The nonmarital birth rate and the proportion of births that occur to unmarried women have both increased in recent decades for all age groups, including teens (Curtin, Ventura & Martinez, 2014). Within the category of nonmarital births, births to cohabiting women have risen as cohabitation itself has become more common (Cherlin, 2010). During the same general period, factors that are associated with teen fertility, such as maternal education and family structure also changed.

Young single mothers and their children have worse outcomes across a host of measures than young married mothers; the outcomes of cohabiting mothers and their children fall somewhere in-between (McLanahan, 2009). Thus, pattern of teen births patterns change in terms informal as well as formal marital status, knowing more about children's birth circumstances leads to better understanding of the circumstances they face as they grow up. Understanding links between young mothers' backgrounds and their teen birth status is useful for targeting assistance and interventions to teens, teen mothers and their children.

This research combines the trends in factors associated with teen fertility and the risk of a teen birth by informal marital status (IMS) (marital, cohabiting, single) across three decades of women. It examines both the proportion of women in high- and low-risk sociodemographic (SD) categories in each cohort and the level of risk of each type of teen birth within these categories by cohort. The overall goal of this study is to analyze how first teen births differ by birth cohort in terms of IMS and to analyze the role of childhood SD factors in predicting type of teen birth. To address this goal, the following research questions were posed:

Research Questions

1. What percent of women in each cohort had a marital, cohabiting or single first birth by age 20?
2. What is the distribution of childhood SD factors across birth cohorts?
3. What are IMS first teen birth patterns by childhood SD factors across birth cohorts?
4. What are cohort IMS patterns net of childhood SD factors?
5. How are SD factors associated with teen childbearing within each cohort?

Data & Methods

Data and Sample

Data for this study are from the 2002 and 2006-2010 cycles of the National Survey of Family Growth (NSFG). The NSFG is based on in-person interviews of a national sample of women and men 15-44 years of age in the household population of the United States. The data for women in all cycles contain complete pregnancy and birth histories, retrospectively reported. The data from both cycles were pooled and three consecutive ten-year birth cohorts of female respondents encompassing 30 years were constructed, covering women born in the 1960s, 1970s and 1980s. Each cohort includes respondents from both NSFG cycles. The study sample includes respondents who were age 20 or older at time of interview so that their entire teen fertility risk period occurred before the interview. Women who arrived in the U.S. after their teen years were excluded from the analyses.

Variables

Outcome. The outcome combines whether a first birth was a teen birth and whether the respondent was married, cohabiting with a partner or single at the time of the birth. Thus, it is a four-category variable: 1) marital teen birth, 2) cohabiting teen birth, 3) single teen birth, and 4) no teen birth.

Independent variables. The focal independent variable is respondent's decade of birth. Respondents were categorized by their decade of birth: 1) born 1960-1969; 2) born 1970-1979; and 3) born 1980-1989. The analyses incorporate variables that describe respondents' childhood SD factors. *Maternal education* is the education of respondents' mothers. *Maternal fertility history* incorporates the age at first birth of respondents' mothers and number of total births. *Family structure history* combines

whether a respondent's parents were married at her birth and whether the parents remained married during her youth. In addition, race/ethnicity was included in all analyses.

Analyses

Cross-tabulations of type of first teen birth and SD factors by birth cohort address the first two research questions. To address the third question, birth cohort-specific cross-tabs of type of teen birth by SD factors were carried out.

Multivariate logistic and multinomial regressions were used to answer the final two research questions. Logistic regression was used to estimate the odds of a teen birth by cohort net of childhood SD factors. A multinomial regression model using the four-category outcome variable estimated the odds of a marital teen birth, a cohabiting birth, and a single birth versus no birth by birth cohort and SD factors. Answering the final question employed a similar approach: for each birth cohort, logistic regression predicted the odds of a teen birth and multinomial regression estimated the odds of each category of teen birth versus no teen birth.

Results

Bivariate Results

Across birth cohorts, between 77% and 81% of women never had a teen birth (Table 1). The proportion with a marital first teen birth declined across cohorts as the proportion with a cohabiting first teen birth rose. The percentage with a single first teen birth was stable. Maternal educational levels rose steadily across cohorts. Women born in the 1980s were less likely to be born to teen mothers and mothers with high fertility than those born in the 1960s. The proportion of women born to unmarried parents doubled across cohorts. Non-Hispanic (NH) whites declined across cohorts as a proportion of the population; the proportion that is Hispanic rose.

Multivariate Results

Type of First Teen Birth across Birth Cohorts

Net of SD factors, there were no cohort differences in the odds of a marital birth, women born after 1969 were more than twice as likely to have a cohabiting birth as those born in the 1960s; and women born in the 1970s were more likely than those born earlier to have a single teen birth (data not shown).

Type of First Teen Births within Cohorts

Having a mother without a high school education was associated with a higher risk for a single teen birth for the 1960s cohort but associated with higher risk for marital and cohabiting births for later cohorts (Table 2). Having a more educated mother lowered the risk of a marital birth for the 1960s and 1970s but not 1980s cohorts; it was associated with a lower risk for a cohabiting or single birth in the 1970s and 1980s cohorts. Having a high fertility teen mother is associated with a higher risk of each type of teen birth in each cohort, whereas having a low-fertility teen mother was associated with a higher risk of a single birth in all cohorts. Having a high-fertility adult mother was associated with higher odds of a cohabiting or single birth for the first but not subsequent cohorts. Being born to unmarried parents was associated with a higher risk of a cohabiting or single teen birth for all cohorts; growing up in a non-intact family was associated with a higher risk of a cohabiting birth in all cohorts and a higher risk of a single birth for the 1970s and 1980s cohorts as well as a higher risk of a marital birth for the first two cohorts. In each cohort, blacks were the least likely to have a marital birth and more likely to have a single birth; Hispanics were the most likely to have a cohabiting birth.

Conclusion

The results suggest a mixed picture. Similar proportions of each birth cohort had a teen birth, but the IMS of these first births changed across cohorts. Some risk factors have increased with cohort (e.g., parents not married at birth), others have declined (e.g., less educated mother, born to high-fertility teen mother). In most cases, the association between SD factors and IMS of teen births is stable across cohorts but the change in the proportion of cohorts in higher risk categories appears to contribute to changes in IMS of teen births. For example, having a high-fertility teen mother is consistently associated with each type of teen birth across cohorts but the proportion of women in this category has declined with each cohort. The results suggest that targeting young women from higher risk backgrounds with effective interventions will yield significant decreases in teen births of all types.

References

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Table 1. Sociodemographic Characteristics by Birth Cohort (Percents & CIs)

Birth Cohort:	1960-1969	1970-1979	1980-1989
Teen Birth***			
Marital	6.6 (5.6- 7.8)	4.9 (4.1- 5.8)	3.5 (2.7- 4.7)
Cohabit	2.8 (2.2- 3.6)	6.1 (5.3- 7.0)	6.2 (5.2- 7.3)
Single	9.8 (8.4-11.3)	11.4 (10.2-12.7)	9.7 (8.4-11.1)
None	80.8 (78.9-82.6)	77.6 (75.7-79.5)	80.6 (78.3-82.8)
Mother's Education***			
<High school	24.9 (23.0-27.0)	20.2 (18.6-21.9)	15.4 (13.3-17.7)
High school	42.0 (39.7-44.4)	35.7 (33.9-37.5)	30.9 (28.7-33.2)
>High school	33.0 (31.0-35.2)	44.2 (42.1-46.3)	53.7 (50.5-56.8)
Mother's Fertility History***			
Teen Mother	37.5	36.0	30.0
1-3 births	13.2 (11.8-14.8)	18.0 (16.7-19.5)	16.0 (14.3-17.9)
>3 births	24.3 (22.4-26.3)	18.0 (16.6-19.4)	14.0 (12.4-15.7)
Not Teen Mother	60.5	62.0	68.6
1-3 births	34.1 (31.9-36.4)	44.5 (42.6-46.5)	52.4 (49.2-55.5)
>3 births	26.4 (24.6-28.3)	17.5 (15.8-19.3)	16.2 (13.1-19.9)
None	2.0 (1.5- 2.6)	2.0 (1.5- 2.6)	1.4 (1.1- 1.9)
Family History***			
Par Married @ Birth			
Intact family	63.4 (60.9-65.8)	56.3 (54.3-58.2)	53.4 (50.2-56.5)
Not intact	26.8 (24.8-29.0)	29.2 (27.4-30.9)	27.6 (25.6-29.6)
Par Not Married @ Birth	9.8 (8.6-11.1)	14.6 (13.4-15.9)	19.1 (16.9-21.4)
Race/Ethnicity***			
NH White	73.4 (70.9-75.8)	67.4 (65.0-69.8)	63.7 (59.9-67.2)
NH Black	13.6 (12.0-15.5)	14.4 (12.9-16.1)	15.2 (13.0-17.6)
Hispanic	8.9 (7.7-10.3)	13.5 (11.8-15.5)	15.5 (13.1-18.2)
NH Other	4.0 (2.8- 5.8)	4.6 (3.6- 5.9)	5.7 (4.4- 7.2)
n	4,806	5,885	4,328

***$p < 0.001$

Table 2. Odds of Marital, Cohabiting and Single Teen Birth vs. No Birth for 1960-1969, 1970-1979, 1980-1989 Birth Cohorts

Cohort:	1960-1969			1970-1979			1980-1989		
	Marital B vs No B	Cohabit B vs No B	Single B vs No B	Marital B vs No B	Cohabit B vs No B	Single B vs No B	Marital B vs No B	Cohabit B vs No B	Single B vs No B
Mother's Education									
<High school	1.43	1.2	1.55*	1.52^{+}	1.54*	0.85	4.25***	1.60*	0.96
High school	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
>High school	0.44**	0.59	0.76	0.53**	0.69^{+}	0.43***	0.77	0.56**	0.54***
Mother Fert History									
Teen Mother									
1-3 births	1.77	2.07	2.43**	2.33***	1.56*	1.41*	1.02	1.81*	1.81**
>3 births	2.42**	2.61*	3.11***	3.83***^{T}	1.83*	2.25***^{T}	2.82***^{T}	1.90**	2.74***
Not Teen Mother									
1-3 births	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
>3 births	1.16	2.42*	2.15**	1.53	0.92	1.31^{+}	0.98	1.02	1.29
Family History									
Par Married @ Birth									
Intact Family	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Not Intact	1.94**	2.68**	1.15	1.79**	2.16***	2.32***	1.50	3.81***	1.74***
Par Not Marr @ Birth	1.37	4.86***	1.84*	1.29	2.36***	2.66***	0.98	3.69***	1.95***
Race/Ethnicity									
NH White	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
NH Black	0.36**	2.46*	5.61***	0.21***	1.10	3.54***	0.15**	0.72	3.79***
Hispanic	1.10^{B}	5.40***^{B}	1.45^{B}	1.46^{+B}	2.35***^{B}	1.98***^{B}	0.87^{B}	1.82**^{B}	2.25***^{B}
n		4,086			5,885			4,328	
-2ll		672.2			957.2			716.5	

$^{+}p < 0.10$; *p < 0.05; **p < 0.01; ***p < 0.001

^{B}Hispanics SG different from NHB

^{T}SG difference b/t Mother is Teen Mother (MTM) 1-3B and MTM >3B