

**The National Survey of Religious Leaders:
Background, Methods, and Lessons Learned in the Research Process**

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ABSTRACT

The National Survey of Religious Leaders (NSRL) is a new survey of a nationally representative sample of 1,600 clergy from across the religious spectrum. Conducted in 2019-2020, the NSRL contains a wealth of information about congregations' religious leaders and provides a rich new resource for answering a wide range of questions about clergy who serve congregations. We describe NSRL methods so that analysts will be equipped to use this complex dataset. Aiming to deepen understanding about the research process, we also describe several challenges we encountered while pursuing this project, our responses to those challenges, and what we learned from confronting them.

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Religious specialists and leaders have been a central concern in the social scientific study of religion at least since Max Weber introduced the concept of charisma and distinguished magicians from priests, priests from prophets, and ethical from exemplary prophets. Types and subtypes of religious specialists abound, but a key distinction, emphasized in different ways by both Weber and Durkheim, is between religious specialists who are private practitioners with whom people interact as individuals, and religious specialists who are leaders of organized religious communities. For Durkheim, the presence of a community is, by definition, essential for religion. For Weber, only organized religious communities (and only certain subtypes, at that), and only religious specialists who gather, serve, or lead organized communities offer the potential for religion to generate social change. Contemporary scholars may not follow Durkheim or Weber in every particular, but the social importance of religious communities relative to various forms of religious individualism remains widely recognized. This recognition has led to much more study of leaders of local religious communities – congregations – than of the broader category of religious specialists who may or may not lead communities. This is why the sociological study of religious leaders in contemporary Western societies is largely a sociology of the clergy, meaning the study of people who lead religious congregations.¹

Clergy have been studied from a variety of perspectives, with many specific research questions and purposes in mind. Interest in the clergy as an occupation and profession has

¹ We use “clergy” to mean people who are recognized as religious leaders of a congregation, whether or not they are officially ordained or credentialed.

motivated research on clergy job satisfaction, time use, recruitment, education and training, the fit between clergy and congregations, leader effectiveness, role complexity, career tracks, job markets, and how clergy fit into the larger system of professions (Abbott 1988; Brunnette-Hill and Finke 1999; Carroll 2006; Ferguson and Packard 2022; Gautier et al. 2012; Pitt 2022; Woolever and Bruce 2012). Concern with inequality and injustice has fueled research on gender, racial, and other inequalities among clergy (Eagle and Mueller 2022; Edwards and Kim 2019; Hoge and Wenger 2005; Lauve-Moon 2021; Lehman 1993; Munn 2019; Nesbitt 1997, 2019; Schleifer and Miller 2018; Zikmund et al. 1998). Interest in the clergy's social and political influence has inspired research on their participation in politics and social movements, and on their effort and efficacy as mobilizers of political support and action (Brown et al. 2021; Djupe and Gilbert 2003; Edwards and Oyakawa 2022; Guth et al. 1997; Hadden 1969; Malina and Hersh 2021; Olson 2009; Smidt 2004, 2016). Concern about clergy's physical and mental health and well-being has stimulated research on those subjects (Bloom 2019; Eagle et al. 2017; Flannelly et al. 2002; King and Bailar 1969; Proeschold-Bell et al. 2013; Proeschold-Bell and Byassee 2018; Proeschold-Bell and LeGrand 2012; Weaver et al. 2002). Recognition that clergy often are in a position to counsel people grappling with mental illness and end-of-life decisions has led to research about their views and roles in those contexts (Farrell and Goebert 2008; Larson 1968; Payne 2014; Taylor et al. 2000; Weaver et al. 2003; Young et al. 2003). And classic questions about the relationship between religion and science have prompted attention to clergy views about human evolution, cosmology, and other scientific subjects (Colburn and Henriques 2006; Hodge et al. 2020; Jelen and Lockett 2010).²

² The works cited in this paragraph illustrate research on these subjects; they of course do not amount to a comprehensive bibliography of sociological research on clergy. Dean Hoge's 2011

Methodologically, the vast majority of social scientific research on clergy is based on samples that are not nationally representative because they are drawn from just one religious denomination or from a limited set of denominations, focus on geographic areas smaller than the entire country, or rely on convenience samples. In this context, Jackson Carroll's 2001 survey of a nationally representative sample of clergy from across the religious spectrum stands out as a landmark in the sociological study of those who lead congregations (Carroll 2006; Carroll et al. 2001). The 2008-09 wave of the U.S. Congregational Life Survey, best-known for surveying people in the pews, also surveyed a nationally representative sample of clergy (Woolever et al. 2009a, 2009b), and the U.S. Census Bureau's Current Population Surveys contain enough clergy to support meaningful analysis of a nationally representative sample of clergy (McMillan and Price 2003; Perry and Schleifer 2019; Schleifer and Chaves 2016; Schleifer and Cadge 2019). These were the only surveys of nationally representative clergy samples before 2019.

The National Survey of Religious Leaders (NSRL) is a new survey of a nationally representative sample of clergy from across the religious spectrum. It contains a wealth of information about congregations' religious leaders. There are questions about respondents' jobs and careers, including job satisfaction; religious beliefs and practices; views about and practices related to mental health; attitudes and practices related to end-of-life issues; community involvement; political attitudes and practices; engagement with the larger religious world; knowledge of and attitudes about science, and how science informs their work; primary information sources; mental and physical health; and demographic characteristics such as gender, race/ethnicity, age, education, birthplace, marital status, and income. Some of these questions

chapter is, to our knowledge, the most recent overview of sociological literature on clergy (Hoge 2011).

replicate items from Carroll's groundbreaking survey, providing an opportunity to assess change since 2001. Other questions were drawn from earlier surveys of clergy that were national in scope but limited to only some religious groups, permitting analysts to place results from specific religious groups in a broader context. Still other questions address subjects unexplored in any previous national survey of clergy. On these subjects, the NSRL answers basic questions about clergy for the first time. All in all, the NSRL constitutes a significant new resource for deepening our knowledge about religious leaders in twenty-first century America.

We do two things in this paper. First, we describe NSRL methods so that analysts will be equipped to use this complex dataset in informed ways. Second, we reflect on certain key challenges we faced during this project, and we highlight several key lessons we learned along the way. We hope these reflections contribute to general knowledge about the research process.

METHODS

Generating the NSRL Sample

Developing a nationally representative sample of clergy from across the religious spectrum requires overcoming the same obstacle faced in developing a nationally representative sample of congregations: the absence of a comprehensive and unbiased sampling frame. Overcoming this obstacle requires building on the same insight that inspired the congregations sampling strategy first implemented by the 1998 National Congregations Study (Chaves et al. 1999). That is, just as the congregations attended by a nationally representative sample of individuals constitute a nationally representative sample of congregations, the leaders of congregations attended by a nationally representative sample of individuals constitute a nationally representative sample of congregational leaders. One can therefore bypass the need for a comprehensive list of clergy from which to sample by starting with a nationally representative

sample of individuals, generating a nationally representative sample of congregations by asking those individuals who attend religious services to say where they attend, and, finally, identifying the leaders of those congregations. This was the clergy sampling strategy pursued by Jackson Carroll's 2001 clergy survey and by Cynthia Woolever's 2008-09 survey, which is why those efforts stand out among earlier clergy surveys. It also is the strategy pursued by the NSRL.

The NCS-IV. The NSRL was conducted in conjunction with the fourth wave of the National Congregations Study (NCS-IV) and the 2018 General Social Survey (GSS). The GSS is an in-person survey of a nationally representative sample of non-institutionalized, English- or Spanish-speaking adults conducted by NORC at the University of Chicago (Smith et al. 2019). The 2018 GSS asked respondents who said they attend religious services at least once a year where they attend. The congregations named by GSS participants constitute a nationally representative sample of U.S. congregations. NORC then contacted those congregations and interviewed a key informant, usually a clergyperson or other leader, about the congregation's people, programs, and characteristics. The NCS-IV cooperation rate – the percentage of contacted congregations who agreed to participate – was 74 percent. The response rate, calculated in line with the RR3 response rate developed by the American Association for Public Opinion Research (2016:62), but not taking account of the GSS's own response rate, was 69 percent. The NCS-IV gathered data from 1,262 congregations. See Chaves et al. (2020) and the online NCS codebook for more detailed methodological information about the NCS.

Defining and Operationalizing Religious Leaders. The religious leaders of NCS-IV congregations constitute the NSRL sample. By "religious" leaders, we mean those doing a congregation's core religious work of preaching, teaching, leading collective worship services and other rituals, and engaging in pastoral care. We used congregation websites and social media

pages, staff rosters provided by NCS-IV respondents, and information gathered on the NSRL questionnaire itself to identify these leaders. Each congregation's primary leader was included in the NSRL sample whether or not they were paid and whether or not they were ordained clergy. Beyond the primary leader, we included only religious leaders who were paid for their work in the congregation, and who served congregations with 25 or fewer paid secondary leaders. Since very few congregations have staffs that large, this size criterion does not significantly limit the NSRL's generalizability. The NSRL sample still represents 94 percent of all secondary ministerial staff in congregations and the secondary staff in more than 99 percent of all congregations. We identified 1,281 primary leaders and 3,030 in-scope secondary leaders in the 1,234 NCS-IV congregations that had religious leaders.³

Deciding exactly who counted as a religious leader, and then contacting those people, were the project's most significant conceptual, empirical, and practical challenges. We describe these challenges, how we responded to them, and what we think they imply for future research, in the "Lessons Learned" section of this article. That section also provides more detail about the sample.

Collecting NSRL Data

In collaboration with NORC at the University of Chicago, the NSRL gathered data from February 2019 to June 2020 primarily via an online self-administered questionnaire.⁴ We did not

³ Twenty-eight of the 1,262 NCS-IV congregations did not have any religious leaders who we considered in-scope for the NSRL. There are more primary leaders than congregations because we included as primary leaders all equal co-leaders of congregations with that leadership structure.

⁴ Since data were collected almost entirely via online or paper self-administered surveys, the onset of the COVID-19 pandemic in the United States did not cause an abrupt mode change in NSRL data collection. Indeed, the 171 NSRL surveys completed on or after 10 March 2020 offer the opportunity to investigate the pandemic's early effects on clergy.

have the resources to do extensive follow-ups with all initial non-respondents, so we prioritized maximizing the response rate from primary leaders. Secondary leaders who did not initially respond received only emailed reminders, and they received those emailed reminders only if we had names and direct email addresses for them. Primary leaders who did not initially respond were more intensively recruited. They were mailed a paper questionnaire, called on the telephone, and offered enhanced incentives to participate. These efforts produced a much higher cooperation rate among primary leaders than among secondary leaders.

The cooperation rates were 70 percent among primary leaders and 23 percent among secondary leaders, for an overall cooperation rate of 37 percent. Taking into account the NCS-IV's own 69 percent response rate, the NSRL's response rate is approximately 50 percent for primary leaders and 17 percent for secondary leaders.⁵ Eighty-two percent of respondents completed the survey online in a self-administered way, 7 percent completed the online survey via an interview, and 11 percent completed and returned a paper questionnaire. The median completion time for the online instrument was 34 minutes. The final NSRL dataset has 1,600 cases, 890 of whom are primary leaders of their congregations. There is at least one leader in the final NSRL sample from 968 of the 1,234 NCS-IV congregations with religious leaders (78 percent).

Non-Response Bias and Sample Weights

Response rates are only a proxy for what we really care about: non-response bias. Looking at the NSRL sample as a whole, the very different response rates for primary and secondary leaders mean that secondary leaders are substantially under-represented relative to

⁵ We report approximate response rates because different assumptions about how many leaders of congregations that did not respond to the NCS-IV would have been out-of-scope for the NSRL shift the response rates up or down by 1 or 2 percentage points.

primary leaders. Conceptualizing the full NSRL sample as two separate samples – one of primary leaders and one of secondary leaders – we assessed non-response bias within each of those samples by comparing characteristics of congregations from whom we had an NSRL respondent to all relevant NCS-IV congregations. We discerned essentially no non-response bias in either the primary- or secondary-leader samples with respect to size, geography, or political ideology.

There was some non-response bias with respect to religious tradition in both the primary- and secondary-leader samples. This bias was very slight in the primary-leader sample and somewhat larger in the secondary-leader sample, where secondary leaders from predominantly white mainline Protestant congregations were somewhat over-represented, and secondary leaders from both predominantly white conservative/evangelical congregations and Black Protestant congregations were somewhat under-represented.⁶

In light of all this, we developed weights that allow analysts to conceptualize and use the NSRL as three distinct samples. It can be conceptualized as (a) a sample only of primary congregational leaders; (b) a sample only of secondary congregational leaders, or (c) a sample of all congregational religious leaders (including both primary and secondary leaders). Analysts should use the NSRL weight appropriate for each conceptualization. Moreover, the NSRL, like the NCS, is a probability-proportional-to-size sample. Leaders of larger congregations are more likely than leaders of smaller congregations to be in the sample. Consequently, in addition to weighting the data to focus on primary leaders, secondary leaders, or all leaders, analysts can weight the data so that results represent leaders without respect to the size of their congregations,

⁶ A detailed assessment of non-response bias is included as Appendix B in the NSRL codebook, available at <https://sites.duke.edu/nsrl>.

or they can weight the data so that results represent leaders in proportion to the number of people in their congregations.⁷

Although the NSRL can be used to examine congregations' primary leaders, secondary leaders, or all leaders, we believe that most analysts, for most purposes, will want to focus on primary leaders. The population of primary leaders is more clearly defined, a better response rate and minimal non-response bias in the primary-leader sample makes it higher quality than either the sample of secondary leaders or the combined sample of all leaders, and many substantive questions will pertain most directly to the population of congregations' primary leaders. That means that, although the NSRL offers analysts several options, most will want to focus on primary leaders, weighting the data so that results represent leaders without respect to their congregation's size.⁸

We describe additional complexities related to deciding which subset of religious leaders is analytically relevant in the "Lessons Learned" section, where we also offer another way to conceptualize a meaningful religious leader population that cuts across the primary- and secondary-leader distinction.

LESSONS LEARNED

We encountered several challenges while conducting the NSRL, and we learned a lot by grappling with them. In this section we describe two major sets of challenges that seem relevant

⁷ For example, if there were only two primary leaders in the sample, a male pastoring a 1,000-person congregation and a female pastoring a 100-person congregation, weighting the data so that results represent leaders without respect to the size of their congregations yields the finding that 50 percent of congregations (1/2) are led by women. Weighting the data so that results represent leaders in proportion to the number of people in their congregations yields the finding that 9 percent of people (100/1,100) are in congregations led by a woman. A detailed description of NSRL weights is available as Appendix A in the NSRL codebook at URL.

⁸ Operationally, this means that, although the NSRL public dataset contains nine weights, most analysts, for most purposes, will want to use WT_NSRL_PRIMARY_DUP.

beyond the NSRL, and our responses to them. We hope that these reflections provide deeper insight into the nature of a project of this sort, including some of the tradeoffs involved.

Lesson 1: Who is a Religious Leader?

As observers of congregations are well aware, there are many forms of congregational leadership, so defining the population from which the NSRL would sample was conceptually and empirically challenging, especially since we did not want to limit the sample only to a congregation's primary leader. At the broadest level, we wanted a sample of *religious* leaders, meaning those doing a congregation's core religious work of preaching, teaching, leading collective worship services and other rituals, and engaging in pastoral care. Leaders of NCS-IV congregations constitute a nationally representative sample of congregational leaders, but deciding exactly which leaders should be included in the NSRL was far from trivial. Indeed, operationalizing "religious leader" was the single biggest challenge we faced.

Several overlapping issues produced this complexity. Should only paid leaders be included? Only leaders who are ordained clergy? How should co-leaders be handled? Is a "campus pastor" within a multisite congregation the primary leader of that campus? Who is the primary leader of a small Catholic parish in which a full-time deacon is responsible for the day-to-day religious and administrative work, and which is visited only on Sundays by a priest who says mass? In congregations with multiple staff members, who among the paid staff and volunteer leaders should be included?

We realized early on that the conceptual and practical issues would be different for primary and secondary leaders. For primary leaders, each congregation's primary leader was included in the NSRL sample whether or not they were paid and whether or not they were ordained clergy. Requiring that primary leaders be paid or ordained would have excluded too

many congregational leaders and, of course, in a structured rather than random way. Identifying the primary leader usually was straightforward since the vast majority of congregations (94 percent) have a single person who clearly is the primary religious leader. Most often this person had a title such as Pastor, Senior Pastor, Senior Rabbi, Imam, Bishop, or the like.

Still, three kinds of primary-leader situations vexed us. First, we had to decide how to handle co-leaders, when no single person is clearly in charge. Did we really want some congregations to be represented by more than one primary leader? If not, how do we choose which of the co-leaders to include? In the end, since the NSRL was intended as a sample of leaders rather than congregations, all co-leaders were included as primary leaders, a decision that also complicated the development of our sample weights.⁹ Second, in multisite congregations, we had to decide whether to designate as the primary leader a campus pastor or the senior pastor of the multisite congregation as a whole. Our decisions here were made on a case-by-case basis, hinging on whether a particular campus or the congregation as a whole participated in the NCS, and on how congregational websites and key informants described the leadership structure. Third, in Catholic parishes in which a priest might be present only on the weekend to say mass, while a non-priest carried the bulk of the pastoral duties, we chose between the priest and the non-priest as the primary leader depending on how parish websites and key informants described the leadership situation and, in some cases, on how respondents described themselves and their work on the NSRL questionnaire itself.¹⁰ None of these situations occurred frequently, but the time we spent grappling with them was far out of proportion to the frequency of their occurrence.

⁹ Only 3 percent of all congregations have co-leaders.

¹⁰ Nearly all (97 percent) of the Catholic primary leaders in the NSRL sample are priests. The few non-priests hold titles such as Parish Director, Parochial Administrator, or Pastoral Coordinator.

Determining which non-primary leaders were in-scope for the NSRL was far more challenging. We know, of course, that volunteers do much valuable work in congregations and often are religious leaders in their own right, but including all volunteer leaders was not feasible, and carving out a subset of volunteers who should be included was intractable. This led us to limit the NSRL secondary leader sample to people who were paid for their work in the congregation.

Among paid secondary leaders, identifying those doing religious work was difficult in practice. Paid staff who only did administrative or custodial work were excluded, as were people whose only responsibilities were performing music or managing technology. Sometimes job titles clearly signaled someone who should be included, such as Associate Pastor, Parochial Vicar, Associate Rabbi, or Director of Faith Formation. But not always. Should Executive Pastors be included? What about Worship Leaders or Pastoral Assistants? Or “coordinators” of things like volunteers or family ministries? In these cases, we used congregational websites to try to assess the extent to which the person’s responsibilities went beyond administration or music performance to include substantive religious work like preaching, leading worship services beyond musical segments, religious education, counseling, or visiting the sick. Executive Pastors were mainly excluded, as were Worship Leaders in large evangelical congregations. Coordinators, Directors, and Assistants within specific ministry areas were assessed on a case-by-case basis, with an eye to whether their responsibilities went beyond administration and logistics to include substantive religious work. Deacons were included in Catholic parishes (if they were paid), but not in Protestant churches. People with Administrator titles mainly were excluded, except in Catholic parishes where it appeared that an Administrator or Parish

Administrator, often a priest, was the congregation's primary leader and engaged in activities typical of a parish priest.

In whatever manner we operationalized "religious leaders," we had to face the practical issue of identifying such people in NCS-IV congregations. How would we know who was doing what work in each congregation? We employed a three-stage strategy. The first stage occurred after a General Social Survey respondent named a congregation, making it eligible to participate in the NCS, but before a key informant from that congregation was interviewed for the NCS. In this stage we examined the congregation's website and social media pages, and GSS respondents' reports of their congregation's leaders' name, to identify a congregation's leaders. The second stage occurred as part of the NCS interview. NCS key informants were asked to confirm, correct, and supplement the leader information we found before the NCS interview. When we were not able to find any leader information before the NCS interview, NCS key informants were asked to provide that information. The goal of these first two stages was to generate a roster of religious leaders of NCS-IV congregations who would be invited to participate in the NSRL.

If, after these two stages, we still were not sure whether an individual who worked at a congregation met our definition of being a religious leader, we erred on the side of inviting them to participate in the NSRL. Consequently, the third stage in the process of identifying congregations' religious leaders used information gathered in the NSRL questionnaire itself to refine the lists of leaders generated in the first two stages. That is, we used responses to questions about the respondent's title, responsibilities at the congregation, whether or not they considered themselves to be a congregation's primary leader, and whether or not they were paid, to confirm or adjust respondents' classifications as primary or non-primary leaders, or to remove them from

the sample if they appeared not to be religious leaders as defined by the NSRL. Specifically, we removed from the final sample respondents who (1) were not primary leaders and who reported being unpaid; (2) reported doing only work pertaining to administration, communications, technology, or facilities upkeep; or (3) reported they never preached, taught, counseled, or visited people in a pastoral capacity.

We did our best to work out our definitions and operationalizations during pretesting, but new job titles and situations constantly came up throughout the entire field period, each of which required our attention. Moreover, sometimes NSRL respondents' self-reports about their job titles and responsibilities contradicted what we had gleaned from websites and/or NCS key informants. In such cases, we used a holistic approach rather than a firm rule to decide whether the respondent was legitimately in-scope for the NSRL and, if in-scope, whether the person should be considered a primary or secondary leader. At the end of the day, the vast majority of people we identified as the congregation's head clergy person using online information and NCS interviews also indicated on their NSRL questionnaire that they were, in fact, the primary leader of their congregation. And only about 100 of the approximately 1,700 initial NSRL respondents were excluded from the final sample because of their self-reported job characteristics. Both of these facts increased our confidence that our initial assessments of who was doing religious work were mainly on target, but they did not remove the need for ongoing fine-tuning of our sample.

Another complexity, this one regarding secondary leaders at very large congregations, led to our most important mid-course correction. Websites of large congregations often do not list all staff by name, and it was not practical to ask NCS key informants from such congregations to name every one of what might be 25 or more ministerial staff members. Although we initially invited all of these people to participate in the NSRL by sending a package of questionnaires to

the NCS key informant and asking that person to distribute them as appropriate, we soon realized that this impersonal approach, coupled with our inability to send reminders directly to people whose names we did not know and whose direct contact information we did not have, would produce a very low cooperation rate. Rather than accept a very low cooperation rate among secondary ministerial staff at congregations with very large staffs, we redefined the NSRL secondary leader population to exclude secondary leaders at congregations with more than 25 secondary ministerial staff members. We noted above that this exclusion does not significantly limit the NSRL's generalizability, but needing to adjust the definition of our religious leader population in the middle of data collection was an important lesson.

Stepping back from the nitty-gritty details of the NSRL, we can offer several observations related to who counts as a religious leader that may be relevant for other researchers. First, the very concept of a religious leader in a congregation is much fuzzier than we anticipated. Moreover, the nature of religious leadership varies importantly across religious groups, congregation size, and other contexts. There were ways in which our research design clashed with how religious leadership is socially organized. We all should reflect constantly on how our definitions of "religious leader" might be warping our view and limiting our understanding of congregational life and leadership. To give just one example, our decision to limit the secondary leader sample to paid staff means that secondary leaders in congregations relying more on unpaid leadership beyond the primary leader – a situation more common in predominantly Black than in predominantly white congregations – are not part of the sample.

Second, unlike textbook presentations of the research process that represent an orderly sampling process that starts with defining the population, proceeds to sampling from that population in a systematic way, and only then gathers data from sampled units, we had neither a

final definition of our population nor a final sample until after data collection was complete. As we noted, the practical difficulties of reaching secondary religious staff in congregations with very large staffs led us to redefine our population to exclude those secondary leaders, and we also used information gathered on the NSRL questionnaire itself to make final decisions about who was in- or out-of-scope. Additionally, our research team spent many hours reading congregational websites and denominational resources and debating the merits of including or excluding various types of leaders in our sample. These investigations and conversations began with NCS-IV pretesting in 2017 and continued well into cleaning of the completed NSRL dataset in 2021. We suspect that this kind of iterative process in which population definitions and criteria for sample inclusion shift over the course of a project is not uncommon in research of various sorts.

Third, perhaps the biggest practical lesson we learned from this experience was that we encountered orders of magnitude more gray areas, fuzziness, and practical difficulties regarding secondary leaders than primary leaders. All things considered, we are not sure that the substantive value of including secondary leaders in the study was worth the hundreds of hours we spent grappling with edge cases. In analyzing the data to address substantive research questions about subjects such as clergy political involvement, clergy health and well-being, clergy religious beliefs and practices, and clergy attitudes and practices concerning science, the causes of mental illness, and other things, we find ourselves focusing almost entirely on just the primary leaders. This is mainly because primary leaders are a more clearly defined type of religious leader, and there is so much heterogeneity among secondary leaders that analyzing them together with primary leaders often seems to muddy the water. There may well be substantive subjects for which analyzing just the secondary leaders, or the full sample of primary

and secondary leaders, would be appropriate. Time will tell. Until the value of that part of the sample is proven by researchers using the secondary leader sample to advance knowledge in important ways, we would recommend that future national surveys of clergy use available resources to maximize the quality of a primary leader sample rather than expand the sample to include secondary leaders.

Reflecting further on the heterogeneity of the secondary leader sample led us to construct a variable that we did not anticipate constructing. Throughout the course of the project, we were focused on the distinction between two types of religious leaders – primary and secondary. While cleaning the data, however, it occurred to us that some secondary leaders are a lot like primary leaders in that they mainly have the same education and training, engage in the same range of religious work (preaching, teaching, pastoral care), and often will be primary leaders of a congregation later in their careers. This recognition led us to construct an indicator that included all primary leaders (with one type of exception)¹¹ plus this specific type of secondary leader.

This indicator, then, identifies a subset of religious leaders that includes primary leaders and a generalist subset of secondary leaders who are much like primary leaders and likely will be primary leaders one day. This seems a meaningful category of religious leaders that, for some substantive purposes, might be an appropriate analytical sample. Our early data analyses suggest that substantive results on various subjects are qualitatively the same whether this analytical sample or just the primary-leader sample is used, but the sample size increases from 890 to 1,102 leaders, increasing statistical power. We mention this indicator here because constructing it was a direct result of encountering and grappling with the challenges of defining religious leadership

¹¹ We excluded the very small number of female primary leaders of priestless Catholic parishes.

raised in this project, and reflecting on what those challenges might imply for improving the state of the art of research on this subject.¹²

Lesson 2: Deductive Identification and Linking to the NCS-IV Data

Because all NSRL respondents served congregations that participated in the NCS-IV, and therefore NCS-IV data can be linked to NSRL data, we did not have to use valuable NSRL survey time to ask questions about a respondent's congregation's characteristics. Earlier clergy surveys, including Carroll et al. (2001) and Woolever et al. (2009a), did not include a separate extensive effort to gather data about congregations as organizational entities, so the information they gathered about congregations was limited to what was asked as part of the clergy surveys themselves. This meant that information about leaders' congregations was mainly limited to religious tradition, size, and a few other things. Being able to link to the NCS-IV data thus was a distinctive strength of the NSRL. It meant we could ask leaders more about themselves, while still being able to link them to the wealth of data about their congregations available in the NCS.

When this project began, we assumed that we would publicly release the linked NSRL-NCS-IV dataset. However, in part because of prodding from Duke University's Institutional Review Board (IRB), we had to confront the possibility that this linked dataset would greatly enhance the risk of deductive identification of NSRL respondents. We assessed this by asking research team members to assume the role of a nefarious and skilled member of the public to see if, armed with a linked NSRL-NCS dataset, such a person would be able to identify any NSRL respondents through creative use of the dataset combined with internet search engines. The

¹² Operationally, analysts can use this analytical sample by selecting cases coded 1 on the NSRL variable GENLEAD and weighting the data using one of the weights designed to allow analysis of all leaders, such as WT_NSRL_ALL_DUP.

answer was yes, leading us to conclude that publicly releasing a linked dataset would not be ethically responsible.

Moreover, since the NCS-IV dataset already was publicly available, and since it contains some information about the congregation's head clergy person, we had to consider the possibility that this same nefarious and skilled person might be able to figure out how to link NSRL cases to NCS-IV cases even if we released a stand-alone NSRL dataset with only a few congregational variables from the NCS. Our IRB suggested that this possibility meant that including even a few NCS variables in a stand-alone dataset presented a risk of deductive identification.

So, beyond not releasing a dataset that linked the NSRL to the full NCS-IV, we had to figure out how to construct an NSRL dataset that would contain at least basic congregational variables (such as religious tradition and size) that any serious analysis would require, while being unlinkable to the already publicly available NCS-IV dataset. To accomplish this, we created NSRL datasets that included various combinations of key NCS variables, with both NSRL and NCS variables coarsened in a number of ways. For each version of the dataset, we tried to link NSRL cases with publicly available NCS cases.

After testing many permutations, we found that no NSRL respondent could be identified from a dataset that included coarsened versions of four NCS variables – religious tradition, region, size, and an indicator of the congregation's predominant racial or ethnic group – along with coarsened versions of the NSRL variables measuring respondent age, year entered ministry, and country of birth. Interestingly, a dataset containing the original detailed versions of these variables would make it possible to link about half the NSRL cases to their congregations in the NCS-IV dataset. After coarsening these variables, an evil, skilled analyst still could produce a few dozen matches between NSRL respondents and NCS congregations, but each of those

matches is either incorrect (that is, it looks like a unique match but the NSRL respondent is in fact matched to the incorrect congregation) or indeterminate (that is, the correct NCS match can be narrowed only to one of several congregations). Moreover, even in the small number of instances where an analyst could narrow the correct match to small number of NCS cases, in none of those cases is it possible to combine our data with internet searches to identify the NSRL respondent. This is the NSRL dataset that will be publicly available. The fully linked NSRL-NCS dataset will be available via a sensitive data sharing agreement.

The larger lesson we learned here is that linking datasets at different levels of analysis created risks of deductive identifiability that were more complex than we anticipated. Constructing an ethically responsible public NSRL dataset was made even more difficult by the fact that the NCS-IV dataset already was publicly available. Now that so much personal and organizational information is available online, deductive identification is a greater risk than it was not that long ago, especially for datasets that include both respondent information and information about an organization with which the respondent is associated. We were committed to public release of an NSRL dataset that included essential congregation-level variables so that the NSRL would be available and useful to everyone, and we eventually found a path to that goal. But researchers aiming to produce publicly available datasets would do well to confront issues like this early in the research process.

CONCLUSION

The NSRL is a valuable new resource for the scientific study of religion. It will be useful for many descriptive and theoretical investigations of religious leaders in the United States, and it will advance knowledge about those leaders' characteristics, beliefs, attitudes, and practices in

several arenas. We have described NSRL methods and data so that analysts will be equipped to use this complex dataset. We also described several challenges we encountered in conducting this research, our responses to those challenges, and what we learned along the way. We especially highlighted the complex conceptual and practical issues involved with defining exactly who is a religious leader. We hope these reflections deepen understanding about the NSRL, the challenges of researching religious leaders, and the research process in general.

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