

Lead Us Not into Temptation: Religion, Religiosity, and the Use of Contraception among Female Adolescents in Brazil¹

Paula Miranda-Ribeiro²
Luciene A. F. B. Longo³
Joseph E. Potter⁴
Christopher G. Ellison⁵

Abstract

Among the cultural factors associated with fertility and fertility planning, religion has received little attention in Brazil. Yet previous work has shown that fertility rates vary substantially across religious affiliations. There is also evidence that teenage fertility is related to religious affiliation in Brazil. Very little is known about the relationship between contraceptive use and religion in Brazil and even less is known about religion and contraceptive use among Brazilian adolescents. The objective of this paper is to investigate the association between religious affiliation and attendance and contraceptive use among female adolescents in Brazil, comparing never married adolescents to those who are in union. In addition to contraceptive use in general, pill and condom use will also be investigated. Data come from the 2006 PNDS (Pesquisa Nacional de Demografia e Saúde. Results suggest that the association between religion and contraceptive use (including pill and condom use) among female teenagers varies according to marital status. Never married committed Protestants and Pentecostals are less likely to use contraception than committed Catholics, whereas never married occasional Protestants and Pentecostals are more likely to use the condom than committed Catholics.

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² Associate Professor, Demography Department and Cedeplar, Universidade Federal de Minas Gerais. CNPq Fellow (Produtividade em Pesquisa 1D). paula@cedeplar.ufmg.br.

³ Socioeconomic analyst at IBGE (Brazilian Census Bureau) and PhD candidate in Demography at Cedeplar, Universidade Federal de Minas Gerais. lulongo@gmail.com.

⁴ Professor of Sociology, The University of Texas at Austin. joe@prc.utexas.edu.

⁵ Professor of Sociology and Dean's Distinguished Professor of Social Sciences, The University of Texas at San Antonio. Christopher.Ellison@utsa.edu.

Historically, religious institutions have played an important role in determining what is acceptable in terms of sexual behavior. Premarital sex is still largely forbidden and several studies have shown that adolescents with religious involvement are more likely to delay sexual debut not only in the US (Meier 2003, Jones et al 2005, Regnerus 2007), but also in Brazil (Verona and Dias Júnior 2010). After the onset of sexual activity, religious involvement is associated with fewer sexual partners among US adolescents (Thornton & Camburn 1989, Manlove et al 2008) but there is very little evidence of any association between individual and family religious affiliation or attendance and contraceptive use (Brewster et al 1998, Jones et al 2005, Manlove et al 2006, Gold et al 2010). One exception is the negative association between religious attendance and use of effective contraceptive methods among female adolescents found by Studer and Thornton (1987).

Among the cultural factors associated with fertility and fertility planning, religion has received very little attention in Brazil. Yet fertility rates vary substantially across religious affiliations. The TFR (Total Fertility Rate) in the city of Belo Horizonte in 2000 was as low as 1.6 children per women among Protestants and 1.8 among Catholics, reaching 2.5 children per women among Pentecostals. Women without religion affiliation had a TFR of 2.0 children per women. During adolescence, variations in fertility according to religious affiliations were also observed. The age specific fertility rate (ASFR) was highest among those without religion (0.088), followed by Pentecostals (0.078). The lowest teenage fertility rate was among Protestants (0.044), whereas Catholics ranked second (0.052) (Miranda-Ribeiro et al 2009).

There is evidence that teenage fertility is associated to religious affiliation in Brazil. In the metropolitan area of Rio de Janeiro, 15 to 17 year-old adolescents who declared themselves Baptist or other Protestant (Presbyterian, Methodist, and Episcopalian) or claimed to belong to Assembly of God and other Pentecostal Churches (except Igreja Universal do Reino de Deus – IURD) had about 1/3 the odds of the Catholics to have had a live birth during adolescence, whereas those who declared no religious affiliation were 60% more likely to have had a child in adolescence, if compared to Catholics (McKinnon et al 2008). In the state of Minas Gerais, adolescents who belong to IURD were more likely to have had a child in adolescence if compared to Catholics, whereas those affiliated to Protestant churches and the Assembly of God are less likely to have had a child in their teenage years (Miranda-Ribeiro et al 2010a).

Despite the association between religion and teenage fertility in Brazil, very little is known about contraceptive use and religion among Brazilian adolescents. A study of 156 pregnant teenagers in Campinas indicates that those who declared some religious affiliation were more likely to have knowledge about contraceptive methods than those who claimed to have no religion (Belo & Silva 2004) whereas a study of 1013 low-income young men and women in Porto Alegre found no difference in condom use according to the level of religiosity (Cerqueira-Santos et al 2008).

The objective of this paper is to investigate the association between religious affiliation and attendance and contraceptive use among female adolescents in Brazil in 2006, based on PNDS (Pesquisa Nacional de Demografia e Saúde – Demographic and Health National Survey) data. We compare never married adolescents to those who were in union. In addition to contraceptive use in general, the use of pill and condom, by far the most prevalent methods among adolescents, are also investigated.

Data and Methods

Data come from the 2006 PNDS, a DHS like survey carried out in Brazil. Our focus is on women 15-19 years-old who were sexually active, not pregnant, and had no children by the time of the survey. In 2006, the PNDS interviewed 525 never married adolescents and 154 teenagers in union who meet those criteria. We used Stata version 10.1 to run binomial logistic regression models.

The dependent variables are contraceptive use, pill use, and condom use (1 if user, 0 otherwise).

The independent variable of interest is a combination of four religious affiliations – Catholic, Protestant/Pentecostal, other, and none – and three levels of religiosity – committed (those who attend services at least once a week), occasional (those who attend less than once a week but more than a few times a year), and nominal (those who never attend or do so very rarely).

The control variables are age (single years from 15 to 19); race/skin color (white, black, mixed); type of union (married, consensual union); years of schooling (0-6, 7+); place of residence (urban, rural); region of the country (Southeast, Northeast, North, South, Center-West); and religious switching (if the adolescent had a different religion in 2006 compared to the one she was raised in).

Preliminary Results

Tables 1A, 1B and 1C present the proportion of female adolescents using contraception according to religious affiliation and attendance. Three out of four adolescents who are sexually active, not pregnant, and have no children use contraception. Interestingly, those who claim to have no religion have the lowest proportion of contraceptive use (72.4%). Nominal Catholics have the highest proportion of contraceptive use (82.8%), followed by committed Catholics (79.6%).

Among the female adolescents who have never married, 73% use contraception. This proportion increases to 80.5% among those in union. As expected, condom use is more prevalent among never married teens, whereas adolescents in union use the pill in greater proportions. Never married, committed Protestants and Pentecostals have the smallest proportion of contraceptive use (63.5%), followed by those who declared to have no religion (69.7%).

Table 1A. Contraceptive Use (%) among Sexually Active, Not Pregnant, and Nulliparous Female Adolescents by Religious Affiliation and Attendance, Brazil, 2006

	Contraceptive	Pill	Condom	Other	N
Committed Catholics	79.6	34.6	48.3	6.6	211
Occasional Catholics	73.6	36.9	38.1	8.1	360
Nominal Catholics	82.8	36.6	46.2	8.6	93
Committed Protest/Pentec	72.2	27.8	37.1	13.4	97
Occasional Protest/Pentec	75.5	32.1	47.2	3.8	53
Nominal Protest/Pentec	100.0	80.0	20.0	0.0	5
Other religion	76.9	51.3	41.0	5.1	39
No religion	72.4	32.3	37.8	13.4	127
Total	75.8	35.4	41.4	8.6	985

Source: PNDS 2006

Table 1B. Contraceptive Use (%) among Sexually Active, Not Pregnant, Nulliparous, and Never Married Female Adolescents by Religious Affiliation and Attendance, Brazil, 2006

	Contraceptive	Pill	Condom	Other	N
Committed Catholics	77.2	29.5	53.7	7.4	149
Occasional Catholics	70.0	28.2	46.5	6.1	213
Nominal Catholics	83.0	26.4	64.2	5.7	53
Committed Protest/Pentec	63.5	17.3	42.3	7.7	52
Occasional Protest/Pentec	72.2	25.0	55.6	0.0	36
Nominal Protest/Pentec	100.0	100.0	0.0	0.0	3
Other religion	78.6	60.7	42.9	0.0	28
No religion	69.7	26.3	48.7	9.2	76
Total	73.0	28.9	49.8	6.2	610

Source: PNDS 2006

Table 1C. Contraceptive Use (%) among Sexually Active, Not Pregnant, and Nulliparous Female Adolescents in Union by Religious Affiliation and Attendance, Brazil, 2006

	Contraceptive	Pill	Condom	Other	N
Committed Catholics	85.5	46.8	35.5	4.8	62
Occasional Catholics	78.9	49.7	25.9	10.9	147
Nominal Catholics	82.5	50.0	22.5	12.5	40
Committed Protest/Pentec	82.2	40.0	31.1	20.0	45
Occasional Protest/Pentec	82.4	47.1	29.4	11.8	17
Nominal Protest/Pentec	100.0	50.0	50.0	0.0	2
Other religion	72.7	27.3	36.4	18.2	11
No religion	76.5	41.2	21.6	19.6	51
Total	80.5	46.1	27.7	12.5	375

Source: PNDS 2006

Table 2 presents the odds ratio regarding contraceptive use. Among never married teenagers, the odds that committed Protestants and Pentecostals use contraception is very small if compared to committed Catholics – only 5%. After controlling for socioeconomic and demographic factors (Model 2A), as well as religion switching (Model 3A), committed Protestants and Pentecostals are still very unlikely to use contraception if compared to committed Catholics. Those who declared to have no religion have 1/3 the odds of the committed Catholics to use contraception (Model 1A) but the effect,

already weak, disappears after adding control variables. The odds of contraceptive use among adolescents who live in rural areas are around 40% the odds for urban area residents.

The story for female adolescents in union is completely different. The only variable associated with contraceptive use is education – adolescents who have 7 or more years of schooling are 13 to 14 times more likely to use contraception than those who have up to 6 years of education.

Table 2. Odds ratio - Contraceptive Use among Sexually Active, Not Pregnant, and Nulliparous Female Adolescents in Brazil, 2006

	Never married			In union		
	Model 1A	Model 2A	Model 3A	Model 1B	Model 2B	Model 3B
Committed Catholics (ref)	1.000	1.000	1.000	1.000	1.000	1.000
Occasional Catholics	0.405	0.550	0.545	1.163	0.944	0.938
Nominal Catholics	1.177	1.092	1.086	1.221	1.607	1.598
Committed Protest/Pentec	0.050***	0.048***	0.056**	1.076	1.555	0.929
Occasional Protest/Pentec	0.954	1.149	1.313	6.026	17.649	9.137
Other religion	0.722	0.516	0.672	2.572	3.243	2.896
No religion	0.315*	0.377	0.496	0.830	0.850	0.496
15 years-old (ref)		1.000	1.000		1.000	1.000
16 years-old		0.282	0.283		2.268	2.211
17 years-old		0.684	0.678		2.810	2.599
18 years-old		0.473	0.481		1.466	1.430
19 years-old		0.373	0.374		0.609	0.607
White (ref)		1.000	1.000		1.000	1.000
Black		1.682	1.669		0.186	0.185
Mixed ("Parda")		0.557	0.568		0.812	0.784
Married		-	-		1.000	1.000
Consensual union		-	-		0.311	0.330
0-6 years of schooling (ref)		1.000	1.000		1.000	1.000
7 + years of schooling		0.571	0.545		14,348***	13,166***
Urban (ref)		1.000	1.000		1.000	1.000
Rural		0,422*	0,418*		2.445	2.437
Southeast (ref)		1.000	1.000		1.000	1.000
North		0.426	0.428		1.421	1.379
Northeast		0.450	0.458		1.966	1.857
South		0.998	1.007		0.337	0.315
Center-West		0.666	0.681		0.600	0.576
Same religion as growing up			1.416			0.458
N	525	525	525	154	154	154
Log pseudolikelihood	-262.44	-245.14	-244.78	-72.55	-56.04	-55.76
Pseudo R2	0.1625	0.2177	0.2189	0.0133	0.2378	0.2416

Source: PNDS 2006

*** <=.001 **<.05 *<.1

Table 3 presents the odds ratios regarding pill use. Among never married adolescents, those who have other religious affiliation rather than Catholic, Protestant or Pentecostal are much more likely to use the pill if compared to committed Catholics – 17 times when religion is the only variable taken into account, 19 times when socioeconomic and demographic variables are added and 79 times when religious switching is also controlled for. However, these results should be interpreted with caution due to the small sample size (28 cases).

Among female adolescents in union, nominal Catholics are almost 5 times more likely to use the pill if compared to committed Catholics and about 11 times more likely when control variables are added to the model. Those who declare no religious affiliation are 18 times more likely to use the pill than committed Catholics. The fact that occasional Protestants and Pentecostals are more likely to use the pill should also be analyzed carefully, given that there are only 17 cases.

Table 3. Odds ratio - Pill Use among Sexually Active, Not Pregnant, and Nulliparous
Female Adolescents in Brazil, 2006

	Never married			In union		
	Model 1C	Model 2C	Model 3C	Model 1D	Model 2D	Model 3D
Committed Catholics (ref)	1.000	1.000	1.000	1.000	1.000	1.000
Occasional Catholics	1.940	2.234	2.622	1.145	2.946	3.097
Nominal Catholics	0.412	0.381	0.369	4.731*	11,078*	10,672*
Committed Protest/Pentec	0.572	0.677	1.179	0.304	0.165	0.568
Occasional Protest/Pentec	0.518	0.565	0.689	5.180	10,426*	58,433**
Other religion	16.960***	18,621***	79,473***	0.185	0.325	0.444
No religion	2.200	3.228	16,118***	0.892	4.565	18,035*
15 years-old (ref)		1.000	1.000		1.000	1.000
16 years-old		1.101	0.986		0.353	0.355
17 years-old		1.216	1.143		0,166*	0.193
18 years-old		2.056	1.897		0,064**	0,058**
19 years-old		1.104	1.071		0.827	0.798
White (ref)		1.000	1.000		1.000	1.000
Black		0.258	0,218*		0.203	0.224
Mixed ("Parda")		0.730	0.708		0,220**	0,242**
Married		-	-		1.000	1.000
Consensual union		-	-		0,151*	0,158*
0-6 years of schooling (ref)		1.000	1.000		1.000	1.000
7 + years of schooling		1.052	0.769		0.492	0.526
Urban (ref)		1.000	1.000		1.000	1.000
Rural		0.733	0.661		2.038	1.928
Southeast (ref)		1.000	1.000		1.000	1.000
North		0,222**	0,204**		0.676	0.428
Northeast		0.702	0.699		0.629	0.498
South		1.952	1.908		3.883	2.901
Center-West		1.160	1.163		1.075	0.792
Same religion as growing up			6,232**			5.422
N	393	393	393	113	113	113
Log pseudolikelihood	-232.57	-212.58	-209.30	-68.32	-45.91	-44.85
Pseudo R2	0.1245	0.1997	0.2121	0.0971	0.3933	0.4073

Source: PNDS 2006

*** <=.001 **<.05 *<.1

Table 4 presents the odds ratios for condom use. Once again, results vary according to marital status. Among never married teenagers, occasional Catholics are less likely to use the condom than committed Catholics, whereas occasional Protestants and Pentecostals are 4 to 5.7 times more likely to use the condom. Among adolescents in union, nominal Catholics and those who have other religious affiliations are less likely to use the condom. When all control variables are added, nominal Catholics, occasional

Protestants/Pentecostals, those with other religious affiliations, and those who declare no religion are a lot less likely to use the condom when compared to committed Catholics. Blacks and “Pardas” are extremely more likely to use the condom if compared to Whites, as well as those in consensual union if compared to the ones who are married. Adolescents who have not switched religions are less likely to use the condom if compared to those who have.

Table 4. Odds ratio - Condom Use among Sexually Active, Not Pregnant, and Nulliparous Female Adolescents in Brazil, 2006

	Never married			In union		
	Model 1E	Model 2E	Model 3E	Model 1F	Model 2F	Model 3F
Committed Catholics (ref)	1.000	1.000	1.000	1.000	1.000	1.000
Occasional Catholics	0.365*	0.373	0,352*	0.653	0.995	0.638
Nominal Catholics	1.211	1.363	1.438	0.127**	0,041**	0,037**
Committed Protest/Pentec	0.874	0.891	0.468	1.006	2.963	0.132
Occasional Protest/Pentec	4.101**	5,701**	4,567*	0.186	0.124	0,002***
Other religion	0.444	0.551	0,134***	0.152**	0,032*	0,012*
No religion	1.527	1.557	0.273	1.448	1.480	0,037*
15 years-old (ref)		1.000	1.000		1.000	1.000
16 years-old		0.579	0.729		2.007	1.584
17 years-old		0.765	0.834		3.191	2.094
18 years-old		0.690	0.830		2.732	3.800
19 years-old		0.465	0.495		2.863	2.331
White (ref)		1.000	1.000		1.000	1.000
Black		1.835	2.121		19,984***	18,379***
Mixed ("Parda")		0.640	0.696		6,102**	5,316**
Married		-	-		1.000	1.000
Consensual union		-	-		16,362***	17,263***
0-6 years of schooling (ref)		1.000	1.000		1.000	1.000
7 + years of schooling		1.220	1.872		2.754	2.222
Urban (ref)		1.000	1.000		1.000	1.000
Rural		1.378	1.598		0.707	0.695
Southeast (ref)		1.000	1.000		1.000	1.000
North		3,817*	4,306*		0.590	1.035
Northeast		1.433	1.473		0.877	1.370
South		0,364*	0,371*		1.779	1.998
Center-West		1.348	1.534		0.607	0.911
Same religion as growing up			0,124***			0,018***
N	393	393	393	113	113	113
Log pseudolikelihood	-215.83	-202.70	-196.54	-65.27	-47.05	-41.95
Pseudo R2	0.0665	0.1232	0.1499	0.0729	0.3317	0.4041

Source: PNDS 2006

*** <=.001 **<.05 *<.1

Preliminary Discussion and Future Research

Two points are worth noting before the results are discussed. First, if Catholic, Protestant or Pentecostal female adolescents followed the prescriptions of their religion, they should keep their virginity until marriage. Thus, those who are not married should not be sexually active and, therefore, should not need any type of contraception. However, as the numbers suggest, this is not the case, even if only the never married adolescents committed to their religion are considered. In other words, they were “led into temptation.” Second, according to the Catholic Church, the purpose of sex is procreation and, therefore, couples who do not want to have children should not have sex. If this was the case, Catholics in union should not use contraception.

As expected, the association between religion and contraceptive use (including pill and condom use) among female teenagers varies enormously according to marital status. The effect of religion is more visible among never married adolescents. Among adolescents in union, religion is not associated with contraceptive use. Do Protestantism and Pentecostalism prevent those adolescent women from using contraception? Would it be related to the desire to begin a family?

Contraceptive use can be interpreted as planned sex, which can be less acceptable among adolescents who are more committed to their religions, as tends to be the case among Protestants and Pentecostals. Thus, the fact that committed Protestants and Pentecostals are less likely to use contraception can be explained by the “unplanned” nature of sexual intercourse – if not actually unplanned, at least not consciously planned. Would they take chances and eventually get pregnant and, in addition, suffer sanctions at the church? Maybe not. When the condom is analyzed by itself, the results point to the opposite direction: occasional Protestants and Pentecostals females are more likely to use the condom if compared to committed Catholics, which means that the former are more protected from sexually transmitted infections (STIs) than the latter.

Never married occasional Protestants and Pentecostals are more likely to use the condom than committed Catholics, which means the former are definitely less subject to STIs, including HIV/Aids. Would never married occasional Protestants and Pentecostals be better informed about STIs than committed Catholics? Would the Catholic Church prevent their members from using the condom? Would occasional Protestants and Pentecostals be more empowered with regard to their male partners?

The association between religion and pill use among adolescents in union, although weak, points to greater chance of use among those with less religious commitment. Among those never married, a strong positive association is found for those who declare no religious affiliation.

The preliminary discussion poses as many questions and it provides answers. Future research includes taking into account the fact that the use of methods is not mutually exclusive (two or more

methods can be used at the same time). We are aware that some of the questions will not be answered without qualitative data, to be collected in the near future.

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