Changing Worship Practices in American Congregations

Joseph Roso
Duke University
joseph.roso@duke.edu

Anna Holleman
Duke University
anna.holleman@duke.edu

Mark Chaves
Duke University
mac58@duke.edu

7 October 2020

Correspondence should be addressed to Mark Chaves, Department of Sociology, Duke University, Box 90088, Durham NC, 27708-0088. ORCID: 0000-0001-6793-2302. Email: mac58@duke.edu.

Changing Worship Practices in American Congregations

Abstract

Worship is the core activity of American congregations and the primary way people experience religion collectively in the United States. We use data from the National Congregations Study (NCS), notably including data from the fourth wave, collected in 2018-19, to examine two key trends in worship practices among American religious congregations. First, the trend toward more informal and enthusiastic worship identified in earlier NCS surveys continues into 2019. Showing no signs of having reached a plateau, a more informal worship style has increased in prevalence across every major American religious tradition. Second, recently developed communication technologies have permeated congregations' worship services in ways that change the collective experience. Collected on the eve of the COVID-19 pandemic, NCS-IV data on worship and technology provide a baseline for future examinations of worship changes caused by the pandemic, and a window into congregations' technological preparedness for a world in which it is not safe to gather.

Changing Worship Practices in American Congregations

INTRODUCTION

Worship services are religious congregations' core activity. They remain the most common form of collective religious expression and the primary way people engage with religious congregations. Worship practices are rooted in religious tradition, socio-cultural heritage, ideas about appropriate ways for people to relate to God and the sacred, and congregations' attempts to provide experiences people value. Changing them means changing the way that people experience collective religious life. We use data from the NCS, notably including data from the fourth wave, collected in 2018-19, to update and enhance our knowledge of American worship practices. We highlight two important trends in the worship practices of American congregations: the continued growth of enthusiastic worship practices across religious traditions and the incorporation of relatively recent technologies into worship services.

Enthusiastic worship is characterized by expressive participation and spontaneous response from worshippers. It long has been part of American religion. Traditionally associated with African American and Pentecostal religious practice, contemporary forms of more enthusiastic worship also occur beyond these groups. For Swee Hong Lim and Lester Ruth, the distinguishing features of "contemporary worship" -- a common label for a now typical form of more informal and enthusiastic worship within Christianity -- include popular music styles, extended periods of uninterrupted congregational singing, musicians who are centrally positioned and featured worship leaders, physical expressiveness, a "predilection for informality," and a reliance on electronic technology (Lim and Ruth 2017:14). Tanya Lurhmann described one such service this way:

There are no hymnals, just PowerPoint-projected lyrics of songs people know so well that many sing them with their eyes shut. Worship is intensely individual, even when everyone sings together. "During worship," reads the bulletin, "feel free to sit or stand, sing or pray. Some people raise their hands as a sign of surrender to God, or dance in celebration." . . . Some people stand, eyes closed, palms out and upward, swaying slightly, their cheeks sometimes wet with tears. . . Occasionally someone lies prostrate or dances in the open space to the side of the seating area (Luhrmann 2012:4).

Not all services that tend in the enthusiastic direction contain all of these elements, but an increasing number of Christian worship services contain some elements of this sort (Chaves and Anderson 2008, 2014; Roozen 2016; Royle 2012). The increasing popularity of this worship style is evident as well in the growth of national conferences to promote and support it, the expansion of degree programs to credential those who lead worship in this style, and the "development of a globally-based musical infrastructure that gave music to the whole phenomenon" (Ruth 2020:10). This trend presumably will plateau at some point, but whether that plateau has been reached or, instead, this worship style continues to diffuse across American religion remains an unanswered question

Enthusiastic practices vary considerably across religious traditions. African American and Pentecostal churches each have their own traditions of enthusiastic, participatory worship (Edwards 2009; Martí 2018a). At the same time, many predominantly white evangelical churches have adopted a more informal, expressive worship style in line with prominent megachurches and associations such as Hillsong and Vineyard (Ingalls 2018; Kelman 2018; Martí 2018b; Miller 1997; Wellman, Corcoran, and Stockly 2019). Roman Catholic and predominantly white mainline Protestant traditions typically have engaged in worship that is less

enthusiastic and more ceremonial in nature (Chaves 2004:143-162). However, even Catholic and mainline churches increasingly have incorporated more enthusiastic and expressive worship practices, partly in an attempt to attract younger people (Ellingson 2007; Freudenberg 2017). These differences invite exploration of how trends in enthusiastic worship practices differ across religious traditions.

In addition to investigating whether the trend towards more enthusiastic worship has continued into 2019, we also assess the extent to which congregations have incorporated relatively new technologies into their worship. Technological developments during the digital era have reshaped daily life, including religious life, in many ways. Religious people of all ages use the internet for Bible study, outreach, and religious education, or to seek out like-minded others in virtual religious communities (Pew Research Center 2014; Richardson and Pardun 2015). In a contemporary context in which many people use new communications technologies for religious purposes, it is not surprising that congregations also have incorporated new technologies to enhance their worship and their public presence. Previous NCS surveys have shown that religious congregations have "enthusiastically [embraced] new information technologies" (Chaves and Anderson 2008:422). Indeed, technology use has changed faster than any other congregational characteristic or activity measured by the NCS, to the point that "in many churches, one is more apt to locate a video screen than a sacred icon" (Sanders 2012:11).

Like enthusiastic worship, there is nothing new about religious groups adopting the latest technologies. Whether it's the printing press, radio, television, or the internet, religious innovators and congregations always have incorporated the latest communications technologies into their efforts to reach and appeal to more people. Still, recent technological innovations have

created new kinds of worship experiences, and it is worth investigating the extent to which congregations are adopting the latest technologies.

We use NCS data to update and extend our knowledge about the prevalence of enthusiastic worship styles, and the extent to which congregations have incorporated certain technologies into their worship.

DATA AND METHODS

Sample

We use all four waves of the National Congregations Study (Chaves et al. 2020a). Data collection occurred in 1998, 2006-2007, 2012, and 2018-2019. At each time period, the General Social Survey (GSS) – 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) – 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 cooperation rates of the four NCS surveys range from 74 to 87 percent. Response rates, 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, range from 69 to 80 percent. Sample sizes are 1,234 in 1998, 1,506 in 2006-2007, 1,331 in 2012, and 1,262 in 2018-2019. The probability that a congregation appears in the NCS is proportional to its size: larger congregations are more likely to be in the sample than smaller congregations. Using weights to retain or undo this over-

representation of larger congregations corresponds to viewing the data either from the perspective of attendees at the average congregation or from the perspective of the average congregation, without respect to its size. We employ one or the other of these weights in all of our analyses. See Chaves et al. (2020b) and the online NCS codebook for more detailed methodological information about the NCS.

Measures

We use NCS data about worship practices and technology. The NCS collects data on worship services by asking informants whether or not their congregation's most recent main worship service included a range of specific practices. In this way, a nationally representative sample of worship events is embedded in the NCS's nationally representative sample of congregations. The NCS has asked about dozens of worship practices over the years, but we limit our attention to two sets of practices. The first set includes practices that have been asked about in all four NCS waves and that indicate a more informal and enthusiastic worship style: whether the most recent main worship service included drums; applause; visual projection equipment; calling out "amen" or other expressions of approval; people besides the leader raising hands in praise; adults jumping, shouting, or dancing spontaneously; and whether people spoke in tongues at any service in the last year.

The second set of items we examine concerns technology. The NCS has tracked congregations' technology use since its inception. In previous waves, that meant asking about congregations' use of websites, e-mail, visual projection during worship services, and, beginning in 2012, Facebook. Responding to the rapid pace of technological innovation, the NCS-IV added new questions about technology in worship and outside of worship. We focus on technology that

is incorporated into the worship service. This includes the visual projection item mentioned above, as well as several new items. Congregations who reported using visual projection equipment in their most recent main worship service were asked in 2018-19 if lyrics were projected and if images of musicians or speakers were projected. All congregations were asked if people watched a video clip during the worship service, and they also were asked if people were offered the opportunity to use their smartphones during the service to participate in some way.

If congregants were encouraged to use their smartphones during worship, the NCS-IV asked how smartphones were used. This question was asked in an open-ended way, with answers recorded verbatim and then coded using six dummy variables that were developed from the verbatim responses: using a smartphone to access scripture, record the service, use social media, donate money to the congregation, engage with the sermon, or interact with the service's music. These are not mutually exclusive categories; responses could be coded as mentioning more than one type of smartphone use. These responses were independently coded by two people, with the codes being refined until at least an 80 percent agreement rate was achieved for each measure.[1]

RESULTS

More Enthusiastic and Informal Worship

Figure 1 shows the increasing proportion of congregations engaging in worship practices that represent more informality or enthusiasm. There is some noise in the data, but there also is a clear signal indicating a continuing trend toward informality and enthusiasm, with some specific practices increasing quite a lot since 1998. For example, the proportion of congregations using

---

[1] We focus on technology used in worship, but the NCS-IV also asked about other ways in which congregations use technology. We say more in the conclusion about these other technology uses.

drums in their main worship service doubled from 20 percent in 1998 to 41 percent in 2018-19. Similarly, the proportion of congregations projecting something on a screen increased from only 12 percent in 1998 to 46 percent in 2018-19. Five of these seven practices increased from 2012 to 2019, and four increased in every wave. Bivariate logistic regression analyses in which each practice is regressed on survey year show that the positive linear trends for four of these practices -- jumping, projecting, using drums, and raising hands -- are statistically significant at least at the .05 alpha-level. The year coefficients in regressions with speaking in tongues, applause, and saying amen are positive but not quite statistically significant at that level (p = .10, .16, and .07, respectively). These findings make clear that more informal and enthusiastic worship practices have continued their march across American religion. Their diffusion has not yet peaked, or even slowed. Instead, these practices are increasingly common.

<center>* * * * * FIGURE 1 ABOUT HERE * * * * *</center>

Moreover, several worship features that could be interpreted as indicating a certain formal, traditional kind of Christian worship appear in services less frequently than they once did. Organs, choirs, and written programs all have declined. In 1998, 72 percent of main services followed a written order of service, 53 percent used an organ, and 54 percent had a choir. By 2018, these numbers had declined to 66 percent for written programs, 47 percent for organs, and 46 percent for choirs. [2] Placing these shifts alongside the practices that Figure 1 shows have become more common, the picture is one of an ongoing replacement of one type of worship style by another.

---

[2] Because many choirs take summers off, the reported percentages for choirs in main services exclude worship services that occurred in July or August. All three of these declines are statistically significant at least at the .05 alpha-level.

We should note that we have not strategically focused only on worship items that display this pattern. Of all the worship practices the NCS has asked about, only three that plausibly could be interpreted as indicating formality or informality have not significantly changed in the informal direction: having a time during the service when people greet each other by shaking hands, having a leader who wears a robe or other special garment, and using a guitar in the service. The prevalence of worship services in which people greet others has remained constant at about 80 percent between 1998 and 2018-19. Leaders wearing robes in services increased from 32 percent in 2006 to 39 percent in 2018-19. And using a guitar in a congregation's main worship service has held steady between 2006 and 2018-19 at about a third of congregations' main worship services. These specific results are interesting in themselves, but they do not alter the main picture of a clear trend in the direction of more informality and enthusiastic practices.

This increase in enthusiastic practices is not simply the result of one religious group adopting more enthusiastic practices over time, or of groups that traditionally employ this worship style constituting a larger share of congregations. To more easily compare trends in these practices across different religious traditions, we constructed a simple scale indicating how many of the practices shown in Figure 1 appeared in a congregation's main worship service. This measure ranges from 0, for a congregation with none of these practices, to 7, for a congregation with all 7 of the enthusiastic or informal practices that were asked about in all four NCS waves.[3]

---

[3] Cronbach's $\alpha = 0.80$ for this scale.

Figure 2 shows the average score for this index across broadly defined religious groupings.[4] There are clear and substantial differences between traditions. Consistent with previous research, black Protestants tend to have the most enthusiastic worship practices (Edwards 2009), predominantly white Evangelical congregations are second, with Catholic and mainline Protestant congregations engaging in the least informal worship styles. Still, an upward trend in enthusiastic practices is evident within each of these religious groupings. Even black Protestant worship, which already was near the maximum on this scale in earlier years, became more enthusiastic on average since 1998. OLS regression analyses confirm that all of these trends are significant at least at the .05 level.

* * * * * FIGURE 2 ABOUT HERE * * * * *

Predominantly white mainline congregations also have seen an increase in enthusiastic practices since 1998, despite such congregations historically having relatively few such practices. In fact, the increase in enthusiastic practices among mainline congregations from 1998 to 2018-19 is virtually the same as -- if not larger than -- the increase among evangelical congregations during the same time period. This finding is consistent with ethnographic observations of predominantly white mainline churches experimenting with enthusiastic worship practices they believe to be attractive to younger people and people who feel alienated from organized religion (Ellingson 2007; Freudenberg 2017; Martí and Ganiel 2014). These data show that the phenomenon these scholars observed in particular churches is far-reaching, encompassing a broad segment of American religion. Placed in the context of observations from

---

[4] These religious traditions (represented by the TRAD3 variable in the NCS dataset) are defined in a way that is similar to the Steensland et al. (2000) categorization. There are not enough Jewish, Muslim, Hindu, or Buddhist congregations to examine separately in a meaningful way.

outside the United States (Cleary 2011; Martin 1990; Miller et al. 2013; Miller and Yamamori 2007), these trends also suggest that American religion may be participating in a worldwide trend towards more informal and enthusiastic forms of collective religious practice.

Technology

Turning to congregations' technology use, Figure 3 shows the extent to which visual projection, video clips, and smartphones have been incorporated into worship services. Visual projection of some sort is the most commonly used of these technologies, with 46 percent of congregations projecting something at the main worship service in 2018-19. Usually this means projecting song lyrics, with 42 percent of all congregations doing that, but 9 percent project enlarged images of speakers or musicians. People watched a video clip during worship in 18 percent of congregations in 2018-19 and, remarkably, people were encouraged to use their smartphones during worship services in one-third of congregations. Most of these practices are more common in larger congregations, and the left-hand panel of Figure 3 shows the percentages of people who attended worship services in 2018-19 that had these features. Notably, more than half of American religious service attendees (52 percent) participated in a service that used visual projection. Watching something on a screen is now more common than not in American collective religious practice.

* * * * * FIGURE 3 ABOUT HERE * * * * *

Using visual projection equipment is the only one of these technologies that the NCS has tracked since its 1998 inception. Projection also is one of the indicators of the more informal worship style discussed above, so its increased use from 12 percent of main worship services in 1998 to 46 percent in 2018-19 was documented in Figure 1. Though larger congregations are

somewhat more likely than smaller ones to use visual projection, congregations of all sizes have been rapidly incorporating this technology into their worship services. Indeed, this more-than-threefold increase over twenty years is one of the largest changes in any congregational practice or characteristic measured in the NCS.

Encouraging people to use smartphones during worship services is perhaps the latest technological enhancement of religious gatherings. Smartphones are now ubiquitous in American life, with 81 percent of the population owning one (Pew Research Center 2019), and we know that people commonly use these devices for religious purposes such as listening to religious podcasts or reading scripture with specially designed apps. However, the extent to which congregations are using smartphones in various ways to enhance the experience of people physically present at a worship service has not been documented before now. As we noted above, smartphone use in worship services already has become widespread, with one-third of congregations incorporating this practice in 2018-19. Figure 4 sheds light on the nature of that use.

<p align="center">* * * * * FIGURE 4 ABOUT HERE * * * * *</p>

By far the most common way people use smartphones during worship services is to read scripture or follow along with scripture readings during the service, with 57 percent of congregations that use smartphones during worship using them in this way. Other relatively common smartphone uses include inviting people to record some part of the service (29 percent of congregations using smartphones), use social media during the service (16 percent), donate money (15 percent), engage with the sermon in some way, such as by filling in an online listener guide associated with the sermon (13 percent), and engage with the service's music, such as by following along with the lyrics of songs and hymns on the congregation's app (5 percent).

Interestingly, larger congregations do not incorporate smart phones at higher rates than smaller congregations – the only one of the five technology-in-worship features asked about in 2018-19 for which this is true – perhaps indicating that it is easy even for small congregations to incorporate this technology into worship. No expensive screens, projectors, or sound systems are needed, no special preparation of attractive slides or relevant video clips is required, and no special expertise is necessary to make it work. Virtually every congregation can count on many people in attendance having smartphones in their pockets, so congregations of any size and resource level can easily incorporate them into worship. Like the spread of video projection in recent decades, it seems that congregations are now building smartphones into their worship at high and probably increasing rates, with some congregations even replacing a traditional moment of silence with a moment for social media, when parishioners are invited to post or share about the service on the social media platform of their choice. Clearly, communication technologies, including smartphones, are changing collective religious practices in ways that are not yet fully understood.

CONCLUSION

We have documented two important trends within congregations: more worship services reflect an informal, enthusiastic style, and more incorporate the latest technologies, such as video projection (not just of song lyrics) and smartphones. The experience of a typical American religious service attendee is changing in the process. All of this raises additional questions: What are the nature and extent of digital divides among congregations? How do changes in collective worship practices shape individuals' religious identities and experiences? How do these changes reflect -- and possibly contribute to -- larger social and cultural developments?

Additional questions are raised by the COVID-19 pandemic's impact on congregations. We do not need systematic research to know that, in the early weeks of the pandemic, nearly all congregations who could do so transitioned from in-person to virtual worship services and other gatherings. We will need systematic research, however, to learn what the medium-to-long-term consequences of the pandemic will be for congregations. Will virtual worship services remain much more common even after they are no longer necessary? Will a hybrid of in-person and virtual gathering become a new norm for American congregations? If so, with what consequences for congregations, their people, and their communities? The NCS-IV provides a baseline for this important research agenda.

We have focused on technology used within worship services, but the pandemic has called attention more broadly to congregations' technological capacity to reach and connect people in the absence of in-person worship gatherings. The NCS-IV's broad range of technology questions -- about websites, Facebook, congregation-produced apps, live broadcasting of worship services, congregation and clergy use of social media, ability to receive financial donations electronically, availability of worship service recordings on websites, and staff who focus on the congregation's virtual presence – will shed light on congregations' readiness to meet this challenge, and variations in that readiness.

Some questions on these subjects can be investigated with NCS data while others will require other kinds of data and research. We hope researchers will pursue these and other questions and thereby advance still further our knowledge and understanding of what happens when people gather to collectively practice their religion.

REFERENCES

American Association for Public Opinion Research. 2016. *Standard definitions: Final dispositions of case codes and outcome rates for surveys. 9th edition*. Available at https://www.aapor.org/AAPOR_Main/media/publications/Standard-Definitions20169theditionfinal.pdf, accessed 20 July 2020.

Chaves, Mark. 2004. *Congregations in America*. Cambridge: Harvard University Press.

Chaves, Mark and Shawna L. Anderson. 2008. Continuity and change in American congregations: Introducing the second wave of the National Congregations Study. *Sociology of Religion* 69(4):415–40.

_____. 2014. Changing American congregations: Findings from the third wave of the National Congregations Study. *Journal for the Scientific Study of Religion* 53(4):676–86.

Chaves, Mark, Shawna Anderson, Alison Eagle, Mary Hawkins, Anna Holleman, and Joseph Roso. 2020a. *National Congregations Study: Cumulative data file and codebook*. Durham, North Carolina: Duke University, Department of Sociology.

Chaves, Mark, Mary Hawkins, Anna Holleman, and Joseph Roso. 2020b. Introducing the fourth wave of the National Congregations Study. *Journal for the Scientific Study of Religion* 59(4): forthcoming.

Cleary, Edward L. 2011. *The Rise of charismatic Catholicism in Latin America*. Gainesville: University Press of Florida.

Edwards, Korie L. 2009. Race, religion, and worship: Are contemporary African-American worship practices distinct? *Journal for the Scientific Study of Religion* 48(1):30–52.

Ellingson, Stephen. 2007. *The megachurch and the mainline: Remaking religious tradition in the twenty-first century*. Chicago: University of Chicago Press.

Freudenberg, Maren. 2017. *The mainline in late modernity: Tradition and innovation in the Evangelical Lutheran Church in America*. Lanham: Lexington Books.

Ingalls, Monique M. 2018. *Singing the congregation: How contemporary worship music forms evangelical community*. New York: Oxford University Press.

Kelman, Ari Y. 2018. *Shout to the Lord: Making worship music in evangelical America*. New York: New York University Press.

Lim, Swee Hong and Lester Ruth. 2017. *Lovin' on Jesus: A concise history of contemporary worship*. Nashville: Abingdon Press.

Luhrmann, T. M. 2012. *When God talks back: Understanding the American evangelical relationship with God*. New York: Alfred A. Knopf.

Martí, Gerardo. 2018a. "*Maranatha* (O Lord, come): The power–surrender dynamic of Pentecostal worship." *Liturgy* 33(3):20–28.

_____. 2018b. "The global phenomenon of Hillsong Church: An initial assessment." *Sociology of Religion* 78(4):377–86.

Martí, Gerardo and Gladys Ganiel. 2014. *The deconstructed church: Understanding emerging Christianity*. New York: Oxford University Press.

Martin, David. 1990. *Tongues of fire: The explosion of Protestantism in Latin America*. Cambridge: Blackwell.

Miller, Donald E. 1997. *Reinventing American Protestantism: Christianity in the new millennium*. Berkeley: University of California Press.

Miller, Donald E., Kimon H. Sargeant, and Richard Flory. 2013. *Spirit and power: The growth and global impact of Pentecostalism*. New York: Oxford University Press.

Miller, Donald E. and Tetsunao Yamamori. 2007. *Global Pentecostalism: The new face of Christian social engagement*. Berkeley: University of California Press.

Pew Research Center. 2019. *Demographics of mobile device ownership and adoption in the United States*. Washington, D.C.: Pew Research Center.

Pew Research Center. 2014. *Religion and electronic media: One-in-five Americans share their faith online*. Washington, D.C.: Pew Research Center.

Richardson, Kathy Brittain and Carol J. Pardun. 2015. The new scroll digital devices, Bible study and worship. *Journal of Media and Religion* 14(1):16–28.

Roozen, David A. 2016. *American congregations 2015: Thriving and surviving*. Hartford Institute for Religious Research. Available at: https://faithcommunitiestoday.org/wp-content/uploads/2019/01/American-Congregations-2015.pdf, accessed 25 July 2020.

Royle, Marjorie H. 2012. *FACTs on worship: 2010*. Hartford Institute for Religion Research. Available at: https://faithcommunitiestoday.org/wp-content/uploads/2019/01/FACTs-on-Worship.pdf, accessed 25 July 2020.

Ruth, Lester. 2020. Introduction: The importance and history of contemporary praise & worship. In *Essays on the history of contemporary praise and worship*, edited by Lester Ruth, pp. 1-12. Eugene, OR: Pickwick Publications.

Sanders, George. 2012. *Panem et circenses*: Worship and the spectacle. *Culture and Religion* 13(1):1–17.

Smith, Tom W., Michael Davern, Jeremy Freese, and Stephen L. Morgan. 2019. *General Social Surveys, 1972-2018: Data file and codebook*. Chicago: NORC at the University of Chicago.

Steensland, Brian, Lynn D. Robinson, W. Bradford Wilcox, Jerry Z. Park, Mark D. Regnerus, and Robert D. Woodberry. 2000. The measure of American religion: Toward improving the state of the art. *Social Forces* 79(1):291–318.

Wellman, James, Katie Corcoran, and Kate Stockly. 2019. *High on God: How megachurches won the heart of America*. New York: Oxford University Press.

Figure 1:
Change in Enthusiastic Worship Practices, 1998-2019
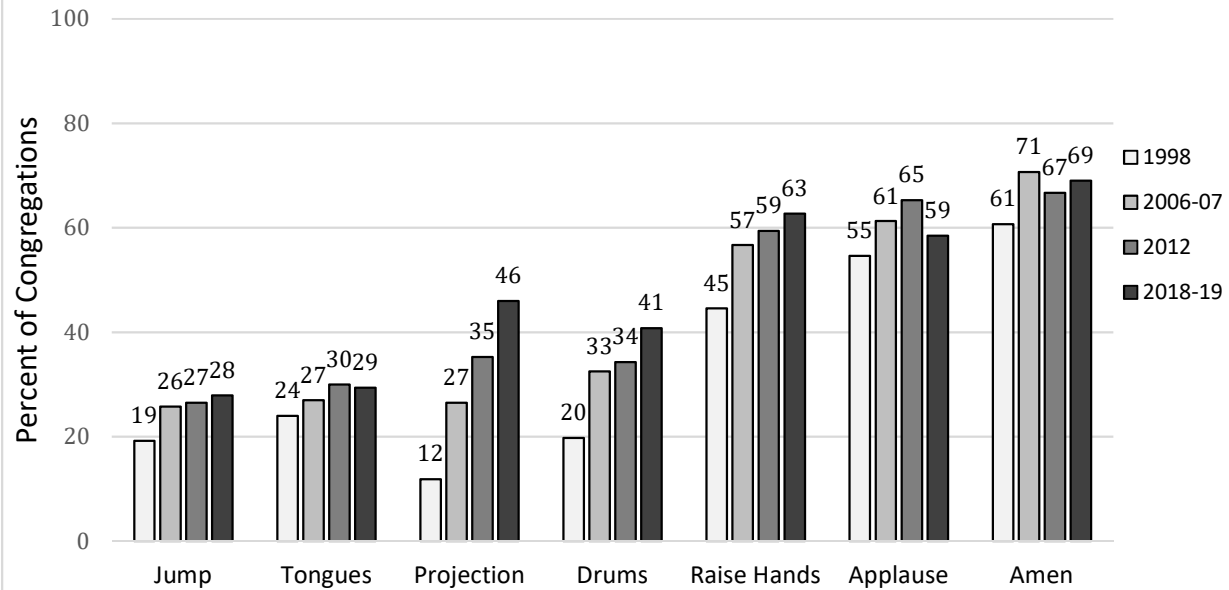
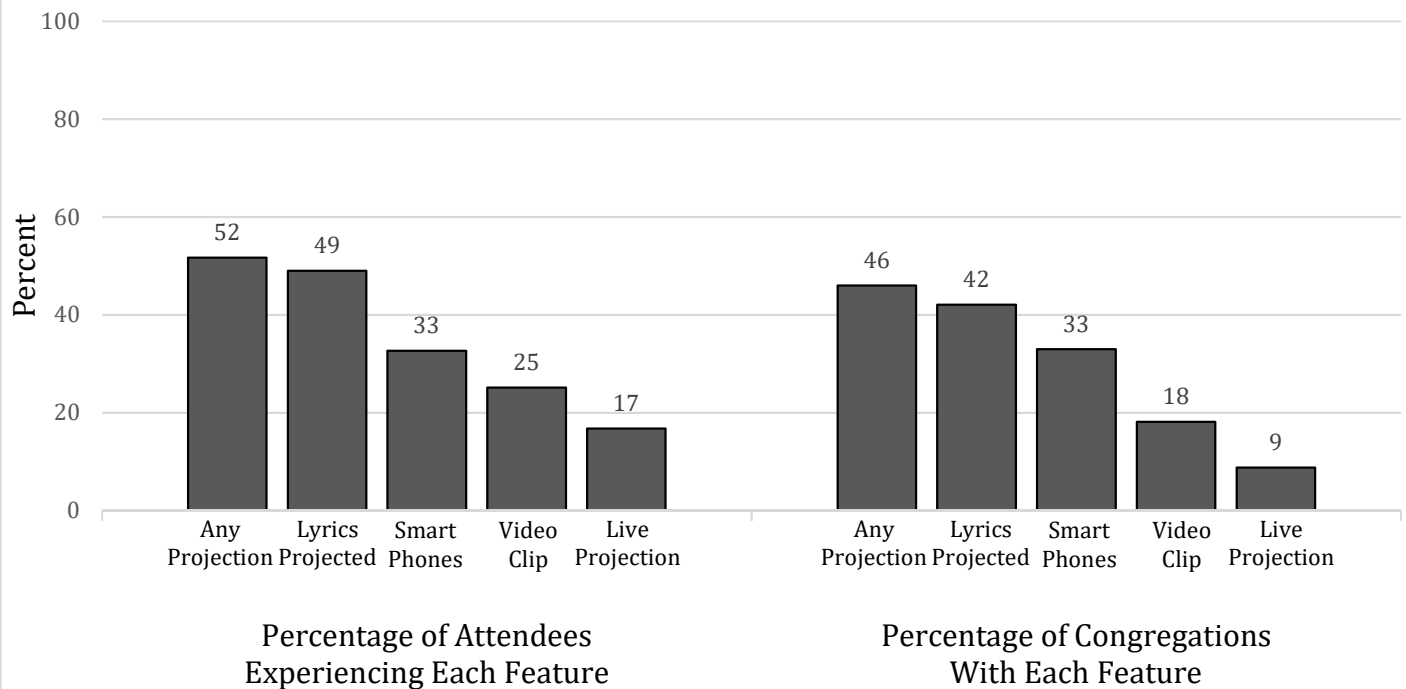*Source*: National Congregations Study, 1998-2019.

Note: A logistic regression in which each worship feature is regressed on survey year yields positive survey-year coefficients that are significantly different from zero at least at the $p < .05$ alpha-level for jumping, projecting, using drums, and raising hands. The positive year coefficients in regressions with speaking in tongues, applauding, and saying amen are positive but not statistically significant at that level (p = .10, .16, and .07, respectively). The data are weighted from the congregation perspective.

Figure 2:
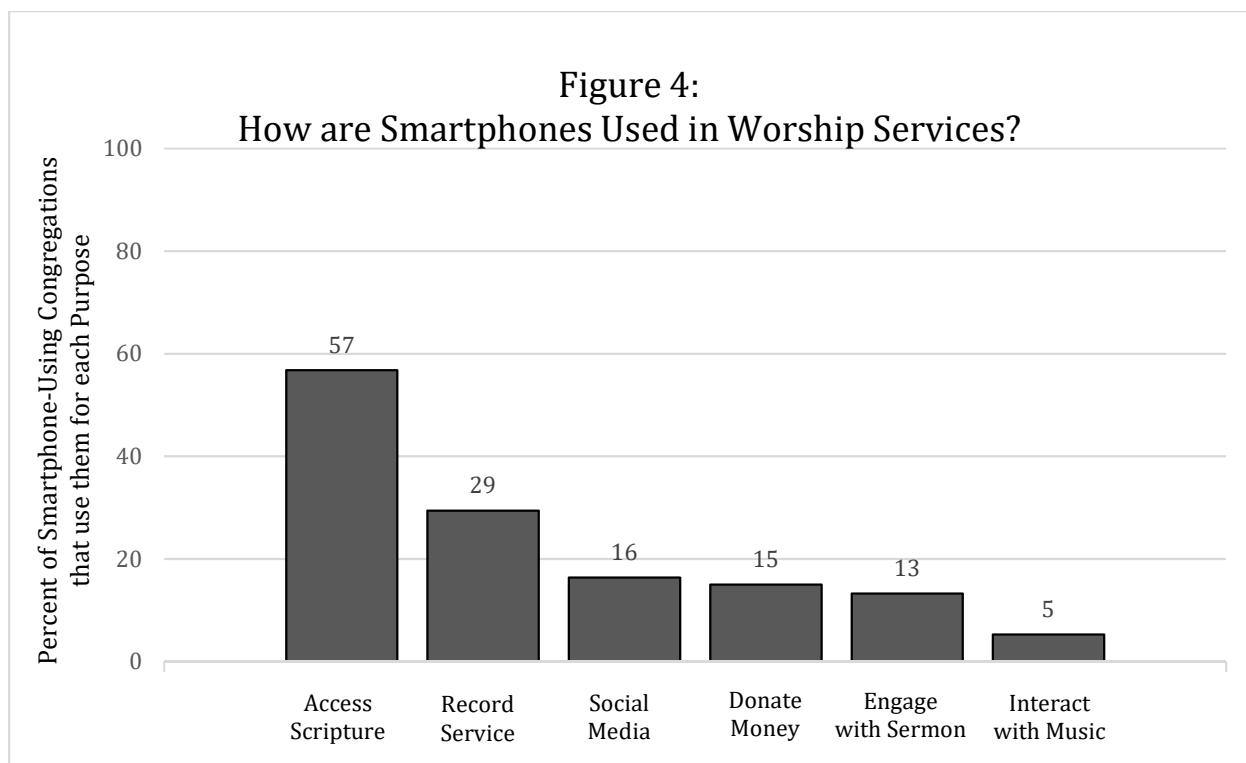Change in Enthusiastic Worship by Religious Tradition, 1998-2019
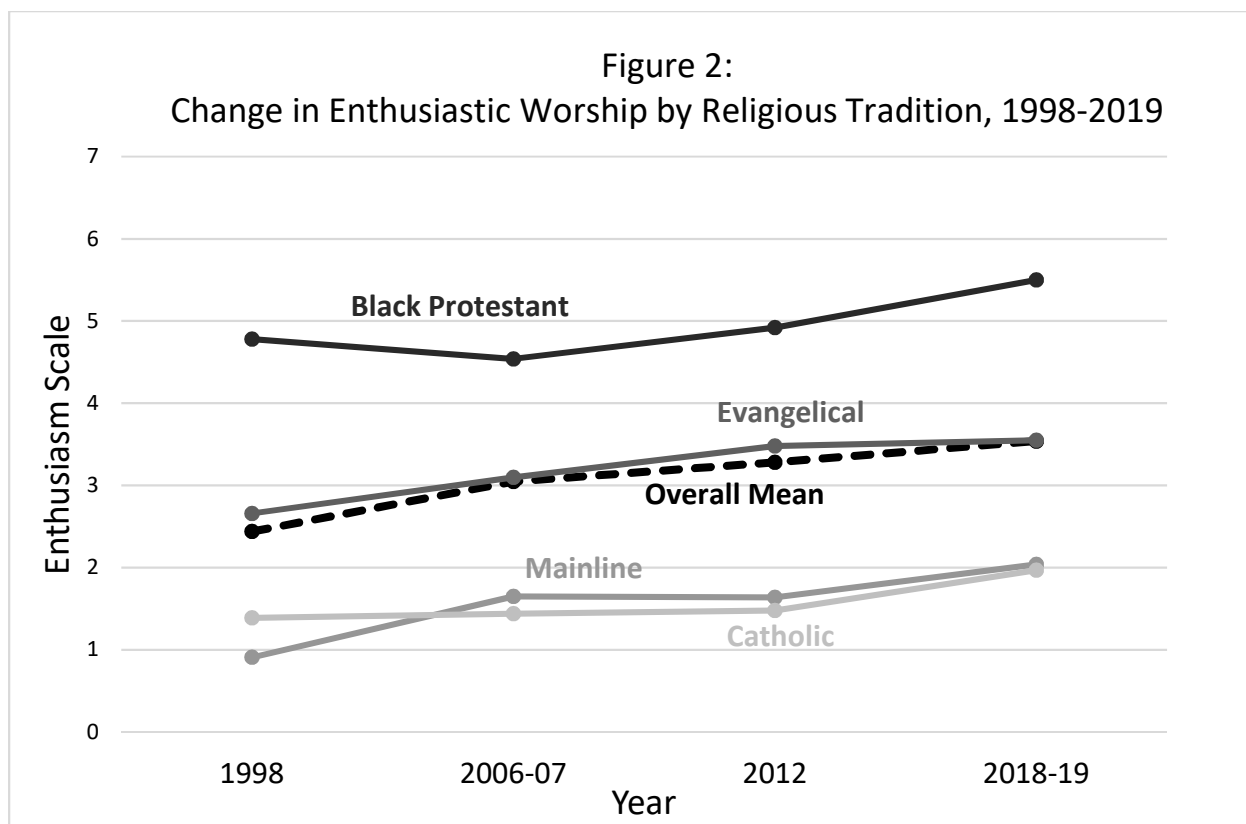
Source: National Congregations Study, 1998-2019.

Note: OLS regressions in which the enthusiasm scale is regressed on survey year for congregations within each religious tradition yield survey-year coefficients that are positive and significantly different from zero at least at the $p < .05$ alpha-level for each line in this figure. The data are weighted from the congregation perspective.

Figure 3:
Technology Used During the Most Recent Worship Service

Percentage of Attendees
Experiencing Each Feature

Percentage of Congregations
With Each Feature

Source: National Congregations Study, 2018-2019.

Figure 4:
How are Smartphones Used in Worship Services?

Source: National Congregations Study, 2018-19.

Note: The denominator for these percentages is the 33 percent of congregations that encourage smartphone use during worship services.