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CAN EARLY FAMILY FORMATION EXPLAIN THE LOWER EDUCATIONAL ATTAINMENT OF U.S. CONSERVATIVE PROTESTANTS?

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CAN EARLY FAMILY FORMATION EXPLAIN THE LOWER EDUCATIONAL ATTAINMENT OF U.S. CONSERVATIVE PROTESTANTS?

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Using nationally representative data, this article assesses whether the timing of life course transitions (i.e., marriage and childbirth) can explain the lower educational attainment of individuals raised in conservative Protestant (CP) households. A key finding is that early family formation affects educational attainment for both white and black women raised in CP households. For white women, the timing of family formation, net of controls, reduces the negative effect of childhood CP to insignificance. For black women, the timing of family formation reduces but does not eliminate the negative effect. For black men and white men, the negative effect of childhood CP on adult educational attainment is explained away by control variables.

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BACKGROUND

Past research has shown significantly lower educational attainment among young adults raised in U.S. households affiliating with Christian fundamentalist denominations¹ (Darnell and Sherkat 1997; Keysar and Kosmin 1995; Lehrer 1999). These effects appear even after rigorously controlling for the possible confounding effects of race, social class, region, and rural residence. Darnell and Sherkat (1997) detail how theological beliefs that deemphasize material success, coupled with cultural suspicion of secular institutions more generally, lead parents to fear the secularizing effects of higher education in particular. Lehrer (1999) points out that religiously conservative institutions of higher education are both in short supply and relatively expensive for families. These explanations focus on the lower demand for higher education among religious conservatives and the lower supply of suitable institutions.

But there may be an alternative explanation as well. Recent research (Glass and Jacobs 2005) has shown a pattern of earlier marriage and childbearing among women raised in conservative religious households in the National Survey of Families and Households. If youth are truncating their educational attainment in order to facilitate early family formation, the same pattern of lower educational attainment would be found, given the incompatibility of full-time school attendance with supporting an independent household and/or raising children. Indeed, several researchers have found a negative association between early family formation and later adult attainment (Chandler et al. 1994; Marini et al. 1989).

In this article, we explore the possibility that early family formation accounts for the lower educational attainment of adults raised in CP denominations. Using the 1988 National Survey of Families and Households, we use information on the respondents' age at marriage and age at first birth to see whether these events are associated with the cessation of education, and whether this association can explain the lower educational attainment of those individuals raised in CP households. We further test to see if these associations are robust for both black and white respondents, given racial differentiation in religious expression and in sexual behavior and marriage. Similarly, we test for gender differences in the processes linking religion and lower attainment, given the gender differentiation in family roles and responsibilities characteristic of CPism. Women

¹To avoid possible pejorative connotations associated with the term fundamentalist, we primarily refer to these traditions as CP in this article.

may have stronger motivations to conclude their education in order to form families, given their greater role in childrearing and home care within conservative theology.

THEORETICAL FRAMEWORK

The recent rise in Christian Evangelical denominations and their emerging political clout has led to renewed study of the links between cultural beliefs and demographic behavior. In the realm of education, this growth in conservative Christian denominations has been linked to a rise in home schooling, attempts to control the content of public school education in areas like biology and sex education, and the growth of religiously-based private schools (including institutions of higher education). The effects of these alternative forms of schooling on adult attainment have yet to be rigorously studied in part because of their recency. But these more recent attempts to control or reform the secularizing effects of education stem from the same cultural, specifically theological, discomfort with intellectual explanation and secular engagement in the social world.

While these recent attempts to “reform” educational institutions represent a strategic accommodation to the demand for highly educated workers in the labor market, a more common strategy appears to be earlier withdrawal from schooling among the children of religious fundamentalists. Darnell and Sherkat (1997, p. 309) illustrate the particular dangers of secular colleges and universities for fundamentalist families in this quote from conservative Christian author Beverly LaHaye: “One of the dangers of secular college education today is that the whole educational system has been taken over by an atheistic, humanist philosophy that is largely anti-God, anti-moral, and anti-Christian...we have seen scores of fine Christian young people go down the drain or lose interest in spiritual things while attending such colleges.” This line of reasoning has been used to explain the documented differences in educational attainment based on fundamentalist religious affiliation.

However, truncated educational attainment may be the result of another important cultural goal among religious conservatives—the incorporation of young adults into stable nuclear families. Promoting marriage, and in particular restricting sexual activity to marriage, are important tenets of many fundamentalist denominations (Smith 1999). Members of these conservative denominations have been shown to consistently display more traditional attitudes regarding abortion, premarital sexual behavior, and gender roles within marriage (Brooks 2002; Gallagher 2004; Grasmick et al. 1990; Hertel and Hughes 1987)

Shortening the transition to adulthood through early marriage and subsequent parenthood shortens the period of time during which young people are most likely to experiment with alternate life paths involving serial monogamy or sexual promiscuity, nonmarital childbearing, abortion, or cohabitation. By promoting the sexual fulfillment and happiness to be found in marriage and parenthood (adult statuses that are, at best, difficult to combine with full-time schooling for both partners) religiously conservative parents may be indirectly encouraging earlier cessation of schooling. Research has shown a pattern of earlier marriage and higher subsequent fertility among conservative Christians (Mosher et al. 1992; Glass and Jacobs 2005). This rapid progression to higher parity births, with the accompanying need to care and provide financial support for those children, makes subsequent schooling difficult for both mothers and fathers. Using this line of reasoning, the lower educational attainment of adults raised in CP households may have as much to do with early demographic transitions to marriage and parenthood in this population as with a cultural suspicion of higher education.

There are, however, important reasons to suspect that the origin of lower educational attainment among CPs may differ by race and gender. African-Americans exhibit different family formation patterns compared to European origin whites in several ways. Most prominently, early and out-of-wedlock childbearing is higher among African-Americans while marriage rates are significantly lower and occur later in life (South and Tolnay 1992). Extended family support has decoupled marriage and parenthood to a greater degree in the African-American community. It is therefore unlikely that African-American CPs exhibit earlier childbearing than others and subsequently truncate their education. African-American CP churches may also differ from white CP churches in their focus and cultural message (Woodberry and Smith 1998). African-American churches, in general, have served as vehicles for community organizing and individual empowerment, buffering the effects of racism and socioeconomic disadvantage for black youth (Patillo-McCoy 1998). Thus, it is likely that African-American churches encourage family stability and promote educational attainment, but eschew the promotion of early marriage and parenthood. Because of the dramatic differences in the role and content of church practices between black and white CP churches, separate race models are needed to adequately describe the relationships between fundamentalism and educational attainment.

Additionally, there may be important differences in the pathway between CP religious affiliation and lower educational attainment by gender. The particular obligations of women to care for husbands

and children in CP theology, combined with earlier and more frequent childbearing, lowers their expectations for market work in adulthood and lessens the opportunity costs of quitting school after marriage and childbearing. Husbands' obligations to provide financial support in a conservative marriage system pulls young men in two opposing directions, however. The need for immediate income encourages school withdrawal, while the need to assume the ultimate role of family breadwinner encourages educational credentialing in order to qualify for more and better jobs. Because of these countervailing pressures, early family formation may better explain the cessation of schooling among women raised in CP faiths compared to men. To investigate these potential differences, we compare separate models for women and men within races.

The above discussion leads to four hypotheses:

1. The negative effect of childhood CPism on adult educational attainment for white women will be reduced by early family formation.
2. The negative effect of childhood CPism on adult educational attainment for black women will *not* be reduced by early family formation.
3. The negative effect of childhood CPism on adult educational attainment for white men will be reduced by early family formation, but the reduction will be smaller for white men than white women.
4. The negative effect of childhood CPism on adult educational attainment for black men will *not* be reduced by early family formation.

RESEARCH PLAN AND METHODS

We used data from NSFH Wave I, 1987–1988 to investigate how being raised in a CP household and the occurrence and timing of life course transitions affect adult women and men's educational attainment. The NSFH contains extensive information on religiosity, and the timing of births, marriages, and education. More specifically, the NSFH includes variables related to different dimensions of religion, including denominational affiliation and conservative religious ideology. While the NSFH provides only retrospective accounts of childhood religious experience and family formation, it contains information from multiple age cohorts as opposed to the restricted range in other longitudinal panel surveys such as the 1979 NLSY.

The NSFH is composed of in-person face-to-face interviews of a random selection of adults (aged nineteen and over) in noninstitutionalized households. The first wave of interviews took place during 1987 and 1988 and consisted of 9,643 households. An additional 3,374 individuals were selected to overrepresent certain minority groups (e.g., blacks, Hispanics, single parents, stepparents, cohabitators, and recently married persons) for a total sample of 13,017 respondents. After imposing selection criteria and listwise deletion of cases based on our variables of interest the total sample size is 8,387. In order to maximize our sample size while minimizing the inclusion of respondents who may have not yet completed their education our analysis is limited to respondents between twenty-five and sixty-five years of age. Because prior research suggests that the effects of childhood religion and life course transitions on educational differ by gender and race, we create separate models for White Women (N = 3,953), Black Women (988), White Men (2,876) and Black Men (570). This decision is supported both theoretically (see above literature review) and empirically. Glass and Jacobs (2005) report results of Chow tests on the NSFH data confirming the appropriateness of separate race models. Additionally, we conducted a series of incremental F-tests to assess whether the effects of key independent variables (i.e., childhood religion, marriage, and child-birth) varied by gender. The results (available upon request) confirm that separate gender and race models are appropriate.

Variable Construction

Our central variables of interest are years of completed education, childhood religious affiliation, and family formation. In addition to these theoretical variables we include a range of sociodemographic and background variables as controls. The dependent variable *completed education* is a summary measure of the total number of years of schooling completed by the respondent. The mean value for the entire sample is slightly less than thirteen years.

The main independent variables of theoretical interest are childhood religion, and transitions into marriage and parenthood. The respondents' childhood religiosity was identified by denominational affiliation. The respondents' answers to the question, "In what denomination were you raised?" were recoded into non-CP, CP, and no religion categories based on codes adopted by Roof and McKinney (1989). Roof and McKinney took the several hundred Protestant and non-Protestant denominations and coded each according to the theological statements issued by each denominations'

governing body. Those that indicated belief in the literal truth of the Bible (biblical inerrancy) and the importance of literal scriptural guidance in the conduct of everyday life were coded as CP in orientation. No distinctions were made between those denominations that were predominantly African-American in membership and others; although, they used separate race models to trace the impact of religious fundamentalism as we do here. We used two dummy variables to represent the three religion categories, with non-CP religious denominations (i.e., *any* religious affiliation that is *not* CP) as the omitted category.

We constructed a series of variables in order to include the timing of life course transitions. These variables were constructed based on life history data for each respondent included in the 1988 NSFH.² *Late marriage or No marriage* is a dichotomous variable representing respondents who never married and those whose age at first marriage was at, or above, the seventy-fifth percentile for respondents of the same sex and race. *Normative marriage* is a dichotomous variable indicating respondents whose age at first marriage was between the twenty-fifth and seventy-fifth percentiles for respondents of the same sex and race. Early marriage (i.e., those respondents at or below the twenty-fifth percentile) is the omitted category. *Late birth or No birth* is a dichotomous variable indicating those respondents who never had a child or whose age at the birth of their first child was at, or above, the seventy-fifth percentile for respondents of the same sex and race. *Normative Birth* is a dichotomous variable indicating a respondent whose age was between the twenty-fifth and seventy-fifth percentiles for respondents of the same sex and race at the birth of their first child. Early birth (i.e., those respondents at or below the twenty-fifth percentile) is the omitted category.³ *Nonmarital birth* is a dichotomous variable indicating if a respondent who never married had a child or if the respondent's first child was born before the respondent was married. Means and standard deviations for all variables are shown in Table 1.

²We experimented with multiple alternate coding schemes before selecting the approach used in the present analyses. The most promising alternate approach used information identifying the year education was stopped and the year of first marriage and/or first birth. This allowed us to construct variables indicating (1) respondent's age at each of these events (if they took place) and (2) whether cessation of education took place in the year after, before or concurrent to the life course events. While this approach may have provided a more precise test of our theoretical argument, the empirical model was plagued by multicollinearity issues resulting from the necessary use of age-related information in construction of multiple timing variables.

³Our approach conceptualizes the *timing* of life course events as being relative to subpopulation (i.e., gender and race categories) norms rather than individually specific.

Table 1. Descriptive statistics for variables in the analysis, all groups (N = 8,387)

Variable	Mean	Std. deviation
Education	12.80	3.07
CP Childhood Religion (1 = yes)	.20	.40
No Childhood Religion (1 = no childhood religion)	.04	.20
Age	40.48	.59
Female	.59	.49
Gender Traditionalism (five-point scale, 5 = strongly traditional)	3.26	.96
Black	.19	.39
Hispanic	.08	.28
White	.73	.44
Father Absent (1 = father absent)	.10	.30
Mother Not Employed (1 = mother not employed)	.45	.50
Family Disruption (1 = family disruption)	.17	.37
Father's Occupational Prestige	29.65	19.29
Father's Education (years)	9.82	3.84
Mother's Occupational Prestige	16.27	18.94
Mother's Education (years)	10.55	3.31
Urban (1 = urban residence)	.76	.43
Northeast (northeast residence)	.20	.40
Northcentral (northcentral residence)	.27	.44
West (west residence)	.17	.38
South (southern residence)	.36	.48
Number of Siblings	3.66	3.00
Early Marriage	.21	.41
Normative Marriage	.43	.50
Late or No Marriage	.37	.48
Early Birth	.18	.39
Normative Birth	.39	.49
Late or No Birth	.43	.49
Nonmarital Birth (1 = nonmarital birth)	.04	.20

Control Variables

Because persons from the South, rural areas, and lower socio-economic backgrounds are more likely to express a fundamentalist affiliation (Darnell and Sherkat 1997), it is vital that indicators of respondents' class background and geographic location be included in analyses of educational attainment to avoid misspecifying the effects of fundamentalism. Respondent's class background is measured with four indicators: highest level of *education* received by the respondent's mother and father, and mothers' and fathers' occupation when the respondent was sixteen (which were recoded into an *occupational prestige* score). Because not all respondents lived with their father and had reported values for their father's education

and occupation and not all mothers were employed, dummy variables for father absence and mother's employment status when the respondent was age sixteen are included in the equations as well. Two variables captured father absence. One, *father absent*, indicates all respondents who did not give a valid answer to questions about their father's education or occupation. The second, *family disruption*, indicates all respondents who reported that their parents were separated/divorced or had never coresided. Respondent's *age* is measured in years and a series of dummy variables indicate *Hispanic* origin, *region of residence* and *urban residence*. Finally, because family size can impact the level of investment in children's education our models also control for the *number of siblings* in the family of origin for the respondent.

Because childhood fundamentalism may operate chiefly through its impact on adult gender role beliefs, a measure of traditional family ideology, *gender traditionalism* ($\alpha = .68$), is used, based on a scale of the following items: "It is better for everyone involved if the father works while the mother stays at home with the children;" "Preschool children are likely to suffer if their mother is employed;" and "How much do you approve/disapprove of mothers who work full time when their youngest child is under age five?"⁴

Analysis of Data

OLS regression models by race, for women and men separately, are produced through the following nested models. First, educational attainment is regressed on the childhood religion variables. Next the block of demographic and socioeconomic control variables (e.g., age, class background, geographic location, and family structure measures) are added as independent variables, to determine the net impact of childhood fundamentalism on adult educational attainment. Next, we add the attitudinal control variable, gender traditionalism, to the model. The following two models include sets of marriage and birth transition variables. The final model includes an interaction term to determine whether the effect of childhood CPism varies with age. After presenting and interpreting the findings

⁴This index taps into beliefs about appropriate gender roles and division of labor within households. Support for traditional roles and divisions of labor will likely lead to early cessation of education for women as they transition into marriage and motherhood. Inclusion of this gender traditionalism measure allows us to isolate the effect of being raised in CP households above and beyond traditional gender beliefs. In other words, after including this measure in the model we can interpret the effects of CPism as being unique to CPs and not simply a manifestation of traditional/conservative beliefs.

from the nested models we conduct an auxiliary analysis to validate our interpretation of the life course transition variables used in the multivariate models.

RESULTS

Table 2 presents the results for white women. Model 1 indicates that being raised in a CP household has a significant negative affect ($-.73$) on educational attainment for white women.

The inclusion of the control variables in model 2 reduces this effect by 40% but the effect of childhood CPism remains significant and negative. Model 3 demonstrates that gender traditionalism has a negative direct effect on educational attainment, net of background controls and childhood religion, and reduces the size of the negative CP effect by eighteen percent. In model 4 and 5 the first set of life course transition variables are added. Marrying at the normative age for white women produces slightly over one additional year of education compared to marrying early. Marrying late or choosing not to marry increases white women's educational attainment by nearly one and three-fourths year. Most striking is that including measures of the timing of marriage reduces the negative CP effect to non-significance. In other words, for white women the negative effect of childhood CPism on educational attainment is completely driven by the timing of life course transitions—specifically, the timing of marriage. Model 5 adds the birth related variables to the equation. All three variables are statistically significant ($p < .001$). The timing of marriage variables remains statistically significant in this model; although, the size of the effects are reduced by forty-two percent for normative marriage and forty-six percent for late or no marriage. White women who delay having a child, or do not have a child at all, receive an education “credit” of approximately one and one-third years. Having a nonmarital first birth decreases the educational attainment of white women approximately one and one-fifth year. The interaction term added in Model 6 for childhood CPism and age is not statistically significant.⁵

⁵Some researchers believe that differences between CPs and the rest of society have narrowed in the later part of the twentieth century (Woodberry and Smith 1998) This suggests that the effects of being CP will vary by generation (i.e., socioeconomic “penalties” of CPism will be greater for older respondents than younger). We model this possibility by including an interaction term between childhood CPism and age. However, “[d]ifferences by age shown by cross-sectional data may or may not be age effects, because the people (or other entities) of different ages are members of different cohorts and may have been shaped by different formative experiences and influences” (Glenn 2005, p. 3). Accordingly, we experimented with

As exhibited in Table 3 childhood religious affiliation, background characteristics and life course transitions play a markedly different role in educational attainment for black women than they do for white women.

The unadjusted effect of childhood CPism (-1.21) is larger for black women than for any other group in the analysis. As with white women, the inclusion of the control variables reduces the childhood CPism effect considerably (in this case by about forty-one percent). Each unit increase in gender traditionalism (Model 3) reduces the educational attainment of black women by nearly one-half year, and this variable slightly decreases the net effect of childhood CPism. The addition of the marriage variables in model 4, both of which are significant and positive, further reduces this effect by another six percent to approximately one-half its original magnitude. All three of the parenthood variables and both the marriage variables are statistically significant ($p < .001$) in Model 5. When compared to early life course transitions, delaying marriage or not marrying at all produces an education credit of over three-fourths of a year, while delaying child birth or not having children produces a credit of nearly one and one-half years. A nonmarital first birth decreases the educational attainment of black women approximately three-fourths of a year. The inclusion of the interaction term in Model 6 indicates that the negative effect of CPism on educational attainment is strongest for older black women. To illustrate, for a twenty-five-year-old respondent, the predicted net effect of being raised in a CP household on educational attainment is a credit of one-third year. In contrast, the predicted net effect for a fifty-year-old respondent is an educational penalty of nearly one-half year. These findings suggest that cohort or period effects are likely influencing the effect of childhood CPism on educational attainment for black women—with the relative negative impact lessening over time. Unlike the results for white women, the

creating a dichotomous cohort variable “(Pre-WWII” and “Baby Boomers”). Because age and cohort are highly correlated the inclusion of both measures produces unreliable estimates for the two variables, so we ran models that substituted cohort for age. The models using cohort exhibit the same pattern as age (complete results available upon request). The interaction term for CP and cohort are statistically significant only for black women. The effect on education, net of controls, for black women Baby Boomers who were raised CP is $-.128$; for members of the Pre-WWII cohort the effect is -1.45 . Because (1) this pattern is consistent with the CP by age interaction reported above, and (2) the use of cohort does not change the statistical significance of any of the coefficients for key variables nor improve model fit, and (3) we have no way of determining with these data whether the relationship is ultimately the product of age, cohort or period effects, we present results using age and age interactions only.

Table 2. Regression of completed education (years) on childhood religious affiliation and life course transitions, white women (N = 3,953)

	Model 1	Model 2 [^]	Model 3 [^]	Model 4 [^]	Model 5 [^]	Model 6 [^]
CP Childhood Religion	-.73*** (.13)	-.44*** (.11)	-.36*** (.11)	-.17 (.11)	-.17 (.11)	-.06 (.37)
No Childhood Religion	-.15 (.27)	-.32 (.22)	-.38 (.22)	-.30 (.21)	-.27 (.20)	-.29 (.20)
Gender Traditionalism			-.45*** (.04)	-.43*** (.04)	-.42*** (.04)	-.42*** (.04)
Normative marriage			1.05*** (.10)	1.05*** (.10)	.61*** (.12)	.60*** (.12)
Late or no marriage			1.69*** (.10)	1.69*** (.10)	.92*** (.14)	.91*** (.14)
Normative birth					.61*** (.12)	.60*** (.12)
Late or no birth					1.34*** (.14)	1.33*** (.14)
Nonmarital birth					-1.21*** (.25)	-1.21*** (.25)
CP by Age	.01	.37	.39	.43	.45	-.00 (.01)
Adjusted R ²						.45

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

[^]Controlling for age, Hispanic, father's education and occupational prestige, mother's education and occupational prestige, family disruption, urban residence, region, and number of siblings.

Table 3. Regression of completed education (years) on childhood religious affiliation and life course transitions, black women (N = 988)

	Model 1	Model 2 [^]	Model 3 [^]	Model 4 [^]	Model 5 [^]	Model 6 [^]
CP Childhood Religion	-1.21*** (.17)	-.71*** (.17)	-.65*** (.17)	-.61*** (.17)	-.57*** (.16)	2.07** (.5)
No Childhood Religion	-1.52* (.74)	-1.02 (.66)	-.92 (.66)	-.89 (.66)	-.80 (.64)	-.81 (.62)
Gender Traditionalism			-.44*** (.08)	-.42*** (.08)	-.38*** (.08)	-.35*** (.08)
Normative marriage				1.18*** (.21)	.74*** (.22)	.69*** (.22)
Late or no marriage				1.08*** (.21)	.88*** (.25)	.91*** (.24)
Normative birth					.95*** (.20)	.96*** (.20)
Late or no birth					1.39*** (.28)	1.32*** (.22)
Nonmarital birth					-.76** (.24)	-.81** (.24)
CP by Age						-.07*** (.01)
<i>Adjusted R</i> ²	.05	.22	.24	.26	.30	.32

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

[^]Controlling for age, Hispanic, father's education and occupational prestige, mother's education and occupational prestige, family disruption, urban residence, region, and number of siblings.

childhood fundamentalism effect remains statistically significant in all models. The full model explains thirty-four percent of the variance in educational attainment for black women.

Turning now to the findings for white men (Table 4) we see a markedly different pattern of results. Without control or life course variables, the childhood Conservative effect is significant and negative ($-.83$) and comparable to the effect for white women. However, the inclusion of the control variables in Model 2 reduces the childhood CP effect to insignificance. Although childhood CPism does not affect the dependent variable in the subsequent models, the life course transition variables do influence adult educational attainment of white men. The full model, model 6, indicates that marrying at a normative age (or marrying late or not at all) is associated with over a three-fourths-year education credit. The timing of children is not as important for white men as it was for white women. The only statistically significant birth timing variable indicates that having a child later in life or not at all (as compared to doing so early) produces about a third of a year additional education. The inclusion of the timing of first birth and interaction term does not increase the adjusted R-square of .36 found in Model 4. It is worth noting that the unadjusted effect of no childhood religion was $-.92$ for white men. This effect remains significant throughout all models and the size of the initial coefficient is only reduced by 22% in the full model. In other words, after background characteristics, gender traditionalism, and timing of life course transitions and interactions are introduced into the model, white men who were raised in nonreligious households have on average about three-fourths of a year less education than those raised in religious but non-CP households.

The patterns for black men, shown in Table 5, are quite similar to those for white men. The unadjusted childhood CP effect ($-.84$) for black men in Model 1 is comparable in magnitude to the effect for white men. Further, the inclusion of the control variables in Model 2 reduces the effect size of childhood CPism to insignificance, indicating, as was also the case for white men, that the negative effect of childhood CPism was a result of socioeconomic and geographic factors. In contrast to the findings for the three other groups examined, gender traditionalism does not significantly effect educational attainment for black men in any of the models. The life course transitions exhibit similar noneffects: none of the marriage or childbirth variables have a significant effect on educational attainment for black males. The full model explains thirty-three percent of the variation in educational attainment of black men. The key explanatory variable in the models of educational attainment for black men is being raised in a non-religious household. The initial

Table 4. Regression of completed education (years) on childhood religious affiliation and life course transitions, white men (N = 2,876)

	Model 1	Model 2 [^]	Model 3 [^]	Model 4 [^]	Model 5 [^]	Model 6 [^]
CP Childhood Religion	-.83*** (.17)	-.27 (.15)	-.23 (.15)	-.13 (.15)	-.13 (.15)	-.50 (.51)
No Childhood Religion	-.92*** (.25)	-.73*** (.21)	-.77*** (.21)	-.73*** (.20)	-.72*** (.21)	-.72*** (.20)
Gender Traditionalism			-.28*** (.06)	-.27*** (.06)	-.26*** (.06)	-.26*** (.06)
Normative marriage				.95*** (.13)	.81*** (.16)	.79*** (.16)
Late or no marriage				1.02*** (.14)	.82*** (.19)	.81*** (.19)
Normative birth					.24 (.17)	.26 (.17)
Late or no birth					.35 (.19)	.36 (.19)
Nonmarital birth					-.70 (.50)	-.70 (.51)
CP by Age	.01	.34	.34	.36	.36	.01 (.01)
Adjusted R ²						.36

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

[^]Controlling for age, Hispanic, father's education and occupational prestige, mother's education and occupational prestige, family disruption, urban residence, region, and number of siblings.

Table 5. Regression of completed education (years) on childhood religious affiliation and life course transitions, black men (N = 570)

	Model 1	Model 2 [^]	Model 3 [^]	Model 4 [^]	Model 5 [^]	Model 6 [^]
CP Childhood Religion	-.84** (.27)	-.44 (.25)	-.09 (.25)	-.08 (.25)	-.09 (.25)	1.56 (.86)
No Childhood Religion	-1.77** (.60)	-1.56** (.53)	-1.56** (.53)	-1.44** (.53)	-1.39** (.53)	-1.39** (.52)
Gender Traditionalism			-.18 (.13)	-.19 (.14)	-.21 (.14)	-.11 (.14)
Normative marriage				.55 (.31)	.59 (.34)	.60 (.33)
Late or no marriage				-.01 (.31)	-.18 (.39)	.14 (.39)
Normative birth					-.48 (.39)	-.53 (.34)
Late or no birth					-.09 (.38)	-.05 (.38)
Nonmarital birth					-.65 (.51)	-.66 (.50)
CP by Age						-.04 (.02)
Adjusted R ²	.03	.29	.29	.30	.31	.31

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

[^]Controlling for age, father's education and occupational prestige, mother's education and occupational prestige, family disruption, urban residence, region, and number of siblings.

unadjusted effect (-1.77) was reduced by twenty-one percent in the final model—producing a net effect for those raised in a nonreligious household of nearly one and one-half years less than those respondents raised in religious but non-CP households.

The final stage of our analysis is designed to assess the validity of our interpretation of the life course transition variables used in the multivariate models. As discussed above, the modeling strategy we employ capitalizes on the detailed life course information provided by the NSFH. From these data we were able to specify each respondent's age at: (1) first marriage, (2) birth of first child, and (3) final year of education. Unfortunately, the survey did not ask respondent's directly (or otherwise measure) whether family formation influenced education decisions. Thus, we are left with uncertainty as to what, if any, causal relationships exist between these variables. By creating measures of early, normative and late life course transitions we have intentionally adopted a life course perspective which acknowledges the socially embedded nature of life course transitions. Our theoretical argument states that children raised in CP households face strictures regarding premarital sexual activity that encourage early family formation and child rearing. If the promotion of family formation associated with CPism has a lasting effect on those raised within the tradition, then we would expect to see lower rates of concurrent education and family formation for CPs. In other words, we expect that when faced with the difficult decision to either (a) continue one's education, or (b) enter the paid labor market or provide full-time household labor and caregiving, that CPs will be more likely than others to choose "b." This expectation is supported by the results presented in Table 6, which provide additional support for our contention that early transitions into marriage and childrearing have a particularly deleterious effect on education attainment for those raised in a CP household. Focusing on comparisons between those with early transitions (as opposed to late), we see that in seven of the eight possible contrasts our posited pattern holds: *CPs are more likely* than those in the other childhood religion categories (i.e., non-CP and no religion) *to receive no additional education after an early marriage or childbirth.*⁶ Marriage and parenthood seem to be crucial markers of adulthood among religious conservatives that direct wives' energy into homemaking and child care and husbands'

⁶A reviewer suggested that we also examine whether CPs marry more quickly than others after completing schooling—perhaps even getting married more frequently before they leave school. If so, this might provide evidence that the primary reason for school cessation is (anticipated) family formation. In response to this suggestion we calculated the time lag between age

Table 6. Cross tabulations of timing of family formation and education cessation by childhood religious affiliation

		White Women (%)	Black Women (%)	White Men (%)	Black Men (%)
No additional education after early timing of marriage	CP	51**	51*	55	65*
	Other	37	37	51	47
No additional education after normative timing of marriage	CP	66	69**	59	70
	Other	61	48	59	59
No additional education after early timing of the birth of 1st child	CP	70**	42	71*	65*
	Other	48	21**	57	36
No additional education after normative timing of the birth of 1st child	CP	74	67**	67	72
	Other	74	46	69	61

**p < .001; *p < .05. Pearson Chi-Square (Asymptotic Significance, two-sided).

energy into earning a family wage. The flexibility that would allow one or the other partner to continue their education seems to be missing from these more gender traditional couples whose children arrive earlier and more frequently following marriage. What emerges from this analysis is view of family formation that leaves little room for further human capital development among religious conservatives.

DISCUSSION

The overall results of this analysis can shed light on the importance of marriage and childbearing patterns on the educational attainment of CPs in the United States. Surprisingly, once controls are included

at first marriage and age at education cessation and tested whether this time lag was different for CPs than others within each of the gender and racial categories. Unfortunately, education cessation is only reported by year (as opposed to specific month or date) making our measure fairly crude. Statistically significant differences emerged only for black women and black men. The average time lag between getting married and stopping schooling for black CP women is .27 year and it is -1.52 years for black non-CP women. In other words, black CP women, on average, wait until after completing schooling to get married while the black non-CP women tend to marry before completing education. This is consistent with the interpretation that marriage and children are defining events for CPs that propel them into adult responsibilities that preclude further education. In contrast, both CP and non-CP black men tend to get married after the cessation of schooling. The average time lag for black CP men is 3.04 years and 1.20 years for black non-CP men.

for possible confounding effects, the negative effect of childhood CP on adult educational attainment disappears for both white and black males. Thus, the question of whether the timing of family formation can explain the lower educational attainment of U.S. CPs appears only to be relevant for black and white *women*. Keeping this important general finding in mind, we now turn to our specific hypotheses.

First, we found support for our hypothesis that the negative effect of childhood CPism on adult education for white women is at least partially explained by early family formation. After controlling for background and socioeconomic effects (which reduced the effect of childhood fundamentalism by 40%) the inclusion of gender traditionalism and the timing of first marriage variables reduce the effect of childhood fundamentalism on educational attainment to statistical insignificance.

Our second hypothesis, that the negative effect of childhood CPism on adult education for black women will *not* be explained by early family formation, was partially supported. The inclusion of the control variables reduced the negative childhood fundamentalism effect by forty-one percent. Adding the family formation variables and interactions increases the adjusted R-square for the model by an additional 35%. Thus, as is the case for white women, the diminished educational attainment for black CP women is at least partially explained by early family formation (the inclusion of family formation variables reduces the size of the CP effect by seven percent). However, unlike white women, this effect is never reduced to insignificance.

Our third hypothesis, that the negative effect of childhood CPism for white men will be reduced by early family formation, was not supported. In fact, once the relevant control variables are included, the negative coefficient for childhood fundamentalism is reduced to insignificance for white men. Gender traditionalism and having been raised in a nonreligious household have negative impacts on educational attainment for white men. In terms of our theoretical variables, delaying marriage (either normative or late) or not getting married at all results in increased educational attainment for white men. The inclusion of the theoretical variables produces a small increase in the overall explanatory power of the models.

Our fourth hypothesis, that the negative effect of childhood CPism for black men will not be explained by family formation, was supported. The unadjusted negative effect was eliminated by controlling for family background, social class, and place of residence, suggesting that black men's educational attainment is affected most strongly by their social class background and region (variables that

are correlated with religious conservatism in the family of origin but distinct in their effects). Childhood CP affiliation does not appear to directly affect the educational attainment of black men. However, being raised in nonreligious household produces an education penalty for black men of nearly one and one-half years.

Because our analysis focused on the specific question of how childhood CPism affected educational attainment we used the variable *no childhood religion* as an indicator variable to differentiate being raised CP, belonging to a non-CP religion, and having no religious affiliation in childhood. It is worth noting that the effect of being raised in nonreligious household on educational attainment is negative and significant in the full model for both white men and black men. These findings show that the negative effects of childhood fundamentalism on educational attainment cannot be extended to *all* forms of religious upbringing. Indeed, for men there is no educational penalty for being raised in a CP household (once relevant controls have been included) while there is a significant educational penalty for being raised in a nonreligious household. The fact that this penalty for a nonreligious upbringing is larger for black men than white men (−1.39 years versus −.72 years of education) suggests that a “protective” effect of religious involvement for disadvantaged black men may be at work—as long as black men were raised with some kind of religious affiliation, they did better than those without any religious affiliation. However, since white men also pay an educational penalty for being raised in a nonreligious household, albeit smaller, the protection thesis tells only a piece of the story. The larger question for future research is why religious affiliation of any kind is important for men’s educational attainment, but not women’s.

Drawbacks of the present analysis suggest the need for further research. First, the measure of childhood religion used here, the denomination in which the respondent was “raised,” is only a weak indicator of actual household religious teaching and practices. The salience of religious ideology in the household, as well as the timing and degree of childhood religious participation, is unmeasured with such an indicator. Additionally, important questions remain about the causal role of the importance of sexual restraint before marriage, and opposition to certain forms of contraception, in the effects of childhood denominational affiliation on educational attainment.

Second, in this analysis we identify that (1) *early*, as opposed to normative or late, family formation is associated with lower educational attainment and (2) those raised in CP households are more likely than those raised in other religious and nonreligious households to receive no additional education after *early* family formation. As explained

above, the measures of “early,” “normative,” and “late” placed respondents into one of these categories by comparing each case to the distribution of the timing of these events by relevant race and gender categories in the full, nationally representative sample. While beneficial in many ways, this approach prevents us from making strong claims of causality regarding the precise relationship between life course transitions and educational attainment. However, we are unaware of any nationally representative data sets that contain comprehensive information on religion, education, marriage, and parenting, as well as motivational and attitudinal questions that would allow researchers to isolate the reasons for early family formation and cessation of education.

The findings presented here suggest the following conclusions about the importance of life course transitions, specifically the timing of family formation, on adult educational attainment. To put it simply, in contrast to Darnell and Sherkat’s findings (1997) from the National Educational Survey, results from the NSFH show white and black men *do not* pay an educational penalty for being raised in a CP home, once rigorous controls for social class and family structure in the family of origin are included. Further, our results show that black women and white women raised in a CP home *do* pay an educational penalty even after extensive controls. The explanation for the diminished educational attainment of United States Protestant CPs advanced by Darnell and Sherkat (1997) suggests that a cultural suspicion of secular education leads to the early cessation of education by CPs. Our findings illustrate that the early timing of family formation explains at least part of this educational deficit among black women and white women raised in CP homes.

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