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School comes first then comes marriage then comes baby? : Racial and ethnic variations in the path to first birth in the United States

Research Question/Objective:

Previous research suggests that the delaying effects of education on the timing of first birth varies among adolescents from different racial/ethnic groups (Glick, et al., 2006; Wildsmith and Raley, 2006). Of particular note is the finding that Asian adolescents, both girls and boys have particularly low nonmarital fertility and particularly high rates of school enrollment, compared to other racial/ethnic groups. However, little research has gone beyond educational transitions out of high school to examine the role of subsequent education as a delaying force on first birth. This paper relies on 5 waves of the National Education Longitudinal Study (NELS) data, to investigate the transition beyond adolescence, focusing on post - high school years. We expect the delaying effects of education on the first birth for Asians is largely due to the delaying effects of education on the timing of marriage because Asians follow the pathway of marriage preceding first birth. We expect to see that after Asian young adults finish their college degrees /enter into job market and get married, their birth rate will catch up to some extent to that of the other racial and ethnic groups. Thus, if we take marriage status as a covariate, the seemingly bigger delaying effects of educations on the timing of first birth will at least diminish.

Background and Significance:

First marriage or first birth is an important life course transition that has implications for subsequent education and labor market activity. As postsecondary education becomes more normative, the relationship between higher educational attainment and family formation has been the focus of more debate. Previous literature shows the general delaying effects of educational attainment on the timing of first birth. However, our understanding of the diversities in terms of timing of first birth among different racial/ethnic groups is not complete. There has been little systematic research which draws a complete picture depicting the differentials in delaying effects of education on first birth after high school years to early career life by different racial/ethnicities for today's young adults in the United States.

Analytical/Theoretic Framework:

The delaying effects of educational enrollment/attainment can be explained by the conflicts between roles of being a student and a spouse/parent. Asians historically have a lower non-martial birth rate than other racial and ethnic groups. However, their marital fertility rates are similar to non-Hispanic Whites overall. The expectation, rules, and strains of a spouse/parent role are different for various racial/ethnic groups. Out of wedlock childbearing is largely discredited for Asians. Thus, the delay of first marriage is highly and positively associated with the delay of first birth. However, the

expectation of a parent role might not be necessarily linked to marriage for other racial/ethnic groups. The perception of the role strains of parenthood vary among different racial/ethnic groups. These differences in the compatibility of marriage and parenthood with schooling may lead to divergence in terms of the effects of education on the timing of first birth for different racial/ethnic groups. Also, given various impediment and access to socioeconomic success in the United States, groups may employ various strategies when facing the conflict between education and family formation. Since life course transitions are part of a continuing and accumulative process, we expect that the delaying effects of educational enrollment/attainment on family formation for all races/ethnicities influence to differ from their early adolescence to their adulthood life. Thus, we will explore whether the delaying effect of education on childbearing, so strong in early adolescence for Asians but much weaker for other groups, becomes less effective in delaying first birth by young adulthood when many of them get married. Preliminary support for this hypothesis comes from comparing marital and nonmarital fertility rate by racial/ethnic groups. Asians in the US have comparatively low nonmarital fertility rates (14.9) but their overall fertility rates (64.1) are higher than whites (57.4) (Sources: National Vital Statistics Reports 2003, vol 53, no. 9)

Planned Analysis:

Using data from the National Education Longitudinal Study (NELS), we employ discrete-time multinomial logistic regression models examining the likelihood of first birth from adolescent to young adult, for boys and girls separately. The data contains 5 waves from 1988-2000 beginning when respondents are in 8th grade and following them until they are in young adulthood (average age 25). The data cover a wide range of information from basic demographic characteristics, school, work, home experiences, educational resources and support; the role in education of their parents and peers; neighborhood characteristics; educational and occupational aspirations; and other student perceptions. The abundant information guarantees us to investigate the various delaying effects of education and relevant covariates on the first birth by different racial/ethnicity groups, for both boys and girls now extending eight years after high school.

Dependent Variable:

We are interested in the delaying effects of educational enrollment/attainment on the timing of first birth. However, the decision of being enrolled in school (or in a job) might be based on an impending birth. Therefore, we lag the timing of birth for nine months and take a respondent's characteristics at approximately the beginning of pregnancy. Thus, we measure the characteristics that will influence the timing of birth in a correct time order.

Independent variables:

One of the major aims of this project is to capture the differences in the effects of educational attainment/enrollment on the timing of first birth for different

racial/ethnicities groups. Four major racial/ethnicity groups are used here: non-Hispanic whites, blacks, Mexican, and Asians. It is acknowledged that there exists a considerable variation within Asians of different origin. We take on this pan-ethnic grouping due to the limited sample size.

Some important time varying covariates include the time of first marriages, educational transitions (including highest educational attainment and enrollment status), employment status. These time varying measures are expected to mediate the relationship between race/ethnicity and the timing of first birth. Also, we include measures of family and socioeconomic status that may be associated with both race/ethnicity and subsequent patterns of family formation. Other measures such as a respondent's family structure and parental expectations on young people's educational attainment are included too.

We expect that the delaying effects on the timing of first birth for Asians will largely diminish compared to other racial/ethnic minorities once we control for timing of marriage. Diverse paths to first birth are presented here by various racial/ethnic groups in the United States.

References: (still working on it)

Glick, Jennifer, Stacey D. Ruf, Michael J. White and Frances Goldscheider. 2006. "Educational Engagement and Early Family Formation: Difference by Ethnicity and Generation." *Social Force* 84(3): 1392-1415.

Wildsmith, Elizabeth and R. Kelly Railey. 2006. "Race-Ethnic Differences in Nonmarital Fertility: A Focus on Mexican American Women." *Journal of Marriage and Family* 68: 491-508

Appendix:

Table A: Fertility rate and birth to unmarried mother by racial/ethnic groups: United States, 2002

	All				Asian or
	races				Pacific
	and	Non-Hispanic	Non-Hispanic		Islander
	origins	white	black	Hispanic	total
Cautility, water	04.0	F7.4	07.4	04.4	64.4
Fertility rate	64.8	57.4	67.4	94.4	64.1

Sources: National Vital Statistics Reports, vol 54, no.9, 2003

Table B: Percent of live births to unmarried mothers by race/ethnicity: United States, Selected Years 1980-2001

Race, Hispanic origin of Mother	1980	1985	1990	1995	1996	1997	1998	1999	2000	2001
All Races	18.4	22	28	32.2	32.4	32.4	32.8	33	33.2	33.5
Whites	11.2	14.7	20.4	25.3	25.7	25.8	26.3	26.8	27.1	27.7
Black or African American	56.1	61.2	66.5	69.9	69.8	69.2	69.1	68.9	68.5	68.4
Asian or Pacific Islander	7.3	9.5	13.2	16.3	16.7	15.6	15.6	15.4	14.8	14.9
Hispanic or Latino	23.6	29.5	36.7	40.8	40.7	40.9	41.6	42.2	42.7	42.5
Mexican	20.3	25.7	33.3	38.1	37.9	38.9	39.6	40.1	40.7	40.8
Not Hispanic or Latino										
White	9.6	12.4	16.9	21.2	21.5	21.5	21.9	22.1	22.1	22.5
Black or African American	57.3	62.1	66.7	70	70	69.4	69.3	69.1	68.7	68.6

SOURSES: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System, Birth File. Hamilton BE, Sutton PD, Ventura SJ. Revised birth and fertility rates for the 1990s and new rates for Hispanic populations, 2000 and 2001: United States. National vital Statistics reports; vol 51, no 12. Hyattsville, Maryland: National Center for Health Statistics, 2003; Births: Final data for each data year 1997-2000. National vital statistics reports. Hyattsville, Maryland: Final natality statistics for each data year 1993-1996. Monthly vital statistics report. Hyattsville, Maryland; Ventura SJ. Births to unmarried mothers: United States, 1980-92. Vital Health Stat 21(53). 1995