

DOES THE HABIT MAKE THE NUN? RELIGIOUS FREQUENCY AND SELF- PERCEPTION OF RELIGION IN BRAZIL*

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ABSTRACT

Using the Brazilian Religion Survey (BRS), this article presents data on the frequency of religious activities and the religious self-perception of Catholics and Protestants. While Protestants are more involved with religion than Catholics, it is surprising that both are similarly devoted to prayer and that, among Protestants, Pentecostals and historical Protestants present almost identical percentages of religious participation. This article simulates the distribution of Brazilian religions based on a high-frequency filter, as well as the probability of affiliation based on observed religious practices. The results show a decrease in the number of Catholics and an increase in the number of Pentecostals in greater proportions than those of the 2010 Census and demonstrate that the probability of being Catholic in Brazil is independent of the intensity of religious practice adopted.

Keywords: Frequency of religious activities. Self-report. Protestants. Catholics.

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RESUMO

Utilizando a pesquisa Valores e Religião no Brasil (PVRB), este artigo apresenta dados sobre frequência e autopercepção religiosas de católicos e evangélicos. Embora os evangélicos sejam mais envolvidos com a religião que os católicos, surpreende que ambos sejam semelhantemente devotos na reza/oração e que, entre os evangélicos, os pentecostais e os históricos apresentem porcentagens de participação religiosa quase idênticas. Simula-se a distribuição das religiões brasileiras a partir do filtro de alta frequência e também a probabilidade de filiação a partir das práticas religiosas observadas. Os resultados evidenciam diminuição do grupo de católicos e aumento do de pentecostais em proporções maiores que as do Censo de 2010, e demonstram que a probabilidade de ser católico no Brasil independe da intensidade da prática religiosa adotada.

Palavras-chave: Frequência religiosa. Autodeclaração. Evangélicos. Católicos.

Whether seeking benefits after death (“salvation motive”), the satisfaction of participation in a faith community (“consumption motive”), or the possibility of obtaining material success (“social-pressure motive”) (AZZI; EHRENBERG, 1975), the fact remains that approximately 90% of the world’s population has some sort of religious affiliation (OLIVEIRA; CORTES; BALBINOTTO NETO, 2013). Religions provide worldviews that shape social and political attitudes in a way that cannot be attributed solely to social class, education level, or race (STEENSLAND et al., 2000). The greater or lesser involvement of individuals with diverse expressions of faith is strongly associated with sexual behavior, number of children, family planning, how income is used, academic achievement, and involvement in social networks. It is also associated with labor market participation, definition of gender roles, personal satisfaction, etc. (ANUATTI-NETO; NARITA, 2004; IANNACCONE, 1998; LIM; PUTNAM, 2010; NOVAES, 2005; OGLAND; VERONA, 2011; PRANDI, 2008; ROSAS; CASTRO, 2014; SMITH; DENTON, 2005).

One of the most widely used indicators for understanding religious involvement is church attendance. In the United States, a country where data on the subject abounds, it has been shown that the proportion of people who go to

services at least once a week is less than what has been reported³. The number of people who rarely or never attend services in churches or synagogues is growing (PEW RESEARCH CENTER, 2013a). Nearly ten percent of those who eventually go to church do not attribute their lack of attendance at religious services to anything in particular (PEW RESEARCH CENTER, 2013b)⁴. Low attendance is typical of the secularization process (BERGER, 2002; CASANOVA, 2001; HADAWAY; MARLER, 2005; ZEPEDA, 2010), which is also characterized by religious pluralism, desacralization, a weakening in the coercive capacity of congregations, and the emergence of spontaneity (JUNGBLUT, 2012).

The notable successes and large memberships that religious enterprises have achieved in recent years have also been associated with this same modernity (CHANG; LIM, 2009; FRESTON, 2005, 2009). The hypothesis of state deregulation – the more free, more diverse, and less state-regulated a religious market is, the greater the involvement of individuals in faith practices will be – represents one theoretical effort to understand the religious vitality observed in certain contexts (AARTS et al., 2010; IANNACCONE; FINKE; STARK, 1997)⁵. Brazil is a good example of this vitality. Although it has the largest population of Catholics in the world, it presents a significant increase in the number of Protestants, who now total 22.2% of the population, according to the last official census (2010). As this increase is due mainly to those who have converted to Pentecostalism⁶, the country has been

³ Researchers report that when subjects respond to how many times they go to services, the response is much more indicative of whether they already went, would like to go, or plan to go, rather than how often they actually do go (AARTES et al., 2010; IANNACCONE, 2004).

⁴ 37% attribute infrequent attendance to disagreements with the church's religious leaders or beliefs, 24% to personal priorities, and 24% to practical difficulties (PEW RESEARCH CENTER, 2013b).

⁵ Following this track, economists of religion assume that religious preferences and tastes are stable over time and that individuals behave in a way that maximizes the benefits and minimizes the costs of their options in relation to faith. Freedom of choice and the regulation of the religious market would influence the content of the commodities and competitiveness among the firms (churches), leading to consumer's satisfaction (OLIVEIRA; CORTES; BALBINOTTO NETO, 2011).

⁶ Brazilian Pentecostalism is complex and heterogeneous. To better understand the phenomenon, it was divided by sociologists into three main waves: the first in 1910-1911, the second in 1950, and the third in 1970 (FRESTON, 1994). The number of Pentecostals based on church membership grew significantly during the third wave, which stressed proselytism in electronic media through appeals for healing and prosperity (ALMEIDA, 2008; ANTONIAZZI, 2006; CAMPOS, 2008b; MARIANO, 1999). Although there are temporal and theological differences that characterize the three waves, there is a consensus that they influence each other and that the asceticism and sectarianism found at the beginning of the century do not predominate among Pentecostals (MARIANO, 2005). The specialized literature (MARIANO, 1996, note 2) considers Pentecostals to be

transformed into one of the global centers of this religious tradition, with the second largest population of “practicing Protestants” (FRESTON, 2005; 2009; 2010).

The intensity of religious transit and the emergence of new faith alternatives⁷ present themselves as a challenge for scholars of the phenomena, mainly because there is no regular and temporally comparable quantitative data in Brazil on church or temple attendance, nor on variations in religious practices (OLIVEIRA; CORTES; BALBINOTTO NETO, 2013). In addition to interviews and field observations, researchers primarily rely on Census data – decennial demographic research generated by the Brazilian Institute of Geography and Statistics (Instituto Brasileiro de Geografia e Estatística - IBGE) – which allows for analysis of the population’s religious composition, including the size and numerical evolution of the groups.

The Census has collected its subjects’ religious self-classification in mutually exclusive categories since 1940⁸, making self-report the most frequent measure for addressing membership in faith groups. Yet, there has been no progress towards creating other metrics. Although the differences reported by the subjects and later summarized by the Census are relevant for noting ecclesiological and historical inconsistencies between the various religious options, people can declare that they belong to different religions and experience them in a similar way⁹. They can also say that they are part of the same religion and have very different faith practices. This makes the collected information quantitatively incomplete, and the analytical categories inadequate to capture effects that should be attributed to religion but that are instead wrongly captured by variables such as race, gender, and region (STEENSLAND et al., 2000).

individuals who declare that they are members of a church that could be classified into one of the three waves. Taking that attestation, and considering the variables from the database used for this article, we use the nomenclature “Pentecostal” comprehensively to refer to a belief in the contemporaneity of the gifts of the Holy Spirit (ROLIM, 1985).

⁷ An analysis of the “new religious movements” can be found in Camurça (2003), Giumbelli (2002), Guerriero (2006), and Machado (2010).

⁸ When administering the questionnaire, an open-ended question is asked and the answers are categorized only later. The exception to this procedure was the 1991 Census, which presented *a priori* religious options. In general, people can declare that they belong to any set of beliefs, ideologies, and customs (DECOL, 1999).

⁹ Nowadays, in addition to Umbanda, there are also Protestant churches that allow the faithful to have both a committed membership and a somewhat engaged involvement. The Universal Church of the Kingdom of God (Igreja Universal do Reino de Deus - IURD) is an example.

To contribute to the debate and demonstrate the extent to which self-report is a satisfactory measure, this article examines religious affiliation based on the way in which people practice their religiosity. The reference groups are the numerically most representative within the Brazilian context: Catholics and Protestants (Pentecostals and non-Pentecostals)¹⁰. Data on the non-religious complement the approach. We used the following information: 1) the perception of the faithful regarding their own religiosity; 2) the frequency with which they pray; 3) the frequency with which they attend services; and 4) the frequency of participation in church activities¹¹. Using this information, we grouped people according to the "intensity" of their practices, and, as a result, we found that if the religious composition of the population was weighted and defined for only those who practice their religiosity, we would see a decrease in the number of Catholics and an increase in the number of Pentecostals in greater proportions than those of the 2010 Census.

Although the data are from 2002, the Brazilian Religion Survey (BRS) (SCALON; GREELEY, 2005) is one of the few surveys that allows for an investigation of the association between religious belonging and the way in which faith is experienced¹². Using this survey, we highlight the impact that different

¹⁰ The nomenclature "Protestants" will not distinguish between "Pentecostals" and "non-Pentecostals". The latter will also henceforth be called "Historical Protestants" because the designation evokes a denominational tradition, arising from the Protestant Reformation, that is juxtaposed to the acceptance of one or another gift of the Holy Spirit.

¹¹ Based on the Brazilian Religion Survey, what we call "religious affiliation" or "declaration of belonging" is based on the answer to the following open-ended question: "Currently, what is your religion?" In turn, "religious self-perception" is based on the question: "Do you consider yourself..." , the answer to which lies on an ordinal scale from 1 to 7, with "1 = extremely religious" and "7 = extremely non-religious". Finally, "frequency of religious activities" is based on three questions: "How often do you go to a religious/church service?"; "How often do you pray?"; and, "Besides religious ceremonies, how often do you participate in church activities/services?" Self-perception and predefined frequencies of religious activities were re-categorized among the options "High", "Average", "Low", and "Never" to facilitate comparison among them as well as a visualization of the extent of individuals' involvement (see Appendix I).

¹² In addition to the BRS, the supplement to the National Household Sample Survey (Pesquisa Nacional por Amostra de Domicílios - PNAD), conducted by the IBGE in 1988, and the 2004 Brazilian Social Survey (Pesquisa Social Brasileira - PESB), conducted by Fluminense Federal University, also collected information on religious affiliation, religious beliefs and frequency of religious activities. These surveys were used by economists to investigate the frequency of religious membership according to socioeconomic attributes (ANUATTI-NETO; NARITA, 2004) and to "test the assumptions of Rational Religious Choice applied to the Consumer Theory" (OLIVEIRA; CORTES; BALBINOTTO NETO, 2011, p. 828).

forms of classification have on the perception of statistical realities, a discussion that has also been done in other areas, such as the sociology of race/color (BAILEY; LOVEMAN; MUNIZ, 2013; LOVEMAN; MUNIZ; BAILEY, 2012; MUNIZ, 2012). This study advances our knowledge of how categories of analysis are constructed and sheds light on how the choice of categories directly influences our understanding of the composition and dynamics of growth and decline of religious groups.

The text is divided into four parts. The first part presents an overview of attempts to classify religious expression and discusses different understandings of the involvement of individuals in faith groups. The second part describes the BRS data and the methodology. The third part compares the report of religious belonging with the faithful's practice, presenting the composition of the groups based on high or low frequency of participation in religious activities. The fourth part concludes the article.

ON RELIGIOUS CLASSIFICATIONS IN BRAZIL

A discussion of the classificatory schemes of religions in Brazil could start with a question asked by Emerson Giumbelli and reformulated by Paula Montero (2006, p. 50): "where, when, and by who are the classificatory systems invented and how does their acceptance acquire legitimacy?" Montero's response takes a sophisticated analytical path through the relationship between religion and the public sphere in Brazil, pointing out that the history of religions in our country is a history of groups that sought to obtain legitimacy by relating themselves, to some extent, with the old official religion – Catholicism. Manifestations of non-Catholic beliefs and practices, such as Umbanda and spiritualism, had to fight for their rites and customs to be decriminalized.

Even though the separation of the Catholic Church and the state has been official since the Proclamation of the Republic, Catholicism was hegemonic and enjoyed great privileges for many years. At the time of Portuguese colonization, the state commanded and disciplined the religious order (through the patronage system); priests and missionaries of the Catholic Church were thus royal officials (CARREIRO, 2007). The inclusion of other non-Christian religions in the country, such as those of the slaves, for example, was suppressed. Among the alternatives for a faith of Christian origin, the arrival of European and American Protestants with missionary motivations occurred mainly after 1850. From 1910 onwards, Pentecostalism developed in the country, accompanied by the emergence of

various denominational options, such as the pioneering Assembly of God (Assembleia de Deus) and Christian Congregation of Brazil (Congregação Cristã do Brasil). Other religions such as spiritualism also emerged at that time. However, it was only after 1960 that Catholicism notably went into decline, something that Pierucci (2008) called a tendency towards “detraditionalization,” which would affect any religion that had held symbolic power for so long.

According to Montero and Almeida (2000), international factors such as the Cold War and the decolonization of Africa, as well as local factors such as the “rusting of the Catholic Church to the military regime,” also led to Catholicism’s democratic and ecumenical openness as well as to the development of a “Catholicism of the poor” (which reduced the emphasis on processions and miracles of the saints and focused on the working classes’ political awareness). This caused Catholicism to lose strength and cede space to other religions. Non-Catholic faith alternatives began to fight over visibility and recognition. This led researchers to create and adapt classifications that would include sets of beliefs and practices; although these beliefs and practices were not always new, they had now become evident.

As an example of the impact that changes in religious composition had on the typologies used, Ricardo Mariano (2005), referring to the Protestant group, showed how the most frequently used classifications tried to define Pentecostalism using different terms for which there was no consensus: “autonomous Pentecostalism,” “divine healing,” “small sects,” etc. Mariano argued that the same term sometimes referred to different things, i.e., sometimes it took ritualistic characteristics into account, sometimes the church’s national prominence and sometimes the faithful’s socioeconomic condition (MARIANO, 2005, p. 25). Later, Giumbelli (2000) inventoried the different criteria adopted to establish typologies that seek to distinguish different types of Pentecostalism and noted what was taken into account: the level of the ecclesiastical government’s centralization, genealogy, theological emphases and their relationship with Protestant churches, and asceticism. Although these authors’ debate is much broader than what we present here, it is important to note the difficulty in establishing common criteria for measuring.

The classificatory efforts in Brazil demonstrate an attempt to recognize distinct faith alternatives and are also a consequence of changes in the religious landscape. The categories used by most quantitative research are based on typologies that result from them. Thus, it is possible to argue that the report of belonging that is given by a subject responding to a questionnaire is itself an

insufficient indicator of religious involvement. A key element has not been accounted for: namely, how people experience faith. Many contemporary religions attract believers without necessarily requiring a moral commitment and formal membership (HERVIEU-LÉGER, 2008; POLLAK-ELTZ, 2003, p. 86-88), which complicates the understanding of how beliefs, worship, and rites actually exert influence.

It is thus important to ask how the limits of categorization broaden or narrow when emphasis is given to religious experience rather than being limited to a report of belonging. It is worth asking the extent to which religious affiliation is able to inform about the intensity with which faith is lived. In fact, self-classification of belonging can only explain differences in the experience of religion if we assume that religious institutions can still reproduce, at least in most believers, the differences established by the classification criteria that have already been elaborated.

In Brazil, Catholicism has gone into decline, Umbanda and the Protestantism of immigrants (like Lutheranism) have experienced a downturn, and the number of those who declare they are non-religious has increased significantly (PIERUCCI, 2004). To understand this panorama, this study includes a measure of religious intensity, i.e., how individuals practice faith. Two questions guide this research: 1) Which group is more religious, Catholics or Protestants? Are there significant differences in engagement between them? 2) How is the distribution of Catholics and Protestants in Brazil altered when the intensity of faith practices is adopted as a criterion in addition to the report of belonging?

DATA AND METHODOLOGY

Our analysis relies on secondary data from the Brazilian Religion Survey, coordinated by the former University Research Institute of Rio de Janeiro (Instituto Universitário de Pesquisas do Rio de Janeiro - IUPERJ) between March 21 and April 4, 2002 (SCALON; GREELEY, 2005)¹³. The survey uses a quota sampling based on geographical distribution by sex, age, education, and household income observed in the 2000 Demographic Census. Its religious composition is similar to

¹³ Ogland and Hinojosa (2012) used the BRS to study how religion influences moral judgments and the formation of marital unions. The database is available on the Social Information Consortium (Consórcio de Informações Sociais - CIS) website, <http://www.nadd.prp.usp.br/cis/DetailheBancoDados.aspx?cod=B52>, where details about the sample design and methodology can also be found.

the composition found in that Census, which showed that 73.8% of respondents were Catholics, 10.4% were Pentecostals, 4.2% were historical Protestants, and 7.3% were non-religious. In the BRS, Catholics represented 74% of the sample, followed by Protestants, Pentecostals (17%) and non-Pentecostals (3%). Approximately 6% said they were “non-religious”¹⁴.

The questionnaire includes questions regarding religious affiliation, values, beliefs, self-perception of religiosity, and frequency of participation in prayer, services, and church activities. The survey has 2,000 observations for men and women between the ages of 18 and 87, who are residents of both urban and rural areas representing 195 Brazilian municipalities in 24 states and the Federal District. After exclusion of missing values, the sample is reduced to 1,483 observations.

Three analytical approaches compose the study’s methodology. The first compares frequency of participation in religious activities among the four categories of belonging. This strategy takes into account how the faithful experience their practices to show which religious groups are more similar or more different.

Furthermore, the degree of consistency between religious self-perception and experienced religiosity is shown in an agreement matrix that permits, to some extent, the validation of self-perception using the declared frequencies of participation (church activities, services, and prayer). The agreement matrix demonstrates whether the way the faithful perceive their religiosity is compatible with the intensity of the declared practices.

The second analytical approach consists in describing what the sample’s religious composition would be if we only considered those people who have a high frequency of specific religious practices. There is speculation that there are a considerable number of “non-practicing Catholics” in Brazil, i.e., those included in this category because of tradition rather than practice.

When we exclude those who never prayed or engaged with their church’s services and activities from the religious composition, we hope to have a more accurate picture of Brazil’s religious distribution. We seek to verify how “practicing” Catholics and Protestants are represented in the population, thereby considering an alternative scenario to the official relative distribution depicted by demographic censuses and surveys, which, as a rule, do not consider self-reported affiliations through implied religious practices.

¹⁴ Other beliefs and non-responses (4.25%) were not included in the analytical sample.

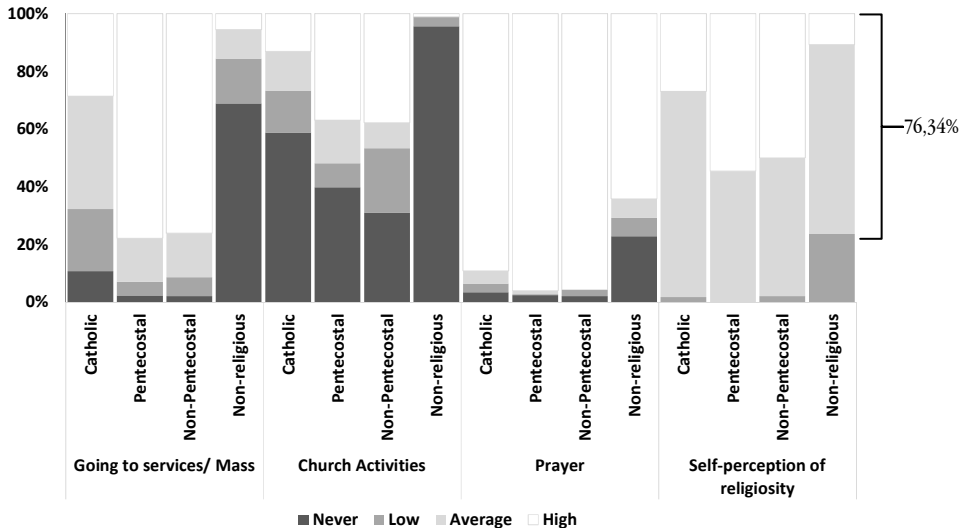
The third strategy consists in estimating the latent probabilities of being Catholic, Protestant, or non-religious by using the declared frequencies of participation in religious activities while controlling for differences in sample composition (age, sex, marital status, region, and religion of the respondents' parents¹⁵). The estimated probabilities derive from multinomial logistic models that, in addition to measuring the association between the event of interest and the relevant variables, also permit the construction of counterfactual scenarios that "standardize" the comparative analysis. The "standardization" consists in assuming that the individual attributes remain constant, while those whose influence is to be analyzed vary according to the researcher's interest. Counterfactual scenarios allow one to ask, for example, what the probability of being classified as Catholic or Protestant would be, assuming that there are individual differences only in the intensity of attending services and participating in church activities.

RESULTS

The data on the faithful's perception of their own religiosity (used as a type of subjective control of affiliation) corroborate the image of Brazil as a religious country. More than 30% of the sampled population consider themselves very religious; there is an especially high proportion among Pentecostals, as 54.37% consider themselves very religious (see Figure 1 and Appendix 2). Figure 1 also reveals that there is no contradiction between having no religion and possessing some religiosity, as more than 76% of those who classify themselves as non-religious also consider themselves to be involved with faith (high and average involvement) in the "Self-perception of religiosity" group.

¹⁵ Oliveira, Cortes, and Balbinotto Neto (2013) used a similar strategy to study the association between personal attributes and the frequency of participation in religious activities using data from the Brazilian Social Survey (Pesquisa Social Brasileira, PESB) conducted in 2004. From an estimation of ordinal logistic models and taking the model of Azzi and Ehrenberg (1975) as a theoretical framework, the authors concluded that women and older people are more likely to attend religious services. Also, income had a negative correlation with frequency of participation in religious activities.

Figure 1 - Composition of specific religious groups according to self-perception of the faithful and involvement in religious practices



Source: Prepared by the authors using BRS data (CIS), 2002 (Annex 2).

An analysis of the variables that reflect the respondents' degree of involvement with three distinct religious activities (attending Mass/going to services, participating in church activities, and prayer) reveals that, although Catholics belong to the religious belief with the greatest representation in the survey, they are the least engaged in religious activities, as their own self-perception of their involvement indicates. Just over a quarter of them (28.5%) go to Mass with a high frequency, and only 12.7% have a high level of involvement in church activities (Figure 1). Based on this measurement of engagement, it is possible to say that most Catholics can be considered “nominal,” i.e., they are individuals who only go to church to attend funerals, baptisms, weddings, and other special events (ALMEIDA; MONTERO, 2001).

Protestants, both Pentecostals and non-Pentecostals, present higher percentages of participation in services compared to Catholics, 77.8% and 76.1%, respectively, corroborating the findings from other studies on religion (ALMEIDA, 2008; ALMEIDA; MONTERO, 2001; CAMPOS, 2008b; FRESTON, 1994, 2010; MARIANO, 1999; MONTERO; ALMEIDA, 2000; PIERUCCI, 2004, 2006; SANCHIS,

1997). Protestants also have a high level of engagement in church activities, i.e., more than a third higher (37%) than that of Catholics. It is worth emphasizing that non-Pentecostals resemble Pentecostals in terms of religious self-perception and frequency of participation in services and church activities; these data are not observed in the literature.

The most recent branch of Pentecostalism, Neo-Pentecostalism, has caused this group to become numerically significant and attain remarkable visibility. Much like a business, Neo-Pentecostalism used television and radio for proselytizing purposes, which no other Protestants had done before in Brazil. It preached prosperity and success and rallied a crowd of followers who began to go to church more than once a week (in some cases, more than once a day) (CAMPOS, 2008a; FRESTON, 1999, 2010; LIMA, 2010; MACHADO, 2006; MAFRA, 2001; MARIANO, 1999, 2003; MESQUITA, 2007; ORO; CORTEN; DOZON, 2003; ROSAS, 2012, 2013). If we consider this to be true for the Pentecostal group as a whole, conjecturally we might find a lower frequency of participation in religious activities among historical Protestants. However, from the data presented, we see that historical Protestants and Pentecostals are similar in their religiosity. It is speculated that this is due to the renewal of Protestantism, which, in part, followed the Pentecostal/Neo-Pentecostal trend. However, one cannot state the reason for this similarity with any certainty.

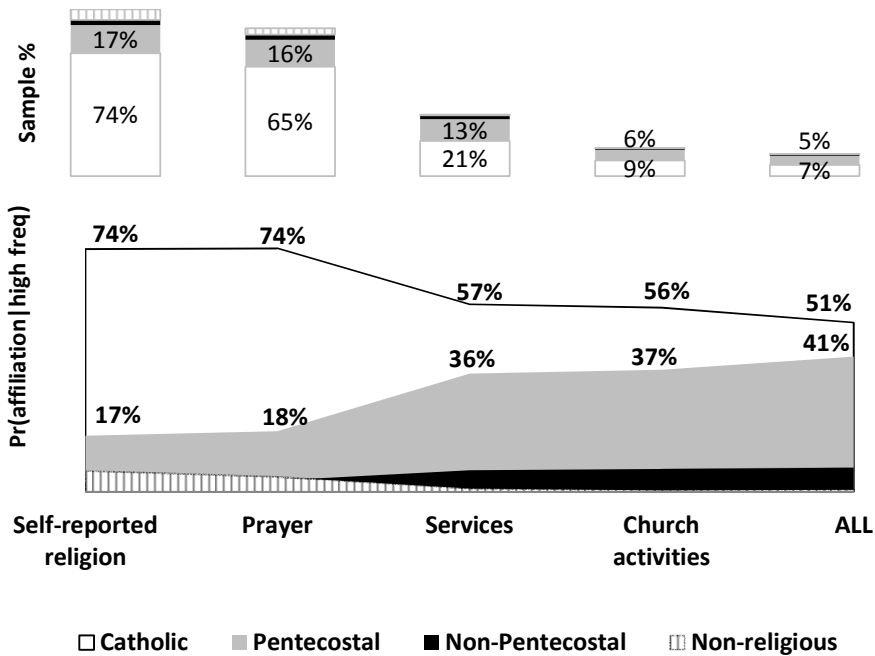
With regard to the act of prayer, all believers pray very often: Pentecostals (95.6%), Non-Pentecostals (95.7%), and Catholics (88.9%), who are slightly less devout in prayer. In all of the religions analyzed, there is a significant number of faithful who reported maintaining a religiosity that might be called privatized.

A picture of religious composition based on the practice of faith

Keeping this framework for Brazilians' religiosity in mind, one might ask if the landscape of religious affiliation would change significantly in its composition if we based our measurement on criteria of frequency. To respond to this question, we simulated the religious composition of Brazil considering only those who self-reported a high frequency of going to services/Mass, participation in church activities, and prayer¹⁶.

¹⁶ The data do not allow us to consider factors such as: exposure to social networks, differences in norms and teaching, sanctions, learning techniques, etc., which also exert influence on Brazil's religious composition.

Figure 2 - Religious affiliation of those with a high level of participation in religious practices.



Source: Prepared by the authors using BRS data (CIS), 2002.

Taking into account those with a high level of frequency of attending services/Mass and a high level of participation in church activities, we observed that Catholicism showed a sharp drop in its representativeness. If self-reported Catholics initially corresponded to 74% of all Brazilians, they only represent 57% after applying this filter. In turn, Pentecostals have the highest growth (they move from 17% to 37% of the country's religious composition). The 2010 Census data, for example, showed that 64.6% of Brazilians were Catholics and 22.2% were Protestants; these proportions are different from the 2000 Census, but less pronounced than those of the simulations presented here.

When we undertake the same procedure for the act of prayer, however, we see that the results obtained through only registering affiliation remain the same. Because the act of prayer occupies a prominent position regardless of group, we

interpret this expression of religiosity as a component that is ingrained in Brazilian culture, a privatized mode of experiencing the beliefs and values of a faith; therefore, it is a criterion that cannot be used to differentiate the faithful's involvement.

Self-perception of religiosity also cannot be used as a criterion to differentiate between the faithful because it is incompatible with the intensity of actual religious experience. This becomes evident when we examine Table 1, which presents percentages of agreement for high (above the main diagonal) and low (below the diagonal) levels of religious intensity. For example, Table 1 shows that only 29.4% of the sample have a high frequency of prayer and perceive themselves as very religious. This percentage is much lower than that of people with a high intensity of prayer. In all of the religions considered, at least 88% of the faithful have a high frequency of prayer (see Annex 2). The highest agreement between perceived and experienced religiosities occurs among those with a high frequency of both going to services/Mass and prayer (35.7%). The lowest agreement occurs among people with a low level of involvement in church activities and a low level of self-perceived religiosity. Only 0.27% of the 1483 people interviewed do not consider themselves religious and have a low level of participation in church activities. In all cells of the cross-tabulated data, there is a clear dissonance between perception and experience, thus suggesting that empirical analysis based on the subjective information on religious intensity should be conducted with a grain of salt.

Table 1 – Percentages of agreement between self-perceived and experienced religiosities

Service	13.35	35.67	19.96
3.64	Church	16.39	10.79
1.62	0.61	Prayer	29.4
0.34	0.27	0.4	Perceived religious intensity

Note: The table's values use sample size as the common denominator (n= 1483) and refer to distinct crossings between perceived religious intensity and the intensity of activities experienced. Thus, the percentages shown in Table 1 should not be added and therefore do not

equal 100%. Agreement with respect to the category “high” lies above the diagonal, and agreement with respect to the category “low” lies below the matrix’s main diagonal. The chi-square test for the null hypothesis of independence was significant at the $\alpha = 5\%$ level in all tabulations crossed between “self-perceived religiosity” and “frequency of religious practices,” thus indicating the presence of statistical association between these two variables.

Source: Prepared by the authors using BRS data (CIS), 2002.

In summary, respondents’ religion, the measure of religious self-perception, and the act of prayer do not reflect the same degree of involvement depicted by frequency of attending services/Mass and participating in church activities. If only the most fervently religious were considered in the composition – 13% of the sample presented a high frequency in all religious practices – the percentage of Pentecostals would equal 41%, while that of Catholics would be 51%.

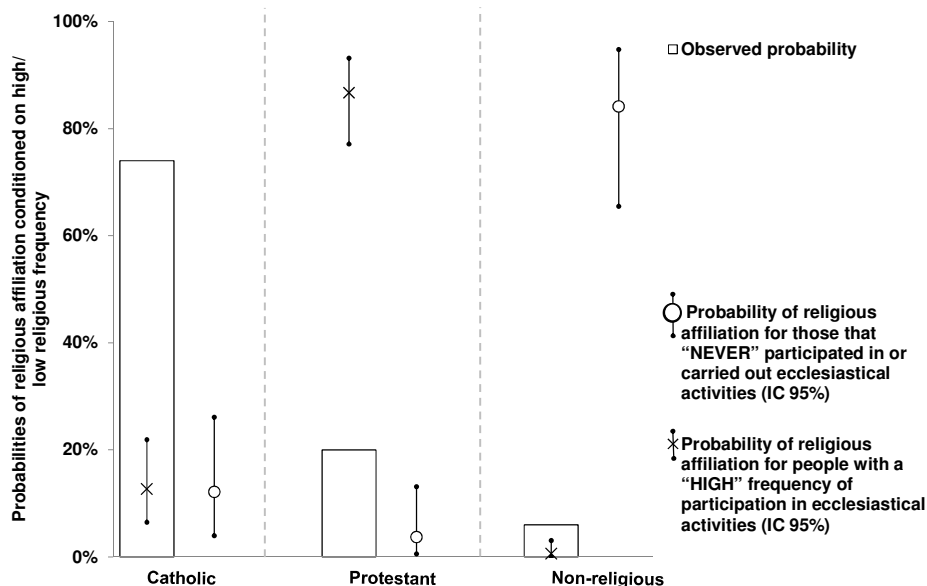
Probabilities of belonging

Consequently, is there some association between religious practice and the likelihood of defining oneself as Catholic, Protestant, or non-religious? If we knew the nature and intensity of people’s religious practices, could we infer which religion they belong to? To answer these questions, we calculated the predicted probabilities of being Catholic, Protestant, or non-religious according to the type and intensity of the faith practice¹⁷. These predicted probabilities assume comparable individual profiles of people with a high or low frequency of participation in religious activities. On the one hand, Figure 3 shows that

¹⁷ To make the presentation and discussion of the results more instructive, the probabilities of classification among Catholics, Protestants, and the non-religious are predicted using the approach suggested by King, Tomz, and Wittenberg (2000), which uses Monte Carlo simulations to construct statistical confidence intervals. To obtain comparable estimates, the individual characteristics were fixed, and only the frequencies of prayer and participation in services and church activities varied. Age, sex, marital status, and the variables indicating residence in the North, Northeast, or Midwest regions were excluded from the model because they were not statistically associated with self-reported religious affiliation. The categories “Pentecostal” and “Non-Pentecostal” were grouped together under the heading “Protestants” because of the statistical similarity between their coefficients. One of the “ideal types” adopted has the following characteristics: he or she has never prayed, gone to services, or participated in church activities; he or she lives in the Southeast region; and he or she has a Catholic father and non-Catholic mother. Unlike the point estimate commonly presented at the output of the regression, the predicted values in the Monte Carlo simulation are drawn from a distribution of coefficients (ex: betas) calculated from 1000 bootstrap simulations. The coefficients of the estimated multinomial model can be found in Appendix 3.

individuals with a high frequency of attending services, participating in church activities, and prayer have high probabilities of being Protestant (87%) and near-zero probabilities of being non-religious (0.6%). On the other hand, Figure 3 shows that the probability of being Catholic is independent from the frequency of ecclesiastical practices. On average, an affiliation with Catholicism is not tied to religious practices because both those who are very religious and those who never practice religion have the same probability of being Catholic ($\cong 12\%$).

Figure 3 - Estimated probabilities of religious affiliation contingent upon frequency of prayer and participation in church activities



Note: The observed probabilities correspond to the sample percentage pertaining to every religious belief. The estimated probabilities are based on “ideal types” defined in footnote 15. All predictions were made using confidence intervals of 95%.

Source: Prepared by the authors using BRS data (CIS), 2002.

Although 74% of the BRS sample was Catholic, the point probability of an “ideal type” (a resident of the Southeast region whose father is Catholic and mother is not) calling himself or herself Catholic is 12% for both practitioners and

those who have never prayed or participated in Masses and church activities. These results demonstrate that the probability of belonging to Catholicism is not linked to involvement in religious activities and reveals the entanglement between Catholicism and national identity, in which the status quo of Catholic self-determination prevails, influenced more by tradition than by practice.

FINAL CONSIDERATIONS

The statistical description we set forth, in dialogue with Catholicism's declining hegemony, the growth of Pentecostalism, and the redefinition of the faithful's engagement in general, shows a Brazil that is no less religious but certainly less Catholic and more Protestant than has been assumed. On the one hand, three quarters of the population (73%) were Catholic in 2000, and this number reached 64.6% in 2010 according to the last Census. On the other hand, when we filter the BRS percentage by the faithful's involvement in going to services/Mass and participating in church activities, Catholics come to represent little more than half the population (57%). This result corroborates the hypothesis of "detraditionalization" proposed by Pierucci (2008) that the loss of faithful believers during modernity would occur, above all, in more traditional religions. The data collected also show that if the composition of religious groups were guided by a high intensity of participation and religious practice, we would observe a greater decline in Catholicism than what is shown in research that is based on self-affiliation.

When we simulated the religious composition of Brazil by considering only people who possess a high frequency in all ecclesiastical activities, the percentage of Pentecostals increased to 41%, higher than the number recorded by the Demographic Census in 2000 (15.4%) and 2010 (22.2%). This study also reinforces the fact that Protestants are more involved with their religion than Catholics, while Pentecostals and non-Pentecostals have nearly identical percentages for attending services and participating in church activities. As for prayer, even though Catholics are less dedicated to this practice than Protestants, the numbers show that the development of a privatized religiosity permeates all Christian beliefs in Brazil and is perhaps part of something common to other forms of experimentation with the sacred that are included in national identity.

Our analysis also shows the weakness of the link between religiosity and Catholic affiliation. Using counterfactual statistical models, we demonstrated that the probability of people calling themselves Catholic is the same for religious

practitioners and non-practitioners. When the frequency of attending services is high, the odds of someone being Protestant are more than eight times that of being Catholic (see Appendix 3).

In summary, throughout this study we have shown that the religious reality that is observed depends on how the data are constructed and interpreted. On the one hand, that this is so reveals the changes that appear from transformations in the religions/religiosities themselves over time. On the other hand, it accentuates how a religious landscape can be represented differently if we change the mode of measurement employed. We acknowledge that we have covered only one among many possibilities for understanding religious affiliation in Brazil. Other forms of analyzing the phenomenon may consider beliefs, involvement in different activities (such as social work and support networks), the relationship to science, etc. However, in a period when typologies and classifications are produced and discarded at the same time that religious individuals transit through multiple forms of belonging (HERVIEU-LÉGER, 2008), the intensity of participation occupies, and should occupy, a central place in academic analyses because it can substantially contribute to the understanding and future use of the religion variable, perhaps altering the landscape being mapped.

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APPENDIX 1

Table 2 – Recodifying self-perceived religiosity and the frequency of participating in/undertaking activities

Variable	Questionnaire categories	New categorization
Going to Mass/ services:	1. Infrequently	Low
	2. A few times per year	Low
	3. Once per month	Average
	4. Two or three times per month	Average
	5. Once or more per week	High
Prayer and/ or participating in church activities:	1. Never	Never
	2. Less than once per year	Never
	3. About once or twice per year	Low
	4. Several times per year	Low
	5. About once per month	Average
	6. Two or three times per month	Average
	7. Practically every week	High
	8. Every week	High
	9. Several times per week	High
Would you describe yourself as:	1. Extremely religious	High
	2. Very religious	High
	3. Somewhat religious	Average
	4. Neither religious nor non-religious	Average
	5. Somewhat non-religious	Average
	6. Very non-religious	Low
	7. Extremely non-religious	Low

Source: Prepared by the authors using BRS data (CIS), 2002.

APPENDIX 2

Table 3 – Frequency of religious activities X self-reported religious affiliation

Frequency of participation in:	Religion				Total
	Catholic	Pentecostal	Non-Pentecostal	Non-religious	
Going to services/Mass (Pearson $\chi^2(12) = 537.50$ Pr = 0.00)					
Never	10.71	2.38	2.17	66.67	12.54
Low	21.52	4.76	6.52	15.05	17.80
Average	39.01	15.08	15.22	9.68	32.37
High	28.48	77.78	76.09	5.38	36.88
No response	0.27	0.00	0.00	3.23	0.40
Church activities (Pearson $\chi^2(12) = 169.14$ Pr = 0.00)					
Never	57.05	39.29	30.43	94.62	55.56
Low	14.01	8.33	21.74	3.23	12.61
Average	13.19	14.68	8.70	0.00	12.47
High	12.73	36.51	36.96	1.08	16.79
No response	3.02	1.19	2.17	1.08	2.56
Prayer (Pearson $\chi^2(12) = 104.57$ Pr = 0.00)					
Never	3.39	2.38	2.17	22.58	4.38
Low	3.02	0.40	2.17	6.45	2.76
Average	4.40	1.19	0.00	6.45	3.84
High	88.92	95.63	95.65	63.44	88.67
No response	0.27	0.40	0.00	1.08	0.34
Self-perception of religiosity (Pearson $\chi^2(9) = 241.68$ Pr = 0.00)					
Low	1.83	0.00	2.17	23.66	2.90
Average	70.79	45.24	47.83	65.59	65.41
High	26.74	54.37	50.00	10.75	31.15
No response	0.64	0.40	0.00	0.00	0.54
Total (n)	1092	252	46	93	1483

Note: The chi-square test (*chi2*) developed by Pearson (1900) evaluates the null hypothesis (H_0) of independence between two categorical variables. The p-value (Pr) represents the probability of the right tail being higher than the observed χ^2 value, for the distribution of chi-square with $df = (1 - \#lines) (1 - \#columns)$ degrees of freedom for the contingency table. There is evidence against H_0 at the α level if $p \leq \alpha$ ($\alpha = 0.05$) (AGRESTI; FINLAY, 2012, p. 259).

Source: Prepared by the authors using BRS data (CIS), 2002.

APPENDIX 3

Table 4 - Odds ratios of being Protestant or non-religious estimated from the multinomial logistic model

	Protestant	Non-religious
1 if high frequency of:		
attending services	8.279***	0.677
church activities	1.922**	0.958
prayer	1.202	0.309**
1 if never participated in:		
services	0.602	7.054***
church activities	1.089	6.133***
prayer	1.001	1.434
South Region	1.712*	0.515
Southeast Region	1.668**	1.692
Catholic mother	0.117***	0.196***
Catholic father	0.229***	0.220***
Constant	0.981	0.332
N	1483	
BIC	1566,441	
Log-likelihood	-702,9	
Pseudo R2	0,343	

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Note: The values presented in the table represent the odds ratio (exponentiated coefficients) of being Protestant or non-religious as a function of covariates, using the category of Catholics as the reference group.

Source: Prepared by the authors using BRS data (CIS), 2002.