Maternal Influence on Daughters' Family Gender Role Attitudes

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Using mother-daughter pairs from the National Longitudinal Survey of Youth 1979, I estimate mothers' influence on their young adult daughters' egalitarian vs. more traditional gender role attitudes. Following up Moen, Erickson, and Dempster-McClain (1997), I employ structural equation analysis to test the verbal socialization hypothesis that mothers' attitudes regarding family gender roles directly and positively influence daughters' gender role attitudes. I also test the hypotheses that maternal employment while daughters are young will lead to more egalitarian than traditional gender role attitudes of daughters, and maternal employment during the early years of a daughter's childhood will have more influence on daughter's attitudes than maternal employment later in adolescence. I find support for the verbal socialization hypothesis, but I do night find evidence of direct behavior socialization of gender role attitudes through mother's employment or dynamic differences in behavior socialization. I suggest further exploration into causal models for exogenous variables.

INTRODUCTION

In the United States, massive changes in women's roles both inside and outside the realm of the family have led to the question, "How did we get here and where are we heading?" I explore this very question as a follow-up and extension of research on gender role socialization by Moen, Erickson, and Dempster-McClain (1997) and others. Moen, Erickson, and Dempster-McClain (1997) find that mothers' gender role attitudes and educational attainment predict their daughters' gender role attitudes and employment behaviors among mother-daughter pairs observed from the 1950s to the 1980s. They conclude that verbal socialization and status are the most important intergenerational

influences on gender role attitudes, while behavior socialization does not play an important role.

This paper is a first attempt at exploring the causal structure of gender role attitude socialization of young adult women. I see it as a solid basis and proposal for further analysis. Using structural equation modeling, I examine the gender role attitudes of these young women and estimate the influence of maternal attitudes, or verbal socialization, and maternal employment, or behavior socialization, throughout the daughter's early childhood, mid-childhood, and adolescence on these attitudes. In the current version of this paper, I also explore the possible influences of social status and family instability that may be important influences on this cohort of women. I estimate a multiple regression model in the following analysis; however, I plan to test more complex, dynamic causal structures in future versions of this paper.

I focus on a contemporary cohort of young women experiencing the transition to adulthood. These women are deciding how they want to transition into their roles as employees, students, wives, and mothers. As Moen, Erickson, and Dempster-McClain (1997) have shown, influences on gender role attitudes are changing over time; therefore, it is important to reexamine these possibly changing influences among new cohorts of young adults.

THEORY

Over the last half of the 20th Century both attitudes and labor force participation patterns have shifted. These shifts have allowed, and even encouraged, women to participate in paid employment outside of the household. While radical changes in women's labor force participation began in the 1960s and 1970s, women's employment

is increasing in the U.S. even in recent decades. Long term trends show that along with labor force participation, women are also experiencing greater career opportunities and earnings (Rosenfeld 1996). The rearing of children has, in the past, reduced women's labor force participation or kept them out of the labor force completely for periods of time. Over time, the impact of even small children on women's employment outside the home has decreased; however, fertility still affects the amount of time women can spend at work and the types of employment positions they can take (Rosenfeld 1996; Vandenheuval 1997). Vandenheuval (1997) found that substantial minorities of both Black and White women experience variability (or discontinuity) in labor force participation/nonparticipation 2 years after a first birth (about 20%) and about half experience variability 5 years after the first birth.

Within the context of families and households, the division of labor has changed dramatically for women. Cancian and Reed (2004) show that there has been a substantial increase in women's share of work outside the household and household earnings among couples from 1970 to 2000. About half of women contributed half of the paid working hours to their household (couples only) by 1980 and the proportion has risen to about 2/3-3/4 of women, even for young women who possibly have young children. Men, however, are still the primary workers and earners among couples in the United States.

Shifts in attitudes about gender roles within the family have accompanied shifts in female labor force participation. At the aggregate level, people in the United States seem to value women's work outside the home. There is widespread agreement in Westernized countries, both developed and developing, that married women should work outside the home; however, normative attitudes still reflect the belief that *mothers* of small children

should not work outside the home (Treas and Widmer 2000). Treas and Widmer find that broader structural factors such as obstacles to employed mothers are the primary predictors of gender attitudes at the aggregate level in most countries. Miller and Glass (1989) found period changes in gender role attitudes towards those of more egalitarian gender roles for three generations of women from 1971 to 1985. It was found that older cohorts (with an average age of 78 in 1985) had more rigid gender role attitudes. Thornton, Alwin, and Camburn (1983) also found that older cohorts tend to have more traditional attitudes. Attitudes for younger generations tend to be more malleable and followed period trends towards egalitarian gender role attitudes, with decreased change but still more egalitarian attitude shifts in the older cohorts (Miller and Glass 1989; Moen, Erickson, and Dempster-McClain 1997).

Micro-level Influences on Attitudes

Maternal attitudes. Over the years, several studies have found support for the intergenerational socialization of gender role attitudes through attitudes or "verbal" socialization (Thornton, Alwin, and Camburn 1983; Miller and Glass 1989; Starrels 1992; Moen, Erickson, and Dempster-McClain 1997). Starrels (1992) finds a positive linear relationship between mother's and daughter's gender role attitudes. Thornton, Alwin, and Camburn (1983) and Moen, Erickson, and Dempster-McClain (1997) find that attitude socialization is the primary predictor of gender role attitudes among offspring. However, Moen, Erickson, and Dempster-McClain (1997) find that direct maternal attitude influence has decreased among more recent cohorts. This finding stresses the need for reexamination of influences on gender role attitudes.

Behavior Socialization. Maternal employment outside of the home is one possible influence on daughter's gender role attitudes. A daughter with a working mother may view women's work roles outside the home as valuable. Starrels finds that this type of "social learning theory" is supported by showing that mother's employment status predict children's attitudes. Starrels, however, is not able to identify mechanisms (such as solidarity, or child's identification with the mother) by which this socialization occurs. Others do not find strong support for this hypothesis. Moen, Erickson, and Dempster-McClain (1997) find that verbal socialization is a much stronger influence on gender role attitudes when compared to maternal employment. Thornton, Alwin, and Camburn (1983) find that mothers' employment prior to marriage predicts gender role attitudes of offspring, but employment during the life course of the child had no significant influence.

It is possible that maternal labor force participation measured in early childhood could pick up behavior socialization effects for a cohort in which maternal employment is normative, but in which maternal employment during early childhood is still less normative (Treas and Widmer 2000). There is little evidence that early maternal employment negatively affects children's early cognitive and behavioral development (Parcel and Menaghan 1994), but there has been no research that specifically focuses on long-term effects of early maternal employment on gender role attitudes.

Status. Moen, Erickson, and Dempster-McClain (1997) test the hypothesis that daughters who come from higher status families will be more inclined to achieve or maintain higher status and will, therefore, have more egalitarian gender role attitudes. Maternal educational attainment is used to measure status (the sample contains only Whites, so

race cannot be used to determine status). They find that the disparity between mother's educational attainment and daughter's educational attainment is actually a better predictor of daughter's gender role attitudes than status itself. Less educated daughters of more educated mothers have the most traditional gender role attitudes. More educated daughters of less educated mothers have the least traditional gender role attitudes. Downward educational mobility predicts more traditional beliefs for daughters. Overall, Moen and colleagues find that all daughters of high school (or less - author combines the 2 categories) educated mothers are less traditional, regardless of their own education, than daughters of college educated mothers. They suggest that daughters of lower-status mothers my be especially motivated to move to a higher status. This implies that these daughters of lower-status mothers may work harder to maintain or gain status than daughters of higher-status mothers, and their gender attitudes reflect this motivation. These findings contradict research by Thornton, Alwin, and Camburn (1983) who find that highly educated mothers have more egalitarian gender role attitudes and more egalitarian daughters. This study does not estimate the interaction effects of mother's educational attainment and daughter's educational attainment. Moen, Erickson, and Dempster-McClain (1997) use a much more nuanced and dynamic operationalization of social class and status attainment. Both studies find, however, that attitude socialization is a greater influence on offspring attitudes than status.

Family Structure Instability. The increases in divorce and non-marital childbearing over the last few decades have ushered in new family forms experience by children in the United States. Family transitions such as divorce may force women into the labor force when they otherwise would not have worked outside the home, or women going through

these transitions may have to increase their paid labor in order to earn the sole support of their children. Kroska (1997) theorizes that social and economic factors may force people into work roles not in accordance with their gender/work ideologies, and therefore, may cause distress and discrepancy with their identity. Individuals may adjust their gender/work ideologies to fit their current gender and work roles, but this is conditional on their prior commitment to their gender ideology. Although the model is proposed by Kroska, she does not use data to test this model empirically. Thornton, Alwin, and Camburn (1983) find that divorce does not influence family gender role ideologies. However, measurement of family instability, rather than family structure itself, may better capture the cumulative effects of family transitions on gender role attitudes for mothers and their children.

The following analysis estimates the intergenerational influences of attitude socialization, behavior socialization, status, and family instability on young women's family gender role attitudes. I use structural equation models to estimate the various theoretical hypotheses and inconsistencies presented in the literature. I then discuss further directions for this research project on family gender role attitudes which, is still in its early stages.

DATA AND METHODS

The National Longitudinal Survey of Youth (NLSY) is a panel survey that has obtained longitudinal data on 12,686 men and women in the United States since its first wave in 1979. The survey uses a national sample of young adults ages 14 to 22 in 1979. In 1983, data collection began on all biological children of women in the original

NLSY79 sample, and it continues through adolescence and young adulthood. The child/young adult sample contains siblings from the same biological mother and, therefore, is not a nationally representative sample of children. However, the utility of linking parent characteristics and behaviors with child outcomes outweighs the costs of using a non-representative sample when studying intergenerational influences. While interviews with mothers provided much of the data for the Child Sample, more information was provided directly by the child in both personal interviews and confidential paper and pencil supplements as they reached the Young Adult sample.

Young adult data were collected in the years 1994, 1996, 1998 and 2000, and data collection is still ongoing.[1] There are a total of 3885 young adults, both male and female, in the NYLS79 Young Adult sample through the year 2000. My analysis uses data on 409 Black and White mother-daughter pairs in the NLSY79 Young Adult sample. The NLSY79 Young Adult Data consist of those children who were born to women in the original 1979 sample of the National Longitudinal Survey of Youth and who had reached the age of 15 by the end of each survey year. The sample used in my analysis has an average age of 18 years old in the year 1998 (the last wave used in this analysis). The youngest woman in the sample was 14 years old and the oldest was 22 years old in the year 1998 (born in 1983 and 1977 respectively). In addition to the Young Adult waves of the NLSY79, I use data from the NLSY79 original sample corresponding to the mother of each person in the NLSY79 Young Adult Sample. I also use data from the NLSY79 Child Sample, which are data collected earlier in the life of those in the Young Adult sample. Mothers' age at the birth of the respondent ranges from 18 to 26 years old. I truncate the sample so that mother-daughter pairs in which the mother gave birth to the

[1] The 2002 wave is now available.

daughter before age 18 are excluded from the analysis. This elimination reduces the sample bias of young mothers who are likely to be systematically different from older mothers in term of socioeconomic disadvantage and family attitudes. Vital statistics show that the means for mother's age at birth from 1977 to 1983 range from 24 years old to 25 years old (Mathews & Hamilton 2002). The sample of mothers used in this analysis is three to four years younger than the national mean; however, the relatively young sample is likely exclude many higher-order births which decreases the mean age of the mothers relative to mean age of mothers for all parities combined.[2] Children born to relatively young mothers, especially the older children contained in the sample, are more likely to be born to mothers who are racial/ethnic minorities, less educated, and more disadvantaged (CHRR 1993). There is, however, more heterogeneity exhibited among the younger children in the sample because these children will have been born to older mothers than the older children in the sample (CHRR 1993).

I exclude men from the sample due to data limitations and for the purpose of simplifying the analytic models. The children of the NLSY79 Child/Young Adult sample cannot be linked to detailed information on their father's attitudes and behaviors. While I would like to explore the relationship between mother's attitudes and behaviors and their son's family gender role attitudes, the models for mothers influence on sons may be theoretically different from mothers' influence on daughters. I also limit the current analysis to Black and White mother-daughter pairs in order to simplify the models. The NLSY79 contains a minority over-sample; therefore, my analytic sample contains near-equal numbers of Black and White mother-daughter dyads (210 and 199 respectively). I

[2] In the future, I would like to do a more systematic comparison of the analytic sample to national statistics. Also, I will be able to analyze a sample based on older mothers upon the release of the NLSY79 2002 Young Adult wave.

randomly select one daughter from each family for those families that have more than one daughter in the Young Adult sample so that I may maintain the assumption of independence between cases in the sample.

Family Gender Role Attitudes. I measure family gender role attitudes as a latent variable using three observed items (see Table 1). The attitude items are part of a larger set of "family attitude" questions administered by the NLSY79 in 1979, 1982, and 1987 to the mothers and in 1994, 1996, and 1998 to the daughters. The three items specifically concern women's employment outside the home and its consequences for families. Family gender role attitudes are measured on a four-point agreement scale in which a lower score indicates more egalitarian attitudes and a higher score indicates support for more "traditional" gender role attitudes within the context of the family. The three-item scale used in this analysis has a respectable reliability with a Cronbach's alpha of .72 for mothers in the sample. The scale is slightly less reliable but still acceptable with a Cronbach's alpha of .67 among the daughters in the sample. I use only 1987 mothers' reports in the current analysis in order to test the socialization hypothesis, which requires that the mothers may have exposed their children to their gender role beliefs during their children's life course. I use 1998 reports of daughters' gender role attitudes.[3]

(Table 1 about here)

Table 1 shows that, in general, both mothers and daughters in the sample have more egalitarian beliefs than traditional beliefs about family gender roles. On the whole, daughters report more egalitarian beliefs in 1998 than their mothers did in 1987. Only 13

[3] Attitudes from previous waves in 1994 and 1996 were imputed for those daughters who were missing attitude reports in 1998.

percent of mothers and nine percent of daughters agree that wives do not have time for employment outside of the home. Only slightly more mothers and daughters agree that a wife's employment leads to juvenile delinquency, with 18 and 11 percent agreeing respectively. Item 3 is less skewed with 29 percent of mothers agreeing that families are better off when women limit their work to home and family and 17 percent of daughters agreeing with the same statement. A slightly higher proportion of White mothers agree with traditional gender role attitudes compared to Black mothers, while White daughters report more egalitarian attitudes than Black daughters.

Mother's employment. I measure mother's employment as the average number of hours worked per week over three consecutive periods in the span of her daughter's life course. Research from Vandenheuval (1997) stresses the importance of dynamic measurement of maternal employment in order to capture variability in labor force participation of mothers. Aggregate employment patterns in the sample seem to follow normative patterns in the U.S. in which mothers tend to work less when their children are very young and work more as their children age and go to school (see Appendix). Mothers worked an average of 16 hours per week when their daughters were 1 to 5 years old. Almost 20 percent of the mothers in the sample did not work at all between their daughters ages of 1 and 5 and about the same proportion worked over 30 hours per week during this period. From their daughters' ages 6 to 10, mothers worked an average of 21 hours per week. Fewer mothers did not work at all during this period compared to the 1 to 5 age range (13 percent), and more women were working more than 30 hours per week (34 percent). From their daughters ages 11 to 14, mothers worked an average of 24

hours per week. Only 10 percent of mothers did not perform any paid work during this period and nearly half of mothers worked more than 30 hours per week. White mothers tended to work more hours per week than Black mothers during all three periods of their daughters life course. Under my current analysis, I am only able to speculate that socioeconomic and geographic disadvantages lead to racial discrepancies in the observed employment of mothers in this sample. More rigorous investigation into employment patterns and other factors are needed to explore this point in the future.

Instability in Family Structure. I measure family instability experienced by mother-daughter dyads by simply counting the number of transitions into and out of marriage that the mother experiences during her daughter's life course up to the year 1998. Both Black and White mothers have experienced an average of 1.5 marital transitions during their daughters' lifetimes. While Black and White mother-daughter dyads experience about the same number of family transitions, I cannot assume that these transitions are qualitatively similar for the two groups. Family structure patterns for Black and White mothers are increasingly divergent over the past few decades (Wu, Bumpass, & Musick 2001). For example, Black mothers in the sample experiencing no marital transitions are probably more likely to be never-married than White mothers reporting no transitions. Furthermore, this instability measure does not account for transitions into and out of cohabitation which has significantly increased over the life course of the daughters in the sample. For simplicity's sake, I only use the quantitative measure of cumulative family structure instability in my analysis. This type of instability measure has been shown to

affect child outcomes independent of family structure and other sources of family instability such as income (Wu and Martinson 1993; Wu 1996).

Status. I include two separate indicators of status, race and mother's educational attainment, in the current analysis.[4] Historically, Blacks have experienced greater socio-economic disadvantage than Whites in the United States. Mother's educational attainment is also associated with higher socioeconomic status among both men and women. On average, both Black and White mothers in the sample have about a high school education, or 12 years of schooling. Though mother-daughter disparities in educational attainment have been shown to be a salient predictor of gender role attitudes (Moen, Erickson, and Dempster-McClain 1997), the youth of the sample will not allow me to compare with mothers' education.

Analytical Strategy. Following Moen, Erickson, and Dempster-McClain (1997), I use structural equation modeling to test six hypotheses:

1. Maternal attitudes toward family gender roles directly and positively predict daughters' family gender role attitudes.
2. Greater amounts of time spent at work among mothers will predict more egalitarian gender role attitudes among daughters.
3. Lower family status will predict more egalitarian attitudes for daughters.
4. Family instability will predict more egalitarian gender role attitudes among daughters.

[4] Due to complicated multiple income reports in the NLSY, I had to exclude family income as a status measure in the current version of this paper.

5. Mothers who work more when their daughters are very young will have daughters with more egalitarian attitudes, and maternal employment at younger ages will have a greater impact on daughter's attitudes than employment at older ages.
6. Indicators of family gender role attitudes are equally good estimates of attitude factors for daughters and mothers.

I combine factor models of family gender role attitudes and multiple regression models to predict daughters' family gender role attitudes as measured in 1998 for young women ages 15 to 21. The structural model equation is as follows:

$$\eta = \gamma_{11}\xi_1 + \gamma_{12}\xi_2 + \gamma_{13}\xi_3 + \gamma_{14}\xi_4 + \gamma_{15}\xi_5 + \gamma_{16}\xi_6 + \gamma_{17}\xi_7 + \gamma_{18}\xi_8 + \zeta$$

where the η parameter represents a factor of daughter's family gender role attitudes. The ξ_i parameters respectively represent the mothers' family gender role attitude factor, mother's average paid employment from her daughter's ages 1 to 5, employment from ages 6 to 10, employment from ages 11 to 14, daughter's year of birth, family instability, mother's education, and race. The measurement model equations for the dependent variable are as follows:

$$y_1 = \eta + \varepsilon_1$$

$$y_2 = \lambda_{21}\eta + \varepsilon_2$$

$$y_3 = \lambda_{31}\eta + \varepsilon_3$$

where the y_i represent the three observed family gender role attitudes indicators for daughters. The factor for daughters' attitudes is normalized on indicator y_1. The measurement model equations for exogenous variables are as follows:

$$x_1 = \xi_1 + \delta_1 \qquad x_6 = \xi_4$$

$$x_2 = \lambda_{21}\xi_1 + \delta_2 \qquad x_7 = \xi_5$$

$$x_3 = \lambda_{31}\xi_1 + \delta_3 \qquad x_8 = \xi_6$$

$$x_4 = \xi_2 \qquad x_9 = \xi_7$$

$$x_5 = \xi_3 \qquad x_{10} = \xi_8$$

Variables x_1, x_2, and x_3 are indicators for the mother's family gender role attitude factor. The attitude factor is normalized on the first indicator. All other exogenous variables are measured as identities and constrained to have zero measurement error.

I estimate four structural models. In Model 1, direct effects of all exogenous variables are estimated as free parameters. Exogenous variables are also allowed to covary freely amongst themselves. Model 2 is a modification of Model 1 that constrains the effects of all three employment measurement to be equal. Model 3 adds equality constraints on corresponding indicators of family gender role attitudes for mothers and daughters. Model 4 applies zero constraints on direct effects of insignificant predictors. Graphical representations of path diagrams can be found in Figure 1 and Figure 2.

RESULTS

Model 1 demonstrates that the latent variables for the family gender role attitude predict the indicators quite well for both mothers and daughters (see Table 2 and Figure 1). Regression coefficients of Items 2 and 3 on the latent maternal attitude variable are .80 and 1.05 respectively. For daughters, coefficients of observed Items 2 and 3 are .90 and 1.21 respectively. The latent exogenous variable of maternal family gender role attitudes significantly predicts daughters' family gender role attitudes with a coefficient of .18.[5] This relationship provides support for the socialization of gender role attitudes through attitudes and values themselves. Mothers with more traditional family gender role attitudes tend to have daughters with more traditional attitudes (and similarly for egalitarian attitudes). Model 1 does not provide support for the status hypothesis. Black daughters tend to have more traditional gender role attitudes. The direct effect of being Black on family attitudes is estimated at .16. Greater maternal educational attainment predicts more egalitarian attitudes among daughters (b=-.12).

(Figure 1 about here)

Model 1 provides little support for the employment socialization hypothesis. Maternal employment at any point a daughter's life course does not strongly predict daughter's attitudes. While more hours of maternal employment from age 1 to 5 predict more egalitarian attitudes as hypothesized, the coefficient is small and insignificant. Conversely, more hours worked at older ages predict

[5] Metrics are excluded from my model interpretation due to the use of ordinal variables and their transformation using PRELIS.

more traditional attitudes, but again, the results are not significant. There is also no support for the family instability hypothesis in Model 1. While greater instability predicts more egalitarian daughter attitudes, the estimate is not significant. Model 1 has a marginal fit with a chi-squared estimate of 50.46 and 36 degrees of freedom, but the model still cannot be rejected. Standardized coefficients show that race is the strongest predictor of family gender role attitudes, but maternal attitudes are stronger predictors than maternal education.

(Table 2 and Table 3 about here)

Model 2 places equality constraints on the direct effects of maternal employment at all points in the life course (see Table 3). Estimates of the maternal employment effects are effectively reduced to zero and other coefficients remain very similar to Model 1. However, the equality constraints improve the fit relative to Model 1. Model 2 has a chi-squared of 50.60 with 38 degrees of freedom. Table 6 shows that Model 2 fits the data significantly better than Model 1 with a difference in BIC of 11.89.

Model 3 constrains the loading of each observed indicator of mothers' attitude estimates to be equal to each corresponding loading of daughter's attitudes. The magnitude of the estimated effects of maternal attitudes increase slightly when attitude constraints are added to the model (b=.20). Model 3 fits the data well with a chi-squared of 52.02 and 40 degrees of freedom. Model 3 supports the hypothesis that family gender role attitudes measures are measured equally well for mothers and daughters.

(Table 4 and Table 5 about here)

Model 4 (see Table 5) eliminates the direct effects of employment and family instability while maintaining equality constraints on attitudes. Model 4 fits the data well with a chi-squared of 53.21 and 42 degrees of freedom. Estimates of direct effects of status and attitudes remain despite the added constraints on the model, and about 13 percent of the variance in daughters' attitudes is explained by the model. Parameter estimates of the covariances between exogenous variables (see Appendix for phi matrices) show that greater numbers of hours worked among mothers is associated with more egalitarian attitudes. Family instability is positively associated with average hours worked, but only marginally associated with mother's attitudes. It may be possible that employment and family instability influence daughters' attitudes only through maternal attitudes. Further exploration of the causal structure among the exogenous attitude, employment, and family instability measures is needed. Table 6 demonstrates that Model 4 is superior to the other models in the analysis. Model 4 has a BIC of -199.37 and is significantly better than Models 1, 2, and 3. Structural equation analysis has shown that the attitude socialization and status model adequately predict daughter's family gender role attitudes (see Figure 2); however, lower status does not predict more egalitarian attitudes among daughters as Moen, Erickson, and Dempster-McClain (1997) suggest. The direct effects of maternal employment and family instability do not improve the model.

(Table 6 and Figure 2 about here).

CONCLUSIONS AND DIRECTIONS FOR FUTURE RESEARCH

In support of Thornton, Alwin, and Camburn (1983), structural equation modeling has demonstrated that verbal attitude socialization and family status (i.e., race and maternal education) are strong intergenerational influences on young women's' family gender role attitudes. My analysis also supports Moen, Erickson, and Dempster-McClain's (1997) finding that gender role attitude socialization rather than behavior socialization through maternal employment predicts gender role attitudes of daughters. However, my more simplistic operalization of status does not measure status mobility, and the findings contradicted Moen, Erickson, and Dempster-McClain's (1997) conclusion that lower status daughter's may work harder to gain and maintain status, possibly adopting less and less traditional gender role attitudes in the process.

The inclusion of Black women in the sample and the finding that race is a stronger predictor of family gender role attitudes of daughters than mother's attitudes adds a new dimension to the model of gender role attitudes and status. The finding that Black daughters tend to have more traditional gender role attitudes than White daughters may reflect the response of Black women to barriers in educational and career opportunities for Blacks in the United States.

I find no evidence that maternal employment directly influences daughters' gender role attitudes or that early maternal employment is a greater influence on gender role attitudes than later maternal employment. I speculate that family gender role attitudes of the mother may be more or less dynamic depending on employment experiences throughout the mother's life course. While their may be mutual causation between family gender role attitudes and

employment, women may be forced in and out of the labor force due to different factors (such as economic necessity, family crisis, fertility, etc.), regardless of their attitudes towards gender roles. Kroska (1997) suggests that identities and attitudes may adjust in response to these unanticipated changes. I plan to make a dynamic analysis of the causal structure between the exogenous variables, maternal family gender role attitudes and maternal employment, the next step in my analysis of maternal influence on daughter's gender role attitudes.

Family instability also does not directly influence daughters' gender role attitudes. Family instability may have an indirect influence on daughter's gender role attitudes my influencing changes in mother's gender role attitudes and possibly employment. Family roles and employment situations may shift in direct response to changes in family structure and marital status of the mother, thereby possibly influencing gender role attitudes.

There is much room for improvement and added complexity to the structural model of daughters' gender role attitudes. Much variance in daughters' attitudes has not been explained by the structural models proposed in this paper. I plan on estimating first-order causal effects of the exogenous dynamic employment variables on maternal attitudes. Measurement of maternal employment may also be improved. Research has shown that measurement of "labor force attachment," commitment to career, or employment sequencing may be useful predictors of daughters' outcomes (Vandenheuval 1997; Moen, Erickson, and Dempster-McClain 1997; Menahan and Parcel 1990). Also, despite data limitations, I may be able to roughly measure paternal influence on

daughters' gender role attitudes through employment, status, and, possibly, father-daughter involvement. Previous research has found that paternal influence may be important in predicting gender role attitudes of men and women (Thornton, Alwin, and Camburn 1983; Rosenfeld 1996).

Overall, this study has shown that contemporary cohorts of young women have increasingly egalitarian family gender role beliefs. These beliefs are still directly influenced by their mothers' attitudes and by their status in society as a whole. While I am unable to adequately measure the actual labor force participation, educational achievement, or family roles of the young women in this study, their attitudes suggest that they may be following in their mothers' footsteps and will possibly be even more focused on labor force participation than their mothers.

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Tables and Figures

Table 1. Percent of mother's and daughters who agree with family gender role attitude items (total n=409; White n=199; Black n=210)

Family Gender Role Attitude Items	Total		White		Black	
	Mothers	Daughters	Mothers	Daughters	Mothers	Daughters
1. A wife who carries out her full family responsibilities doesn't have time for outside employment.	0.13	0.09	0.15	0.03	0.11	0.13
2. Employment of wives leads to more juvenile delinquency.	0.18	0.11	0.20	0.09	0.17	0.12
3. It is much better for everyone concerned if the man is the achiever outside the home and the woman takes care of the home and family.	0.29	0.17	0.29	0.12	0.29	0.22

Table 2. Model 1 selected parameter estimates, standard errors, and standardized coefficients. Full model with no equality constraints.

Parameter	Label	Model 1 Unst. coef	S.E.	St. coef
Daughter Attitudes (1=Egalitarian; 4=Traditional)				
λ^{y}_{11}	Item 1	1.00	--	.81
λ^{y}_{21}	Item 2	.90	.07	.64
λ^{y}_{31}	Item 3	1.21	.09	.84
Mom Attitudes				
λ^{x}_{11}	Item 1	1.00	--	.76
λ^{x}_{21}	Item 2	.80	.09	.68
λ^{x}_{31}	Item 3	1.05	.10	.92
Predictors of Daughter's Family Attitudes				
γ_{11}	Mom attitudes	.18	.06	.19
γ_{12}	Mom hrs worked ages 1-5	-.01	.09	-.01
γ_{13}	Mom hrs worked ages 10-6	.00	.01	.00
γ_{14}	Mom hrs worked ages 11-14	.01	.07	.01
γ_{15}	Year of birth	.04	.04	.05
γ_{16}	Family instability	-.03	.04	-.05
γ_{17}	Mom's edu	-.12	.04	-.16
γ_{18}	Black	.16	.05	.21
Disturbance				
ψ_{11}	Daughter attitudes	.50	.07	.88
Measurement Error				
ε_{11}	Daughter item 1	.43	.09	.43
ε_{21}	Daughter item 2	.54	.09	.54
ε_{31}	Daughter item 3	.16	.09	.16
δ_{11}	Mother item 1	.35	.09	.35
δ_{21}	Mother item 2	.59	.08	.59
δ_{31}	Mother item 3	.29	.09	.29
χ^2		50.46		
df		36		
n		409		
BIC		-166.03		

Table 3. Model 2 selected parameter estimates, standard errors, and standardized coefficients. Full model with equality constraints on direct effects of mothers employment for ages 1 to 14.

Parameter	Label	Model 2 Unst. coef	S.E.	St. coef
Daughter Attitudes (1=Egalitarian; 4=Traditional)				
λ^{y}_{11}	Item 1	1.00	--	.76
λ^{y}_{21}	Item 2	.90	.08	.68
λ^{y}_{31}	Item 3	1.21	.10	.92
Mom Attitudes				
λ^{x}_{11}	Item 1	1.00	--	.80
λ^{x}_{21}	Item 2	.80	.07	.64
λ^{x}_{31}	Item 3	1.05	.09	.85
Predictors of Daughter's Family Attitudes				
γ_{11}	Mom attitudes	.18	.06	.20
γ_{12}	Mom hrs worked ages 1-5	.00	.01	.00
γ_{13}	Mom hrs worked ages 10-6	.00	.01	.00
γ_{14}	Mom hrs worked ages 11-14	.00	.01	.00
γ_{15}	Year of birth	.03	.04	.05
γ_{16}	Family instability	-.04	.04	-.05
γ_{17}	Mom's edu	-.13	.04	-.17
γ_{18}	Black	.15	.03	.20
Disturbance				
ψ_{11}	Daughter attitudes	.50	.07	.88
Measurement Error				
ε_{11}	Daughter item 1	.42	.09	.42
ε_{21}	Daughter item 2	.53	.09	.53
ε_{31}	Daughter item 3	.16	.09	.16
δ_{11}	Mother item 1	.35	.09	.35
δ_{21}	Mother item 2	.59	.08	.59
δ_{31}	Mother item 3	.29	.09	.29
χ^2		50.60		
df		38		
n		409		
BIC		-177.92		

Table 4. Model 3 selected parameter estimates, standard errors, and standardized coefficients. Full model with equality constraints on direct effects of maternal employment for ages 1 to 14 on daughters' attitudes and equality constraint on mothers' and daughters' attitude indicators.

Parameter	Label	Model 3 Unst. coef	S.E.	St. coef
Daughter Attitude Factor (1=Egalitarian; 4=Traditional)				
λ^{y}_{11}	Item 1	1.00	--	.80
λ^{y}_{21}	Item 2	.84	.06	.67
λ^{y}_{31}	Item 3	1.13	.07	.90
Mom Attitude Factor				
λ^{x}_{11}	Item 1	1.00	--	.77
λ^{x}_{21}	Item 2	.84	.06	.65
λ^{x}_{31}	Item 3	1.13	.07	.87
Direct Effects on Daughter's Family Attitudes				
γ_{11}	Mom attitudes	.20	.06	.19
γ_{12}	Mom hrs worked ages 1-5	.00	.01	.00
γ_{13}	Mom hrs worked ages 10-6	.00	.01	.00
γ_{14}	Mom hrs worked ages 11-14	.00	.01	.00
γ_{15}	Year of birth	.05	.04	.06
γ_{16}	Family instability	-.04	.04	-.05
γ_{17}	Mom's education	-.13	.04	-.16
γ_{18}	Black	.16	.04	.20
Disturbance				
ψ_{11}	Daughter attitudes	.56	.06	.88
Measurement Error				
ε_{11}	Daughter item 1	.37	.08	.37
ε_{21}	Daughter item 2	.55	.07	.55
ε_{31}	Daughter item 3	.19	.08	.19
δ_{11}	Mother item 1	.41	.07	.41
δ_{21}	Mother item 2	.58	.07	.58
δ_{31}	Mother item 3	.24	.08	.25
χ^2		52.02		
df		40		
n		409		
BIC		-188.53		

Table 5. Model 4 selected parameter estimates, standard errors, and standardized coefficients. Equality constraints on mothers' and daughters' attitude indicators and zero constraints on direct effects of maternal employment and family instability on daughters' attitudes.

Parameter	Label	Model 4 Unst. coef	S.E.	St. coef
Daughter Attitudes (1=Egalitarian; 4=Traditional)				
λ^{y}_{11}	Item 1	1.00	--	.79
λ^{y}_{21}	Item 2	.84	.06	.66
λ^{y}_{31}	Item 3	1.14	.07	.90
Mom Attitudes				
λ^{x}_{11}	Item 1	1.00	--	.76
λ^{x}_{21}	Item 2	.84	.06	.64
λ^{x}_{31}	Item 3	1.14	.07	.87
Predictors of Daughter's Family Attitudes				
γ_{11}	Mom attitudes	.21	.06	.20
γ_{12}	Mom hrs worked ages 1-5	--	--	--
γ_{13}	Mom hrs worked ages 10-6	--	--	--
γ_{14}	Mom hrs worked ages 11-14	--	--	--
γ_{15}	Year of birth	.05	.04	.06
γ_{16}	Family instability	--	--	--
γ_{17}	Mom's edu	-.13	.04	-.16
γ_{18}	Black	.16	.03	.21
Disturbance				
ψ_{11}	Daughter attitudes	.54	.05	.88
Measurement Error				
ε_{11}	Daughter item 1	.38	.08	.38
ε_{21}	Daughter item 2	.56	.07	.56
ε_{31}	Daughter item 3	.19	.08	.19
δ_{11}	Mother item 1	.42	.07	.42
δ_{21}	Mother item 2	.59	.07	.59
δ_{31}	Mother item 3	.24	.08	.24
χ^2		53.21		
df		42		
n		409		
BIC		-199.37		

Table 6. Model selection for daughter's family gender role attitudes.

Model	Chi-squared	df	n	p-value	BIC	Diff. in BIC
1. Full	50.46	36	409	0.06	-166.03	--
2. Equality constraints: employment	50.60	38	409	0.08	-177.92	-11.89
3. Equality constraints: employment & attitudes	52.02	40	409	0.10	-188.53	-10.61
4. Zero constraints: employment & instability	53.21	42	409	0.12	-199.37	-10.84

Figure 1. Path diagram of daughter's family gender role attitudes, full model.

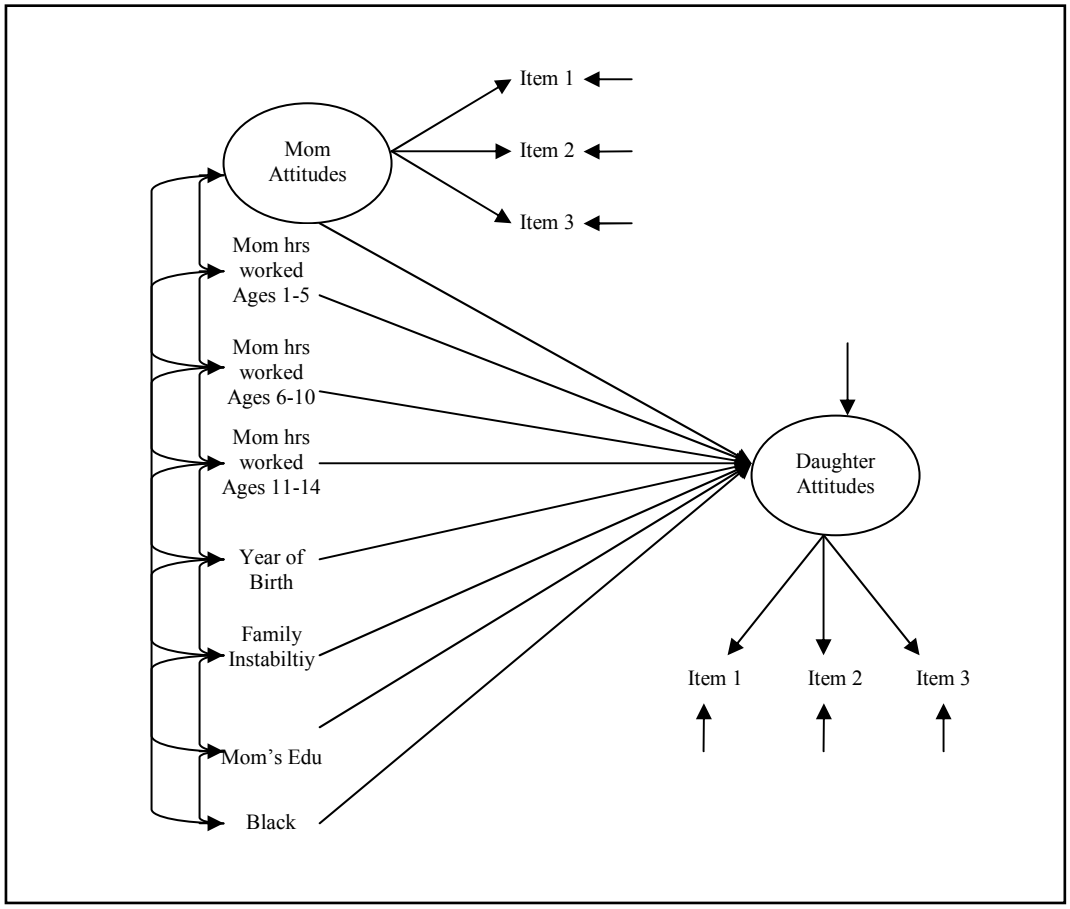
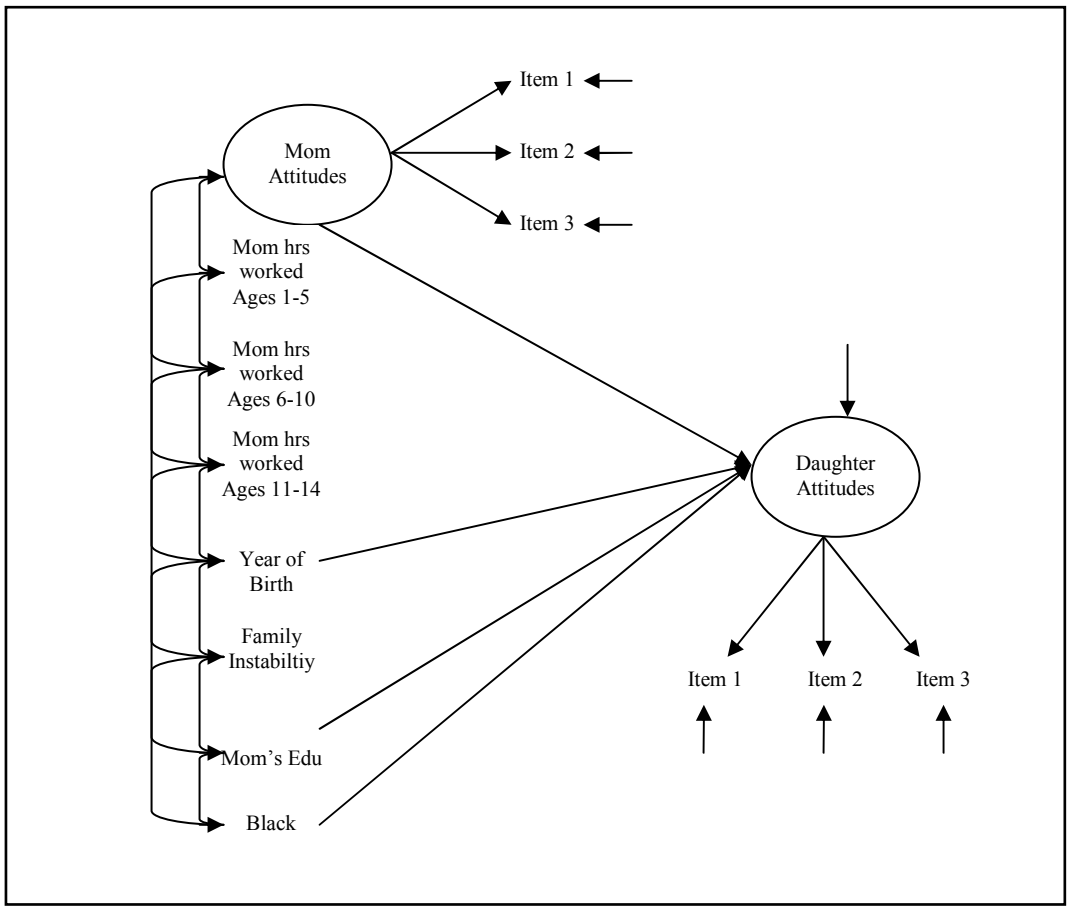


Figure 2. Path diagram of daughter's family gender role attitudes, full model with zero-constraints on mother's employment and family instability.



Appendix

Means and standard deviations for total mother-daughter sample, White mother-daughter pairs, and Black mother-daughter pairs

Variable	Total			White			Black		
	n	Mean	S.D.	n	Mean	S.D.	n	Mean	S.D.
Daughter's Attitudes (1=Most Egalitarian 4=Most Traditional)									
Item 1	409	1.70	1.61	199	1.61	0.55	210	1.79	0.72
Item 2	409	1.80	0.65	199	1.78	0.67	210	1.82	0.64
Item 3	409	1.83	0.65	199	1.71	0.71	210	1.95	0.77
Mother's Attitudes (1=Most Egalitarian 4=Most Traditional)									
Item 1	409	1.87	0.69	199	1.87	0.72	210	1.87	0.66
Item 2	409	2.01	0.71	199	2.00	0.75	210	2.01	0.67
Item 3	409	2.14	0.78	199	2.13	0.81	210	2.16	0.75
Mother's mean hours worked/wk:									
Daughter age 1-5	409	15.65	13.97	199	17.30	14.28	210	14.08	13.53
Daughter age 6-10	409	20.67	15.78	199	21.98	15.43	210	19.44	16.04
Daughter age 11-14	409	24.36	16.06	199	25.97	15.42	210	22.82	16.53
Year of birth	409	1980	1.85	199	1980	1.76	210	1980	1.92
Mother's marital transitions (Family Instability)	409	1.52	1.54	199	1.54	1.56	210	1.50	1.53
Black	409	0.51	--	199	--	--	210	--	--
Mother's education	409	12.31	1.61	199	12.32	1.56	210	12.31	1.66

Correlation matrix for total analytic sample (n = 409), all variables.

	1	2	3	4	5	6	7	8	9	10	11	12
1. Mom Item 1	1.00											
2. Mom Item 2	0.43	1.00										
3. Mom Item 3	0.47	0.47	1.00									
4. Work 1-5	-0.24	-0.17	-0.25	1.00								
5. Work 6-10	-0.21	-0.14	-0.25	0.63	1.00							
6. Work11-14	-0.17	-0.11	-0.21	0.48	0.69	1.00						
7. Year of Birth	-0.07	0.01	-0.03	0.15	0.12	0.10	1.00					
8. Family Instab.	-0.08	-0.08	-0.03	0.19	0.20	0.19	-0.11	1.00				
9. Black	-0.01	0.02	0.02	-0.12	-0.08	-0.10	-0.13	-0.01	1.00			
10. Mom Edu.	-0.19	-0.11	-0.18	0.24	0.29	0.27	0.06	0.00	0.00	1.00		
11. Daughter Item 1	0.09	0.01	0.08	-0.14	-0.14	-0.17	0.04	-0.07	0.13	-0.09	1.00	
12. Daughter Item 2	0.08	0.06	0.11	-0.08	-0.20	-0.17	0.01	-0.09	0.03	-0.13	0.33	1.00
13. Daughter Item 3	0.06	0.04	0.13	-0.15	-0.15	-0.14	-0.04	-0.07	0.16	-0.18	0.50	0.39

Model 1 Phi matrix, parameter estimates of exogenous variables. Standard errors in parentheses.

	Model 1	1	2	3	4	5	6	7	8
1.	Mom Attitude	0.647							
		(0.074)							
2.	Work 1-5	-0.269	1.000						
		(0.041)	(0.050)						
3.	Work 10-6	-0.235	-7.337	1.000					
		(0.040)	(10.869)	(0.050)					
4.	Work 11-14	-0.176	-0.201	-8.891	1.000				
		(0.039)	(10.856)	(12.813)	(0.050)				
5.	Year of Birth	-0.043	0.109	0.071	0.080	1.000			
		(0.042)	(0.046)	(0.048)	(0.044)	(0.050)			
6.	Family Instab.	-0.089	0.212	0.228	0.228	-0.097	1.000		
		(0.046)	(0.048)	(0.045)	(0.046)	(0.053)	(0.050)		
7.	Mom edu.	-0.210	0.288	0.305	0.305	0.076	-0.005	1.000	
		(0.043)	(0.047)	(0.052)	(0.053)	(0.050)	(0.054)	(0.050)	
8.	Black	0.023	-0.098	-0.217	-0.428	-0.131	-0.002	-0.020	1.000
		(0.035)	(0.326)	(0.362)	(0.371)	(0.046)	(0.044)	(0.042)	(0.050)

Model 2 Phi matrix, parameter estimates of exogenous variables. Standard errors in parentheses.

Model 2	1	2	3	4	5	6	7	8
1. Mom Attitude	0.647							
	(0.074)							
2. Work 1-5	-0.271	1.000						
	(0.040)	(0.050)						
3. Work 10-6	-0.236	-6.346	1.000					
	(0.039)	(8.082)	(0.050)					
4. Work 11-14	-0.179	1.621	-6.380	1.000				
	(0.038)	(7.064)	(10.224)	(0.050)				
5. Year of Birth	-0.045	0.109	0.071	0.081	1.000			
	(0.042)	(0.046)	(0.048)	(0.043)	(0.050)			
6. Family Instab.	-0.090	0.215	0.231	0.232	-0.098	1.000		
	(0.045)	(0.047)	(0.044)	(0.044)	(0.053)	(0.050)		
7. Mom edu.	-0.211	0.289	0.309	0.309	0.077	-0.003	1.000	
	(0.043)	(0.046)	(0.051)	(0.052)	(0.050)	(0.054)	(0.049)	
8. Black	0.023	-0.100	-0.195	-0.357	-0.131	0.000	-0.018	1.001
	(0.035)	(0.291)	(0.356)	(0.320)	(0.046)	(0.044)	(0.042)	(0.049)

Model 3 Phi matrix, parameter estimates of exogenous variables. Standard errors in parentheses.

	Model 3	1	2	3	4	5	6	7	8
1.	Mom Attitude	0.589							
		(0.054)							
2.	Work 1-5	-0.256	1.000						
		(0.038)	(0.050)						
3.	Work 10-6	-0.221	-7.031	1.000					
		(0.037)	(8.569)	(0.050)					
4.	Work 11-14	-0.169	1.216	-7.279	1.000				
		(0.036)	(7.729)	(10.838)	(0.050)				
5.	Year of Birth	-0.031	0.103	0.062	0.075	1.000			
		(0.040)	(0.046)	(0.048)	(0.043)	(0.050)			
6.	Family Instab.	-0.084	0.217	0.230	0.231	-0.095	1.000		
		(0.043)	(0.047)	(0.044)	(0.045)	(0.053)	(0.050)		
7.	Mom edu.	-0.192	0.285	0.302	0.305	0.069	-0.006	1.000	
		(0.040)	(0.046)	(0.051)	(0.052)	(0.050)	(0.053)	(0.049)	
8.	Black	0.019	-0.086	-0.176	-0.353	-0.129	0.000	-0.012	1.001
		(0.033)	(0.284)	(0.357)	(0.312)	(0.046)	(0.044)	(0.042)	(0.049)

Model 4 Phi matrix, parameter estimates of exogenous variables. Standard errors in parentheses.

	Model 4	1	2	3	4	5	6	7	8
1.	Mom Attitude	0.584							
		(0.054)							
2.	Work 1-5	-0.254	1.000						
		(0.038)	(0.050)						
3.	Work 10-6	-0.220	-7.241	1.000					
		(0.037)	(10.774)	(0.050)					
4.	Work 11-14	-0.169	0.337	-9.422	1.000				
		(0.036)	(10.758)	(12.664)	(0.050)				
5.	Year of Birth	-0.030	0.107	0.069	0.079	1.000			
		(0.040)	(0.045)	(0.047)	(0.043)	(0.050)			
6.	Family Instab.	-0.079	0.214	0.227	0.225	-0.098	1.000		
		(0.043)	(0.048)	(0.045)	(0.046)	(0.053)	(0.050)		
7.	Mom edu.	-0.192	0.286	0.298	0.297	0.070	-0.002	1.000	
		(0.039)	(0.046)	(0.052)	(0.051)	(0.050)	(0.053)	(0.049)	
8.	Black	0.023	-0.180	-0.397	-0.433	-0.129	-0.004	-0.019	0.999
		(0.032)	(0.179)	(0.182)	(0.195)	(0.046)	(0.043)	(0.040)	(0.049)