Legacies of Racism: Negative Attitudes toward Medicine and Young Women's Subsequent Contraceptive Behavior

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Abstract

Recent studies have documented mistrust of contraceptive providers among young adults, particularly racial/ethnic minorities, but no study to date has linked these attitudes to detailed measures of young adults' subsequent contraceptive behavior. Using new data from the Relationship Dynamics and Social Life study (RDSL), I investigate the relationship between young women's negative attitudes toward contraceptive providers and their selection of particular contraceptive methods in contraceptive use weeks over a period of 30 months. I find that the belief that the government does not ensure the safety of contraceptives is associated with less use of contraceptive pills and more reliance on condoms, but only among White women. The belief that new contraceptive methods are tested on poor people and minorities is also associated with less pill use and more condom use among White women, but this belief is associated with more pill use and less condom use among Black women.

Young adults of all racial/ethnic groups overwhelmingly believe that pregnancy should be planned (Kaye et al. 2009), but these shared beliefs do not translate to equal success in avoiding unwanted pregnancies. In 2006, 67% of Black women's pregnancies were unintended, compared to 40% of White women's pregnancies and 49% of all pregnancies in the U.S. (Finer & Zolna 2011). These unintended pregnancies are concentrated among young adults. Nearly half of unintended pregnancies occur to women using some form of contraception, which implies that many women trying to prevent pregnancy do not consistently use highly effective contraceptive methods. Among sexually active women, Black women are less likely than White women to use contraception; among contraceptive users, Black women are less likely than White women to use oral contraceptives and more likely to use condoms (Mosher & Jones 2010). Condoms and other barrier methods require planning for each instance of intercourse and the cooperation of a partner, are difficult to use perfectly, and are more likely than hormonal contraceptives to fail even with perfect use (Trussell 2004). Thus, Black women's greater reliance on barrier methods elevates their risk of unintended pregnancy even among contraceptive users.

In this paper, I investigate the relationship between young women's attitudes towards contraceptive providers (broadly defined to include pharmaceutical companies, public health institutions, and physicians) and their contraceptive use and method choice. Specifically, do women who hold negative attitudes toward contraceptive providers use less effective contraceptive methods than their counterparts with more positive attitudes towards providers? If so, do racial differences in attitudes towards providers account for Black-White differences in overall levels of contraceptive use and in the use of specific contraceptive methods? To that end, I use newly available data from the Relationship Dynamics and Social Life study (RDSL), a 30-month study of young women's relationships, sexual behavior, contraceptive use, and

pregnancies. The sample includes young women between the ages of 18 and 22, an age group whose high rate of unintended pregnancy (Finer & Zolna 2011) makes the identification of determinants of contraceptive behavior particularly consequential.

Background

In the United States, hormonal contraceptives are only available by prescription and generally require at least one office visit and a physical exam. Medical assistance is also necessary in order for women to *stop* using some of the more effective hormonal methods, such as inter-uterine devices and implants. Use of hormonal contraception, then, necessarily involves some level of medical supervision, and low-income and women of color reasons to be wary of medical intervention into their fertility that originate in a history of coercion and abuse.

Racial/ethnic minorities and low-income people continue to receive inferior medical care and consequently experience poorer health outcomes than more affluent Whites (Smedley et al. 2006). Moreover, scholarly accounts of racism and classism within medicine have demonstrated the historical vulnerability of low-income and non-White populations to unethical and dangerous medical research as well as coercive population control practices such as involuntary surgical sterilization (Roberts 1997; Washington 2006; Kluchin 2009; Stern 2005). In 1973, the sterilization of the Relf sisters (aged 14 and 12) without parental consent prompted a class-action lawsuit that brought national attention to then-common practices in Southern clinics and hospitals: medically unnecessary tubal ligations and hysterectomies performed on Black women without informed consent, sometimes even without their knowledge. Another class-action lawsuit was brought against the University of Southern California-Los Angeles County Center in 1978 on behalf of Latina women who received similar treatment (Gutierrez 2007). More recently, the introduction of the 5-year contraceptive implant Norplant in the 1990s inspired a

wave of proposals by states to incentivize or even compel Norplant use for women receiving public assistance. Supporters of such legislation invoke racialized and classist images of overly fertile "welfare queens" and the "urban underclass," proposing long-acting contraceptives as a potential medical remedy for perceived social ills (Davis 1981; Gutierrez 2007).

These historical accounts do vital work to contextualize the sometimes fraught relationships between members of marginalized social groups and the medical establishment, but they cannot tell us how women today reconcile the potential for abuse with the pursuit of their own reproductive goals. More recently, a research literature has emerged to consider women's attitudes toward contraceptive providers, their historical antecedents, and their possible consequences (Rocca & Harper 2012; Thorburn & Bogart 2005.) For instance, in a nationally representative study of men and women aged 18-29 years, Kaye and colleagues (2009) discovered high levels of agreement that pharmaceutical companies prioritize profits over the safety of their products, that the government fails to ensure the safety of contraceptives, that new contraceptive methods are tested on vulnerable populations, and that the government and public health officials target poor and minority populations for population control. These beliefs were common within the entire sample, but levels of agreement were highest among Black respondents, a finding consistent with a long history of reproductive coercion directed towards Black Americans.

This recent engagement of contraception researchers with the legacies of medical racism and reproductive coercion in America has great potential to contribute to scholarly understanding of contraceptive behavior, especially in light of research demonstrating that experiences of discrimination in a medical setting can reduce healthcare utilization and adherence to medications (Amy et al. 2006; Thrasher et al. 2008). Unfortunately, a lack of suitable data has

prevented researchers from considering these attitudes in conjunction with subsequent contraceptive behavior. This paper advances existing knowledge about contraceptive behavior by measuring beliefs about contraceptive providers within a racially and socioeconomically diverse group of young women and linking these attitudes to intensive measurement of women's contraceptive use over a 30-month period.

Hypotheses

Women will be more likely to hold negative attitudes[1] towards contraceptive providers if they are Black or if they are economically disadvantaged–that is, if they belong to groups who have borne the brunt of medical racism and coercive population control. Secondly, women with negative attitudes toward providers will use less effective methods in weeks in which they do use some method of contraception. For instance, women who doubt the safety of contraceptives will use hormonal contraception less often than other women. Women who express concern about reproductive coercion will be less likely to use methods such as the IUD that are medically invasive and cannot be discontinued without a doctor's assistance. Finally, I hypothesize that the greater prevalence of negative attitudes toward contraceptive providers among Black women will partially explain Black-White differences in contraceptive method choice.

Data

The Relationship Dynamics & Social Life study (RDSL) is a longitudinal study of young women residing within one county in Michigan. Respondents were 18 or 19 years old at the time of recruitment and were randomly selected from the Michigan Department of State's Personal Identification Card and driver's license database. In-person baseline interviews were conducted

[1] Since the attitudes measured in RDSL pertain to various members of the contraceptive supply chain (e.g. manufacturers versus physicians) and invoke different specific concerns (e.g. physical safety versus the risk of coercion), I anticipate that these beliefs may not be equally salient to all groups of women or all contraceptive methods. Indeed, a goal of this research is to determine which of these attitudes that *could* plausibly influence contraceptive use actually do so and for which women.

with 1,003 women; 992 of these women subsequently enrolled in a 30-month journal study recording women's relationships, sexual behavior, contraceptive use, and pregnancies on a weekly basis. Respondents had the option to submit journals either via telephone or online, and were paid $1 per journal, with a $5 bonus for submitting five journals in a row. In addition to the baseline survey and weekly journals, respondents were invited to participate in three topical survey supplements over the course of the journals study. Since attitudes toward contraceptive providers are measured in one of these supplements, the Social Life Journal Supplement (SLJS), and so the analytical sample for these analyses is limited to women who completed the SLJS. The analyses also exclude weeks in which respondents reported a pregnancy or a strong desire to become pregnant, and weeks in which respondents were not sexually active. The final analytical sample consists of 132 Black women and 321 White women; these 443 women contributed a total of 14,422 journals.

Measures

Attitudes toward contraceptive providers are measured in the Social Life Journal Supplement, a one-time survey administered during the journal study[2]. Other predictors include sociodemographic characteristics measured at the initial baseline survey. Outcome variables were constructed using journal data about sexual behavior and contraceptive use that week. The distributions of predictors and outcomes for the whole sample and within racial groups are presented in Table 1.

[2] Since the SLJS was administered after the beginning of the journal study, the outcome measures incorporate journal data collected prior to the attitude measures. To the extent that attitudes toward contraceptive providers vary over time, the timing of the SLJS relative to the journal study precludes strong causal arguments. Nevertheless, I include journals submitted prior to the SLJS in these analyses because doing so does not change the substantive conclusions of the study, and does produce a more complete record of respondents' contraceptive use over time.

Attitudes toward contraceptive providers

The Social Life Journal Supplement includes a set of four questions concerning respondents' beliefs about contraceptive providers. These attitudes are measured on a scale of 1-4 (strongly agree to strongly disagree.) Two questions refer to the safety of contraceptives and the adequacy of governmental oversight as new methods are developed: respondents indicate agreement or disagreement that "*the government makes certain that birth control methods are safe before they come into the market*" and that "*drug companies don't care if birth control is safe, they just want people to use it so they can make money*." The other two questions measure attitudes toward the government and public health institutions, invoking the possibility of reproductive coercion: respondents are asked whether they agree or disagree that "*the government and public health institutions use poor and minority people as guinea pigs to try out new birth control methods*" and that "*the government is trying to limit Blacks and other minority populations by encouraging the use of birth control*." In these analyses, these measures are collapsed into dichotomous variables indicating agreement or disagreement. Since one question measures trust rather than distrust ("*the government makes certain that birth control methods are safe…*"), this item is reverse-coded so that a value of 1 indicates mistrust for all four measures.

The proportion of the full sample agreeing with each statement ranges from 19.9% to 30.7%, although there are large and significant racial differences in three of the four attitudes (the government does not make certain new methods are safe, new methods are tested on poor and minority people, and drug companies don't care if birth control is safe.) For all three attitudes with significant racial differences, black women express greater mistrust than white women. The levels of mistrust observed in the RDSL sample are consistent with those observed

in a recent, nationally representative survey of adults aged 18-29 that incorporated identical measures (Kaye et al. 2009).

Sociodemographic characteristics

Sociodemographic characteristics measured during the baseline interview include race, mother's age at her first birth, childhood family structure, religious importance, receipt of public assistance during childhood, current receipt of public assistance at the time of the baseline interview, and educational attainment and enrollment at baseline. Only a handful of respondents who participated in the SLJS reported a racial identity other than Black or White (e.g. Asian, Pacific Islander, etc.) Absent a strong theoretical justification for combining these respondents with either the White or Black women, these respondents are dropped from the analytical sample since their number is not sufficient to analyze them separately. Mother's age at first birth is measured with the question, "How old was your biological mother when she had her first child?" and is used to create a dummy variable indicating whether the respondent's mother had a child as teenager. The childhood family structure indicates whether or not the respondent's primary childhood residence was a two-parent household composed of either two biological parents or one biological parent and one step-parent. Religious importance was measured with the question "How important if at all is your religious faith to you – would you say not important, somewhat important, very important, or more important than anything else?" I collapse this variable into a dichotomous indicator of high religiosity in which respondents who indicated that religious faith is "more important than anything else" are coded 1 and all other respondents are coded 0.

Receipt of childhood public assistance is measured with the question, "While you were growing up, did your family ever receive public assistance?" Respondents are also asked about their receipt of various types of public assistance at the time of the baseline interview: "Are you

currently receiving public assistance from any of the following sources? WIC (Women, Infants, and Children Program), FIP (Family Independence Program), Cash welfare, or Food Stamps." If respondents reported participating in any of these programs, they are coded as current public assistance recipients at baseline. Finally, educational attainment and enrollment are captured in a series of dummy variables: dropped out of high school and not currently enrolled, currently enrolled in high school, high school graduate but not enrolled in a postsecondary institution, and high school graduate enrolled in any type of postsecondary education. (In the following analyses, high school graduates who are not enrolled in postsecondary education are treated as the reference group with respect to education.)

Outcomes:

Summary measures of contraceptive use and method choice are constructed from a series of questions in the weekly journal. All respondents were initially asked, "Did you use or do anything that can help people avoid becoming pregnant, even if you did not use it to keep from getting pregnant yourself?" Respondents who did report having used some method were asked a series of follow-up questions about particular non-coital methods, including oral contraceptive pills, patch, Nuva-Ring, Depo-Provera, implant, IUD, and rhythm. Respondents who reported sexual intercourse in the journal were asked a second series of questions about their use of coital-specific contraceptives methods, including condoms (male and female), diaphragm/cervical cap, spermicide, and withdrawal. *The proportion of weeks with no contraception* is calculated by summing the number of weeks in which the respondent did not report using any contraceptive method and dividing by her total number of journals submitted. (Although respondents could and did report using non-coital methods in weeks in which they did not have sex, these analyses are limited to sexually active weeks.)

Contraceptive use weeks are classified into the following categories: LARC (including IUD, implant, and Depo-Provera), pill/patch/ring[3], condom, and withdrawal. These categories are mutually exclusive and indicate the most effective method used that week. For instance, journals classified as withdrawal weeks are journals in which withdrawal was the best or only method used; if a respondent used withdrawal and condoms, that week was coded as a condom week. For each specific method, the *proportion of use weeks* was calculated by dividing the number of journals in which the respondent reported using that method by her total number of sexually active contraceptive use weeks. [4]

Analyses

For each of the four attitude measures, I estimate a separate set of ordinary least-squares (OLS) regression models predicting the proportion of LARC weeks, pill/patch/ring weeks, condom weeks, and withdrawal weeks. Attitudes toward contraceptive providers are analyzed individually because they are not highly correlated with one another (limiting the usefulness of an index), and because it is not clear a priori that attitudes toward different types of contraceptive providers (e.g. pharmaceutical companies, physicians) are equally relevant to each of the contraceptive methods under consideration here. The model-building process for each attitude, however, is identical: I begin with bivariate models including race alone and then the attitude alone. In the third model, I include both race and the attitude. In the fourth model, I add an interaction term between race and the attitude to allow for the possibility that the effect of the attitude may vary by race. In the fifth model, I add childhood variables, including mother's age at first birth, childhood family structure, religiosity, and childhood public assistance. In the sixth

[3] Throughout this paper I refer to the "pill/patch/ring" category as "pill" because the vast majority of weeks classified this way are weeks with pill use.

[4] In a small number of weeks, a respondent reported using contraception, but did not specify the method. These weeks are dropped from analyses predicting the proportion of use weeks in which specific methods were used.

and final model, I add current receipt of public assistance at the baseline interview as well as the dummy variables for current educational attainment and enrollment, treating high school graduates *not* enrolled in postsecondary education as the reference category. This process is repeated for each of the four outcome measures.

Results

In the bivariate models predicting use of specific methods by race, there are no significant racial differences in the proportion of use weeks in which women relied on LARC methods or withdrawal as their most effective contraceptive method. There are, however, large and highly significant racial differences in pill use and condom use: White women use the pill in 18.2% more journal weeks than Black women, and they use condoms in 14.6% fewer journal weeks than Black women.

Table 3 presents the results of the OLS models using the first attitudinal predictor: "*the government [does NOT make] certain that birth control methods are safe before they come into the market.*" This belief is not significantly associated with use of LARCs, condoms, or withdrawal in the bivariate model (Model 2), but it is associated with a significant decrease in pill use. This relationship persists when race is added back into the model (Model 3). Moreover, the coefficients for both predictors are nearly unchanged from earlier models, indicating that these effects are essentially independent. Doubting that the government ensures the safety of contraceptives does *not* explain Black-White differences in pill use—in fact, this attitude is *only* associated with pill use among White women, as demonstrated by a significant interaction between White race and this attitude in Model 4 that leaves the main effect of the attitude insignificant. The interaction between the belief that contraceptives may be unsafe and White race is also significant in Model 4 predicting condom use, but the direction of the effect is

reversed. *Whereas White women who believe that government does not ensure the safety of contraceptives use the pill in many fewer journal weeks than other white women, these women use condoms as their sole or best contraceptive method in far more journal weeks than other white women.* Again, this attitude has no effect for the Black women in the sample. The magnitude of the effect shrinks slightly with the addition of childhood variables and current public assistance and education in Models 5 and 6, but these additions do not change the substantive conclusions. Although these models do not predict the likelihood of choosing one method versus another in a particular week, the distribution of use weeks between these methods is zero-sum; these results suggest that among White women only, the belief that the government does not ensure the safety of contraception prompts greater reliance on condoms as an alternative to the pill.[5]

Table 4 presents results of the models using the second attitudinal predictor: "*the government and public health institutions use poor and minority people as guinea pigs to try out new birth control methods.*" The final two attitudinal predictors, "*the government is trying to limit Blacks and other minority populations by encouraging the use of birth control*" and "*drug companies don't care if birth control is safe, they just want people to use it so they can make money*," are never significantly associated with the use of any specific contraceptive method. The results of these models are thus omitted here in the interest of space, but are available from the author upon request.

[5] That is not to say that White women with this belief use the pill *less* than Black women or use condoms *more* than Black women. The magnitude of the interaction is slightly smaller than the main effect of White race for both the pill models and the condom models. Nevertheless, these findings suggest that the contraceptive behavior of White women with this attitude resembles that of Black women in the sample more it resembles the behavior of other White women.

Discussion

These preliminary findings support the hypotheses that negative attitudes toward contraceptive providers are more common among Black women, and that some of these attitudes do influence women's contraceptive method choices. With respect to behavioral outcomes in these data, White women's higher level of pill use and Black women's higher level of condom use were anticipated and are consistent with the literature (Mosher & Jones 2010). The relationship observed among White women between the belief that the government does not ensure the safety of contraceptives and less frequent use of oral contraceptive pills is consistent with my hypotheses. On the other hand, the positive association between concern about the testing of new contraceptive methods on minorities and greater pill use among Black women was unexpected. I had anticipated that all four attitudes might not be significant predictors of the usage of each contraceptive method. Still, I expected that where significant associations did exist, negative attitudes would always be associated with *less* use of hormonal and/or medicalized contraceptive methods. In light of this surprising finding, I plan to extend this research by conducting multinomial logistic regression models to predict the odds of using the pill versus other specific methods in a given week: these findings should help me to understand the theoretical significance of the higher level of pill use among Black women who believe that new birth control methods are tested on minorities. I also plan to conduct similar analyses predicting non-use of contraception in sexually active weeks.

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Table 1: Descriptive statistics

	Full sample (*n=453*)					Black women (*n=132*)		White women (*n=321*)		
	N	Min	Max	Mean	SD	Mean	SD	Mean	SD	
Sociodemographic characteristics										
White	453	0	1	0.709	0.455					
Biological mother younger than 20 at first birth	453	0	1	0.336	0.473	0.523	0.501	0.259	0.439	***
Grew up in two-parent household	453	0	1	0.570	0.496	0.356	0.481	0.657	0.475	***
High religious importance	453	0	1	0.183	0.387	0.364	0.483	0.109	0.312	***
Childhood public assistance	453	0	1	0.334	0.476	0.477	0.501	0.290	0.454	***
Current public assistance	453	0	1	0.227	0.420	0.333	0.473	0.184	0.388	***
Education										
Dropped out of high school	453	0	1	0.055	0.229	0.061	0.240	0.053	0.224	
Enrolled in high school	453	0	1	0.128	0.334	0.159	0.367	0.115	0.320	
High school graduate	453	0	1	0.199	0.399	0.129	0.336	0.227	0.420	**
Enrolled in post-secondary institution	453	0	1	0.618	0.486	0.652	0.478	0.604	0.490	
Beliefs about contraceptive providers [a]										
The government does not make certain new birth control methods are safe	451	0	1	0.262	0.440	0.305	0.462	0.244	0.430	
The government and public health institutions test new birth control methods on poor people and minorities	445	0	1	0.270	0.444	0.378	0.487	0.226	0.419	***
The government is trying to limit minority populations	453	0	1	0.199	0.399	0.333	0.473	0.143	0.351	***
Drug companies don't care if birth control is safe, they just want to make money	453	0	1	0.307	0.462	0.417	0.495	0.262	0.440	***
Contraceptive outcomes										
% of use weeks that R used LARC	448	0	1	0.068	0.177	0.092	0.206	0.058	0.162	*
% of use weeks that R used pill/patch/ring	448	0	1	0.313	0.351	0.193	0.279	0.361	0.366	***
% of use weeks that R used condom	448	0	0.97	0.106	0.146	0.102	0.130	0.108	0.152	
% of use weeks that R used withdrawal	448	0	0.90	0.079	0.159	0.066	0.140	0.084	0.166	

* p<0.05, ** p<0.01, *** p<0.001 (one-tailed tests)

Table 2: Proportion of contraceptive use weeks in which women used each method (*gov't doesn't make sure new BC methods safe*)

	LARC				**Pill/patch/ring**				**Condom**				**Withdrawal**			
	Total LARC users = 99 Total LARC weeks = 1,186				Total PPR users = 298 Total PPR weeks = 6,369				Total condom users = 324 Total condom weeks = 3,106				Total withdrawal users = 242 Total withdrawal weeks = 2,079			
	r^2	ß	se	p	r^2	ß	se	p	r^2	ß	se	p	r^2	ß	se	p
M1	0.005				0.044				0.035				0.000			
White		-0.034	0.024	0.150		**0.182**	**0.040**	**0.000**		**-0.146**	**0.036**	**0.000**		-0.001	0.029	0.969
M2	0.001				0.009				0.001				0.004			
Gov't doesn't make sure new BC methods safe		0.016	0.025	0.512		**-0.084**	**0.043**	**0.049**		0.028	0.039	0.473		0.040	0.030	0.182
M3	0.004				0.051				0.037				0.004			
White		-0.029	0.024	0.227		**0.179**	**0.040**	**0.000**		**-0.148**	**0.037**	**0.000**		-0.003	0.029	0.928
Gov't doesn't make sure new BC methods safe		0.014	0.025	0.564		**-0.072**	**0.042**	**0.086**		0.018	0.038	0.641		0.040	0.030	0.186
M4	0.008				0.060				0.046				0.008			
White		-0.009	0.028	0.752		**0.232**	**0.047**	**0.000**		**-0.195**	**0.043**	**0.000**		-0.028	0.034	0.417
Gov't doesn't make sure new BC methods safe		0.062	0.043	0.154		0.055	0.074	0.451		-0.097	0.067	0.147		-0.021	0.053	0.698
White * gov't doesn't make sure new BC methods safe		-0.071	0.053	0.182		**-0.187**	**0.089**	**0.036**		**0.169**	**0.081**	**0.038**		0.089	0.065	0.168
M5	0.022				0.109				0.059				0.026			
White		0.000	0.031	0.988		**0.146**	**0.051**	**0.004**		**-0.149**	**0.047**	**0.002**		0.003	0.037	0.945
Gov doesn't make sure new BC methods safe		0.064	0.043	0.141		0.051	0.072	0.479		-0.096	0.067	0.150		-0.019	0.053	0.721
White * gov't doesn't make sure new BC methods safe		-0.078	0.053	0.142		**-0.162**	**0.088**	**0.064**		**0.158**	**0.081**	**0.051**		0.082	0.064	0.205
Biological mother less than 20 years old at first birth		0.012	0.024	0.616		**-0.111**	**0.040**	**0.006**		0.025	0.037	0.490		**0.073**	**0.029**	**0.013**
Grew up with two parents (both bio or bio/step)		-0.018	0.023	0.434		**0.102**	**0.039**	**0.009**		-0.055	0.036	0.126		-0.029	0.028	0.310
High religious importance		-0.030	0.029	0.317		-0.035	0.049	0.472		0.062	0.045	0.171		0.003	0.036	0.940
Childhood public assistance		0.037	0.024	0.130		**-0.067**	**0.040**	**0.100**		0.029	0.037	0.440		0.001	0.030	0.980
M6	0.052				0.134				0.070				0.033			
White		0.007	0.031	0.814		**0.160**	**0.051**	**0.002**		**-0.165**	**0.048**	**0.001**		-0.002	0.038	0.948
Gov doesn't make sure new BC methods safe		0.059	0.043	0.174		0.038	0.072	0.600		-0.084	0.067	0.211		-0.012	0.053	0.815
White * gov't doesn't make sure new BC methods safe		-0.085	0.052	0.106		**-0.144**	**0.087**	**0.099**		**0.152**	**0.081**	**0.061**		0.076	0.065	0.240
Biological mother less than 20 years old at first birth		0.008	0.024	0.746		**-0.092**	**0.040**	**0.021**		0.017	0.037	0.648		**0.067**	**0.030**	**0.024**
Grew up with two parents (both bio or bio/step)		-0.007	0.023	0.754		**0.080**	**0.039**	**0.041**		-0.050	0.036	0.172		-0.023	0.029	0.436
High religious importance		-0.025	0.029	0.396		-0.035	0.049	0.474		0.058	0.045	0.202		0.002	0.036	0.961
Childhood public assistance		0.011	0.025	0.663		-0.041	0.042	0.328		0.033	0.039	0.403		-0.003	0.031	0.929
Current public assistance		**0.102**	**0.028**	**0.000**		-0.044	0.047	0.353		-0.050	0.044	0.257		-0.008	0.035	0.825
Dropped out of high school/not enrolled		-0.024	0.053	0.655		-0.062	0.088	0.476		0.036	0.082	0.660		0.050	0.065	0.443
Enrolled in high school		-0.018	0.039	0.647		0.078	0.064	0.222		-0.067	0.060	0.264		0.006	0.048	0.896
Enrolled in postsecondary ed.		-0.012	0.029	0.682		**0.125**	**0.048**	**0.009**		**-0.079**	**0.044**	**0.077**		-0.035	0.035	0.326

Coefficients in bold are significant at p<0.05 (one-tailed tests)

Table 3: Proportion of contraceptive use weeks in which women used each method (*new methods tested on poor & minorities*)

	LARC				**Pill/patch/ring**				**Condom**				**Withdrawal**			
	Total LARC users = 99 Total LARC weeks = 1,186				Total PPR users = 298 Total PPR weeks = 6,369				Total condom users = 324 Total condom weeks = 3,106				Total withdrawal users = 242 Total withdrawal weeks = 2,079			
	r^2	ß	se	p	r^2	ß	se	p	r^2	ß	se	p	r^2	ß	se	p
M1	0.005				0.044				0.035				0.000			
White		-0.034	0.024	0.150		**0.182**	**0.040**	**0.000**		**-0.146**	**0.036**	**0.000**		-0.001	0.029	0.969
M2	0.001				0.003				0.004				0.000			
New methods tested on poor & minorities		-0.014	0.025	0.572		-0.049	0.043	0.250		0.050	0.038	0.193		0.013	0.030	0.660
M3	0.005				0.044				0.038				0.000			
White		-0.034	0.024	0.165		**0.180**	**0.041**	**0.000**		**-0.148**	**0.037**	**0.000**		0.002	0.029	0.956
New methods tested on poor & minorities		-0.019	0.025	0.440		-0.021	0.042	0.620		0.027	0.038	0.481		0.013	0.030	0.658
M4	0.007				0.067				0.061				0.001			
White		**-0.050**	**0.030**	**0.091**		**0.272**	**0.050**	**0.000**		**-0.232**	**0.045**	**0.000**		0.010	0.036	0.775
New methods tested on poor & minorities		-0.052	0.042	0.216		0.164	0.071	0.021		-0.143	0.064	0.026		0.031	0.051	0.548
White * new methods tested on poor & minorities		0.051	0.052	0.332		**-0.284**	**0.088**	**0.001**		**0.260**	**0.079**	**0.001**		-0.027	0.063	0.673
M5	0.020				0.112				0.075				0.017			
White		-0.041	0.032	0.210		**0.181**	**0.053**	**0.001**		**-0.184**	**0.049**	**0.000**		0.043	0.039	0.266
New methods tested on poor & minorities		-0.047	0.042	0.271		**0.145**	**0.070**	**0.038**		**-0.140**	**0.064**	**0.029**		0.041	0.051	0.418
White * new methods tested on poor & minorities		0.040	0.052	0.447		**-0.242**	**0.086**	**0.005**		**0.246**	**0.079**	**0.002**		-0.045	0.063	0.481
Biological mother less than 20 years old at first birth		0.010	0.024	0.671		**-0.106**	**0.040**	**0.009**		0.028	0.037	0.447		**0.067**	**0.029**	**0.022**
Grew up with two parents (both bio or bio/step)		-0.016	0.024	0.506		**0.100**	**0.039**	**0.011**		-0.052	0.036	0.152		-0.033	0.029	0.252
High religious importance		-0.030	0.030	0.318		-0.036	0.049	0.463		0.063	0.045	0.165		0.003	0.036	0.931
Childhood public assistance		0.038	0.025	0.119		**-0.068**	**0.041**	**0.097**		0.032	0.037	0.386		-0.003	0.030	0.915
M6	0.051				0.138				0.089				0.023			
White		-0.032	0.033	0.322		**0.198**	**0.054**	**0.000**		**-0.206**	**0.050**	**0.000**		0.041	0.040	0.306
New methods tested on poor & minorities		-0.047	0.042	0.263		**0.145**	**0.069**	**0.037**		**-0.142**	**0.064**	**0.026**		0.045	0.051	0.383
White * new methods tested on poor & minorities		0.027	0.052	0.608		**-0.232**	**0.086**	**0.008**		**0.256**	**0.080**	**0.001**		-0.051	0.064	0.420
Biological mother less than 20 years old at first birth		0.008	0.024	0.754		**-0.088**	**0.040**	**0.029**		0.019	0.037	0.612		**0.061**	**0.030**	**0.038**
Grew up with two parents (both bio or bio/step)		-0.006	0.024	0.801		**0.079**	**0.039**	**0.044**		-0.046	0.036	0.202		-0.027	0.029	0.355
High religious importance		-0.026	0.030	0.380		-0.036	0.049	0.461		0.059	0.045	0.197		0.004	0.036	0.918
Childhood public assistance		0.012	0.026	0.647		-0.041	0.042	0.328		0.035	0.039	0.366		-0.006	0.031	0.855
Current public assistance		**0.105**	**0.029**	**0.000**		-0.045	0.048	0.348		-0.055	0.044	0.212		-0.005	0.035	0.893
Dropped out of high school/not enrolled		-0.020	0.054	0.707		-0.065	0.089	0.466		0.055	0.083	0.508		0.031	0.066	0.640
Enrolled in high school		-0.016	0.039	0.673		0.090	0.064	0.162		-0.088	0.059	0.140		0.014	0.048	0.763
Enrolled in postsecondary ed.		-0.006	0.029	0.837		**0.125**	**0.048**	**0.010**		**-0.084**	**0.044**	**0.058**		-0.034	0.035	0.330

Coefficients in bold are significant at p<0.05 (one-tailed tests)