

Community Location, Individual Characteristics, and Rural Young Women's Contraceptive Use

Introduction: This paper uses the 2006-2010 National Survey of Family Growth to investigate the link between U.S. rural young women's patterns of contraceptive use, their individual characteristics, and the rural location of their communities, in a sample of non-pregnant, sexually active 15 to 24-year olds. I find that the relationships between contraceptive use and family of origin characteristics, religious observance, and sexual relationship characteristics differ in rural places from those in urban and suburban locations.

Background: Young people's decisions about sexual behavior and family formation take place in the context of their surrounding communities. Research has established that the characteristics of low income communities function to encourage early, risky sexual behavior among resident youth. Low-income community norms favor early sex and family formation, while limited opportunities for schooling and work constrain available alternatives to early parenting. Research to date on the relationship between community characteristics and youth sexual behavior has focused primarily on low-income urban places. However, like many cities, many rural communities exhibit high levels of poverty and unemployment, under-resourced schools, and norms that favor early childbearing. Physical isolation and high rates of un-insurance restrict residents' access to health care and social services, both of which may constrain access to contraception.

Data and Methods: I use the 2006-2010 National Survey of Family Growth, limiting my sample to non-pregnant, married and unmarried women aged 15-24, who had sex at least once in the twelve months prior to interview. My sample includes women who live in rural, urban and suburban communities. The outcome variable is current contraceptive use, a binary measure of use or non-use of a contraceptive method at last intercourse in the past twelve months. Focal independent variables include measures of location type, family characteristics, individual protective behaviors, and sexual relationship characteristics.

Short Discussion: Table 1 shows the characteristics of my analytic sample. Table 2 shows the abridged results of a logistic regression model of contraceptive use at last intercourse.

In rural locations, young women with intact families of origin are more likely to use contraception, and those whose mothers had a teen birth are less likely to use contraception than suburban women with comparable family characteristics. I argue that the physical isolation of rural locations combined with their relative dearth of opportunities for schooling and work, mean that family stability and parental role modeling play a strong role in influencing rural young women's motivation to avoid pregnancy, and facilitating their access to contraception.

Regular religious attendance and being raised in a fundamentalist denomination are associated with higher probability of contraceptive use among rural young women than similarly religiously observant urban and suburban young women. I argue that in the context of rural communities' relative dearth of recreational opportunities and school extracurricular activities, religious involvement offers young women a supportive community of like-minded peers and caring adults, and that these play a more pivotal role in motivating young women to avoid pregnancy

than they would in a community where structured options for forming friendships, finding mentors, and building skills abound.

Rural young women in sexual relationships with male partners who are more than two years older are less likely than urban and suburban young women in comparable relationships to use contraception. I argue that in the absence of many options for schooling and future work, rural young women may have less interpersonal leverage with their partners than young women in urban and suburban locations. Rural norms for early parenthood may encourage them to accelerate the timing of their own desired family formation behavior to match an older partner's place in the life course.

Table 1
Descriptive Statistics for Analytic Sample

Independent Variables	Total	Rural	Urban	Suburban
N	2,418	393	1,099	926
<i>Percentages</i>				
Married	14.89	16.70	17.35	11.70
Cohabiting	17.68	19.45	19.22	15.32
Living with parents	48.16	45.67	37.15	59.48
Had a previous pregnancy	35.62	32.68	39.57	33.62
Had health insurance for all of prior year	66.85	63.26	65.58	69.94
Intact family of origin	50.46	50.31	50.52	50.49
<i>Mother's education</i>				
Less than high school	17.40	16.40	17.86	17.52
High school diploma only	30.13	36.19	28.31	28.50
Some college	30.21	28.37	27.97	33.23
Bachelor's degree or more	22.26	19.04	25.85	20.75
Respondent's mother had a teen birth	32.28	34.00	34.00	29.80
<i>Family income</i>				
\$24,999 or less	40.51	40.31	47.00	34.73
\$25,000 - \$49,999	29.38	34.67	29.60	26.34
\$50,000 - \$74,999	16.18	12.18	13.48	20.77
\$75,000 +	13.93	12.84	9.22	18.15
<i>How often attends religious services</i>				
Never	30.65	33.54	28.62	30.94
1-2 times per year	14.59	15.27	12.76	15.87
3-11 times per year	14.09	11.09	12.50	17.14
1 time per month	10.47	9.39	12.06	9.62
2-3 time per month	10.88	11.27	12.23	9.45
1 time per week	13.80	13.36	15.75	12.27
More than 1 time per week	5.52	6.07	6.09	4.70
Raised in a fundamentalist denomination	4.40	5.89	4.30	3.69
Enrolled in school	48.04	46.80	48.53	48.27
Sexual partner is more than two years older	31.96	30.44	32.67	32.13
<i>Race/Ethnicity</i>				
Hispanic, any race	16.62	6.54	19.28	19.65
Black, non-Hispanic	15.64	11.25	25.47	9.09
White, non-Hispanic	61.70	75.12	50.82	64.32
Other, non-Hispanic	6.04	7.08	4.43	6.93
<i>Means</i>				
Age	20.62	20.36	20.93	20.48
Sexual frequency per month	6.12	6.66	6.20	5.75

Table 2

Coefficients and Standard Errors for Logistic Model of Contraceptive Use at Last Intercourse, with Interactions by Location Type (vs. Rural Location)

	Model 1		Model 2		Model 3		Model 4	
	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.
<i>Baseline characteristics</i>								
Urban	0.49	2.51	0.32	0.70	-0.02	0.45	2.45	2.79
Suburban	-0.86	2.62	0.50	0.70	0.50	0.48	-0.58	2.95
Age	0.05	0.10	0.06	0.05	0.12**	0.04	0.09	0.10
	x Urban	0.03	0.12				-0.04	0.12
	x Suburban	0.07	0.12				0.11	0.13
Married	-0.93	0.57	-0.58*	0.25	-0.39†	0.22	-1.37†	0.69
	x Urban	0.57	0.65				0.67	0.80
	x Suburban	0.56	0.71				1.26	0.79
Cohabiting	-0.58	0.58	-0.48*	0.21	-0.29	0.21	-0.65†	0.36
	x Urban	0.05	0.66				-0.05	0.51
	x Suburban	0.50	0.67				0.80	0.52
Lives with parents	-0.30	0.40	0.12	0.20	-0.04	0.20	-0.03	0.31
	x Urban	0.33	0.50				0.08	0.43
	x Suburban	0.65	0.55				0.47	0.51
Had a previous pregnancy	-0.86	0.54	-1.12***	0.23	-1.12***	0.21	-0.01	0.54
	x Urban	-0.94	0.59				-1.45*	0.61
	x Suburban	-0.42	0.59				-0.75	0.65
Sexual frequency	-0.01	0.01	-0.02†	0.01	-0.02*	0.01	-0.02†	0.01
	x Urban	-0.03	0.02				-0.02	0.02
	x Suburban	-0.01	0.03				-0.01	0.03
Had insurance all of prior year	1.31**	0.40	0.62**	0.20	0.54**	0.19	1.68**	0.53
	x Urban	-1.01*	0.50				-1.54*	0.59
	x Suburban	-0.72	0.51				-1.50*	0.60
<i>Family of origin and SES</i>								
Intact family of origin			0.28	0.43			0.33	0.63
	x Urban		0.37	0.52			0.35	0.69
	x Suburban		-1.09*	0.54			-1.09	0.7
Mother's education (vs. less than high school)								
High school			0.58	0.49			0.26	0.44
Some college			0.36	0.51			0.35	0.52
Bachelor's degree			2.00†	1.11			1.74	1.3
	High school x urban		-0.89	0.57			-0.39	0.51
	Some college x urban		0.25	0.62			0.50	0.63
	Bachelor's degree x urban		-1.86	1.17			-1.44	1.35
	High school x suburban		-0.37	0.65			-0.40	0.59
	Some college x suburban		0.72	0.65			0.34	0.72
	Bachelor's degree x suburban		-0.94	1.32			-1.03	1.42
Respondent's mother had a teen birth			-0.67	0.45			-0.56	0.40
	x Urban		0.26	0.50			0.22	0.48
	x Suburban		1.09†	0.57			1.04*	0.52
Family income (vs. \$24,999 or less)								
\$25,000 - \$49,999			0.48	0.43			0.87*	0.40
\$50,000 - \$74,999			0.32	0.65			0.86	0.76
\$75,000 and above			-0.13	0.80			0.24	0.74
	\$25,000 - \$49,999 x urban		-0.22	0.50			-0.54	0.49
	\$50,000 - \$74,999 x urban		0.47	0.75			-0.33	0.85
	\$75,000 and above x urban		0.30	0.96			-0.10	0.96
	\$25,000 - \$49,999 x suburban		-0.01	0.54			-0.32	0.50
	\$50,000 - \$74,999 x suburban		0.12	0.83			-0.56	0.91
	\$75,000 and above x suburban		0.62	0.97			-0.09	0.97

Table 2, Continued

	Model 1		Model 2		Model 3		Model 4	
	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.
<i>Behavioral and Relationship Characteristics</i>								
Religious attendance (vs. never attends services)								
1 or 2 times per year					0.47	0.51	0.94*	0.47
3-11 times per year					1.04	0.89	1.12	0.93
Once per month					0.84	0.67	0.91	0.87
2 - 3 times per month					1.68†	0.91	2.01*	0.83
Once per week					0.24	0.51	1.13*	0.49
More than once per week					-0.22	0.77	-0.11	0.87
1 or 2 times per year x urban					-0.00	0.73	-0.39	0.75
3 - 11 times per year x urban					-0.71	0.96	-0.87	1.00
Once per month x urban					-1.35†	0.78	-1.67†	0.97
2 - 3 time per month x urban					-1.62	1.04	-1.91*	0.95
Once per week x urban					-0.59	0.67	-1.64*	0.65
More than once per week x urban					0.59	0.90	0.39	0.99
1 or 2 times per year x suburban					-0.24	0.68	-0.48	0.66
3- 11 times per year x suburban					-0.59	1.09	-0.74	1.11
Once per month x suburban					0.35	1.10	0.67	1.15
2 - 3 times per month x suburban					-1.53	1.04	-1.58	0.97
Once per week x suburban					-0.77	0.68	-1.24†	0.64
More than once per week x suburban					0.57	1.00	0.70	1.05
Raised in a fundamentalist denomination					0.13	0.77	1.37†	0.70
x Urban					-0.29	0.94	-1.77*	0.86
x Suburban					-1.26	0.98	-2.26**	0.85
Enrolled in school					1.11**	0.39	1.11*	0.49
x Urban					-0.30	0.47	-0.52	0.57
x Suburban					-0.05	0.51	0.22	0.64
Sexual partner more than two years older					-1.16*	0.48	-0.96*	0.48
x Urban					1.22*	0.56	1.07†	0.55
x Suburban					0.51	0.64	0.21	0.64
<i>Controls for Race/Ethnicity</i>								
Constant	1.00	2.14	0.46	1.28	-0.42	1.02	X	X
Observations	2,418		2,418		2,418		2,418	

*** p<0.001, ** p<0.01, * p<0.05, † p<0.10