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Not a lonely crowd? Social connectedness, religious service attendance, and the spiritual but not religious



Orestes P. Hastings*

Department of Sociology, University of California, Berkeley, USA

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ABSTRACT

Using the 2006–2014 General Social Survey and 2006–2012 Portraits of American Life Study, I find that on three dimensions of social connectedness: social interaction frequency, core discussion network size, and number of close ties, that religious service attenders are more connected than religious non-attenders and then either spiritual nor religious, but there are few differences between attenders and the spiritual but not religious. Difference-in-differences and fixed-effects models show little evidence that switches between categories are associated with changes in connectedness, and additional models show that prior social connectedness explains only a small amount of future switches. This paper challenges assumptions that the non-religious are a homogenous group lacking the benefits provided though the social networks of religious congregations and has implications for research on what it means to be spiritual, measuring religion and spirituality, and understanding the role of formal organizations in social life.

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1. Introduction

Cries of increasing American individualism and diminished social engagement have been raised by concerned scholars and pundits alike. In seeking to explain what underlies these asserted shifts, some have suggested an important factor may be changes in the religious landscape such as declining religious service attendance, growing numbers of "religions nones," emerging forms of privatized or alternative religions, or the apparent supplanting of religion by spirituality. Are these trends indeed tearing away at the social fabric? Or what do they suggest about the social connectedness of Americans?¹

It is well established that a great deal of social life occurs *inside* American congregations. The recent well-documented increase in the religiously unaffiliated (Hout and Fischer, 2002, 2014; Putnam and Campbell, 2010) and decline in religious service attendance (Chaves, 2011) suggests similar declines for social connectedness. However, little research has explored the role of religion and spirituality in social life *outside* of religious congregations, and in particular, social life that may take place within "alternative" or "spiritual" communities. For example, many have assumed that those who identify with labels such as "Spiritual But Not Religious" are necessarily individualistic and practice their beliefs in private ways, but scholars have presented a number of recent examples of non-religious communities and groups of individuals that practice forms of spirituality together (e.g., Bender, 2010; Oh and Sarkisian, 2011).

^{*} University of California, Department of Sociology, 410 Barrows Hall, Berkeley, CA 94720, USA. E-mail address: ophastings@berkeley.edu.

¹ The scope of this paper is the United States. Some parts may be generalizable to other parts of the world, but religion and non-religion in America are often quite unlike anywhere else in the world.

This paper compares the social connectedness of regular religious service attenders (Attenders) with three types of non-attenders: Religious Non-attenders (RNA), the Spiritual But Not Religious (SBNR), and the Neither Spiritual Nor Religious (NSNR). Using seven waves of data from two nationally representative surveys, I show that Attenders are more connected than the RNA and NSNR, while differences between Attenders and the SBNR are small or non-existent, depending on the measure. Difference-in-differences and fixed-effects models provide little evidence that switches between categories are associated with changes in connectedness. Models that use lagged measures of connectedness to predict switching show there may be some selection effect in explaining why the RNA are less connected, but do not explain why Attenders and the SBNR are more connected than the NSNR. Thus, this paper challenges existing assumptions that those with no religion or who do not participate in religious services are less connected, and it joins other scholars (e.g., Ammerman, 2013b) who suggest social scientists need to pay greater attention to the heterogeneity of those who do not affiliate with or participate in conventional religious traditions.

The paper proceeds as follows: First, I outline the concerns that have been raised regarding the consequences of the increase in the religiously unaffiliated and decline in religious service attendance for both individual social well-being and the social cohesiveness of American life. Second, I briefly summarize the current state and limitations of knowledge about the connectedness of the religiously unaffiliated and the spiritual but not religious, and I map this knowledge onto four sets of testable hypotheses. Third, I test these hypotheses with cross-sectional and panel analyses of three different measures of connectedness using the 2006–2014 General Social Surveys and 2006–2012 Portraits of American Life Study. Finally, I discuss the implications of my findings for ongoing research into what it means to be spiritual, measuring religion and spirituality, and understanding the role of formal organizations in social life.

2. The concerns

Social scientists have long been interested in the quantity and nature of the social connections that people have, with particular concern raised for those who may be especially socially isolated or less connected (e.g., Durkheim [1897], 1951; Riesman et al., [1950], 2001; Bellah et al., 1985). Social connections through friends, neighbors, co-workers, and family are generally seen as valuable for a number of reasons. They are sources of social support (e.g., Wellman and Wortley, 1990), socialization to norms and values (e.g., Heckathorn, 1988), and valuable information and resources (e.g., Podolny and Baron 1997; Granovetter 1973)—particularly in difficult times (e.g., Hurlbert et al., 2000). For these reasons, it is not surprising that positive associations have been found between the extent of one's social connectedness and one's physical, mental, and economic well-being (Berkman and Syme, 1979; House et al., 1988; Podolny and Baron, 1997; Bearman and Moody, 2004).

Given the importance placed by scholars on social connectedness, it should be no surprise that particular interest has been paid to the religiously unaffiliated because they frequently miss out on one of the most common forms of social interaction—conventional religious worship. Indeed, Hout and Fischer (2014) note that those "who prefer no religion seldom if ever attend religious services" (p. 432). Thus some argue that the religiously unaffiliated may miss the benefits that typically come from the social networks that arise from being part of a congregation.

Reduced social connectedness through religious communities has, at times, been discussed directly in the context of a larger debate on possible downward trends in social connectedness in the U.S. (e.g., Putnam, 2000; Fischer, 2011). For reasons noted above, reduced social connectedness from religious communities could have negative effects across a variety of outcomes. For example, higher levels of religiosity have long been associated with greater life satisfaction, but Lim and Putnam (2010) argue that religious people are more satisfied with their lives specifically because they regularly attend religious services and build social networks in their congregations, and not because of private or subjective aspects of religiosity. In their words, "For life satisfaction, what matters is how involved one is with a religious community, not whether that community is Baptist, Catholic, or Mormon" (p. 920). Lewis, MacGregor, and Putnam (2013) take it yet a step further, arguing that religious service attendance is positively associated with several civic and neighborly outcomes primarily because of the network of friends that people have in their congregations.

Furthermore, it has also been argued that the content of congregation-based social connectedness is uniquely valuable. First, congregations develop civic skills and recruit for engagement and service (Verba et al., 1995; Putnam, 2000), something the religious unaffiliated may miss out on. As their numbers increase, the concerns are further magnified because decreased participation in congregations may reduce the resources they have to continue in this developmental function. Consider Chaves' (2011) summary of the state of American religion:

² Some who do not identify as religious still regularly attend religious services, but this population is very small (Hout and Fischer, 2014). The emphasis in this paper is on the connections from religious service attendance, so I only count SBNR and NSNR who do not attend religious services regularly. However, my findings are robust to including religious-service-attending SBNR and NSNR in their respective categories. More description is in the Methods section.

³ Though the part effects of social ties soom positive not all social ties are handfeld, and Smith and Christakie.

³ Though the net effects of social ties seem positive, not all social ties are beneficial, as discussed by Parigi and Henson (2014) and Smith and Christakis (2008).

⁴ Readers familiar with the arguments that follow may recognize that some of it comes from studies of "social capital." Given the omnibus nature of the term "social capital," I think its use here would be more confusing than helpful (see Fischer, 2005). This paper focuses on specific measures of social network size and social interactions, though these could be thought of as measures of the associational aspect of "social capital."

"People who do not care about American religious institutions for their own sake still might be concerned that the hollowing out of some traditional religious beliefs and practices—alongside a tentative increase in a generic spirituality—could point to a future in which American religiosity may be less grounded in institutions If half of all the social capital in America—meaning half of all the face-to-face associational activity, personal philanthropy, and volunteering—happens through religious institutions, the vitality of those institutions influences more than American religious life. Weaker religious institutions would mean a different kind of American civic life." (p. 113)

Second, participation in religious congregations may help facilitate other forms of social connectedness. For example, Mahoney (2010, 2013) surveys literature suggesting that higher levels of religious service attendance are tied to the formation and maintenance of ties within the family. However, Mahoney notes this research often ignores the potentially crucial differences between a general measurement of religious participation and actual measures of the beliefs or practices—which may still be held or practiced by those not belonging to congregations—that may facilitate these ties.

In this paper, I test a key part of concerns presented. I examine whether or not those who do not attend religious services are less connected, while paying careful attention to differences among the non-attenders. To date, no published work examines this question. In the following section, I describe two existing streams of research on those who do not participate in organized religion.

3. Beyond organized religion

Previous research on those with no organized religion has taken two primary forms. One vein of research has focused broadly on those with "no religion"—that is, those who do not describe themselves being as part of any religion, or who do not belong to a religious congregation. The other vein has focused more narrowly on those who are "Spiritual But Not Religious" (although this particular label is only one of many that has been used to describe this group). Despite the fact that the populations of interest in these two areas of research overlap significantly, the literature in these two research strands remains largely unsynthesized.

3.1. No religion

Survey-based studies have found a decrease in religious service attendance since the 1960s (Chaves and Anderson, 2012; Chaves, 2011) and a rapid rise in identifying with "no religion" beginning around 1990 (Hout and Fischer, 2002). However, the cause of these trends has spurred much debate. The delaying of marriage and parenthood—both key life course events that tend to bring adults back to religion—and the decline in generational transfer of religious participation from parent to child has explained some of this trend (Baker and Smith, 2009b; Hout and Fischer, 2002, 2014).

Politics is another explanation. Many Americans without a religious affiliation are political and social liberals who still maintain traditional beliefs about God, prayer, and the afterlife, Hout and Fischer (2002) argue that some of these Americans may find themselves disenchanted with organized religion because they have come to associate "religion" with the contemporary religious right. More recently, Vargas (2012) found that those with liberal political views were significantly more likely to consider leaving religion than their more conservatives counterparts.

Finally, others have pointed to secularization theories, arguing that religious nones are (or are becoming) seculars (Bruce, 2002; Marwell and Demerath III, 2003). Even where religious beliefs outlast religious affiliation, the demise of the former may follow the latter over time (Voas, 2009).

Only a few studies have explored the social characteristics of those with no religion. Baker and Smith (2009b) showed that the religiously unaffiliated are more frequently married to other religiously unaffiliated and belong to peer groups with other religiously unaffiliated, though whether this is a result of influence or selection is undetermined. Compared to the religious, the non-religious have appeared to be less engaged in non-religious forms of social activity, including participating in community and political life (Putnam and Campbell, 2010; Smidt, 1999; Uslaner, 2002). Furthermore, the nonreligious are more likely to volunteer when they have personal ties to those who are religious (Lim and MacGregor, 2012).

Other recent work also recognizes a possible "liminal" group between the religious and non-religious. Lim, MacGregor and Putnam (2010) suggest that about ten percent of Americans are "liminal nones" who give differing answers about their religiosity when asked at different times. Thus, at any given time, they expect approximately half of these liminals to report being religious and half being non-religious. Though Lim et al. demonstrate that religious identity is not an entirely stable characteristic and that the boundary between religion and no religion is often porous and fuzzy, they do not attempt to connect liminals with alternative religions or the SBNR. In fact, none of the work summarized in this section addresses to what extent the religiously unaffiliated (liminal or not) participate in alternative religion or spirituality.

3.2. Spiritual but not religious

Many Americans who reject religious affiliation and participation nonetheless possess some form of spiritual identity not associated with any major religious tradition. Scholars have attached to these people such labels as "believing without belonging" (Davie, 1994), "spiritual seekers and metaphysical believers" (Roof, 2001), "unchurched believers" (Baker and

Smith, 2009a; Hout and Fischer, 2002), "tinkerers" (Wuthnow, 2007), "noninstitutional religion" (Besecke, 2005), "religious privatism" (Greer and Roof, 1992), and, of course, "spiritual but not religious" (Fuller, 2001).

The distinction between religion and spirituality has long been tenuous, and even what is now understood to be spiritual is quite different from what was spiritual only a few generations ago (Fuller, 2001). In recent practice, scholars have generally treated "religion," whatever else it may be, as something that is "corporate, public, and stable" (Bender, 2007). Scholars defining "spirituality" have typically placed more emphasis on an "individualized process of searching for the ultimate significance of life and the experience of the sacred" (Oh and Sarkisian, 2011). Thus, in contrast to religion, spirituality is often treated as "private, emergent, emotional, and individual" (Bender, 2007). However, religion and spirituality are in no way mutually exclusive (Ammerman, 2013a, 2013b; Bender and McRoberts, 2012). Most religious people also consider themselves to be spiritual, and most Americans develop their spiritual beliefs and practices through their participation in the informal and formal contexts of various specific religious traditions (Albanese, 2001; Ammerman, 2013a; Mahoney and Cano, 2014).

Furthermore, the distinction between religion and spirituality is permeable. Bender (2007) points out that whether one is between "spiritual" and "religious" often depends on the context—someone might call herself "religious" in one situation, yet "spiritual" in another, depending on which discursive construction is most socially appropriate. Ammerman (2013a, 2013b) identities four distinct discourses about spirituality, and also shows that their uses vary between religious and non-religious populations. In particular, what the religious mean by "spiritual" is frequently quite different from what the nonreligious mean by the same term.

Despite the complex relationship between religion and spirituality, there is a notable upward trend in the number of people who consider themselves spiritual, while not being religious in the traditional sense. In this paper, I define the Spiritual But Not Religious (SBNR) as those who consider themselves to be spiritual, do not consider themselves to be religious, and do not attend religious services on a regular basis. Similarly, I define the Neither Spiritual Nor Religious (NSNR) as those who do not consider themselves to be spiritual, do not identify with a religious affiliation, and do not attend religious services on a regular basis. Although some who do not identify as religious may still regularly attend religious services, this population is small (Hout and Fischer, 2014), and this paper focuses on the proposed benefits of connections from being part of a religious community, so I do not include any regular attenders in my categories of SBNR and NSNR (however, including them does not significantly alter any of the findings in this paper). Fig. 1 shows the fraction of adults in America who are SBNR and NSNR based on my definitions using data from the General Social Survey. From 1998 to 2014, the SBNR increased from 1.9% to 6.7% of population and the NSNR increased from 4.3% to 12.1% (data on spirituality were only collected in the GSS in 1998 and from 2006 onward).

Particular interest has been paid to the SBNR. Some have emphasized the independence of this group. For example, Roof's (1993) study of baby-boomers revealed a large defection from organized religions in the 1960s and 1970s, and an increase in "new religions" which emphasized direct spiritual experience over institutional religion. One segment of this generation, whom Roof called "highly active seekers," were those who adopted a highly individualized spirituality that rejected organized religion and traditional forms of worship. This group was more educated, more individualistic, and more likely to view their faith as a "spiritual journey" or "quest." Similarly, Hout and Fischer (2014) described part of the lack of intergenerational transfer of religion as the result of successive generations preferring greater autonomy, despite still praying frequently. This is all generally consistent with a model of secularization as declining religious authority (Chaves, 1994).

Yet others have suggested that many SBNR belong to emerging alternative forms of "spiritual community." One U.K. study, for example, identified a "holistic milieu" of organizations and activities linking mind, body, and spirit (Heelas and Woodhead, 2005). From yoga classes to Reiki practitioners, spiritual loyalties appeared to be being transferred from old institutions (congregations) to new ones. Could such a social change also be occurring in the U.S.? Interview and ethnographic studies have examined various spiritual communities, such as Mind-Body-Spirit practitioners (Oh and Sarkisian, 2011) and New Age adherents (Bender, 2010), while others have identified how events such as Burning Man have a distinctly spiritual element that involve deep ritual activities and forge enduring connections (Gilmore, 2010).

Unfortunately, despite the recognition that the SBNR represent a growing and not-well-understood population, much of the scholarship in the sociology of religion has only been concerned with whether or not someone belongs to an organized religion. Thus most analyses concerned with religion or religious participation have separated respondents based on religiosity or religious affiliation. As a result, potentially important differences among those with no religion has rarely been addressed (this point is also made, but not tested, by Baker and Smith, 2009b).

4. Evaluating the concerns

As scholars raise an abundance of concerns about the consequences of weakened religious organizations, it is important to understand the heterogeneity of social life outside of them. This paper compares the social connectedness of regular religious

⁵ Ammerman (2013a) suggests that SBNR is better thought of as a "boundary-maintaining device and source of legitimacy than as a description of the empirical situation" (p. 51). Her evidence of this is that she finds that only one of her 95 study participants fits this description. I am not so quick to dismiss this empirical category. My definition of SBNR excludes both those who identify as religious but cannot attend religious services for structural constraints (e.g., poor health or work schedules) and excludes those who might be actively part of a religious congregation but claim to reject "empty 'religion' ... in favor of deep personal 'spirituality'" (p. 50), something she observes among some conservative Protestants. Even if the percentage of "true" SBNR in the U.S. is only 5% of the population (a conservative estimate based on the GSS and PALS survey data), that is still a substantial number.

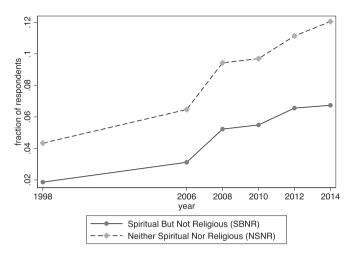


Fig. 1. Changes in the Spiritual But Not Religious (SBNR) and Neither Spiritual Nor Religious (NSNR) over time. Source: General Social Survey. Data on spirituality were only collected in 1998 and from 2006 onward.

service attenders (Attenders) with three types of non-attenders: Religious Non-attenders (RNA), the Spiritual But Not Religious (SBNR), and the Neither Spiritual Nor Religious (NSNR). Hereafter, I refer to this typology as the Attendance-Affiliation status of an individual. The research outlined above suggests several possible expectations for the differences in connectedness between individuals of different Attendance-Affiliation statuses. I describe each and map them onto testable hypotheses. All hypotheses are *ceteris paribus*.

First, some scholars makes a clear argument for religious participation—not self-identification—being the key to connectedness (e.g., Lim and Putnam 2010). If accurate, those who attend religious services frequently will be more connected than the RNA, SBNR, and NSNR.

Hypothesis 1a. Attenders are more connected than the RNA.

Hypothesis 1b. Attenders are more connected than the SBNR.

Hypothesis 1c. Attenders are more connected than the NSNR.

Second, many accounts of the growth of the unaffiliated (SBNR and NSNR) suggest the those who switch into these categories come primarily not from Attenders, but from the RNA, who are sometimes referred to as religious "in name only" (e.g., Hout and Fischer, 2014). If one's spiritual or religious affiliation outside of a religious congregation is unimportant to one's degree of connectedness, then we should expect few differences between the RNA, SBNR, and NSR.

Hypothesis 2a. There is no difference in the connectedness of the RNA and SBNR.

Hypothesis 2b. There is no difference in the connectedness of the RNA and NSNR.

However, there may be an emerging field of spiritual communities that have capacities similar to religious congregations for building social connectedness. Unfortunately, to date survey instruments have not been implemented to gather nationally representative data on alternative spiritual communities. Ethnographic studies (e.g., Bender, 2010) of spiritual communities have great value, but by their nature selectively observe those who are engaged in community already. Although we cannot observe the presence of alternative communities in existing survey data, we should expect that if these communities have a significant capacity to generate social connectedness among their participants, then the SBNR will be the most socially connected among those who do not attend religious services regularly.

Hypothesis 3a. The SBNR are more connected than the RNA.

Hypothesis 3b. The SBNR are more connected than the NSNR.

Another explanation of variation in connectedness by Attendance-Affiliation status is that those with different levels of social connectedness might more likely to switch to different statuses. Empirical work finds that those with more contact with friends in their religious congregations also report greater feelings of belonging to the same congregations (Stroope and Baker, 2014). It is possible then that those with less of a sense of belonging are also more open to switching (e.g., by leaving their religious congregation or trying out a yoga class).

Hypothesis 4. Those who are less connected at time t-1 are more likely to switch to a different Attendance-Affiliation status at time t.

However, the opposite effect is also plausible. Those with more connections may receive more exposure to alternative identifies, beliefs, and practices through their personal networks and interactions, which could increase the likelihood of switching. Thus, lack of support for Hypothesis 4 could also be the result of countervailing effects.

5. Data and methods

The data in this paper come from the General Social Survey (GSS) and Portraits of American Life Study (PALS) between 2006 and 2014. Though either dataset could be used to test the hypotheses above, using two sources enhances the validation of the study and increases sampling heterogeneity. I use 2006 as a starting point because data on respondents' spirituality is not consistently available in the GSS prior to 2006 (it was asked about only once previously, in 1998), and 2006 is when the first wave of the PALS was conducted.

5.1. General social survey

I analyze the 2006, 2008, 2010, 2012, and 2014 GSS, a face-to-face survey of non-institutionalized adults in the United States with response rates greater than 70% in each wave (Smith et al., 2015). Some respondents in each year were added to three-wave panels. I measure social connectedness with two different measures. The first measure is a frequency of social interaction scale. Respondents were asked how often they spend an evening with (1) neighbors, (2) relatives, and (3) friends outside the neighborhood, with each being coded on a 7-point scale ranging from "never" to "almost daily." I standardized each and then combined them into a single standardized scale.⁷

The second measure is the size of one's self-reported "Core discussion network" (McPherson et al., 2006). This measure comes only from the 2010 GSS, which contained a module presented to a subsample of respondents that sought to measure respondents' core discussion networks, which have often been understood as an informative way of capturing close interpersonal relationships (Bailey and Marsden, 1999; McPherson et al., 2006; for limitations, see Bearman and Parigi, 2004). Respondents were asked: "From time to time, most people discuss important matters with other people. Looking back over the last six months—who are the people with whom you discussed matters important to you?" If the respondent gave fewer than five names, interviewers probed for additional names by asking, "Anyone else?" Up to six names were recorded, so those with more than six are recorded as six. This question was also used in three previous iterations of the GSS, but the 2010 GSS is the only survey to include both this measure and a measure of spirituality. The accuracy of this name generator in previous iterations of the GSS has been the subject of some controversy (McPherson et al., 2009; Fischer, 2009; Brashears, 2011). To help resolve this debate, the 2010 GSS included a field survey in which the question was positioned differently across three ballots, which were randomly assigned. This follow-up study found that interviewers were less effective in soliciting names when the item was positioned later in the survey (Paik and Sanchagrin, 2013). Thus the choice of ballot is a significant predictor of reported network size, so I control for each ballot with an indicator variable.

My key independent variable is one's Attendance-Affiliation status. Attenders are respondents that reported attending religious services at least several times per year (56% of the total GSS sample). Research comparing self-reported attendance with counts of actual weekly attendance in congregations suggests that people may over-report their frequency of attendance (and certainly do not underreport it), so this can be seen as a conservative estimate of attendance (Hadaway et al., 1998; Woodberry, 1998). My analyses are substantively unaffected by shifting the threshold up such that regular attendance was defined as attending at least once per month or down such that regular attendance was defined as only those who reported never attending.

I obtained religious affiliation from the question "What is your religious preference? Is it Protestant, Catholic, Jewish, some other religion, or no religion?" Non-attenders who reported a religious preference were coded RNA (27% of the total sample). I obtained one's spiritual status from the question, "To what extent do you consider yourself a spiritual person? Very, Moderately, Slightly or Not at All?" Those with no religious affiliation and who were not Attenders, but considered themselves very or moderately spiritual were coded SBNR (6%). Non-attenders with no religious affiliation and who were only slightly or not at all spiritual were coded NSNR (10%).⁸

My remaining independent variables, which serve as controls, are age (25–34, 35–44, 45–54, 55–64, 65–74), sex, race and ethnicity (non-hispanic white, non-hispanic black, non-hispanic other, hispanic), marital status (married, separated/divorced/widowed, never married), highest educational degree (less than high school, high school, junior college, bachelors degree, graduate degree), political ideology (liberal, moderate, conservative), work status (working full-time, working part-time, unemployed, retired, keeping house, other), region of interview (the nine Census regions), and year of interview. Consistent with prior research on the religiously unaffiliated (e.g., Hout and Fischer, 2002, 2014), respondents less than 25

⁶ All of the data for this paper are publicly available from the websites of the General Social Survey (http://www3.norc.org/gss+website/) and the Portraits of American Life Study (http://www.ps-are.org/).

⁷ The Cronbach's alpha for this measure is 0.44. I am not concerned about this being low, because I do not expect each form of social interaction to measure some single latent concept of "social connectedness." Rather, it is the combination of these three variables that is a measure of how socially connected one is. Also, connectedness on one dimension may also affect connectedness along another dimension (e.g., someone who frequently spends time with relatives living nearby may be less inclined to build ties with friends). In this paper I am focused on how socially connected people are, rather than the sources of those connections.

⁸ I also considered an alternative coding of RNA, SBNR, and NSNR. Instead of using religious affiliation, I considered using the complimentary question to the spiritual person question: "To what extent do you consider yourself a religious person?" Under this coding, non-attenders who reported being very or moderately religious were coded RNA. Non-attenders who were not Religious but reported being very or moderately spiritual were coded SBNR. The remaining respondents were NSNR. This yielded substantively similar results.

⁹ I find substantively identical results using political party affiliation instead of political ideology.

years of age were dropped to ensure that most respondents had finished their education. Respondents 75 and older were dropped because of concerns that they might be physically unable to attend religious services or actively maintain social contacts. Missing data in the independent variables caused the deletion of 3.9% of the data for the final analysis sample (final N=11,162), but I found virtually no difference between the original sample and final sample on the dependent variables or the Attendance-Affiliation categories. Descriptive statistics of the variables from the GSS used in my analysis are presented in Table A1 of the Appendix.

5.2. Portraits of American life study

I analyze data from the PALS, a nationwide survey first conducted in 2006 via in-home face-to-face interviews with adults (N=2610, response rate =58%) (Emerson et al., 2010). A follow-up survey was conducted in 2012 with 54% of the original respondents (N=1417). The measure of social connectedness is based on the question, "Now think about the persons outside your home that you feel closest to. These may be friends, co-workers, neighbors, relatives, or anyone else who does not live here. Not including people living in your home, about how many people, if any, would you say you feel close to?" Responses greater than 10 were recoded to 10.10 The measure differs from the GSS core discussion measure in three key ways: first, the PALS close ties measure asks about those you feel "close to," which may differ from who one discusses important matters with (the extent to which they may capture similar or differing networks is beyond the scope of this paper). Second, the question did not collect names, only recorded the number given by the respondent. Third, the measure excluded those living in one's own home, whereas the GSS measure had no such restriction.

To measure involvement in a religious congregation, I rely on the response to "How often do you attend worship services, not including weddings or funerals?" I code Attenders as those who reported attending at least several times per year (55% of the PALS sample).¹¹

To measure religious affiliation and spiritual identification, I use the response to the question, "Which of the following do you consider yourself?" Respondents were shown a card that contained the following options: Christian, Muslim, Jewish, Roman Catholic, Latter Day Saints, Buddhist, Hindu, Agnostic (You are not sure if there is a god), Atheist (You believe there is no god), Spiritual (But not committed to a particular faith), Don't give religious things much thought, and Other. Non-attenders who selected a religion were coded RNA (29%). Non-attenders who selected Spiritual were coded as SBNR (9%) Respondents who selected Atheist, Agnostic, or Don't give religious things much thought were coded as NSNR (7%). Those who selected Other were dropped since it was unclear which category they would belong to (though the number of responses dropped for this reason was very small, N = 28). To my knowledge, PALS is the only nationally-representative survey to allow respondents to choose spiritual over any other religious or "no religion" categories. ¹² This difference in questioning also means there are differences in how Attendance-Affiliation status is determined for GSS and PALS respondents.

My remaining independent variables which serve as controls are age, sex, race and ethnicity, marital status, household size, college completion, political ideology, employment, region of the country (Northeast, Midwest, South, West), and year of survey. As with the GSS data, the sample includes only those ages 25-74. Missing data in the controls reduced the final analysis sample by 2% (final N=3276), but I found virtually no difference between the original sample and final sample on the dependent variables or the Attendance-Affiliation categories. Descriptive statistics of all the PALS variables in my analysis are presented in Table A2 of the Appendix.

5.3. Methods

To test Hypotheses sets 1, 2 and 3, I first report on the bivariate relationships between each measure of connectedness and whether one is an Attender, RNA, SBNR, or NSNR. I then estimate linear regression models of connectedness on Attendance-Affiliation status while also controlling for a host of respondent characteristics that could confound the relationship between connectedness and Attendance-Affiliation status. I also include year fixed effects in all models to account for national level shifts in connectedness and Attendance-Affiliation status. All models employ sampling weights and adjust for respondents appearing in multiple waves using clustered standard errors. The coefficients of control variables are not shown, but are available upon request. The baseline category is Attenders. Wald tests are performed to estimate the statistical significance of differences in coefficients between other categories (e.g., SBNR vs NSNR).

¹⁰ In the dataset, respondents that reported more than 9 people they were close to were coded into three bins (10–14, 15–19, 20+). Because it is not clear what value those respondents had, these were all recoded to 10.

¹¹ Both attendance measures in the GSS and PALS capture the same cutoff of respondents who report attending "several times a year." But the scales in the two surveys are not identical. In the GSS, the option below "several times a year" is "once a year" while in the PALS, the next lower options was "once or twice a year." These measures may not be perfectly identical, but the proportion Attender is nearly the same in both datasets (56% in the GSS vs 55% in the PALS). With the PALS data I also performed analyses using a dichotomous response to the question "Are you currently involved in, affiliated with, or a member of a religious congregation or other place of worship? By congregation, I mean a church, temple, synagogue, mosque, or other place of worship." This also yielded similar results. Conceptually, I prefer to measure attendance, because I expect that one's connectedness to others in a congregation has more to do with physical presence than nominal affiliation or membership.

¹² Some who identified as atheists and agnostics in the PALS data might also have considered themselves spiritual, if they had the ability to choose more than one option. In the GSS sample, 15% of those who did not believe in the existence of God and 14% of those who said there was no way to find out if God existed were classified as SBNR.

Although the main models control for a large number of socio-demographic characteristics of individuals, differences in social connectedness by Attendance-Affiliation status may still be affected of unobserved confounding variables. For example, perhaps differing childhood experiences and socialization predispose some people to be both more religiously active and to be more socially connected than others. I address these possible confounders by employing the panel structure of the data to estimate two additional types of models that examine whether changes in Attendance-Affiliation status are associated with changes in connectedness (because the GSS only measured core discussion network size at one point in time, this measure cannot be used to look at change over time).

First, I estimate difference-in-differences models that regresses the change in connectedness between waves for each respondent on a categorical variable of switches to each Attendance-Affiliation status compared to a baseline of no change in status, while still controlling for all of the same characteristics as in the main models. This approach reduces selection bias by netting out both any time-invariant characteristics of individuals and everything that changes in equal amounts for all individuals, but under the assumption that individuals would have similar changes over the two time periods in their social connectedness absent any switches in their Attendance-Affiliation status after controlling for everything else in the model.

Second, I estimate fixed effects models that again test whether switches in Attendance-Affiliation status are associated with changes in connectedness. This approach further reduces bias by using only changes within individuals over time, thus effectively controlling for all time-invariant unobserved characteristics of individuals. However, this approach only estimates the effect for those who actually switch over the time period of the study, and thus cannot compare switchers to those who do not switch at all. In the fixed effects models I still control for characteristics of respondents that may vary across waves.

Finally, to test Hypothesis 4, I use the panel structure to see if connectedness itself might explain switching. I estimate logistic regression models of the likelihood of any switching and multinomial logistic regression models of the likelihood of switching into each Attendance-Affiliation status. The key independent variable is a lagged measure of social connectedness. Again, the GSS measure of core discussion network size cannot be tested because this question was only asked of respondents who were in wave 3 (so they were not reinterviewed in the next wave). However, I created two lagged measures of social interaction frequency—one based on the reported frequency in the previous wave (a two-year lag) and one based on the reported frequency two waves before (a four-year lag), as well as the lagged measure of number of close ties (a six-year lag). I also include all the control variables as in the main models.

6. Results

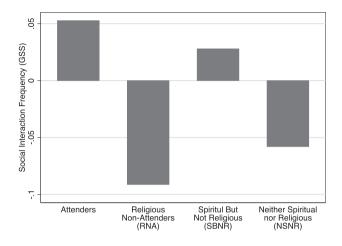
Fig. 2 shows the bivariate relationship between the measures of connectedness and each Attendance-Affiliation status, with data from all years pooled. Consistent with Hypotheses 1a, 1b, and 1c, Attenders report the most social interactions in the top panel. But there is notable heterogeneity among non-attenders. Consistent with Hypotheses 3a and 3b, the SBNR report the second most social interactions, followed by the NSNR and finally the RNA. On average, the difference between an Attender (the highest group) and an RNA (the lowest group) is [Mean(Attenders) - Mean(RNA) =] 0.17 standard deviations (SD).

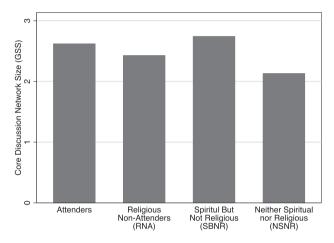
The SBNR report the largest core discussion networks, followed by Attenders, RNA, and NSNR, respectively [Mean(SBNR) — Mean(NSNR) = 0.68 persons]. In the PALS measure of number of close ties, Attenders and the SBNR report nearly the same number of close ties, followed by the RNA and lastly NSNR [Mean(SBNR) — Mean (NSNR) = 0.88 persons]. For both of these two outcomes the results are consistent with Hypotheses 1a and 1c, because Attenders report larger discussion networks and more close ties than the RNA or NSNR, and with Hypotheses 3a and 3b, because the SBNR report larger discussion networks and more close ties than the RNA and NSNR. There is no support for Hypotheses 1b, because the SBNR do not report smaller discussion networks and fewer close ties than Attenders. The bivariate relationships are also not supportive of Hypotheses 2a and 2b, which predicts few differences between the RNA, SBNR, and NSNR. In the following section, I analyze these relationships further with multivariate models that control for other characteristics of individuals that might be confounding the relationship between connectedness and Attendance-Affiliation status.

6.1. Models of social connectedness

Table 1 presents the regression coefficients for each Attendance-Affiliation status. Attenders are the baseline category. In Model 1 the outcome is social interaction frequency. All else being equal, the model predicts that compared to Attenders, the RNA have -0.19 SD less social interaction (p < .001), the SBNR have -0.16 less social interaction (p < .01), and the Neither Spiritual Nor Religious have -0.27 SD less social interaction (p < .001). The size of the coefficients also suggests that the SBNR are more connected than the NSNR and RNA and that the RNA are more connected than the NSNR. However, these differences are not statistically significant, although the differences between the RNA and NSNR and between the SBNR and NSNR both have p-values less than 0.1.

I also estimate separate models with each dimension of social interaction (neighbors, relatives, and friends) as the outcome. These results are included in Table A3 of the Appendix. They suggest that, all else being equal, the RNA spend more time with relatives than the SBNR or NSNR, but the SBNR spend more time with both neighbors and friends than the RNA or NSNR. Attenders are more connected in all the models except compared to the SBNR in social interaction with friends. The





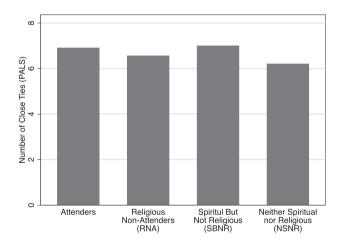


Fig. 2. Bivariate relationship between social connectedness and Attendance-Affiliation status.

differences between Attenders and the SBNR among neighbors and Attenders and NSNR among friends are also not statistically significant. Despite the differences in these models of separate dimensions of interaction, I prefer the combined scale because I consider the combination of these three variables to best capture how socially connected one is (see also footnote 7 above).

Table 1OLS models of social connectedness.

	(1)	(2)	(3)
	Social interaction frequency	Core discussion network	Close ties
Religious Non-Attender (RNA)	-0.19*** (-6.22)	-0.11 (-0.78)	-0.42^* (-2.28)
Spiritual But Not Religious (SBNR)	-0.16^{**} (-3.02)	0.14 (0.54)	0.16 (0.59)
Neither Spiritual Nor Religious (NSNR)	-0.27^{***} (-5.92)	-0.40(-1.82)	-0.77^* (-1.99)
Observations	11,162	1055	3276

t statistics in parentheses.

Note: Baseline is Attenders. Each model uses sampling weights and the standard errors are adjusted for clustering as individuals may appear in multiple waves in Models 1 and 3. See the main text for the list of control variables, which are not shown, but included in every model.

In Model 2 the outcome is the number of people one reports discussing important matters with. All else being equal, the coefficients suggest that the SBNR will have 0.14 more people in their core discussion network than Attenders, while the NSNR and RNA will have 0.40 and 0.11 fewer, respectively. However, none these differences are statistically significant, although the differences between the NSNR and Attenders and between the SBNR and NSNR have p-values less than 0.1.

In Model 3 the outcome is the number of people one reports being close to. All else being equal, the model predicts that the RNA will have on average 0.42 fewer close ties (p < .05) and the NSNR with have 0.77 fewer close ties (p < .05) compared to Attenders. The SBNR are predicted to be have more close ties than Attenders, although this difference is not significant, but the differences in coefficients between the SBNR and RNA and between the SBNR and NSNR are both statistically significant (p < .05).

Based on these three models, Hypothesis 1a (that Attenders are more connected than the RNA) and Hypothesis 1c (that Attenders are more connected than the NSNR) are mostly supported. The only exception is that in Model 2 the differences between Attenders and the RNA and between Attenders and the NSNR are not significant, although the coefficients are still negative. There is only a little support for Hypothesis 1b. All else being equal, Attenders are not more connected than the SBNR in the models of core discussion networks and close ties, but they do report more frequent social interactions.

There is little support for Hypothesis 2a, which predicts no difference between the RNA and SBNR. Although there is only a small difference between coefficients in Model 1, in Model 3 there is a significant difference in coefficients, with the SBNR predicted to have 0.58 more close ties on average than the RNA. And in Model 2, the difference in coefficients between RNA and SBNR is not significant, but is still substantial in magnitude ($\beta_{SBNR} - \beta_{RNA} = 0.25$ people one talks to about important matters) and is bigger than the difference between the RNA and Attenders. There is support for Hypothesis 2b, which predicts no difference between the RNA and NSNR, as there is no statistically significant difference between the RNA and NSNR in any of the models.

Finally, there is some support for Hypotheses 3a. In every model, the SBNR are predicted to be more connected than the RNA, but as mentioned above, the difference between the RNA and SBNR is only significant in model 3. Similarly, there is some support for Hypothesis 3b. In every model the coefficients suggest the SBNR are more connected than the NSNR, but in Models 1 and 2 these differences are not statistically significant (p = .08 and p = .09, respectively).

6.2. Difference-in-differences and fixed effects models of social connectedness

Table 2 present the coefficients from models predicting how switches in Attendance-Affiliation status are associated with changes in connectedness. In all three models, the baseline is no switch (being in the same status in consecutive waves). We are unable to reject the null hypothesis that any switch is associated with a statistically significant change in connectedness.

Another approach is to conduct fixed effects regressions, which also model how changes in status are associated with changes in connectedness, but only by using within-person variation. This means only respondents who change affiliation status can contribute to the estimates and the baseline must necessarily be one of the switching categories (in this case, becoming an Attender). Table 3 presents the fixed effects regression coefficients. There is a significant negative relationship between becoming NSNR and a decline in the number of people one is close to compared to the same relationship for becoming an Attender ($\beta = -2.2$, p < .05), but we are unable to reject the null hypotheses that any other switches are associated with statistically significant changes.

p < .05, p < .01, p < .01, p < .001

¹³ For all three outcomes in my main analysis, I conducted alternative models that separated attenders into categories of "high" (attends at least once a week) and "medium" (attends more than several times a year but not once a week). High attenders are more connected than medium attenders, which is consistent with prior work (e.g., Lim and Putnam, 2010). Even the medium attenders are more connected than the RNA and NSNR, though the differences are not always statistically significant. I also conducted models where I separated the NSNR into atheists, agnostics, and other. There were no significant differences between these three categories in Models 1 and 3. In Model 2 (core discussion network size), atheists were significantly more connected than agnostics or other NSNR. Some have argued (e.g., Bainbridge, 2005) that low connectedness is a source of atheism in particular, but these results do not support this. Results are available upon request.

Table 2Difference-in-differences models of social connectedness.

	(1)	(2)	(3)	
	Two-year change in Social interaction frequency (GSS)	Four-year change in Social interaction frequency (GSS)	Six-year change in Close ties (PALS)	
Switch to Attender	-0.04 (-0.59)	-0.11 (-1.24)	0.49 (0.90)	
Switch to RNA	0.05 (0.83)	0.03 (0.38)	0.25 (0.50)	
Switch to SBNR	-0.09(-0.83)	0.01 (0.07)	0.00 (0.00)	
Switch to NSNR	-0.08(-0.81)	-0.03(-0.31)	-1.26(-1.54)	
Observations	4358	1939	1149	

t statistics in parentheses.

Note: Baseline is no switch. Each model uses sampling weights. See the main text for the list of control variables, which are not shown, but included in every model.

6.3. Models of switching on lagged social connectedness

To test Hypothesis 4, Table 4 presents the changes in the log odds of switching. In Models 1 and 2, the key dependent variable is the two-year (one-GSS-wave) lag of social interaction frequency, in Models 3 and 4 it is the four-year (two-GSS-waves) lag of social interaction frequency, and in Models 5 and 6 it is the six-year (one-PALS-wave) lag of number of close ties. In each pair, the first model is a logistic regression predicting the probability of any switch and the second is a multinomial logistic regression that predicts that probability of switching to each Attendance-Affiliation status relative to a baseline of not switching at all.

Models 1–4 show little support for Hypothesis 4, which predicts negative coefficients. However, in Model 5, the number of people one reported being close to in 2006 was negatively associated with the likelihood of having switched by 2012 ($\beta = -0.07$, p < .05). Model 6 shows that this is particularly for becoming an Attender ($\beta = -0.11$, p < .05) or an RNA ($\beta = -0.10$, p < .05). I calculate the average marginal effect for both of these outcomes; I find that one additional close friend in 2006 predicts a 0.6 percentage point decrease in the probability of switching to being an Attender and a 0.7 percentage point decrease in the probability of switching to being an RNA.

7. Discussion and conclusion

These analyses show significant and interesting differences in social connectedness depending on Attendance-Affiliation status. In particular, I find in the cross-sectional analyses that, after controlling for a number other differences between individuals, Attenders are generally more connected than Religious Non-Attenders and the Neither Spiritual Nor Religious (who show little difference between each other). Attenders also spend more evenings with others than the Spiritual But Not Religious, but there is no difference between the Attenders and SBNR on the size of their core discussion networks or number of close ties, and in fact, the direction and magnitude of the coefficients suggest the SBNR are more connected in these cases. Similarly, in every model the coefficients suggest the SBNR are more connected than the NSNR and RNA, although these differences are not statistically significant in every model.

In the analysis of the panel data I find only a little evidence that changes in Attendance-Affiliation status are associated with changes in connectedness, except one fixed effects model that suggests becoming NSNR is associated with a decrease in the number of close ties one has. It is possible that Attendance-Affiliation switches do matter, but that changes require a longer time lag to have an effect. For example, perhaps the correct timeline is that someone switches but takes longer than is observed in these data to create new social connections or leave old ones. Note that although the gaps between waves range from two to six years, the switch could have happened at any point during that time, including up to just prior to administering the follow-up survey. Another limitation is that people who switch later in life may be quite different than those who remain in the same

Table 3 Fixed effects models of social connectedness.

	(1)	(2)
	Social interaction frequency (GSS)	Close ties (PALS)
Religious Non-attender (RNA)	0.067 (1.58)	-0.44 (-1.20)
Spiritual But Not Religious (SBNR)	-0.035 (-0.49)	-0.88(-1.47)
Neither Spiritual Nor Religious (NSNR)	-0.014(-0.19)	$-2.21^{*}(-2.42)$
Number of Person-years	2313	480
Number of Persons	826	240

t statistics in parentheses.

Note: Baseline is Attenders. Each model uses sampling weights. See the main text for the list of time-varying control variables, which are not shown, but included in every model.

p < .05, p < .01, respective, 0.01

p < .05, p < .01, p < .01, p < .001

Table 4Logistic and multinomial logistic regression models predicting the likelihood of switching.

	(1)	(2)	(3)	(4)	(5)	(6)
Main						
Social Interaction Frequency (2-year lag)	$-0.038 \; (-0.81)$					
Social Interaction Frequency (4-year lag)			0.026 (0.37)			
Number of Close Ties (6-year lag) Switch to Attender					-0.070^* (-2.54)	
Social Interaction Frequency (2-year lag)		0.024 (0.36)				
Social Interaction Frequency (4-year lag)		0.024 (0.30)		0,17 (1.55)		
Number of Close Ties (6-year lag)				0.17 (1.55)		$-0.11^*(-2.33)$
Switch to RNA						()
Social Interaction Frequency (2-year lag)		$-0.031 \; (-0.48)$				
Social Interaction Frequency (4-year lag)				-0.016 (-0.16)		
Number of Close Ties (6-year lag)						-0.095^* (-2.40)
Switch to NSNR		0.004 (0.50)				
Social Interaction Frequency (2-year lag)		-0.064(-0.59)		-0.017 (-0.12)		
Social Interaction Frequency (4-year lag) Number of Close Ties (6-year lag)				-0.017 (-0.12)		0.0055 (0.09)
Switch to NSNR						0.0033 (0.03)
Social Interaction Frequency (2-year lag)		-0.19(-1.53)				
Social Interaction Frequency (4-year lag)		, ,		-0.18 (-0.98)		
Number of Close Ties (6-year lag)						-0.0097 (-0.13)
Observations	4362	4362	1937	1937	1149	1149

t statistics in parentheses.

Note: Coefficients are log-odds. Each model uses sampling weights and the standard errors are adjusted for clustering as respondents appear in multiple waves in Models 1 and 2. See the main text for the list of control variables, which are not shown, but included in every model.

Attendance-Affiliation status throughout their adult lives, but the difference-in-differences models assume that switchers and non-switchers at least have similar "trajectories" and the fixed-effects models ignore non-switchers altogether.

Finally, the last set of lagged models suggests there could be some selection effect in the lower connectivity of the RNA compared to the other statuses. This seems very plausible—for example, those who identify as religious but do not feel connected to their religious congregation may stop attending regularly. However, the same lagged model suggests similar negative effects for Attenders, and does not explain why the SBNR would have higher level of connectivity than the NSNR.

Overall, these findings suggest that those who are not religious or do not actively participate in religious services should not be treated as a single group. As scholars take increasing interest in those who are exiting traditional religions, they need to pay attention to the heterogeneity of this population. In the remaining discussion, I outline three areas where we can apply these findings to improve future sociological research.

7.1. Implications for understanding spirituality and the SBNR

The analyses in this paper show the SBNR are more connected than other non-Attenders, both religious and non-religious. How can this be explained? Scholars have long been interested in understanding the nature of what it means to be spiritual, and although in this study I do not know what respondents mean by their spirituality, these findings may be useful to those interested in this question.

Research is needed to explore the sources of connectedness for SBNR. Do they have alternative sources of spiritual community, analogous to the connections accessible to the religious within their congregations? It is possible that supportive relationships within the context of spiritual community may help reinforce spiritual beliefs and practices, just as relationships inside religious congregations help to facilitate and maintain religious devotion (e.g., Ammerman, 2013a). But it is also possible that the SBNR are more likely to find alternative sources of community from other "secular" venues, such as political (e.g., a political campaign), intellectual (e.g., a book club), community (e.g., a Parent Teacher Association), common interest (e.g., a bowling league), or purely informal groups.

Scholars have frequently contrasted spirituality and religion by identifying how spirituality lacks institutions, authority structures, community, and traditions that have long been integral to religion (for a in-depth discussion, see Bender and McRoberts, 2012). But given the high connectedness of those who are spiritual, we should also consider if there is something about the content of spirituality itself contributes that could help explain the connectedness of the SBNR. For example, those who are spiritual (not just the SBNR) may see their relationships as invested with spiritual properties, which may enhance those relationships and incentive the creation of new ones. Moreover, positive interactions that include spiritually-oriented conversation or practices may further reinforce one's spiritual identity, even for those who are not religious. Mahoney (2010, 2013) develops these ideas extensively in the context of family, but this may apply to other relationships as well.

Spirituality could also be associated with other characteristics—such as openness to new ideas, greater concern for others, or more self-confidence—that may also promote connectedness. It is also possible that there are a priori characteristics—such

^{*}p < .05, **p < .01, ***p < .001

as personality type—that precede and encourage both the adoption of spiritual beliefs and higher levels of social connectedness. Could it be, for example, that there is some intrinsic social element of spirituality (e.g., "a connection to a higher power") such that those who are less interested in being socially connected are also less interested in all forms of religion and spirituality?

Beyond seeking to explain the difference between the SBNR and other non-attenders in social connectedness, it would also be valuable to explore if there are other important differences based on Attendance-Affiliation status. For example, Jang and Franzen (2013) found that young adults who identified as SBNR were more likely to commit a property crime than both those who were religious and neither spiritual nor religious. Perhaps the social connections of the SBNR are not as beneficial as the connections other have. Or, perhaps embracing spirituality but not religion is detrimental, at least in some ways, more for youth and emerging adults than for the adult population analyzed here. Future research is needed to evaluate these possibilities.

7.2. Implications for measuring religion and spirituality

Part of the problem highlighted in this paper is that the binary choice of "religion vs. no religion" misses significant differences within the "no religion" category. A category such as "religious none" —though technically accurate—is defined by what people have chosen to refuse rather than identify with. One of the most common ways of coding religious affiliation is to follow Steensland et al.'s (2000) RELTRAD categories (Mainline Protestant, Evangelical Protestant, Black Protestant, Roman Catholic, Jewish, and Other), and to lump those who are left over as unaffiliated. One might consider extending this—or other religion typologies—to include categories within the unaffiliated. SBNR and NSNR are just two possibilities.

But these simple categories may be too simplistic, particularly if the SBNR are not a connected group analogous to an organized religious community. Another proposed revision of RELTRAD focuses on the content of beliefs and frequency of practice instead of denominational affiliated, yet this categorization also presupposes what "religious" beliefs and practice are (Dougherty et al., 2007). A limitation of research on those with no religious affiliation, including in this paper, is the lack of good measures of spirituality. Though many surveys of religiosity include rich measures of religious beliefs and practices—including even the private practice of religion (Greer and Roof 1992)—I could not find any comparable measures on nationally representative surveys of spiritual beliefs and practices. Ammerman (2013b) notes these same problems while proposing her own typology and also describes an Italian study that attempts to understand the nuances within spirituality (Palmisano, 2010).

To date, in large-scale surveys we are left with only the vague "How important is spirituality in your life?" or "To what extent do you consider yourself a spiritual person?" Yet, as noted above, we lack a rich understanding of what it even means to be spiritual, in order to measure it. Ethnographic studies (e.g., Bender, 2010) provide helpful insights, but are limited because they focus on existing communities and observations of social interaction—yet social connectedness is precisely part of what we need to assess. Ammerman (2013a, 2013b) carefully examined how her research subjects discussed their spirituality in the context of life's everyday activities, but only one of her 95 subjects would be described as SBNR. What may be needed are more open-ended survey questions and interview-based research projects to help develop better measures of spiritual beliefs and practices that can then be used on the myriad of surveys with large probability samples that are meant to gather information on factors affecting social life and well-being.

Additionally, studies exploring the quantity and quality of social connections may benefit from gathering more data on the role that religious and spiritual practices and beliefs play. Although studies that explore the social networks of individuals often determine whether or not a connection is through a religious organization (e.g., a fellow church member), they do not examine how spiritual beliefs may enhance or otherwise alter the nature of one's relationships with their neighbors, friends, and family members. Both qualitative research and structured, in-depth questions on surveys would help researchers fill these present gaps in our understanding.

7.3. Implications for the role of formal organizations in social life

Finally, understanding the ways the religiously unaffiliated obtain and maintain their social connections through avenues other than traditional religious contexts could be particularly important for those interested in social and political mobilization. Others have noted that there exists an apparent "fetish of formal organization as the site of political mobilization" which runs the risk of ignoring or obscuring the actual mechanisms, formal or informal, that make organizations effective for collective action (Bender and McRoberts, 2012, p. 12).

More generally, while not dismissing the vitality of the social interactions that occur within the formal institutions of churches, temples, synagogues and mosques, scholars need to recognize that the connectedness of individuals is about their actual social networks, rather than their memberships in formal organizations. While the latter has sometimes been used as a proxy for the former (e.g., McPherson, 1983), this paper's findings suggest that this may be inaccurate as people find more social connections through informal (and perhaps increasingly internet-mediated) networks.

7.4. Conclusion

This paper began by asking whether declining religious service attendance and the rise in the religiously unaffiliated are connected to a decline in the social connectedness of Americans. The answer is more nuanced than "yes" or "no." The Spiritual But Not Religious are as similarly connected as those who regularly attend religious services, while Religious Non-attenders and those who are Neither Spiritual nor Religious are less so. However, limitations of these analyses abound. For example, the categorization of the RNA, SBNR, and NSNR is inferred from several measures—not through an actual identification by respondents from being asked directly. Also, the measures of connectedness focus on the quantity of social connections, rather than the quality. Though both dimensions are clearly important for social life, the former is the only one I am able to operationalize with the available data. Finally, although causal explanations have been proposed throughout the paper, these analyses can only report whether the associations observed are consistent with what the explanations would suggest. As Stinchcombe (1968, p.13) noted, the clever reader can undoubtedly think of "at least three sensible explanations" for the associations presented here. For survey researchers, better survey questions combined with longer panels would be useful for getting leverage on other possible mechanisms. For qualitative researchers, continued exploration into both why people switch between statuses and how the SBNR "practice" their spirituality would be especially useful.

This paper challenges existing assumptions that those with no religion or who do not participate in religious services are generally less socially connected, and it brings additional nuance to our understanding of this growing population of people living outside communities of religious faith. For researchers studying religion or its absence, this paper suggests recognizing this nuance when developing "religious" typologies and encourages the creation of better measures of spiritual beliefs and practices. For those interested in social engagement and its implications for everyday life, this paper points away from a focus on formal organizations and towards the actual behaviors in them and the specific social networks that arise with or without them.

Acknowledgments

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Table A1 Descriptives from the General Social Survey, 2006–2014.

	Social intera	ction frequency san	nple	Core discuss	sion network sam	ple
	N = 11,162			N = 1055		
	Mean	Min	Max	Mean	Min	Max
Attender	0.56	0	1	0.60	0	1
Religious Non-Attender (RNA)	0.27	0	1	0.26	0	1
Spiritual But Not Religious (SBNR)	0.06	0	1	0.04	0	1
Neither Spiritual Nor Religious (NSNR)	0.10	0	1	0.09	0	1
Social Interaction Frequency	-0.00	-2.64	2.60			
Core discussion network size				2.49	0	6
Age 25-34	0.23	0	1	0.21	0	1
Age 35-44	0.22	0	1	0.22	0	1
Age 45-54	0.24	0	1	0.25	0	1
Age 55-64	0.20	0	1	0.20	0	1
Age 65-74	0.12	0	1	0.12	0	1
Female	0.54	0	1	0.57	0	1
No kids in household	0.23	0	1	0.24	0	1
1 kid	0.17	0	1	0.17	0	1
2 kids	0.29	0	1	0.28	0	1
3 + kids	0.31	0	1	0.31	0	1
1 adult in household	0.19	0	1	0.19	0	1
2 adults	0.58	0	1	0.56	0	1
3 + adults	0.24	0	1	0.25	0	1
Married	0.59	0	1	0.58	0	1
Widowed/Divorced/Separated	0.20	0	1	0.22	0	1
Never Married	0.21	0	1	0.20	0	1
Race: White	0.69	0	1	0.70	0	1
Race: Black	0.13	0	1	0.11	0	1
Race: Hispanic	0.13	0	1	0.14	0	1
Race: Other	0.05	0	1	0.05	0	1
Less than High School Education	0.11	0	1	0.10	0	1
High School	0.48	0	1	0.47	0	1
Junior College	0.09	0	1	0.08	0	1

Table A1 (continued)

	Social intera	ction frequency sa	mple	Core discuss	sion network sam	ple	
	N = 11,162	N = 11,162			N = 1055		
	Mean	Min	Max	Mean	Min	Max	
Bachelors degree	0,21	0	1	0.22	0	1	
Graduate degree	0.11	0	1	0.13	0	1	
Working fulltime	0.55	0	1	0.53	0	1	
Working parttime	0.11	0	1	0.11	0	1	
Unemployed	0.05	0	1	0.06	0	1	
Retired	0.12	0	1	0.12	0	1	
Keeping House	0.11	0	1	0.12	0	1	
Other work status	0.07	0	1	0.06	0	1	
Liberal	0.27	0	1	0.28	0	1	
Moderate	0.38	0	1	0.36	0	1	
Conservative	0.35	0	1	0.36	0	1	
New England	0.04	0	1	0.05	0	1	
Middle Atlantic	0.12	0	1	0.13	0	1	
East North Central	0.16	0	1	0.15	0	1	
West North Central	0.06	0	1	0.05	0	1	
South Atlantic	0.22	0	1	0.21	0	1	
East South Central	0.05	0	1	0.06	0	1	
West South Central	0.11	0	1	0.10	0	1	
Mountain	0.07	0	1	0.08	0	1	
Pacific	0.15	0	1	0.17	0	1	
2006	0.14	0	1				
2008	0.17	0	1				
2010	0.27	0	1				
2012	0.23	0	1				
2014	0.19	0	1				

Note: Descriptives are calculated using the sampling weights for cross-sectional analysis which vary slightly from the appropriate weights used for panel analysis. Core discussion network size was only collected for a subsample of respondents in the 2010, hence the much smaller number of observations for the analyses using this variable.

Table A2 Descriptives from the Portraits of American Life Study, 2006–2012.

	N = 3276			
	Mean	Min	Max	
Attender	0.55	0	1	
Religious Non-Attender (RNA)	0.29	0	1	
Spiritual But Not Religious (SBNR)	0.09	0	1	
Neither Spiritual Nor Religious (NSNR)	0.07	0	1	
Number of close ties	6.77	0	10	
Age 25-34	0.23	0	1	
Age 35-44	0.23	0	1	
Age 45-54	0.23	0	1	
Age 55-64	0.19	0	1	
Age 65-74	0.12	0	1	
Female	0.51	0	1	
Household size	2.93	1	10	
Married	0.67	0	1	
Widowed/Divorced/Separated	0.17	0	1	
Never Married	0.17	0	1	
Race White	0.68	0	1	
Race Black	0.11	0	1	
Race Hispanic	0.13	0	1	
Race Other	0.08	0	1	
Completed college (BA or more)	0.32	0	1	
Employed	0.66	0	1	
Liberal	0.23	0	1	
Conservative	0.29	0	1	
Other political views	0.48	0	1	
Northeast	0.17	0	1	
Midwest	0.24	0	1	
South	0.34	0	1	
West	0.25	0	1	
2006	0.65	0	1	
2012	0.35	0	1	

Note: Descriptives are calculated using sampling weights.

Table A3Models of Social Interaction Frequency by Type.

	(1)	(2)	(3)	(4)
	Social interaction frequency	Neighbors only	Relatives only	Friends only
	(Model 1 of table 1)			
RNA	-0.19*** (-6.22)	-0.21*** (-3.53)	-0.23*** (-4.77)	-0.21*** (-4.52)
SBNR	$-0.16^{**}(-3.02)$	-0.12(-1.11)	$-0.43^{***}(-4.81)$	0.00 (0.05)
NSNR	$-0.27^{***}(-5.92)$	$-0.37^{***}(-4.19)$	-0.44^{***} (-6.01)	-0.13(-1.92)
Observations	11,162	11,162	11,162	11,162

t statistics in parentheses.

p < .05, p < .01, p < .001

Note: Baseline is Attenders. Each model uses sampling weights and the standard errors are adjusted for clustering as individuals may appear in multiple waves. See the main text for the list of control variables, which are not shown, but included in every model.

Appendix

Tables A1 and A2 present the descriptives of the variables from each dataset used in the analyses. Table A3 shows the additional models based on Model 1 of Table 1, but with each dimension of social connectedness (neighbors, relatives, friends not in the neighborhood) as the dependent variable.

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