4.769 ***                   | 4.598 ***                   | 4.765 ***                   |
| **Time period** (ref: 1974–1983) |                             |                             |                             |                             |                             |
| Period 2 (1985–1994)           | .045                        | .037                        | −.071                       | .075                        | −.058                       |
| Period 3 (1996–2000)           | −.007                       | −.012                       | −1.01                       | .026                        | −.007                       |
| Period 4 (2002–2010)           | −1.196 *                    | −.262 *                     | −.261 **                    | −1.156                      | −.240                       |
| **Birth year** (ref: <1944)    |                             |                             |                             |                             |                             |
| Cohort 2 (1944–1954)           | .635 ***                    | .635 ***                    | .632 ***                    | .634 ***                    | .630 ***                    |
| Cohort 3 (1955–1966)           | .782 ***                    | .781 ***                    | .777 ***                    | .778 ***                    | .770 ***                    |
| Cohort 4 (1966+)               | 1.018 ***                   | 1.018 ***                   | 1.013 ***                   | 1.014 ***                   | 1.004 ***                   |
| **SDT***                       | .007 *                      | .008 **                     | .017 ***                    | .007 *                      | .017 **                     |
| **Unemployment rate**          | .042 ***                    | .043 ***                    | .036 ***                    | .053 ***                    | .043 **                     |
| **ERA status** (ref: Ratified) |                             |                             |                             |                             |                             |
| Did not ratify (DNR)           | −1.147                      | −1.161                      | −1.145                      | −1.146                      | −1.118                      |
| Ratified & rescinded (R&R)     | .017                        | .051                        | −.016                       | .013                        | .092                        |
| **Period 2*ERA(DNR)**          | −.021                       |                             |                             |                             |                             |
| **Period 3*ERA(DNR)**          | .023                        |                             |                             |                             | −.213                       |
| **Period 4*ERA(DNR)**          | .124                        |                             |                             |                             | .029                        |
| **Period 2*ERA(R&R)**          | −.047                       |                             |                             |                             | .013                        |
| **Period 3*ERA(R&R)**          | −.180                       |                             |                             |                             | −.559                       |
| **Period 4*ERA(R&R)**          | .086                        |                             |                             |                             | −.092                       |
| **Period 2*SDT**               | −.006                       |                             |                             |                             | .020                        |
| **Period 3*SDT**               | −.017 **                    |                             |                             |                             | −.036***                    |
| **Period 4*SDT**               | −.015 **                    |                             |                             |                             | −.017*                      |
| **Period 2* Unemployment rate**| −.045 *                     |                             |                             |                             | −.038                       |
| **Period 3* Unemployment rate**| −.013                       |                             |                             |                             | −.057                       |
| **Period 4* Unemployment rate**| −.008                       |                             |                             |                             | .006                        |
| **Employment** (ref: full time) |                             |                             |                             |                             |                             |
| Part time                      | −.001                       | −.003                       | −.003                       | −.002                       | −.008                       |
| Not working & other employment | −.156 ***                   | −.156 ***                   | −.158 ***                   | −.159 ***                   | −.162 ***                   |
| **Schooling** (ref: high school) |                             |                             |                             |                             |                             |
| Less than high school          | −.553 ***                   | −.549 ***                   | −.547 ***                   | −.551 ***                   | −.540 ***                   |
| More than high school          | .361 ***                    | .359 ***                    | .363 ***                    | .361 ***                    | .359 ***                    |
| **Religion** (ref: White conservative protestant) |                             |                             |                             |                             |                             |
| White non-conservative protestant | .458 ***                   | .457 ***                    | .458 ***                    | .458 ***                    | .461 ***                    |
| Black protestant               | .396 ***                    | .393 ***                    | .393 ***                    | .397 ***                    | .392 ***                    |
| Catholic                       | .395 ***                    | .394 ***                    | .392 ***                    | .394 ***                    | .396 ***                    |
| Jewish                         | .944 ***                    | .942 ***                    | .935 ***                    | .944 ***                    | .940 ***                    |
| Other                          | .344 ***                    | .342 ***                    | .342 ***                    | .341 ***                    | .341 ***                    |
| None                           | .842 ***                    | .837 ***                    | .841 ***                    | .841 ***                    | .837 ***                    |
| Household income per capita (in thousands of $) | .006 ***                   | .006 ***                    | .006 ***                    | .006 ***                    | .006 ***                    |
| Urban                          | .157 ***                    | .153 **                     | .157 ***                    | .155 **                     | .148 **                     |
| **Variance components, ICC and R²** |                             |                             |                             |                             |                             |
| **Level 2 variance**           | .034 ***                    | .046 ***                    | .032 ***                    | .032 ***                    | .048 ***                    |
| **Level 1 variance**           | 2.493                       | 2.487                       | 2.492                       | 2.493                       | 2.480                       |
| **Period 2 slope**             | .024                        |                             |                             |                             |                             |
| **Period 3 slope**             | .014                        |                             |                             |                             | .062 **                     |
| **Period 4 slope**             | .015                        |                             |                             |                             | .021                        |
| **ICC**                        | .013                        | .018                        | .013                        | .013                        | .019                        |
Building on Lesthaeghe and Neidert’s (2006) research, we found that in states that were further along with respect to the SDT and that ratified the ERA were also more liberal in their beliefs about gender in the earliest time period, supporting Hypotheses 1 and 2. The results suggest, however, that cultural differences between states declined in importance (with respect to beliefs about gender) after the early 1970s (see Models 2–4 in Tables 3 and 4). The declining effect of advancement with respect to the SDT appears to be part of the story of stalled social change in beliefs in period 3 (1996–2000). We found in our HLM analysis that this was the first period in which the positive association between a state’s advancement on the SDT and egalitarian gender beliefs disappeared. By the twenty-first century, beliefs about gender were nearly as egalitarian, or as egalitarian, across states with different ERA voting records and stages of advancement of the SDT. These results support Hypotheses 1a and 2a.

We also found that economic differences between states (as measured by the unemployment rate) continue to influence the beliefs about gender held by the state’s residents, at least for men (consistent with Hypothesis 3). Men reported more egalitarian gender beliefs in states with higher unemployment rates, consistent with our past research which showed that men adopt more egalitarian beliefs during economic hard times (Lee et al. 2010). Overall, our findings confirmed our prediction regarding the importance of the ERA for women (Hypothesis 1b) but challenged our predictions regarding the importance of the SDT for women versus men (Hypothesis 2b) and confirmed our prediction regarding the importance of unemployment rates for men versus women (Hypothesis 3).

**Limitations and Future Research Directions**

Future research should attempt to establish the direction of causality in the association between state-context factors and individuals’ beliefs and attitudes. Although we tried to address the issue of reverse causality by using lagged measures of state context in predicting beliefs about gender, we are unable to fully investigate questions of causal direction using cross-sectional data. Analysis of panel data would also allow for an investigation of within-person changes in attitudes and beliefs over this time period and would be a contribution to the literature. Ideally, future research on state-context effects should also analyze data that are representative at the state level. Such an analysis would further our understanding of the different patterns of changing gender beliefs with age for different political generations in different state contexts following the failed ratification of the ERA.

### Table 4 (continued)

|                | Model 1 (n = 12,661) | Model 2 (n = 12,661) | Model 3 (n = 12,661) | Model 4 (n = 12,661) | Model 5 (n = 12,661) |
|----------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| $R^2_1$       | .181                 | .179                 | .183                 | .182                 | .181                 |
| $R^2_2$       | .598                 | .501                 | .614                 | .611                 | .486                 |

Level 2 $n = 48$; level 1 $n = 12,060$. SDT and unemployment rate entered at level 1 as predictors. ICC = intraclass correlation coefficient

* Variable centered around grand mean

* $p < .05$. ** $p < .01$. *** $p < .001$
Practice Implications

The news media have chronicled the increased partisanship in Washington (Hulse and Herszenhorn 2009; Krugman 2002) and scholars have investigated changing regional divides among Americans, particularly in terms of how such differences translate into voting patterns (Cahn and Carbone 2010; Lesthaeghe and Neidert 2006; Monson and Mertens 2011). Our research weighs into this national discussion about growing cultural divides in the United States and provides some evidence to challenge this claim. With respect to gender beliefs, cultural divides that existed in the 1970s have diminished. More specifically, historical cultural differences that culminated in the heterogeneous voting record on the ERA and differences across states in family formation and dissolution patterns were associated with large differences in gender beliefs in the 1970s, but these differences have diminished over time. When we analyze cultural differences among states in terms of gender beliefs, the story that emerges is one of declining, not growing, difference since the 1970s. Despite claims of growing regional divides in the media and in some scholarly work, our results challenge the claim of growing cultural differences at the state level. If such empirical evidence of declining cultural differences among states was more widely disseminated, this could temper the claims of the United States as a nation increasingly divided.

Conclusion

Our research advances our understanding of how social changes in beliefs about gender have varied from 1974 to 2010, for men and for women, and it provides evidence of the importance of U.S. state-context variables in explaining patterns of change. We have shed light on the characteristics of different states that are associated with the uneven patterns of change in beliefs by geographic region observed by others and have helped explain the reversal in trends toward gender egalitarianism starting in the 1990s. Overall, our findings challenge the claim of growing cultural differences between states. Rather than finding evidence of growing differences between those states that are more and less advanced with respect to the second demographic transition (SDT), we found shrinking differences and, with respect to our measure of the gender context of the state (i.e., ERA voting record), we found differences in gender beliefs that existed in the 1970s, 1980s and even early 1990s but that were no longer present by 2010. These findings all challenge the argument of a growing cultural divide among states, at least with regard to attitudes about gender egalitarianism.

Compliance with Ethical Standards The authors declare that they have no conflict of interest.

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