



The Role of Spiritual and Religious Experiences in Religious Switching: a Nationwide Study in Brazil

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Abstract

Religious switching is a key aspect of spirituality that seems to be increasing. Spiritual and religious experiences (SREs) are often reported as inducing religious change; however, there is a shortage of large sample studies investigating this issue. This cross-sectional study aims to explore the associations between SREs and religious switching, highlighting possible clinical implications. Data were collected through a Brazilian nationwide self-administered panel-based online survey, including 1053 participants. Religious switching profile was identified and 16 SREs were tested as predictors of religious switching. Our results show a massive emigration from the dominant Catholic religion towards growing religious affiliations (Neo-Pentecostalism and Spiritism) and secularization. There was a higher proportion of women, mixed race, middle-aged, and married/cohabiting among Converted and a higher proportion of men, young, and single among Secularists. Most SREs were predictors of switching to a new religion. However, the experience of “connection with nature” and “seeing the spirit of a dead person” were also associated to participants who kept their birth religion or to those who became secularists, reflecting the importance of spiritual experiences as phenomena that go across and beyond religion.

Keywords Spirituality · Parapsychology · Religion and psychology · Religious experiences · Anomalous experiences · Spiritual experiences · Religious conversion

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Introduction

Religious switching and conversion are important phenomena reported throughout the history of humankind, which often alter peoples' lives both individually and collectively (Beider 2020). As part of the relationship between humans and the religious/spiritual dimension, they have shaped theological and historical aspects of most religions and seem to be raising in the last decades (Pew Research Center 2022). In the USA, religious switching is rapidly changing the spiritual landscape, showing a shrinking number of Christians of all age ranges, from 64% in 2020 to 35% of all Americans by 2070. On the other hand, there is a projection of a rise in the proportion of disaffiliation from 30% today to somewhere between 34 and 52% of the US population (Pew Research Center 2022). In Brazil, according to a recent survey, 87% of the population declares to be religious and 12% non-religious. However, 72% report to have had a specific religion throughout their lives, according to a Datafolha research of June 2022.

There are many causes underlying religious switching and some have been reported alongside history as spiritual and religious experiences (SREs) by numerous saints, mystics and spiritual leaders such as Buddha, Abraham, and Paul of Tarsus, among others. SREs are defined as subjective phenomena related to the awareness of a transcendent dimension that can transform the way in which the individual relates with himself, with his peers, with the environment, with suffering and death (Brook 2019; Moreira-Almeida and Lotufo Neto 2003; Moreira-Almeida et al. 2006). SREs are mediated by the context of religious beliefs and practices of individuals, and by cultural values that shape how they are explained or assimilated (Hood Jr. and Chen 2005; Machado et al. 2016).

SREs influence the adoption of beliefs and practices that result in new behaviors and habits (Machado 2009; Machado et al. 2016; Maraldi and Zangari 2012) and are highly prevalent in different populations worldwide and in a vast range of cultural backgrounds (Castro et al. 2014; Haraldsson and Houtkooper 1991; Machado 2009; Moreira-Almeida and Lotufo Neto 2003; Palmer and Hastings 2013; Pechey and Halligan 2012; Reichow 2017; Wahbeh and Radin 2018). In Brazil, a previous study has shown that 92% of the population ($n = 1053$) had at least once, one experience out of 16 different SREs and 47.5% had at least one of them frequently (Monteiro de Barros et al. 2022).

In the Brazilian religious background, the process of religious migration is associated with religious plurality and secularization, as reported in the last national census of 2010 (IBGE 2010) and other population-based studies (Carvalho and Irffi 2019; Moreira-Almeida et al. 2010; Peres et al. 2020). A study carried out with a representative sample of the Brazilian population ($n = 3007$), reported that only 5% of Brazilians declared they had no religion, 83% considered their religious beliefs to be something important in their lives and 10% reported having more than one religion (Moreira-Almeida et al. 2010). Moreover, being "spiritual but not religious" and having multiple spiritual beliefs are fast-growing phenomena throughout Brazil (Carvalho and Irffi 2019; IBGE 2010; Peres et al. 2020).

Despite the traditional religious denominations, SREs are important markers of non-organizational religiosity and form the base ground to the development of several religious/spiritual beliefs and practices. People's religiousness and spirituality are associated with greater chances of occurrence of SREs, and, in turn, may exert an influence on faith and on the process of religious switching (Gutierrez et al. 2018).

Religious conversion and religious switching are two diverse terms with different implications to the believer. Religious conversion encompasses religious switching, while religious switching may not lead to religious conversion. Studies on Psychology of Religion define religious conversion as a broad process of spiritual transformation, which involves change in the individual's sense of self, worldview, and values. As a complex phenomenon, it can be mild or intense, sudden or gradual, and is often not continuous (Beider 2020; Paloutzian 2005). Thus, SREs can be related to religious switching but not necessarily to the process of religious conversion. For both to meet, factors such as a significant involvement of the switcher with his religious beliefs, the type and intensity of the experience, and personality factors, among others, may be required (Maraldi et al. 2021). Nevertheless, religious switching may be the first step towards conversion and a deeper transformative process that can affect experiencers' health and psychological well-being.

Both religious switching and conversion have shaped the religious profile in Brazil and worldwide (Berghuijs 2017; Dalgarrondo 2007; Pew Research Center 2008; Peres et al. 2020). However, the relationship between religious switching and SREs is still underexplored. There seems to be a correlation between the spiritual/religious beliefs, religious switching and SREs (Van Lommel et al. 2001). Haraldsson and Houtkooper (1991) evaluated 18,607 adults from 13 European countries and the USA, inquiring on experiences of telepathy, clairvoyance, and contact with the dead. Results indicated that the experiences' prevalence was mediated by variables such as religiousness and spiritual beliefs (e.g., reincarnation), in addition to practices such as meditation and prayer (Haraldsson and Houtkooper 1991). Another classic study published at *The Lancet* (Van Lommel et al. 2001) on the topic of Near-death experiences, reported significant transformational changes in patients experiencing SREs in up to 8-year follow-up, mostly related to an increase in belief in an afterlife, decrease in fear of death and in becoming more religious when compared with people with no history of NDE. A Brazilian study investigated the prevalence of psi-related experiences among 306 residents of Brazil's largest city and found out that those who attributed a religious cause to their anomalous experiences (e.g., God, Holy Spirit, disembodied beings, and others), changed to a new religion or adopted one (Machado 2009). Furthermore, although secularization implies the religion's disaffiliation or loss of its relevance at personal, organizational, and social levels, it does not necessarily mean a complete loss of spiritual or transcendental beliefs (Carvalho and Irffi 2019; Maraldi et al. 2021). Thus, even the process of religious switching towards secularism could be related to some SREs.

Objectives

This study aimed to explore the associations between SREs and religious switching in a large nationwide sample in Brazil. Our hypothesis was that experiencers are more likely to switching into a new religious affiliation when compared to people who remain in their religion of birth or switch to a secularist profile. We were also interested in investigating the association between the SREs and disaffiliation, related to the secularization process and the growing number of non-religious people in Brazil.

Methods

Study Design

This was a nationwide cross-sectional study, with data collected between June 28, 2016, and August 22, 2016, through a self-administered, online survey coordinated by Qualtrics Panels (Brandon et al. 2013). The survey was part of the project “Spiritual and Religious Beliefs, Practices and Experiences in the General Population” developed by Interfaith Coalition on Spirituality and Health (coalizaointerfe.org), a Brazilian institution composed of health care professionals and representative members of all religious or non-religious faiths in Brazil. The Qualtrics panel sent invitations to participate in the survey inviting the targeted population to complete the online survey, as established a priori within the panels’ agreements. Quotas were established according to social class distribution, age, gender, and geographic location, following the last Brazil’s census (IBGE 2010), respecting a sample similar to the Brazilian population (Peres et al. 2018). Quality checks questions and attention filters were added. Questions were divided into five randomized blocks so that the impact of tiredness of respondents affected equally all questions. Force response validation was included in all questions. The estimated time to complete the whole questionnaire was less than 30 min.

Study Variables

Spiritual and Religious Experiences

To investigate the most common SREs, a pool of experts was consulted, and 16 experiences were listed as probably the most prevalent ones as described in a previous publication (Monteiro de Barros et al. 2022). Participants were asked to fill out the questionnaire answering whether they had any of the experiences listed on a four-point Likert scale with the possible answers: “never happened in my life,” “happened once in my life,” “more than once in my life,” and “frequently happens in my life.” To deal with low count within these categories, we merged the levels “once,”

“more than once,” and “frequently” into the category “at least once,” thus, resulting in a dichotomous variable of SREs “never” or “at least once.” Finally, SREs were grouped based on a comprehensive literature review (Cardeña et al. 2017) (Table 1):

Religious Affiliations and Religious Switching

The religious switching was determined based on questions regarding the religious affiliation of birth and the current religious affiliation. In these questions, the following religious affiliation options were available: “Catholic,” “Evangelical,” “Kardec Spiritism,” “Jewish,” “Buddhist,” “Umbanda,” “Candomblé,” “Atheist,” “Agnostic,” “Spiritualist,” “Christian,” “Jehovah Witness,” “Seicho-no-ie,” “Wicca,” “No Religion,” and “Others.” If response was “Others,” then an option for description was offered. For the purpose of handling small numbers within less prevalent religious affiliations, we categorized them into 6 main groups, according to major religious affiliations groups previously identified in Brazil (IBGE 2010; Peres et al. 2018). The resulting religious affiliations groups were Catholic, Evangelical, Spiritism, Others Christian, Others non-Christian, and Atheist/Agnostic/No Religion. The Others Christian group was composed by Christians ($n = 45$) and Jehovah Witnesses ($n = 3$), whereas the Others non-Christian group included participants affiliated to Spiritualism ($n = 40$), Umbanda/Candomblé ($n = 20$), Buddhism or Seicho-no ie ($n = 7$), and Judaism ($n = 2$). Although this religious categorization was needed due to small number of participants in some groups, we are aware that the “no religion” sub-group might contain people that either did not have any religious beliefs or had multiple spiritual beliefs but no attachment to any specific denomination (“spiritual

Table 1 SREs groups

Experiences groups	Experience types
Group 1: mystical experiences. Phenomena centered on a sense of reality that differs from ordinary experiences, generally characterized by a sense of unity with the whole of reality.	<ol style="list-style-type: none"> 1. Experience of total connection with nature 2. Experience of no perception of time and space 3. Feeling that all is sacred and divine 4. Experience something that cannot be put into words 5. Sentiment of union with everything in the Universe 6. Feeling of a new reality being revealed 7. Unity with God or something higher than oneself 8. Dissolution of ego individual consciousness disappears
Group 2: mediumistic experiences. Phenomena involving reports of contacts with the deceased.	<ol style="list-style-type: none"> 9. Feeling the presence of someone who died 10. Hearing voices of someone who died 11. Experience of seeing apparitions or spirits
Group 3: psi-related experiences. Experiences felt as paranormal such as intuition and precognition.	<ol style="list-style-type: none"> 12. Experience of a dream that later came true 13. Experience of intuition 14. Experience of using intuition to make a decision
Group 4: past life and near-death experiences. Phenomena of alleged past life memories and subjective experiences of dying.	<ol style="list-style-type: none"> 15. Experiencing a memory of a past life 16. Having experienced the process of dying and then coming back to life

but not religious”). Nonetheless, for methodological purposes, we considered that switching to Atheist/Agnostic/No Religion could reflect a secularization process, therefore less likely to relate to SREs.

In the association analyses, participants were grouped into 3 categories according to their religious switching characteristics, namely, “Converted,” “Raised,” and “Secularists.” We defined as “Converted” those who switched from their religious affiliation of birth to a new religious affiliation. In the “Raised” group, we included those who remained in the religious affiliation wherein they were raised. We defined as “Secularists” those who switched from a religious affiliation to Atheist, Agnostic, or No Religion. Because there was a small number of participants who declared to have raised and remained in the Atheist, Agnostic, or No Religion groups (total $n = 22$), they were included in the Secularists group.

Sociodemographic Variables

Several sociodemographic variables were included in the questionnaire and used for the analyses, such as age, gender, marital status (married/cohabiting, divorced/separated, widower, or single), educational level (elementary, secondary, or superior), employment status (Working or Non-working), household income (≤ 2 , 3–4, 5–8, 9–15, or > 15 minimal wages), ethnicity (White, Black, Mixed race, or Others—Asian, Indigenous).

Statistical Analysis

Descriptive statistics for sociodemographic variables and SREs were reported as absolute numbers and percentage for groups according to the profile of religious affiliation switching (i.e., Converted, Raised, or Secularists). Pearson X^2 tests were adopted to calculate the associations between sociodemographic data, SREs, and the profile of religious affiliation switching. Post hoc Bonferroni’s correction test was performed for multiple comparisons of significant associations.

To test the associations between each SRE and the profile of religious affiliations switching, we conducted one logistic regression model, computing the associations of SREs with the “Converted” by selecting “Raised” as the reference group. The SRE level “never” was set as reference category in the analysis and the regression model was adjusted for age, sex, and household income.

The SPSS software (IBM SPSS Statistics for Windows, Version 20.0. Armonk, NY) computed the Pearson X^2 tests and the logistic regression models. A two-tailed p -value < 0.05 was considered statistically significant.

Results

A total of 1053 participants were included for the final analysis. Fig. 1 illustrates the dynamics of religion switching across the 6 religious affiliations groups. Catholics remain the dominant religious affiliation in Brazil, albeit exhibited the

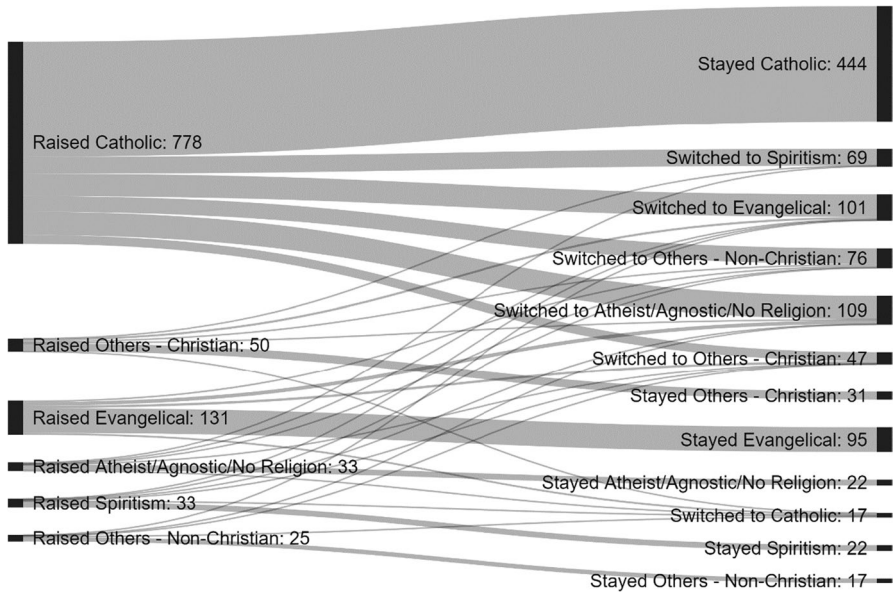


Fig. 1 Alluvial graph of the religious affiliation switching in the COALISION-INTERFAITH survey

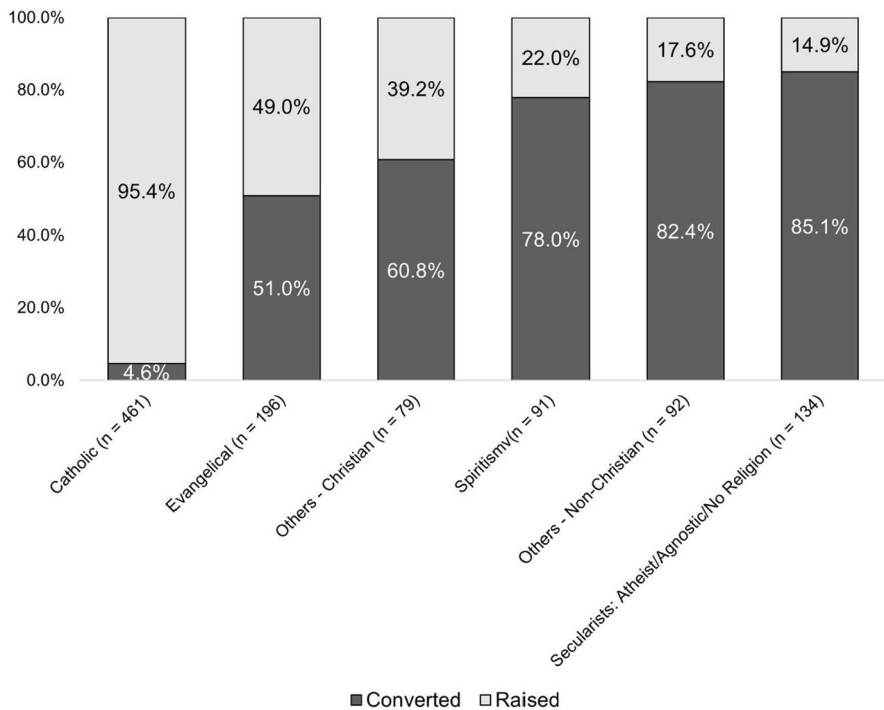


Fig. 2 Proportion of religion switching across different religious affiliations groups

highest out-migration rate (43%). Fig. 2 illustrates the proportion of religion switching across different religious affiliations groups. Secularists (Atheists/Agnostics/No Religion) exhibited the highest in-migration rate (85.1%), in other words, they became atheists, agnostics or declared not religious. They were followed by Others non-Christian (82.4%), Spiritists (78%), Others Christian (60.8%), and Evangelicals (51%) (Fig. 2).

Table 2 summarizes the sociodemographic characteristics of groups according to their religious switching profile. Religious switching was associated with sex ($X^2 = 12.85$, $df = 2$, $p = 0.002$), age ($X^2 = 26.602$, $df = 6$, $p > 0.001$), ethnicity ($X^2 = 12.85$, $df = 2$, $p = 0.002$), and marital status ($X^2 = 38.179$, $df = 6$, $p < 0.001$), with a higher proportion of women, mixed race, middle-age, and married/cohabiting among Converted and higher proportion of men, young, single, from the Center region among Secularists (Table 2).

Table 3 shows the prevalence of SREs according to religious switching groups. Most SREs were associated with religious switching, with a higher proportion of SREs among Converted individuals as compared to Raised or Secularists, with exception for the “connection with nature,” which showed similar proportion among groups (Table 3). Raised individuals also showed higher proportion of SREs compared to Secularists for the majority of SREs (Table 3). The experiences “unity with God or something higher than oneself,” “intuition,” “using intuition to make a decision,” “something that cannot be put into words,” “a new reality revealed,” and “union with everything in the universe” were the SREs respectively most strongly associated with conversion when compared to the Raised group.

In the adjusted regression model (i.e., “Raised” as the reference group), most SREs were predictors of Converted and dissociated from Secularists (odds ratio < 1.0), indicating that SREs associate with conversion, but are unlikely to associate with Secularists (Fig. 3). Two exceptions for this pattern were the mystical and mediumistic SREs “connection with nature” and “seeing the spirit of a dead person,” which showed no significant associations, indicating that these SREs are equally associated with all groups.

Discussion

Our findings revealed that most SREs were significant predictors of switching to a new religion. The conversion reflected an already known pattern of massive emigration from the dominant Catholicism to the fast-growing affiliations of Neo-Pentecostalism, Spiritism, other smaller denominational, and non-denominational affiliations, as well as to secularism, as supported by previous studies (Carvalho and Irffi 2019; IBGE 2010). However, some SREs showed no particular pattern of association either with secularism or conversion, reflecting the importance of spiritual experiences in the Brazilian population regardless religious switching.

Brazilian religious scene has been changing rapidly in recent decades. While at least 87% of Brazilians declare themselves Christians (Maraldi et al. 2021), this study shows that 43% of those raised as Catholics migrated to other religious denominations and only 4.6% were converted into Catholicism. The religious pluralism

Table 2 Participants' sociodemographic data according to religious switching groups

	Converted (<i>n</i> = 312) <i>n</i> (%)	Raised (<i>n</i> = 606) <i>n</i> (%)	Secularists (<i>n</i> = 134) <i>n</i> (%)
Age, years (IQR)	39.5 (37.0–41.0) [†]	40.0 (38.0–43.0) [†]	31.5 (26.0–35.0)
Age Range, <i>n</i> (%)			
18–30	83 (26.6)*	184 (30.4)*	66 (49.3)
31 = 45	113 (36.2)*	193 (31.8)*	28 (20.9)
46–60	84 (26.9)	152 (25.1)	25 (18.7)
> 60	32 (10.3)	77 (12.7)	15 (11.2)
Sex, <i>n</i> (%)			
Female	190 (60.9)**	301 (49.7)	62 (46.3)
Male	122 (39.1)**	305 (50.3)	72 (53.7)
Ethnicity, <i>n</i> (%)			
White	179 (57.4)	380 (62.7)	91 (67.9)
Black	20 (6.4)	27 (4.5)	11 (8.2)
Mixed race	101 (32.4)*	180 (29.7)	27 (20.1)
Others (Asian, Indigenous)	12 (3.8)	19 (3.1)	5 (3.7)
Marital Status, <i>n</i> (%)			
Married/cohabiting	195 (62.5)*	368 (60.7)*	48 (35.8)
Divorced/separated	22 (7.1)	45 (7.4)	11 (8.2)
Widowed	8 (2.6)	7 (1.2)	2 (1.5)
Single	87 (27.9)*	186 (30.7)*	73 (54.5)
Household income, m.w.			
≤ 2	23 (9)	38 (7.3)	7 (6.1)
3–4	49 (19.1)	89 (17)	20 (17.4)
5–8	101 (39.5)	188 (36)	49 (42.6)
9–15	61 (23.8)	153 (29.3)	31 (27)
> 15	22 (8.6)	54 (10.3)	8 (7)
Education, <i>n</i> (%)			
Superior	184 (59.4)	334 (55.5)	72 (54.1)
Secondary	113 (36.5)	248 (41.2)	55 (41.4)
Elementary	13 (4.2)	20 (3.3)	6 (4.5)

Table 2 (continued)

Job status [‡]	Converted (<i>n</i> = 312) <i>n</i> (%)	Raised (<i>n</i> = 606) <i>n</i> (%)	Secularists (<i>n</i> = 134) <i>n</i> (%)
Non-working	104 (33.3)	209 (34.5)	50 (37.3)
Working	208 (67.7)	397 (65.5)	84 (62.7)

**p* < 0.05 vs Secularists, chi-square test with Bonferroni's correction; [#]*p* < 0.05 vs Raised, chi-square test with Bonferroni's correction; [†]*p* < 0.05 vs Secularists, one-way ANOVA, Bonferroni-adjusted; *m.w.* minimum wage; [‡]non-working: unemployed, student, housewife, retired, volunteer, and disabled; working: part-time or full-time job

Table 3 Prevalence of SREs according to religious switching groups

		Converted (<i>n</i> = 312)	Raised (<i>n</i> = 606)	Secularists (<i>n</i> = 134)
Connection with nature	At least once	170 (54.5)	316 (52.1)	59 (44)
	Never	142 (45.5)	290 (47.9)	75 (56)
Suspension of time and space	At least once	140 (44.9)*	233 (38.4)*	35 (26.1)
	Never	172 (55.1)*	373 (61.6)*	99 (73.9)
All sacred and divine	At least once	185 (59.3)*	352 (58.1)*	31 (23.1)
	Never	127 (40.7)*	254 (41.9)*	103 (76.9)
Ineffability	At least once	246 (78.8)*#	387 (63.9)*	63 (47)
	Never	66 (21.2)*#	219 (36.1)*	71 (53)
Sentiment of union with everything	At least once	198 (63.5)*#	331 (54.6)*	46 (34.3)
	Never	114 (36.5)*#	275 (45.4)*	88 (65.7)
A new reality revealed	At least once	204 (65.4)*#	311 (51.3)*	33 (24.6)
	Never	108 (34.6)*#	295 (48.7)*	101 (75.4)
Union with God or something higher	At least once	264 (84.6)*#	442 (72.9)*	31 (23.1)
	Never	48 (15.4)*#	164 (27.1)*	103 (76.9)
Ego dissolution	At least once	112 (35.9)*#	166 (27.4)*	25 (18.7)
	Never	200 (64.1)*#	440 (72.6)*	109 (81.3)
Dream that later came true	At least once	239 (76.6)*	427 (70.5)*	73 (54.5)
	Never	73 (23.4)*	179 (29.5)*	61 (45.5)
Having intuition about something	At least once	215 (84)*#	390 (74.7)	79 (68.7)
	Never	41 (16)*#	132 (25.3)	36 (31.3)
Used intuition in decision making	At least once	202 (78.9)*#	362 (69.3)	75 (65.2)
	Never	54 (32.2)*#	160 (30.7)	40 (34.8)
Feeling the presence of a dead person	At least once	179 (57.4)*	306 (50.5)*	46 (34.3)
	Never	133 (42.6)*	300 (49.5)*	88 (65.7)
Hearing the voice of a dead person	At least once	113 (36.2)*	189 (31.2)*	22 (16.4)
	Never	199 (63.8)*	417 (68.8)*	112 (83.6)
Seeing the spirit of a dead person	At least once	155 (49.7)*#	238 (39.3)	42 (31.3)
	Never	157 (50.3)*#	368 (60.7)	92 (68.7)
Past life experience	At least once	103 (33)*	187 (30.9)*	25 (18.8)
	Never	209 (67)*	419 (69.1)*	108 (81.2)
Near death experience	At least once	56 (17.9)	124 (20.5)*	14 (10.5)
	Never	256 (82.1)	482 (79.5)*	119 (89.5)

* $p < 0.05$ vs Secularists; # $p < 0.05$ vs Raised; chi-square test with Bonferroni's correction

has contributed to the competition among different denominations, challenging the monopoly of Catholicism. Furthermore, the number of people who became non-religious, agnostics, and atheists (8%) has also increased, showing a pattern of disaffiliation, in accordance with population surveys and more recent studies (IBGE 2010; Peres et al. 2018) and supporting the influence of the phenomenon of secularization in the last decades. The increase in the number of Evangelicals is a well-known fact, which may affect the acceptance or rejection of some anomalous phenomena

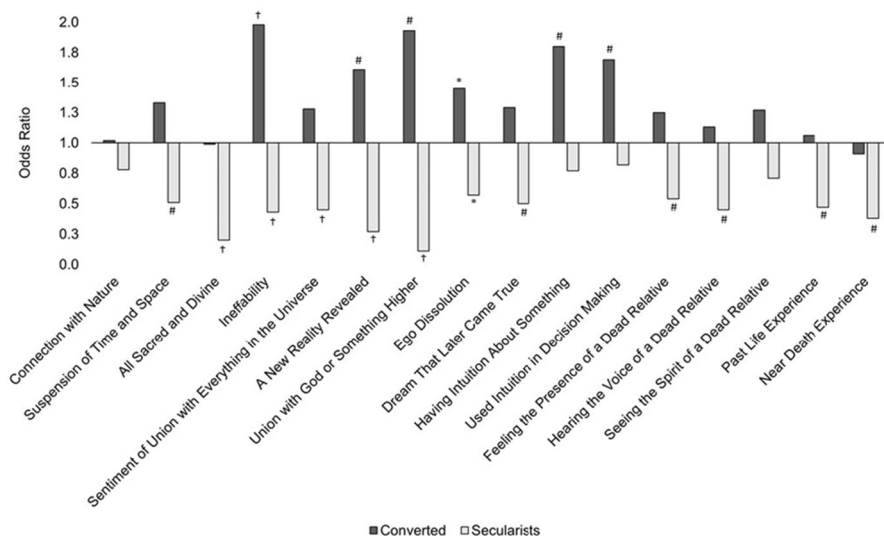


Fig. 3 SREs Odds ratios (95 % CI) of religious switching among “Converted” and “Secularists” groups. Note: The odds ratio is for having experienced SREs “at least once” in lifetime. Reference level: never; reference group: Raised ($n = 606$); * $p < 0.05$; # $p < 0.01$; † $p < 0.001$. The model was adjusted for age, sex, and household income

(“communication after death” type of experiences, for example) among a substantial proportion of Brazilians. On the other hand, substantial rates of migration to Others non-Christians (Umbanda, Candomblé, Spiritualists) and Spiritists, may indicate the historical importance of mediumistic and esoteric religiosities in the Brazilian culture as well (Carvalho and Irffi 2019; Moreira-Almeida et al. 2010; Peres et al. 2020; Pew Research Center 2014; Somma et al. 2017). In addition, previously mentioned, studies suggest that Brazilians’ spirituality comprehends a small but growing number of people (10%) who call themselves “spiritual but not religious” (Peres et al. 2018, 2020), that is, Brazilians who circulate indiscriminately through different religions and traditions or who define themselves as non-religious (Moreira-Almeida et al. 2010; Peres et al. 2020). Due to this cultural characteristic, for the most part, SREs can be interpreted as having a religious or transcendent nature, even among “secularists,” where the non-religious groups are included. Even when they disaffiliate, Brazilians may maintain some of the beliefs originally associated with popular African or indigenous spiritual traditions, like “communication with the deceased,” among others (Pew Research Center 2014).

Another way to explain the large proportion of SREs across the groups of “converted,” “raised,” and even among “secularists” relates to the great porosity of Brazilian culture (Luhmann et al. 2021). Porosity is a concept that reflects the extent to which a culture understands the mind as a permeable structure that enables the interaction between individual’s inner and outer realities. In other words, in general, experiences of an anomalous nature would tend to be more naturally absorbed into Brazilian culture. The porosity can be a factor that explains the differences in the prevalence of SRE’s reports between countries. The greater porosity of a culture

could be a facilitating factor for the manifestation of SREs, as they would be considered valuable, real and therefore embraced as non-pathological (Luhrmann et al. 2021).

A recent study demonstrates a pattern of preference and avoidance in relation to the switching process, indicating that religious mobility also depends upon the nature of involvement between the follower and his previous religious denomination (Maraldi et al. 2021). Complementing these findings, our study suggests that religious mobility is also associated with spiritual and religious experiences. The strongest association between the SREs and the “Converted” individuals, confirms data from a previous Brazilian study carried out with a convenience sample (Machado 2009), indicating that the experiencers may change or adopt a religious denomination or spiritual tradition to explain their unusual experiences, or to feel socially accepted. Intensifying the commitment to a single religion, adopting or changing to a new one, may bring benefits to experiencers, reducing feelings of anxiety and social inadequacy. Although indirectly, our study points to clinical implications, indicating the importance for health professionals to include in the patient’s interviews, questions concerning his religion’s involvement throughout life, including history of affiliation, disaffiliation, and re-affiliation along with information about the occurrence of SREs.

Religious Switching and SREs

Most SREs were predictors of conversion to another affiliation. Some SREs were also very prevalent among those who maintained the religion they were raised in. Individuals born and raised into specific religious denominations, may recognize SREs as having a religious connotation and remain affiliated for the benefits gained from the support provided by their religious group. When their religious traditions do not reject the experience, they provide a safe space for disclosure, creating a “fertile soil” for more experiencing.

“Intuition” and “use intuition to make a decision” were only predictors of conversion, remaining evenly prevalent among the other groups. Intuition has been reported across secular and religious groups, influencing decisions about lifestyle, love, and profession (Castro et al. 2014; Machado 2009). Experiencers can feel their intuitive impression as very realistic and convincing and often perceive them as information provided by a transcendent source (Targ et al. 2004). Individuals who make the decision of switching religion probably believe in the veracity of their intuitive impressions. Christians in general and Evangelicals in special, tend to regard intuition as a direct message from God, training themselves to identify self-generated thoughts from intuition. In Kardec Spiritism, one of the growing religious denominations with high numbers of in-migration in Brazil (78%) understands intuition as an experience particularly inspired by spiritual guides or disincarnated souls who want to help or protect those who are alive. Therefore, intuitive experiences can be highly appreciated among Spiritists and followers of other popular mediumistic traditions, such as Umbanda and Candomblé, which are included in the Others non-Christians group and have a high in-migration rate (82.4%).

The experiences of “something that cannot be put into words,” “a new reality revealed,” “unity with God or something higher,” and “ego dissolution” also proved to be predictors of religious switching, with a pattern of dissociation among secularists. Except for the “ego dissolution,” these are very prevalent experiences among Brazilian general population (66.1%, 52%, and 70%, respectively) (Monteiro de Barros et al. 2022). Ineffability (the impossibility of explaining experience through words) was categorized since William James (1902/1994) as one of the identifying qualities of mystical experiences that reflects the perception of a spiritual and/or religious reality. When occurring along with other experiences of the mystical group, it may open the door for religious switching to become a religious/spiritual transformation (conversion), generating enduring changes in habits, beliefs, and values, even when the experiences are subtle and transient (Wulff 2004). In addition, it is noteworthy the appreciation of mystical type of experiences in Evangelical cults, which grew substantially with the evasion in Catholicism in the last decade (IBGE 2010). In worship services, Evangelicals often recognize these phenomena as divine revelations or “gifts of the Holy Spirit” (Pew Research Center 2014).

The unitive experience of “ego dissolution” can be characterized by the momentary loss of self-identity. Although frequently described as “bad trips,” the ego dissolution experience can (and often does) result in psychological growth. It may reveal a process by which someone can reach God, by eliminating the barriers built by the ego (Wulff 2004) and heading towards religious/spiritual conversion.

The experience “connection with nature” presented similar association across all religious switching groups, partially because it refers to a more generic and ecstatic type of experience (Hardy 1979). To have contact with nature, in general through contemplation, can be a source of inspiration for all types of artistic expression and has been reported as an important trigger of SREs (Taylor and Egeto-Szabo 2017). Although they can be recognized as having a transcendental nature, experiences related to the natural world often originate in non-religious contexts, being widely reported by people who have no religiosity. However, they can be interpreted as spiritual, depending on their magnitude and on the culture in which they are immersed (Taves 2020).

Our results indicate a tendency that SREs implicate in religious switching, especially observing the principle “these signs will follow those who believe,” that is, the experiences tend to be aligned to the “core” beliefs of each religion. This can take place in two directions. For instance, people who have mystical experiences may convert to denominations that favor and encourage these experiences, which is also valid for psi-related experiences, whose conversion would take place in the direction of traditions that explain and welcome intuitive and precognitive phenomena. Likewise, pertaining to a mediumistic denomination, for example, can stimulate the recognition and interpretation of “after death communication” experiences as spiritual and religious phenomena. However, there are other possibilities worth mentioning. As most participants of the “Raised” group were Catholics, the “Converted” group could be a byproduct of the affiliation process per se, and not the result of a proper conversion event. The difference between those two groups could also be explained by the fact that some reported Catholics may not be real practitioners. Along these lines of explanation, secularists could have scored less in SREs because they are less

religious or spiritual and not because of religious switching. Maybe a more direct and easier way to measure the influence of SREs on religious switching would have been to ask participants about their reasons for conversion, including SREs among the response options. That alternative should be considered in future studies.

Nevertheless, although our study is not able to determine the direction of the associations, it leaves no doubt to the importance of SREs for strengthening the relationship between individuals and the spiritual dimension of reality. SREs may generate a religious search, accomplished through the deepening of the experiencers' faith in the denomination they were raised in, or else, through a new one that will help them to understand and integrate their SREs. There can be therapeutic implications involving these phenomena. One would be the importance of narrowing the distance between formal therapeutic environments (psychological or psychiatric), and the places of religious/spiritual expression where people go to seek support for their SREs. The religious switching process may indicate a need for psychological support and, sometimes, psychiatric help. Although a natural and prevalent phenomena, SREs may provoke existential crisis and an urge for transformation. However, there is still a therapeutic gap left by Psychology and Psychiatry and occupied majorly by religious and spiritual institutions. Greater integration between these contexts could prevent people at risk from developing psychiatric disorders, when failing to receive adequate medical and psychological care (Alminhana 2013; Loch et al. 2018; Meneses Júnior and Moreira-Almeida 2009).

Religious Switching and Socio-demographics

Our findings indicate there is a higher prevalence of religious switching among women in the sample, contradicting data from previous studies arguing that, in general, women would be less likely than men to change their religion (Hayes 1996; Maselko and Kubzansky 2006). However, in Latin America the scenario involves many aspects. Earlier studies show that women have higher levels of religious commitment and report to experience more SREs in relation to men (Castro et al. 2014; Machado 2009; Monteiro de Barros et al. 2022; Peres et al. 2018; Pew Research Center 2014; Reichow 2017; Underwood 2011). They are also responsible for the family's religious and spiritual inclination (Sandomirsky and Wilson 1990). On the other hand, women report the greatest discontent in relation to their religious communities of origin (Bednarowski 1999). Furthermore, there seems to be a growing sense of freedom in the expression of religious behavior in women. In the Pentecostal movement, for example, Brazilian women have recently assumed different roles in the religious hierarchy, thereby gaining greater autonomy in relation to their partners and families and greater prominence in politics and society (Machado 2005).

Young and single people are more numerous among the group of "Secularists," reflecting the phenomenon of secularization, also indicated by earlier studies (Maraldi et al. 2021; Peres et al. 2018). We are aware that there are distinctions between the unaffiliated ("no religion"), the agnostics and atheists (they were here treated as a unique category for methodological reasons). Even so, there are clinical implications worth highlighting. A previous study using the same database showed

that unaffiliated as well as individuals with multiple affiliations have poorer quality of life and mental health measures as compared to those with single religious affiliations (Peres et al. 2020). Moreover, having frequent SREs, (especially mystical and unitive types) and no commitment with one specific denomination, is associated with higher prevalence of mental disorders, such as depression and schizophrenia (Haddad et al. 2016; Peres et al. 2020; Willard and Norenzayan 2017). Re-affiliation would be more beneficial than disaffiliation, especially concerning the measures of well-being and mental health. More studies are needed to investigate mental health indicators among those who pertain to the Secularists group, especially the disaffiliated.

Another point that deserves reflection is the association between mixed race and married people with religious switching. In a previous study using this same database, mixed race people were associated with Brazilian Protestants/Evangelicals (Peres et al. 2018), indicating that among that population, the conversion would head towards Evangelic denominations. That is particularly relevant when we consider that the mystical experiences associated with the converted group (“experiences that cannot be put into words,” “unity with God or something higher than oneself,” “new reality revealed,” and “ego dissolution”) are often manifested in Evangelical cults. Marital status, on the other hand, reflects the idea of the importance of the family in the decision of changing religion. Studies indicate that family and marriage are responsible for 37% of decisions about changing religion in the USA and other countries (Barro et al. 2010; Coutinho and Golgher 2014; Loveland 2003; Musick and Wilson 1995). However, the association between marriage, religious switching and the prevalence of SREs needs further investigation. For more detailed analysis of the dynamics of religion mobility in Brazil and the association with sociodemographic variables see Maraldi et al. (2021).

SREs, Religious Switching, and the COVID-19 Pandemic

Since our study was carried out before the COVID-19, it would be relevant to reflect on the possible influence of a situation like the pandemic on religious and spiritual experiences and the adoption of new beliefs (religious affiliation and conversion). Studies have found that during the COVID-19 pandemic, people used religious coping strategies as a way to deal with the dramatic circumstances surrounding the global event, even in countries undergoing a secularization process (Molteni et al. 2021). When facing illness, suffering, and impending death, people showed a pattern of renewing their relationship with spirituality and religiosity (Kowalczyk et al. 2020). In Brazil, studies found an increase in individual spiritual and religious practices, which led to a positive impact in mental health (less fear, lower rates of sadness, higher hope) (Novaes et al. 2022; Lucchetti et al. 2020). Due to social distancing, a significant reduction in institutional and collective rituals was also observed during the pandemic (Novaes et al. 2022; Shoji and Matsue 2020), even though some Afro-Brazilian denominations adhered to virtual collective ceremonies, maintaining a sense of protection and care across their community (Calvo 2021). Although as far as we know, we do not have data concerning the religious and spiritual experiences

specifically, the available data favor the hypothesis of a “spiritual revival” and a “spiritual renewal” during COVID-19 pandemic in Brazil, even among the “Secularists.” If that is correct, it would certainly imply a tendency for new religious affiliations and religious switching in the Brazilian scenario, although possibly on a temporary basis. As SREs are associated with religious change and conversion, it would be expected a higher prevalence among the “Converted” group. Finally, since the pandemic imposed social distancing and isolation, it would be interesting to verify whether SREs related to the “feelings of connection” and “belonging to something greater” would be more reported. However, these are speculations that deserve further investigation.

Study limitations

This is a self-reported cross-sectional study. Therefore, causal and temporal inferences should be made with caution. The SREs adopted in the survey were based on a theoretical construct (Cardena et al. 2017), and have not been validated so far. Because this study was a panel-based online survey, the sample showed a higher socioeconomic status compared to the average of the Brazilian population, according to the 2010 Census. Nevertheless, the associations found here offer a direction and a wide picture of the relationship between religious switching and SREs in Brazil. Due to the methodological characteristics of our study, we were not able to determine whether SREs cause conversions or being converted causes SREs. We could neither discriminate whether the religious migration reported would lead to a process of religious conversion that involves a deep spiritual transformation or simply to a religious/spiritual switching, which limited the interpretation of our data.

Conclusions

Spiritual and religious experiences are associated with a higher likelihood of switching into a new religious affiliation, especially among people who declare to be religious. Most SREs are inversely associated with religious disaffiliation or atheism/agnosticism. However, some SREs can also associate with secularists, indicating overspread spirituality across Brazilians, sustained among non-religious people. There is also a higher prevalence of religious switching among women, which is indicative of the growing sense of freedom and autonomy in the expression of their religious behavior in Brazil.

The will to have a close connection to God has been identified as the most reported reason for Latin American Catholics to change religion (Pew Research Center 2014). SREs may represent the bridge allowing for the connection between the experiencer and the divine, the sacred, or God. The process of switching to denominations or traditions that stimulate, respect, and validate spiritual and religious experiences, may be a natural shift for a great number of Brazilians. Through religious switching, a relational pattern of security and trust can be transferred to the new religion’s belief system, helping the experiencer to feel recognized and special (Kirkpatrick 2005; Sandage and Moe 2013). Our findings confirm the importance of

narrowing the distance between formal therapeutic environments (psychological or psychiatric), and the places of religious/spiritual expression where people go to seek support. The religious switching process may indicate the huge therapeutic gap left by Psychology and Psychiatry and occupied by religious and spiritual institutions when SREs are concerned. Greater integration between these contexts could reduce the chances of experiencers' misdiagnosis or excessive medicalization. At the same time, it might prevent people at risk to develop psychiatric disorders when failing to receive adequate medical and psychological care after an intense SRE (Loch et al. 2018; Alminhana et al. 2013; Menezes Júnior and Moreira-Almeida 2009). The strongest association between the SREs and the "Converters" indicates that the experiencers may change to new religious or spiritual traditions in order to explain their unusual experiences, or to feel socially accepted, possibly reducing feelings of anxiety and social inadequacy. However, more studies are needed to clarify the association between SREs and mental health indicators among "converted."

Author Contribution All authors contributed to the study conception and design and all authors read and approved the final manuscript.

Data Availability Data were collected through a Brazilian nationwide self-administered panel-based online survey, including 1053 participants with consent, in 2022.

Declarations

Conflict of Interest The authors declare no competing interests.

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