

**Religious Influences on Delayed Sexual Initiation among Brazilian Adolescents**

*Running head: Religion and Sexual Initiation in Brazil*

Curtis P. Ogland  
Department of Sociology  
University of Texas at San Antonio  
One UTSA Circle  
San Antonio, TX 78259  
Email: [mrogland@gmail.com](mailto:mrogland@gmail.com)  
Phone: 210-458-6007  
Fax: 210-458-4619

Xiaohe Xu  
Department of Sociology  
University of Texas at San Antonio  
One UTSA Circle  
San Antonio, TX 78259  
E-mail: [Xiaohe.xu@utsa.edu](mailto:Xiaohe.xu@utsa.edu)  
Phone: 210-548-4570  
Fax: 210-458-4619

## **Abstract**

An emerging body of research has begun to examine the influence of religion on teenage sexual and reproductive behavior in non-Western settings. This paper extends such research by examining the influence of religious factors on delayed sexual initiation among non-married Brazilian adolescents ages 15-19. The analysis draws upon data from the 2003 Profile of Brazilian Youth survey using a sub-sample of non-married male and female Brazilian adolescents ages 15-19 (N=1805). Multivariate logistical regression was employed to determine the strength of association, between two key religious variables (religious affiliation and religious group participation), net of covariates, on having had a first sexual experience before age 18. Results indicate that both male and female adolescents affiliated with Protestant faiths, particularly Pentecostalism, have significantly lower odds of reporting sexual initiation before age 18 compared to their non-affiliated counterparts. Additionally, teens belonging to a religious group also demonstrated lower odds of sexual initiation. The results suggest that teens affiliated with Protestant faiths and those integrated into religious networks face a lower risk of an early transition to sexual activity. The research points to the salutary effects of religion as a direct and indirect influence on teenage sexual behavior in a novel context.

Adolescent sexual and reproductive behavior is a critical public health concern across many parts of Latin America. Although fertility rates among female adolescents in the region have been slowly declining over the past few decades, some unsettling trends in the proximate determinants of fertility such as contraceptive use and sexual initiation have attracted increasing scholarly attention (Wellings 2006; Blanc and Way 1998; Cleland and Ali 2004; Singh 1998). In broad strokes, national household survey data suggest that while knowledge of modern contraceptive methods is near universal, consistent use of such among adolescents is stubbornly low (Blanc and Way 1998). Given the trends towards union formation at later ages than in years past, teens are less likely to remain abstinent until marriage and are increasingly sexually active during their adolescent years (Wellings 2006). Without contraceptive use to offset the risks associated with an early transition to sexual activity, teens face the hazards of unintended pregnancy and unwanted childbirth. Even with effective and consistent use, engaging in sexual activity at an early age significantly enhances exposure to sexually transmitted infections (STIs). Ultimately, STIs, HIV/AIDS, and teenage childbearing can incur significant consequences for young women and public health costs for society.

Given the sociological interest in religion as an agent of social control, it is not surprising that a corpus of literature has developed in recent years exploring the influence of religious factors on sexual behavior among adolescents (Regnerus 2007, Rostosky 2004, Bearman and Bruckner 2001). While such existing research has significantly advanced our knowledge, the influence of religion on sexual behavior outside of Western contexts is largely understudied. This lacuna leaves many questions unanswered about the potential salutary effects of religiosity in other parts of the world. Given the notable religious change in Brazil over the past decades and the disconcerting trends in sexual activity among its teen population, an emerging body of

literature has begun to address this gap (Gupta 2000; McKinnon et. al 2008). The aim of our study is to advance this research by examining the religious influences on delayed sexual initiation among Brazilian teens (ages 15-19). Using a multivariate statistical analysis with a nationally representative data set, we test several hypotheses exploring the protective effects of affiliation with Protestant faiths and integration in religious networks on delaying sexual behavior among both male and female adolescents.

### **Background**

Drawing substantive conclusions about trends in sexual behavior among Brazilian teenagers is a challenging exercise given the paucity of nationwide data on adolescent health issues in Brazil. A careful analysis of the adolescent cohort of the Demographic and Health Surveys, however, does provide a good starting place to examine such trends among female teens. The 1986 DHS indicated that only 12 percent of adolescent females ages 15-19 reported having experienced sexual debut, yet in the most recent wave in 2006, a surprising 49 percent of teens reported having had sex<sup>1</sup>. This remarkable increase in sexual initiation among female adolescents over the course of a few decades gives Brazil one of the lowest rates of teen virginity in Latin America (Ali and Cleland 2004). Nationally representative data on male teens is far scarcer, yet our analysis of the Profile of Brazilian Youth data in the current study indicates that approximately 69 percent of non-married male teens have already sexually debuted (PYB 2003). As we piece together these data sources, a clear picture begins to emerge: there has been a rapid increase in sexual activity among the Brazilian adolescent population.

A cluster of prior studies examining the intersection of religion and sexual behavior in Brazil is instructive for advancing current research. An early study using Demographic and Health Survey (DHS) data from the Northeast region of Brazil found that youth who attended

religious services more frequently were at lower risk for early life sexual initiation (Gupta 2000). Subsequent research focusing on denominational affiliation has also proven informative. McKinnon, et. al (2008) found that Protestant adolescents, especially Pentecostals, in Rio de Janeiro demonstrated significantly lower odds of bearing a child during adolescence, thus suggesting that the normative regulations in these faiths served to deter sexual activity. Once again using DHS data from the Northeast, Hill et. al. (2004) found that young men affiliated with Evangelical faiths were significantly less likely to engage in extra-marital sex than their Catholic and non-religious counterparts. A synthesis of the findings from these studies suggests that both affiliation with conservative faith traditions and worship service attendance are strong indicators of restrained sexual activity among younger Brazilians, yet the regional focus of these investigations and the attention to one gender seems to limit the generalization of these findings.

The emerging literature on religion and sex takes on more significance when it is contextualized in the current dynamics of Brazil's religious marketplace. Like many other countries across Latin America, the decline of the monopolistic Catholic Church has given way to a more pluralized religious landscape, allowing emergent faith groups to flourish (Pierrucci and Prandi 2000; Anderson 2004, Miller and Yamamori 2007). While historical Protestant denominations appear to have staked out their niche, the growth in Pentecostalism has been particularly widespread among large swaths of the populace (Pierrucci and Prandi 2000; Novaes 2004). In fact, Pentecostalism has become the fastest growing faith in Brazil over the past 20 years (IBGE 2010). Amidst these shifting sands, secularism is also on the rise, as suggested by the increasing number of Brazilians, particularly younger ones, not affiliated with any religious tradition (Pierrucci and Prandi 2000; Novaes 2004).

## Theoretical Framework and Research Hypotheses

Theoretical work by McQuillan (2004) and Regnerus (2007) provide a useful framework for understanding the mechanisms underpinning religious influence on adolescent sexual behavior. McQuillan's arguments coalesce into essentially three propositions: First, religious organizations must have specific teachings and behavioral expectations directly related to childbearing or its proximate determinants (sex), second, religious faiths must possess the organizational and symbolic means to disseminate their teachings and enforce their behavioral norms, and third, religious influence is more likely to take hold over behavior when one's identity is highly intertwined with the group identity of the religious community. In a similar vein, Regnerus (2007) posits that religion has *direct* effects and *indirect* effects on sexual behavior. That is, religion may directly influence sexual behavior through specific teachings that prohibit premarital sex, and it may indirectly influence sexual behavior through social integration in a religious community where social control serves to enforce behavioral expectations.

Indeed, while both Catholic and Protestant faith traditions prohibit premarital sexual activity, this abstinence orientation derived from religious doctrines is particularly salient among the theologically conservative Protestant traditions. For example, to become a member of the conservative Protestant faith means ascribing to a pro-family ideology that among other things strictly prohibits premarital sex and bearing children outside of wedlock. In addition, considering their religious differentiation from "mainstream" society in Brazil, the ethic of many of the Protestant churches centers around preaching "upright" standards of living and persevering their religious identity through religious socialization and cultural transmission to future generations (Pierucci and Prandi 2004; Gonzalez and Gonzalez 2008; Marty 2008). Pentecostal Protestants, for instance, have thrived in part because they offer a number of supernatural rewards, such as

divine healing and promises of material prosperity to their followers, yet conversion to the faith entails a radical break from a “worldly” lifestyle and strong adherence to the teachings of the faith. The tight organizational networks of Pentecostal churches serve to foster dense social integration, which in turn creates a thick religious community that is able to socialize young members and enforce rules and behavioral expectations (Chesnut 1997; Ireland 1998; Burdick 1993; Lehman 1996). As a result, Pentecostal youth tend to have recurring emotionally-based experiences (e.g., charismatic healing and speaking in tongues) that reinforce adherence.

Based on the contours of Brazilian religion and the insights from the abovementioned theoretical work lead us to put forth three hypotheses with respect to the religious influences on delaying sexual initiation among Brazilian youth. First, given the general moral proscriptions concerning premarital sexual behavior among religious faiths in general, we hypothesize that adolescents affiliated with religious faiths will demonstrate lower odds of being sexual debuted than their non-affiliated peers (*Hypothesis 1*). Second, in light of the specific moral prohibitions on pre-marital sexual activity among Protestant faiths, particularly Pentecostals, and the significance of social integration in these communities, teens affiliated with these faiths will demonstrate the lowest odds of early sexual initiation (*Hypothesis 2*). Third, given the significance of social integration in a religious community, teens that participate in a religious group will demonstrate lower odds of sexual debut when compared to their non-participating peers (*Hypothesis 3*).

## **Methods**

To examine the religious influences on delayed sexual initiation among Brazilian adolescents, this study utilizes data from the Profile of Brazilian Youth (PBY) [*Perfil da Juventude Brasileira*] survey. The PBY is a nationally representative survey that was carried out

across Brazil's five macro regions and within its 195 municipalities in 2003 on behalf of the Youth Project/Citizenship Institute [*Projecto Juventude/Instituto Cidadania*] to collect data on the perceptions, attitudes, and behaviors of male and female Brazilian youth ages 15-24. The PBY final sample included 3,501 respondents. To restrict our analysis to non-married adolescent respondents, we created an analytical sub-sample of non-married teens ages 15-19 (n=1,805).

The dependent variable under investigation captures whether a respondent has had sexual intercourse before age 18. This measure is a self-reported behavior indicated by the question "At what age did you first have sexual intercourse?" Based on responses to this question we utilized a coding scheme that allowed us to create a dichotomous dependent variable. To this end we recoded respondents who reported having had sexually debuted before age 18 as [1] and all other respondents as [0], allowing us to predict whether or not a teen has had sex.

The first of two key independent variables is the respondent's religious affiliation. Religious affiliation was dummy-coded with Catholic, Pentecostal, other Protestant, other religion, and no affiliation (serving as the reference category). Although the PYB questionnaire does not measure frequency of attendance at religious services, we attempt to tap the role of religious participation as whether the respondent reported to be an active member of a religious group. This variable was dummy-coded with respondent belongs to a religious group, respondent belongs to a non-religious extra-curricular group, and respondent does not belong to any group (serving as the reference category).

Since prior literature indicates that other socio-demographic factors influence sexual behavior, we included a number of covariates to serve as statistical controls. The respondent's age was treated as a continuous variable ranging from 15 to 19. Region was dummy-coded into North (serving as the reference), Northeast, Midwest, Southeast, and South. Place of residence

was dummy-coded as either rural (serving as the reference) and urban. Race was dummy-coded as white (serving as the reference) and non-white. The respondent's level of education was treated as a continuous variable ranging from 1 (no education) to 10 (college). Household family income was also treated as a continuous variable ranging from 1 (no income) to 7 (more than 20 times the minimum salary).

Rather than including the respondent's gender as a control variable, we analyzed the data for males and females separately. Given the significant variance in sexual activity across gender among Brazilian youth, adopting for this approach allows us to examine the effects of religion on sexual behavior across gender lines. All the analyses were carried out using the statistical package *Stata* and missing values were imputed with a multiple imputation technique in *Amos*<sup>2</sup>. Since our dependent variable is a dichotomous variable, we used binary logistic regression to test our hypotheses. As shown below, we ran three regression models for male and female adolescents separately. While Models 1 and 2 explore the effects of denominational affiliation and religious participation on sexual debut before age 18 separately, Model 3 examines the joint effects of both variables simultaneously.

## **Results**

[ Table 1 about here ]

Table 1 presents the descriptive characteristics of male and female Brazilian adolescents ages 15-19 in the sample (N=1,805). As shown in the table, about half of Brazilian teens have sexually debuted (53 percent). However, there is a noticeable gender difference, as males are almost twice as likely to be sexually debuted compared to females (69 percent versus 38 percent). Religious affiliation among teens indicates that over 20 percent of the sample claim a Protestant affiliation (16 percent Pentecostal and 6 percent other Protestant), while about 64 percent are

Catholic. The gender differences across religious affiliation are minimal, but it is notable that far more male teens are unaffiliated with a religious tradition than females (15 compared to 9 percent). Turning to the second religious variable, religious group membership, we note that only about 5 percent of teens report belonging to a religious group. The remaining socio-demographic characteristics are largely consistent with expectations and do not indicate any significant variations.

[ Table 2 about here ]

Table 2 displays a bivariate analysis of sexual initiation across religious variables for both male and female Brazilian teenagers. The results begin to demonstrate the religious variations in sexual initiation among Brazilian teens. Congruent with our expectations, adolescents from both Protestant faiths have the lowest reported incidence of having had sex, yet the gendered variations are surprising. Among females only 29 percent of Pentecostals are debuted compared to 57 percent of males, while approximately 20 percent of females from other Protestant faiths are debuted compared to 58 percent of their male counterparts. Additionally, teens who are active members in a religious group also appear to have a lower incidence of sexual initiation (9 percent for females and 47 percent for males).

[Tables 3 and 4 about here ]

Tables 3 and 4 show the odds ratios from multivariate logistic regression to predict having sexual debuted before the age of 18 for Brazilian adolescents in the sample. As we analyzed the data by gender, Table 3 features the findings for females (n=884) and Table 4 presents the findings for males (n=921). Both tables report the findings from three regression models.

Model 1 in Tables 3 and 4 displays the odds coefficients of being sexually debuted with respect to religious affiliation, net of statistical controls. For both males and females the odds of being sexually debuted are significantly lower for adolescents affiliated with all three major faith traditions (Pentecostals, other Protestants, and Catholics) compared to their non-affiliated peers (Female Catholics are marginally significant at the  $p < 0.1$  level). The low odds for teens who at least identify with any faith tradition lends support to Hypothesis 1, which anticipated that teens affiliated with religious faiths in general would present lower odds of sexual initiation compared to non-affiliated teens.

As expected, the odds of being sexually debuted for teens among Protestant faiths are the most robust for both males and females, yet a modest gender difference is evident. While the odds for teens from both Protestant faiths are quite low, among females the odds are lowest for other Protestants (OR = .224,  $p < .01$ ) than for Pentecostals (OR = .346,  $p < .01$ ), whereas for males the odds of being debuted are lowest for Pentecostals (OR = .257,  $p < .001$ ) than for other Protestants (OR = .363,  $p < .01$ ), when compared to their non-affiliated counterparts. In fact, our ancillary analyses indicate that the odds of being debuted are significantly lower for Protestants and Pentecostals, respectively, than for Catholics (results not shown). This is true for both gender groups, thus lending credence to Hypothesis 2.

Model 2 in Tables 3 and 4 displays the odds coefficients of being sexually debuted among teens with respect to participation in a religious group, net of statistical controls. The results indicate that male and female adolescents belonging to a religious group have significantly lower odds of being sexually debuted compared to their counterparts not involved in any group. The findings are quite robust for both females (OR = .140,  $p < .01$ ) and males (OR = .220,  $p < .001$ ), thus giving support for Hypothesis 3, which anticipated that teens belonging to

a religious group would demonstrate lower odds of being sexually debuted compared to their counterparts not involved in any group.

The final model in Tables 3 and 4 presents results of being sexually debuted with respect to the inclusion of both religious affiliation and religious participation, net of statistical controls. For female teens the low odds of being sexually debuted remain significant for adolescents affiliated with Protestant faiths (Pentecostals OR = .382,  $p < .01$ ; other Protestants OR = .239,  $p < .01$ ) and for those teens belonging to a religious group (OR = .161,  $p < .01$ ), while the low odds of being sexually initiated also remain equally robust for males affiliated with Protestant faiths (Pentecostal OR = .297,  $p < .001$ ; other Protestant OR = .411,  $p < .05$ ) and for those whom belong to a religious group (OR = .309,  $p < .01$ ).

Although our central focus is religion, we would be remiss to overlook the influence of several other socio-demographic factors among adolescents in the models that yielded significant effects on sexual initiation. Unsurprisingly, age was a significant predictor of sexual debut for both females (OR = 1.715,  $p < .001$ ) and males (OR = 1.716,  $p < .01$ ), indicating that the likelihood of having sex is greater as a teen gets older. Among females the odds of being sexually debuted were lower for teens with more education (OR = .666,  $p < .001$ ), for those residing in the Northeast region of the country (OR = .282,  $p < .001$ ), and for teens living in areas of higher level of urbanization (OR = 1.573,  $p < .05$ ). Among males the effects of education, region of residence and degree of urbanization were less significant, yet the odds of being sexually debuted were higher for non-white adolescents (OR = 1.716,  $p < .01$ ).

### **Discussion**

Recent trends in the sexual and reproductive behavior of Latin American adolescents have prompted renewed interest among scholars in the factors associated with the protective

effects against premature sexual activity. This study adds to small, yet growing, body of literature that has begun to examine the salutary effects of religion on preventing early sexual behavior among Brazilian teenagers. While most prior research has been limited to female teenagers, the significant findings among both female and male teens in our study extend prior research and fill an important gap in research literature. Even though males were much more likely to be sexually debuted, the effects of religion were equally robust for both genders across all of the models. These findings on the whole indicate that teens affiliated with Protestant faiths and who are involved in a religious group are at significantly lower risk of have experienced an early transition to sexual activity.

The first of our findings indicated that both males and females affiliated with Catholicism, other Protestant faiths, or Pentecostalism have significantly lower odds of early sexual debut when compared to their non-affiliated counterparts. Given that all three principal faith traditions in Brazil have proscriptive doctrines against premarital sex, the results suggest that adolescents that affiliate with these faiths are likely to come under the normative influence of religious teaching on sexuality. While it is impossible to tell if these teens are actively engaged in their faith, our findings suggest at least that a general moral ethos evident in these religions may play a role in preventing an early transition to sexual activity. Adolescents affiliated with these religious faiths are likely to be exposed to pro-family ideologies as well as be socially integrated into communities that share their views. Conversely, adolescents unaffiliated with religious faith remain outside of the influence of religious teachings and the social interaction of religious communities and are thus not likely to have strong proscriptions on premarital sexual activity.

The findings also indicate that teens affiliated with Protestant faiths are at the lowest risk for early sexual debut. These results seem to support the theoretical arguments posed by both

McQuillan's (2004) and Regnerus (2007) concerning the mechanisms that work through religion to influence behavior. First, both historical Protestants and Pentecostals have a theologically conservative orientation informed by a literal view of the Bible that serves as framework for moral teaching and decision-making (Pierucci and Prandi 2004; Gonzalez and Gonzalez 2008). The overt proscriptions on pre-marital sex and the accompanying consequences for transgression extending from religious teachings in both these faiths thus may serve as a direct effect on adolescent behavior (Regnerus 2007). Second, the religious communities in both these faith traditions seem to have the organizational and symbolic means to reinforce their family ideologies and religious teachings. Especially evident in Pentecostal churches, the tight social networks and active religious engagement both act as mechanisms of social control to hem in deviant behavior and reinforce sanctioned beliefs and conduct. Third, given the marginal status of historical Protestants as exclusive and enclave communities and the social and moral integration into Pentecostal congregations (Chesnut 1997; Ireland 1996), teens affiliated with these faiths are likely to have a strong internalized identity with the group identity of the faith. A highly integrated individual identity with the identity of the faith is likely to serve as a strong influence over adolescent's value orientations and behavior choices (McQuillan 2004).

The findings that teens belonging to a religious group are at lower risk for sexual initiation only buttress Regnerus's proposition that religion is both a direct and indirect influence on sexual behavior. In a religious group, teens are likely to be exposed to the moral teachings of the religious faith and interact with peers of similar moral persuasion. In this respect religion serves as an indirect influence on sexual behavior as the mechanisms of social control operate to reinforce the norms and behavioral expectations of their peers and the broader religious faith community (Smith 2003, Regnerus 2007).

While the results presented in this study are quite robust and in consonance with our research expectations, the findings remain only suggestive and must be tempered in light of the research limitations. Although both of our religious independent variables yielded robust findings of the protective effects against sexual debut, the religious participation proxy measure of membership in a religious group is not the most ideal measure of religious participation. Ideally, we would like to measure religious participation based on frequency, yet the lack of this measure in the survey instrument limits the interpretation of this particular finding. Additionally, we also must be cognizant of the possibility of the selection effects inherent in religious research in that while we interpret our results as the influence of religious factors on sexual behavior, it is always possible that youth with conservative religious ideals and family backgrounds are attracted to Protestant religious faiths that have ideologies that support their views (Regnerus and Smith 2005).

### **Conclusion**

Research on religiosity and the sexual behavior of teenagers in the United States has garnered a robust scholarly interest over the past few decades, and in large part the corpus of findings demonstrate that religion can serve as both a protective and salutary influence on the lives of adolescents. Our examination of religion and sexual initiation among Brazilian teenagers seems to corroborate these conclusions about the beneficial effects of religiosity in an understudied region of the world, while also pointing to some broader generalizations about religion. First, the religious teaching about prescriptive and proscriptive conduct, particularly from conservative faith traditions, represents a normative influence on adolescent behavioral decisions. Second, social integration in religious communities serves to reinforce normative patterns and represents a mechanism of social control on deviant behavior. Future research

should pick up on these themes by exploring other dimensions of religiosity on sexual behavior and expand such investigation to the broader youth populations of Latin America.

### Notes

1. These data reflect author's calculations. The data set for the 1986 Brazilian DHS is available at <http://www.measuredhs.com/> and the data set for the 2006 PNDS is available at <http://bvsms.saude.gov.br/bvs/pnds/index.php>.
2. We conducted a series of sensitivity analyses with the listwise-deleted data, which yielded identical results. As such, we decided to report the results with the imputed missing values.

### References

- Ali, Mohamed M. and John Cleland. 2005. "Sexual and reproductive behavior among single women aged 15-24 in eight Latin American countries: a comparative analysis." *Social Science and Medicine* 60: 1175-1185.
- Anderson, A. 2004. *An introduction to Pentecostalism: Global charismatic Christianity*. New York: Cambridge University Press
- Bearman, Peter S., and Hannah Bruckner. 2001. Promising the Future: Virginity Pledges and First Intercourse. *American Journal of Sociology* 106(4): 859-912.
- Blanc, Ann K. and Ann A. Way. 1998. Sexual Behavior and Contraceptive Knowledge and Use among Adolescents in Developing Countries. *Studies in Family Planning* 29(2):106-116.
- Brazilian Institute of Geography and Statistics (IBGE). 2000 census data [online]. Available at <http://www.ibge.gov.br>. Accessed January 1, 2010.
- Burdick, John. 1993. *Looking for God in Brazil: The Progressive Catholic Church in Urban Brazil's Religious Arena*. California: University of California Press.

- Chesnut, Andrew R. 1997. *Born Again in Brazil: The Pentecostal Boom and the Pathogens of Poverty*. New Jersey, Rutgers University Press.
- Gonzalez, Justo L., and Ondina E. Gonzalez. 2007. *Christianity in Latin America: A History*. Cambridge: Cambridge University Press.
- Gupta Neeru. 2000. Sexual initiation and contraceptive use among adolescent women in northeast Brazil. *Studies in Family Planning*, 31 (3): 228-238.
- Hill, Zelee E., John Cleland, Mohamed M. Ali. 2004. "Religious affiliation and extramarital sex among men in Brazil". *International Family Planning Perspectives* 30(1):20-26.
- Ireland, R. 1998. Pentecostalism, conversions, and politics. In *Brazil in Power, politics, and Pentecostals in Brazil*, edited by E. L. Cleary and H. Stewart-Gambino, 123-137. Colorado: Westview Press
- Lehmann David. 1996. *Struggle for the Spirit: Religious Transformation and Popular Culture in Brazil and Latin America*. United Kingdom: Polity Press.
- Mckinnon, Sarah, Joseph E. Potter, and Virginia Garrard-Burnett. 2008. "Adolescent Fertility and Religion in Rio de Janeiro, Brazil in the Year 2000: The Role of Protestantism. *Population Studies* 62(3):289-303.
- McQuillan, Kevin. 2004. When Does Religion Influence Fertility? *Population and Development Review* 30:25-56.
- Miller, Donald E., T. Yamamori. 2007. *Global Pentecostalism: The new face of Christian social engagement*. Berkeley: University of California Press.
- Novaes, Regina. 2004. Os Jovens "sem religiao": ventos secularizantes, espirito de epoca e novos sincretismos. Notas preliminaries. [Youth without religion: secularizing winds, the spirit of the age and a new syncretism] *Estudos Avancados* 18(52):321-330.

- Perfil da Juventude Brasileira [Profile of Brazilian Youth]. 2003. Fundação Perseu Abramo (Banco de Dados). São Paulo: Instituto Cidadania; Fund. Perseu Abramo; Criterium; Sebrae; Inst. de Hospitalidade, 2004. In: Consórcio de Informações Sociais, 2007. available at <http://www.cis.org.br>.
- Pesquisa National de Demographia e Saude da Crianca e da Mulher [National Demographic and Health Survey of Women and Children. 2006. Ministerio da Saude: Brazil.
- Pierucci, Antonio Flavio and Reginaldo Prandi. 2000. Religious diversity in Brazil: numbers and perspectives in a sociological evaluation. *International Sociology* 15:629-639.
- Regnerus Mark. 2007. *Forbidden Fruit: Sex and Religion in the Lives of American Teenagers*. New York, New York: Oxford University Press.
- Regnerus, M. and C. Smith. 2003. Selection effects in studies of religion influence. *Review of Religious Research* 47(1): 23-50.
- Rostosky, Sharon Scales, Brian L. Wilcox, Margaret Laurie Comer Wright and Brandy A. Randall. 2004. The Impact of Religiosity on Adolescent Sexual Behavior: A Review of the Evidence. *Journal of Adolescent Research* 19:677-697.
- Singh, Susheela. 1998. Adolescent Childbearing in Developing Countries: A Global Review. *Studies in Family Planning* 29 (2):117-136.
- Smith Christian. 2003. Theorizing religious effects among American adolescents. *Journal for the Scientific Study of Religion* 42:17-30.
- Wellings, Kate., Martine Collumbien, Emma Slaymaker, Susheela Singh, Zoé Hodges, Dhaval Patel, and Nathalie Bajos. 2006. Sexual Behaviour in Context: A Global Perspective. *Lancet* 368:1706-1728.

**Table 1. Sample Characteristics of Brazilian Adolescents Aged 15-19**

	n	%	n	%	n	%
	<b>Females</b>		<b>Males</b>		<b>Total</b>	
<b>Dependent Variable</b>						
Sexual Debut						
Yes	331	37.40	635	68.90	966	53.50
No	553	62.60	286	31.10	839	46.50
<b>Independent Variables</b>						
Religious Affiliation						
Pentecostal	140	15.80	115	12.50	225	14.30
Other Protestant	56	6.30	52	5.60	108	6.00
Catholic	559	63.20	576	63.20	1135	63.50
Other religion	44	5.00	32	3.50	76	4.30
No religion	77	8.70	137	15.00	214	12.00
Religious Participation						
Religious group	44	5.00	38	4.20	82	4.60
Extra-curricular group	107	12.20	141	15.60	428	13.90
No group	728	82.80	727	80.20	1455	81.50
<b>Control Variables</b>						
Age						
15	200	22.60	180	19.50	380	21.10
16	173	19.60	183	19.90	356	19.70
17	168	19.00	182	19.80	350	19.40
18	178	20.10	227	24.60	405	22.40
19	165	18.70	149	16.20	314	17.40
Education <sup>1</sup>	5.47	1.34	5.30	1.34	5.38	1.34
Household Income <sup>1</sup>	4.11	1.85	4.17	1.85	1.85	1.85
Race						
White	326	36.90	329	35.70	655	36.30
Non-white	558	63.10	592	64.30	1150	63.70
Residence						
Rural	157	17.80	187	20.30	344	19.10
Urban	727	82.20	734	79.70	1461	80.90
Work status						
Employed	155	17.50	330	35.80	485	26.90
Not-employed	729	82.50	591	64.20	1320	73.10
Region						
North	73	8.30	77	8.40	150	8.30
Northeast	259	29.30	276	30.00	535	29.60
Midwest	60	6.80	66	7.20	126	7.00
Southeast	370	41.90	382	41.50	752	41.70
South	122	13.80	120	13.00	242	13.50
<b>N</b>	<b>884</b>	<b>49.00</b>	<b>921</b>	<b>51.00</b>	<b>1805</b>	<b>100.00</b>

<sup>1</sup>Mean and Standard Deviation

**Table 2. Bivariate Analysis of Sexual Debut by Gender and Religious Variables**

	<u>Females</u>				<u>Males</u>			
	Yes		No		Yes		No	
	N	%	N	%	N	%	N	%
<b>Religious Variables</b>								
Religious Affiliation								
Pentecostal	40	28.6	100	71.4	65	56.5	50	43.5
Other Protestant	11	19.6	45	80.4	30	57.7	22	42.3
Catholic	211	37.7	353	62.3	411	70.3	174	29.7
Other religion	23	52.3	21	47.7	21	65.6	11	34.4
No affiliation	43	55.8	34	44.2	108	78.8	29	21.2
Religious Participation								
Religious group	4	9.1	40	90.9	18	47.4	20	52.6
Extra-curricular group	33	30.8	74	69.2	101	71.6	40	28.4
No group	291	40.0	437	60.0	508	69.9	219	30.1

N=1,805

**Table 3. Odds Coefficients to Predict Sexual Debut Before Age 18 among Females**

	Model 1		Model 2		Model 3	
Age	1.710	***	1.710	***	1.715	***
Household income	0.993		0.992		0.989	
Education	0.672	***	0.666	***	0.666	***
Race						
White (reference)						
Non-White	1.155		1.073		1.115	
Work Status						
Not employed (reference)						
Employed	1.024		0.998		0.985	
Residence						
Rural (reference)						
Urban	1.551	*	1.605	*	1.573	*
Region						
North (reference)						
Northeast	0.302	***	0.305	***	0.282	***
Midwest	0.602		0.568		0.570	
Southeast	0.669		0.636		0.589	†
South	1.301		1.215		1.115	
Religious Affiliation						
No religion (reference)						
Pentecostal	0.346	**			0.382	**
Protestant	0.224	**			0.239	**
Catholic	0.596	†			0.625	†
Other religion	1.058				1.095	
Religious Participation						
No group (reference)						
Religious Group			0.140	**	0.161	**
Extra group			0.830		0.870	
N	884		884		884	

† p<.1, \*p<.05, \*\*p<.01, \*\*\*p<.001

**Table 4. Odds Coefficients to Predict Sexual Debut Before Age 18 among Males**

	Model 1		Model 2		Model 3	
Age	2.259	***	2.306	***	2.326	***
Household income	0.983		0.977		0.975	
Education	0.059	†	0.868	†	0.871	†
Race						
White (reference)						
Non-White	1.723	**	1.652	**	1.716	**
Work Status						
Not employed (reference)						
Employed	1.243		1.287		1.319	
Residence						
Rural (reference)						
Urban	1.266		1.226		1.230	
Region						
North (reference)						
Northeast	0.541	†	0.503	†	0.475	†
Midwest	0.408	*	0.343	*	0.351	*
Southeast	0.685		0.606		0.574	
South	0.519	†	0.468	*	0.446	*
Religious Affiliation						
No religion (reference)						
Pentecostal	0.257	***			0.297	***
Protestant	0.363	**			0.411	*
Catholic	0.599	*			0.606	†
Other religion	0.539				0.521	
Religious Participation						
No group (reference)						
Religious Group			0.220	***	0.309	**
Extra group			1.501	†	1.561	†
N	921		921		921	

† p<.1, \*p<.05, \*\*p<.01, \*\*\*p<.001