The Impact of Religious Switching on Conservative Protestant Disadvantage in the Transition to Adulthood

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Extended Abstract

Prior research has demonstrated the disadvantages faced by white youth raised in Conservative Protestant households, especially young women who are at risk for lower educational attainment and earlier ages at first marriage and first birth (Glass and Jacobs, 2005). This "accelerated transition to adulthood" is robust with respect to cohort and data source and has been important in understanding ideational influences on the intergenerational transmission of social class (Fitzgerald and Glass, 2012). But research revealing associations between religion and social class is bedeviled by questions of causal inference: are conservative Protestants motivated by religious participation to order their lives in certain ways, or are those who order their lives by the early assumption of adult roles simply more attracted to the message and resources of conservative Protestant organizations?

Religious switching offers a way to help understand the causal ordering of religious participation and demographic behavior. In this paper, we look at adolescents who change their religious affiliation across four waves of data from the National Longitudinal Study of Adolescent Health (Add Health) and then observe their transition to adulthood using four crucial markers – completed educational attainment, age at first marriage, age at first birth, and current income. By observing youth in conservative Protestant households who do and do not persist in their religious affiliation over time, we can model whether those who disaffiliate subsequently diminish their disadvantage relative to those who remain in their childhood religion. We describe and control for any associated differences that distinguish those who did and did not disaffiliate. We further distinguish between two groups of religious switchers – those who move to a mainline denomination and those who disaffiliate altogether (become secular). There are substantial reasons to expect that those who continue to participate in organized religion will be

advantaged compared to those who disaffiliate because religious participation has been shown to increase social integration, social capital, and ties to conventional institutions (Sikkink and Glanville).

Data and Methods

We use nationally representative data from The National Longitudinal Study of Adolescent Health (Add Health), a school-based survey of adolescents in grades 7-12 during the 1994-95 school year. Adolescents attended 132 schools across 80 communities, with almost all students within each school (n≈90,000) completing in-school surveys in 1994. A nationally representative subsample of these adolescents was given more in-depth, in-home surveys in 1994 (n=20,745) and was surveyed again in 1996 (Wave 2; n=14,738), 2001-2002 (Wave 3; n=15,197), and 2007-2008 (Wave 4; n=15,701). At the time of the final wave, respondents were between ages 24 and 32. Add Health provides a longitudinal perspective on individuals' peer, family, and romantic relationships as well as their social well-being, health status, and health-related behaviors. This dataset is well-suited for the purposes of this study because it offers data on respondents' religious affiliations from adolescence through their transitions to adulthood—when they sought higher education, began families, and entered the workforce.

We restrict our sample to those respondents who completed both Wave 1 and Wave 4 surveys (n=15,704) and to those adolescents who reported belonging to a conservative Protestant denomination at Wave 1 (n=4,525), allowing us to compare the early adulthood transitions and outcomes of those adolescents who remained conservative Protestant into young adulthood to those who switched to a different denomination or (non)religion. Because research suggests fundamental differences in the "denominational culture" (Steensland et al. 2000) of the Black Church, as well as differences in the the role of CP religion in the lives of African Americans

and its effects on their early adulthood outcomes (Glass and Jacobs 2005), we further restrict our analysis to non-Hispanic White and Hispanic conservative Protestants. Due to small cell-sizes, we also exclude Asian Americans/Pacific Islanders, American Indians, and those respondents reporting another race/ethnicity (n=2,561). Finally, we exclude those cases without a valid sample weight (final n=2,311). Because we examine four different outcomes, our sample size varies across our four sets of analyses.

We use the survey command ("svy") in Stata in order to incorporate our sample weight and better account for clustering within schools. We also use single imputation to handle missing data because less than 5% of our data were missing across all variables, with the exception of parental income (≈20% missing). In ancillary analyses, we included a missing flag for parental income as a control in each of our models. We do not report these results because the missing flag was not significant in any of our models.

Dependent Variables

To examine the different dimensions of the transition to adulthood, we examine four dependent variables: *age at first birth*, *age at first marriage*, *adult educational attainment*, and *annual income*. The first two variables are continuous and measure the age at which respondents experienced their *first* family formation event. Adult educational attainment is an ordinal variable measuring highest degree earned (1=no high school degree; 2=high school degree/GED; 3=some college; 4=some two-year or four-year college; 4=two-year degree; 5=four-year degree; 6=advanced degree). Our final dependent variable is measured as the natural log of respondents' reported personal income in 2006, 2007, or 2008, depending on the time the Wave IV survey was completed.

Independent Variables

Our independent variable of interest captures the religious switching of adolescents who reported belonging to a conservative Protestant denomination at Wave 1. We draw from the work of Steensland et al. (2000) and Roof and McKinney (1983) in the construction of our religious affiliation categories. We define those respondents who identified their religion as Adventist, Assemblies of God, Baptist, Holiness, or Pentecostal as conservative Protestant. Because Add Health does not ask Baptist respondents what type of Baptist church they attend, one cannot distinguish between non-CP Baptist denominations and CP Baptist denominations. As a result, we follow the convention of other work on conservative Protestants that used Add Health and define Baptist adolescents as CP (Erickson and Phillips 2012; Regnerus 2005). We refer to CP adolescents who switched to a mainline Protestant denomination[1] as "*Switched to Mainline*." Although we initially excluded CPs who switched to Catholicism from the "Switched to Mainline" group, we report results with this small group of respondents included in this category. Different categorizations of Catholics do not affect our results. We combine conservative Protestants who switched to another religion (Christian Science, Jehovah's Witness, Latter-Day Saints, Mormon, Unitarian, Universalist, Other, Jewish, Buddhist, Hindu, Muslim) with those who reported "no religion/atheist/agnostic" due to the small numbers of conservative Protestants who switched to other religious and non-religious affiliations.[2] We refer to this group as "*Switched to Secular/Other Religion*" in our analyses. Finally, CP adolescents who were also CP at Wave 4 ("*Stayed CP*") serve as our reference category.

We control on a host of variables that may confound the relationship between conservative Protestant switching and our outcomes. In all analyses we control on respondent's

[1] We define Mainline Protestants as Anabaptist, Anglican, Christian, Church of England, Congregational, Episcopalian, Methodist, Presbyterian, Disciples of Christ, Evangelical Covenant Church, Friends, Just Christian, Church of Christ, Wesleyan, Reformed, Salvation Army, United Church of Christ, and Catholic.
[2]Results are similar and our substantive interpretations remain the same when we separate these two groups in analyses.

reported ethnicity (White=0; Hispanic=1); whether the respondent was raised by both biological parents; highest parental education; parental income; rural residence; residence in the South; church attendance at least 1 time per week; Add Health Picture Vocabulary Test (PVT) Score; and respondents' Wave 1 self-reported GPA during the academic school year.[3] Each of these variables was measured at Wave 1. In our model predicting annual income, we also include several variables measured at Wave 4. These include respondents' highest degree earned, relationship status (single=omitted category; cohabiting; married), number of children (none=omitted category; one; at least two), and the number of hours the respondent reported working per week.

Analytic Plan

Our analytic strategies vary across our outcome variables. First, we use Tobit regression analyses to predict respondents' age at first birth and age at first marriage because about half of the respondents have not yet given or fathered a live birth and about a third of respondents have never been married by Wave 4 (ages 24-32). In an attempt to better estimate a causal relationship between CP switching and timing of family formation, we include a separate dummy variable for those CP switchers who switched to a different religion *after* they experienced the family formation event. Thus, our measures of CP switching in the family formation analyses include four mutually exclusive dummy variables indicating whether the respondent stayed CP (omitted), switched to mainline Protestant before the event, switched to other religion/secular

[3] This variable was constructed by averaging students' self-reported grades across four academic subjects, including English, Social Studies, Math, and Science.

before the event, or switched to a non-CP affiliation after the event. We also include a missing flag for respondents for whom we could not determine the timing of their switch.[4]

We estimate respondents' adult education and income with Ordinary Least Squares (OLS) regression[5]. We exclude from our income analysis those respondents who reported no income, worked for less than ten hours per/week, were currently enrolled in school, incarcerated, or serving in the military at the time of the Wave IV in-home survey. This selection filter may bias our estimates of the relationship between CP switching and adult income, particularly if the probability of being excluded from this subsample significantly varies by CP switching status. We employ a strategy rooted in the Heckman two-step selection correction logic in an attempt to address this problem (Berk 1983). We first used a probit model to estimate the likelihood of being included in the sample with a host of covariates listed in the descriptives table. From this, we predicted each respondent's propensity to be included in the sample and then computed the inverse Mills ratio (IMR) (see Berk 1983 for more detailed information). We included the calculated IMR, or the hazard rate of not being included in the sample[6] as a regressor in the model predicting adult annual income. This adjustment does not significantly alter our results.

Our analyses predicting each outcome are stratified by gender. In each analysis, we report estimates of the baseline relationship between CP switching and our outcomes and the estimates of this relationship after adjusting for the control variables discussed earlier.

Results

[4] We were able to determine the timing of switch only for those individuals who responded to all four waves (about 75% of switchers). In ancillary analyses, we restrict our analytic sample to respondents who participated in all four waves and obtain very similar results.

[5] In ancillary analyses, we estimated a multinomial logistic regression estimating the association between CP switching and earning no degree, a two-year degree, or a four-year degree. This analysis resulted in similar substantive interpretations as those reported in Table 2.

[6] The interpretation from the propensity score to the hazard rate changes to "*not* being included in the sample" because the propensity score indicating the probability of being included in the sample is multiplied by negative one.

Table 1 displays the Tobit results for age at first marriage and age at first birth. Both show large and robust results delaying both age at first marriage and age at first birth among those who switch from conservative Protestant to a mainline religious denomination. Similar results accrue for those youth who disaffiliate altogether or have "secularized." Significantly, these delays in family formation occur for both young men and young women after they switch out of a conservative Protestant affiliation.

Table 2 shows the regression results for educational attainment and adult income. Unlike the results for family formation, these models show no advantage of religious switching for those raised in conservative Protestant households. Neither young women nor young men benefit from moves to another mainline denomination in either human capital formation or socioeconomic attainment in young adulthood. Moves to secular status (no religious affiliation) even showed occasional negative effects on later education and income, though none achieved statistical significance.

Why the difference between those outcomes measuring family formation and those outcomes measuring socioeconomic attainment? We believe these differences emerge because youth have less personal control over their eventual educational attainment (and subsequent income attainment) than their age at first marriage and first birth. Because schooling advantages and disadvantages accumulate over time (Kerckhoff 1993), the opportunities a student has for academic upward mobility narrow over the high school career (Stevenson, Schiller, and Schneider 1994; Schneider, Swanson, and Riegle-Crumb 1997). Educational attainment may be set by early adolescence because of the immutable trajectories students face in secondary schools. Moreover, college attendance for this cohort was strongly overdetermined by parents'

willingness to pay for post-secondary education (Steelman and Powell, 1991). While youth may disaffiliate from their childhood religious affiliation, their parents most probably have not.

In contrast, age at first marriage and first birth are strongly tied to young adults' own sexual behavior and desire to establish their own families. While still requiring some parental investment, these choices are often more immune to parental disapproval. When youth alter their religious social network by switching, they come into contact with other youth more likely to postpone family formation, and norms supporting delay until educational and personal goals are satisfied.

References

Berk, Richard A. 1983. "An Introduction to Sample Selection Bias in Sociological Data." *American Sociological Review* 48(1):386-398.

Erickson, Lance D. and James W. Phillips. 2012. "The Effect of Religious-Based Mentoring on Educational Attainment: More than Just a Spiritual High? Journal for the Scientific Study of Religion." *Journal for the Scientific Study of Religion* 51(3):568-587.

Fitzgerald and Glass. 2012.

Glass, Jennifer and Jerry Jacobs. 2005. "Childhood Religious Conservatism and Adult Attainment among Black and White Women." *Social Forces* 84(1):555-579.

Kerckhoff 1993

Regnerus, Mark D. 2005. "Talking about Sex: Religion and Patterns of Parent–Child Communication about Sex and Contraception." *The Sociological Quarterly* 46(1):79-105.

Roof, Wade C. 1987. *American Mainline Religion*. Rutgers University Press.

Schneider, Swanson, and Riegle-Crumb 1997

Steelman, Lala Carr and Brian Powell 1991. "Sponsoring the Next Generation: Parental Willingness to Pay for Higher Education." *American Journal of Sociology* 96(6): 1505-1529.

Steensland, Brian, Jerry Z. Park, Mark D. Regnerus, Lynn D. Robinson, W. Bradford Wilcox, and Robert B. Woodberry. 2000. "The Measure of American Religion: Toward Improving the State of the Art." *Social Forces* 79(1): 291-318.

Sikkink and Glanville.

Stevenson, David Lee, Kathryn S. Schiller and Barbara Schneider. 1994. "Sequences of Opportunities for Learning." *Sociology of Education* 67(3): 184-198.

Table 1. Tobit Regression Coefficients Estimating the Impact of CP Switching on Early Life Course Transitions

	Age at First Birth				Age at First Marriage			
	Females		Males		Females		Males	
Variables	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Conservative Protestant Status (ref: stayed CP)								
Switched to Mainline Protestant before Event	**5.478*** **	**5.097*** **	**5.435*** **	**4.762*** **	**4.262*** **	**4.016*** **	**3.901*** **	**3.425*** **
	(0.842)	(0.838)	(1.005)	(0.988)	(0.953)	(0.890)	(1.172)	(1.134)
Switched to Secular/Other Relig. Before Event	**7.434*** **	**6.794*** **	**7.777*** **	**7.666*** **	**4.915*** **	**4.467*** **	**5.056*** **	**5.448*** **
	(1.108)	(1.117)	(1.101)	(1.085)	(1.275)	(1.261)	(1.312)	(1.242)
Switched After Event	-3.286***	-3.389***	-5.522***	-5.642***	-7.868***	-6.839***	-10.557***	-9.646***
	(0.451)	(0.449)	(0.583)	(0.626)	(0.527)	(0.530)	(0.688)	(0.722)
Timing of Religious Switch missing flag	-5.268***	-4.966***	-4.052**	-4.193***	-4.333***	-3.626***	-3.959**	-4.189**
	(1.069)	(1.060)	(1.244)	(1.192)	(1.025)	(0.958)	(1.411)	(1.346)
Wave 1 Controls								
Hispanic		1.116		3.037*		-1.836		2.472
		(0.976)		(1.443)		(0.988)		(1.838)
Both Biological Parents		0.358		-0.452		1.560**		0.978
		(0.545)		(0.762)		(0.581)		(0.853)
Highest Parental Education (ref: no college attendance)								
Some College		0.385		-0.513		0.782		0.997
		(0.596)		(0.759)		(0.649)		(0.850)
Four Year Degree		0.929		1.910*		1.898**		4.148***
		(0.649)		(0.908)		(0.708)		(1.111)
Advanced Degree		1.983*		1.600		2.946**		3.884**
		(0.915)		(1.078)		(1.046)		(1.272)
Parental Income (logged)		0.180*		0.145		0.036		-0.035
		(0.082)		(0.097)		(0.098)		(0.122)
# of Siblings		-0.156		-0.208		-0.013		-0.392
		(0.207)		(0.256)		(0.198)		(0.288)
Rural		-1.362**		-1.517*		-0.726		-1.421
		(0.477)		(0.663)		(0.571)		(0.766)
South		-1.224*		-0.436		-0.647		0.060
		(0.543)		(0.656)		(0.589)		(0.765)
Attends Church ≥ 1x/week		-0.137		-0.898		1.830***		-0.168
		(0.494)		(0.633)		(0.552)		(0.735)
Add Health PVT Score		-0.026		-0.041		0.007		0.002
		(0.022)		(0.029)		(0.023)		(0.034)
Grade Point Average		0.423		0.594		1.673***		1.498**
		(0.365)		(0.440)		(0.370)		(0.472)
Constant	25.258***	25.735***	28.577***	31.264***	27.866***	19.706***	32.029***	27.040***
	(0.349)	(2.347)	(0.463)	(3.228)	(0.454)	(2.509)	(0.569)	(3.908)
Observations	1,219		1,053		1,227		1,078	
Censored Observations	420		542		325		399	

*** p<0.001, ** p<0.01, * p<0.05

Table 2. OLS Regression Estimating the Association between CP Switching and Educational Attainment and Income

	Educational Attainment				Income			
	Females		Males		Females		Males	
Variables	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2	Model 1	Model 2
Conservative Protestant Status (ref: stayed CP)								
Switched to Mainline Protestant	0.018	0.037	0.042	0.075	-0.059	0.341	0.035	0.098
	(0.106)	(0.084)	(0.121)	(0.095)	(0.302)	(0.634)	(0.236)	(0.262)
Switched to Secular/Other Religion	-0.180	-0.139	-0.080	0.022	-0.437	0.202	0.138	0.349
	(0.139)	(0.118)	(0.136)	(0.120)	(0.363)	(0.883)	(0.213)	(0.446)
Wave 1 Controls								
Age	-0.013	0.024	-0.022	0.013	0.092	0.111	-0.010	0.009
	(0.027)	(0.021)	(0.026)	(0.022)	(0.073)	(0.078)	(0.044)	(0.027)
Inverse Mills Ratio	-		-		-1.481***	0.887	0.312	0.731
					(0.409)	(3.219)	(0.345)	(2.378)
Hispanic		-0.127		-0.019		-0.862		0.077
		(0.155)		(0.181)		(0.927)		(0.574)
Both Biological Parents		0.312***		0.244*		0.099		0.076
		(0.081)		(0.102)		(0.299)		(0.135)
Highest Parental Education (ref: no college attendance)								
Some College		0.311***		0.186		0.104		0.276
		(0.093)		(0.100)		(0.333)		(0.358)
Four Year Degree		0.565***		0.556***		-0.020		0.280
		(0.107)		(0.113)		(0.436)		(0.214)
Advanced Degree		0.874***		0.782***		-0.609		0.248
		(0.125)		(0.157)		(1.229)		(0.454)
Parental Income (logged)		-0.003		-0.020		-0.017		0.132
		(0.014)		(0.023)		(0.032)		(0.116)
# of Siblings		-0.010		0.003		-0.077		0.035
		(0.031)		(0.035)		(0.197)		(0.049)
Rural		-0.126		0.045		-0.405		0.064
		(0.086)		(0.097)		(0.365)		(0.254)
South		-0.019		0.028		-0.374		0.136
		(0.081)		(0.087)		(0.563)		(0.153)
Attends Church ≥ 1x/week		0.345***		0.180*		-0.058		0.128
		(0.080)		(0.086)		(0.397)		(0.271)
Add Health PVT Score		0.019***		0.019***		0.005		0.009
		(0.003)		(0.003)		(0.011)		(0.006)
Grade Point Average		0.585***		0.592***		0.033		0.209
		(0.055)		(0.052)		(0.273)		(0.141)
Wave 4 Controls								
Adult Educational Attainment						0.372		-0.125
						(0.386)		(0.209)
Relationship Status (ref: single)								
Cohabiting						0.915		0.358
						(1.151)		(0.310)
Married						0.355		0.293
						(0.417)		(0.232)
# of Children (ref: none)								
One						-0.500		-0.048
						(1.183)		(0.458)
≥ Two Children						-0.855		-0.289
						(0.893)		(0.305)
# of Work Hrs/Week						0.042**		0.037***
						(0.014)		(0.009)
Constant	3.622***	-1.592*	3.688***	-1.302	8.487***	2.528	9.697***	4.780
	(0.769)	(0.708)	(0.776)	(0.803)	(1.988)	(4.854)	(1.167)	(2.952)
Observations	1,230		1,081		558		666	
R-squared	0.003	0.368	0.002	0.319	0.031	0.093	0.001	0.150

*** p<0.001, ** p<0.01, * p<0.05

Appendix A. Weighted Proportions or Means and Standard Deviations by Conservative Protestant Switching Status and Gender

	Females						Males					
	Stayed Conservative Prot.		Switched to Mainline		Switched to Other Relig/Secular		Stayed Conservative Prot.		Switched to Mainline		Switched to Other Relig/Secular	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
Dependent Variables												
(Ever Had Child)	0.67		0.66		0.62		0.51		0.48		0.42	
Age at First Birth [a]	21.65	3.42	23.51	3.55	23.51	3.50	23.64	3.42	23.81	3.55	24.09	3.47
(Ever Married)	0.77		0.70		0.61		0.62		0.54		0.43	
Age at First Marriage [a]	21.87	3.03	23.14	3.07	22.8	3.06	23.46	2.92	24.38	3.00	24.65	3.32
Adult Education	3.25	1.35	3.27	1.28	3.07	1.35	3.05	1.29	3.09	1.34	2.98	1.29
Adult Income	30313.38	40825.39	29217.45	23679.47	23075.03	15994.60	43733.27	48672.81	44769.20	33548.67	39312.09	39607.57
Independent Variables (Wave 1)												
Race/Ethnicity												
White (ref)	0.94		0.91		0.90		0.94		0.87		0.93	
Hispanic	0.06		0.09		0.10		0.06		0.13		0.07	
Both Biological Parents	0.67		0.67		0.69		0.79		0.77		0.61	
Highest Parental Education												
Never attended college (ref)	0.44		0.47		0.43		0.42		0.37		0.44	
Some college	0.26		0.27		0.31		0.31		0.30		0.37	
Four year degree	0.20		0.17		0.17		0.16		0.20		0.12	
Advanced degree	0.10		0.08		0.09		0.11		0.12		0.07	
Parental Income (logged)	9.91	2.62	9.73	2.99	10.02	2.47	9.78	2.93	10.26	1.93	9.72	2.90
# of siblings	2.42	1.23	2.52	1.47	2.43	1.35	2.48	1.18	2.44	1.22	2.40	1.26
Rural	0.26		0.15		0.20		0.22		0.18		0.18	
South	0.70		0.45		0.60		0.70		0.53		0.47	
Attends Church at least 1x/week	0.54		0.50		0.51		0.55		0.38		0.36	
Add Health PVT Score	100.89	12.13	101.68	14.34	100.94	12.83	102.50	11.65	103.64	12.16	104.93	13.06
Grade Point Average	2.89	0.74	2.87	0.79	2.88	0.73	2.73	0.77	2.68	0.81	2.72	0.76
Wave 4 Covariates												
Age	28.67	1.79	28.29	1.67	28.62	1.76	29.03	1.88	28.88	1.78	28.66	1.96
Inverse Mills Ratio	1.10	0.32	0.75	0.28	0.88	0.27	1.09	0.31	0.84	0.29	0.70	0.28
Relationship Status												
Single (ref)	0.21		0.30		0.23		0.31		0.37		0.38	
Cohabiting	0.13		0.19		0.14		0.15		0.16		0.24	
Married	0.65		0.51		0.62		0.54		0.47		0.39	
# of Children												
None (ref)	0.33		0.38		0.34		0.49		0.52		0.57	
One kid	0.48		0.41		0.45		0.38		0.36		0.31	
At least two kids	0.19		0.20		0.22		0.13		0.11		0.12	
# of work hrs/week	38.89	9.45	39.47	8.68	39.72	9.48	45.84	11.19	45.64	11.54	45.24	10.20
Timing of Relig. Switch missing flg.	-		0.24		0.20		-		0.29		0.31	
N=2311	**699**		**355**		**176**		**611**		**281**		**189**	

[a] Limited to those conservative Protestant switchers who switched *before* they gave birth or got married.