Religious Diversity in the United States
Simpson’s Diversity Scale Applied to Religious Families


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After the 2000 U.S. Religion Census (Religious Congregations and Membership in the United States 2000, Jones et al.) was old news, our offices received a question about religious diversity. Which city was the most religiously diverse? We already knew that no metro area had more of the 149 reporting groups than Chicago, but was that really diversity? Well over half the adherents in Chicago were Catholic, which wouldn’t seem very diverse despite the presence of 103 additional groups. The Washington, DC, area had nearly as many different groups (97) and the largest only contained about one-third of the total adherents. Perhaps the total number of groups was less important than the dominance of one or two groups. In fact, that raised the whole question of just what is meant by diversity. Is the distinction between Judaism and Islam the same level of diversity as that between the United Methodist Church and the Free Methodist Church? And, to those on the outside, is there any distinction between one Pentecostal group and another?

How to measure diversity?

Fortunately, there are measures of diversity available, and we have landed on the Simpson Index of Diversity for our analyses. Simpson’s Index (D) is defined as

\[ D = \sum \left( \frac{n}{N} \right)^2 \]

This measure yields a result between 0 (complete diversity) and 1 (no diversity).

The total number of instances of the data is the large N. This universe can be used for bird species, for flower types, or for religious adherents. Then, one assigns each instance of the data to the appropriate category, the small n. For each category, one divides the small n (instances in that category) by the large N (total instances overall). This is the same first step as in computing a percentage, but rather than multiplying by 100, one squares the result. The same is done for each of the categories, and the squared results are added together.

<table>
<thead>
<tr>
<th>Category</th>
<th>Instances</th>
<th>Division</th>
<th>Squaring</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crows</td>
<td>36</td>
<td>36/90 = 0.4000</td>
<td>0.1600</td>
</tr>
<tr>
<td>Blue Jays</td>
<td>24</td>
<td>24/90 = 0.2667</td>
<td>0.0711</td>
</tr>
<tr>
<td>Robins</td>
<td>30</td>
<td>30/90 = 0.3333</td>
<td>0.1111</td>
</tr>
</tbody>
</table>

Simpson’s Index is the total of the last column, or .3422.
Assuming ten categories, with exactly 1 instance of each category, this would yield a Simpson’s Index of 0.1000. \( \frac{1}{10} = 0.1; 0.1 \times 0.1 = 0.01; 0.01 + 0.01 + 0.01 + 0.01 + 0.01 + 0.01 + 0.01 + 0.01 + 0.01 + 0.01 = 0.1000 \)

With more groups represented and with a smaller proportion within any single group, the second example would represent much more diversity. However, with 0.1000 representing *more* diversity than 0.3422, this seems counter-intuitive. This is why Simpson’s Index of Diversity adds one more step:

\[ 1 - D \]

This step effectively reverses the scale, so that 0 represents no diversity and 1 represents maximum diversity. Our second example then becomes 0.9000 versus 0.6578 for the first, and it seems logical that the larger number represents more diversity.

**What diversity should we measure?**

But knowing *how* to measure diversity does not answer the second question. In the example of birds, is it important to know the gender of the birds as well in measuring the diversity? What about ages of the birds? Subspecies? Aren’t crows and blue jays both nuisance birds, so why not lump them into one category? Defining the categories is influenced by what one considers important.

To measure religious diversity, what categories are appropriate? Should we treat every group as absolutely unique? This is easiest, and avoids value judgments about how to categorize the various faith groups. In the 2010 *U.S. Religion Census*, Grammich *et al.*, 152 groups had adherents reported at the county level. Considering the adherents of each group to be a separate category, the most diverse metropolitan area in the country was Elkhart-Goshen, Indiana, in 2010.

The band of brown counties in the Midwest is indicative of the large number of small Protestant groups with congregations in the nation’s heartland.

However, citizens of New York and Los Angeles might be surprised to know that the concentrations of Jewish and Buddhist believers in their areas do not make them religiously diverse. Perhaps some additional categorization is needed.

In fact, some grouping has already taken place in the *U.S. Religion Census* itself. One category is “Non-denominational Christian Churches.” Every one of those individual congregations could be considered its own faith tradition. Further, several hundred Buddhist and Hindu groups were listed in the *Religion Census* under just four Hindu and three Buddhist traditions.
Rather than treating each religious group as its own category, one could categorize them into the various world religions. There is always some question about where to place some groups, but for this comparison self-identification seemed best. Therefore, the Church of Jesus Christ of Latter-day Saints and the Unitarian Universalist Association of Congregations are included as part of the Christian religion. The *Religion Census* has 2010 adherent counts for Christian, Islam, Judaism, Buddhist, Hindu, Bahá’í and Zoroastrian groups.

The first thing to note is that the highest diversity figure, .048497, would have been in the lowest quintile in the previous map. If the same scale had been used as in the previous example, the map would have indicated no diversity.

Although many world religions are found in the United States, the Christian religion still dominates the religious landscape in America.

But some areas have more non-Christian diversity than others. The West Coast, East Coast, and large cities throughout the nation are more likely to have other world religions than most of the Midwest and South. South Carolina is an interesting exception, perhaps due to the unusually large number of Bahá’í adherents found in that state.

But in the United States, there is significant diversity in the Christian faith. The presence of Orthodox Christians would indicate religious diversity to many Americans. An area that is overwhelmingly Catholic or Mormon would seem less diverse than an area with a strong Protestant presence as well. And within Protestantism, there seems a definite divide between Mainstream groups and more Conservative denominations. Protestant groups focused on the African American community constitute a separate category for some researchers.

One suggested categorization involves twelve classifications of religious adherents in the United States.

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>Religious Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Protestant</td>
<td>African Methodist Episcopal, Church of God in Christ, etc.</td>
</tr>
<tr>
<td>Buddhist</td>
<td>Buddhist groups</td>
</tr>
<tr>
<td>Catholic</td>
<td>Catholic Church</td>
</tr>
<tr>
<td>Conservative Protestant</td>
<td>Southern Baptist, Assemblies of God, Church of the Nazarene, etc.</td>
</tr>
</tbody>
</table>
This grouping is only intended to represent what many Americans would consider religious diversity within an American community. Theological traditions within Protestantism are largely ignored, though they might be very important within a European analysis of diversity. In Western Asia, the distinction between Eastern Rite and Oriental Orthodox churches would be significant. In India, the various branches of Hinduism would need to be classified separately. For the United States, it is relatively easy to adjust the categories, using raw data available through the *Religion Census* for such analyses.

With this suggested breakdown, the diversity pattern changes again. Despite the presence of many immigrant religious groups in New York City or Chicago, the overwhelming Catholic presence in those areas makes the diversity much lower than in less-Catholic Minneapolis or Seattle. Washington, DC, with its close-to-equal mix of Mainline and Conservative Protestant groups, along with many Orthodox congregations, Islamic masjids, and Jewish synagogues, becomes the most diverse major metropolitan area. Only Moscow, Idaho, has a greater diversity index. (A large diversity index is typical in college communities.)

The strength of the Conservative Protestant groups throughout the south and the presence of the Latter-day Saints in Utah and Eastern Idaho gives those areas very low diversity indices. African American churches may be the reason for such diversity as shows up throughout most of the Southern states.

The absence of any dominant group in the Northwest helps to account for the great diversity in Washington and Oregon. With no strong Catholic influx, as in California, Texas, and big cities of the Midwest and East, and without a strong Protestant tradition from either the Mainline or Conservative groups, the Buddhist and Mormon groups are proportionately larger than in other areas.
But there is another factor in American religiosity. As mentioned above, some areas have relatively few people claimed by any religious group. These unclaimed persons constitute about half the United States population. Based on polling data, we estimate that 80% of the unclaimed would say that they believe in God, 60% would consider themselves to be Christian, and 20% believe that they are members of a religious group. Only one-fifth of the unclaimed, about 10% of the national population, would actually say that they are agnostics or atheists.

Some of the 20% of the unclaimed who say they are members may belong to one of the 84 smaller groups included in the *Religion Census* that were not able to provide adherent data. Others may not realize that many local churches or synagogues periodically remove people from their membership lists. And of course some may belong to groups that did not participate in the study at all. But comparisons with other data sources, notably the *Yearbook of American and Canadian Churches*, indicate that at least half of those who believe that they are members are, in fact, not on any such lists.

The unclaimed population does not have a uniform attitude toward religious involvement. But its lack of close involvement in an organized religion can be seen as a religious statement of sorts. If one treats the unclaimed as a thirteenth American religious category, a new picture of religious diversity emerges.

Under this scenario, Rochester, Minnesota, and Beaumont, Texas, are the metropolitan areas with the most religious diversity. Most of the college communities drop further down the list with their large numbers of unclaimed persons. Memphis and Houston are the most diverse metropolitan areas with more than one million people.

The Pacific Northwest, especially Oregon, may be diverse when one only considers those involved in religion. But having over two-thirds of the population not claimed by any of the 152 religious groups creates a very non-diverse religious atmosphere. Michigan, Florida, and northern New England are similarly affected by including the unclaimed as a separate group.

*Where is the greatest diversity?*

So, which area of the country has the most religious diversity?

If we simply measure the presence of separate groups, the lower Midwest has the most diversity. More of our small denominations are concentrated here. The million-plus metropolitan area with the highest Simpson Index of Diversity is Virginia Beach, VA-NC.
If we limit the measure to different world religions, our largest cities and the two coasts are the most diverse. These are the areas where other cultures traditionally arrive first, so it is not surprising that other religions show up stronger here. The million-plus metro with the highest Simpson Index of Diversity is New York, NY-NJ-PA.

If we broadly define some religious groupings often recognized in the United States, the West has the strongest diversity index, excluding strongly Catholic southern California and the Mormon corridor of Utah and eastern Idaho. With few dominant religious groups in the rest of the region, smaller groups divide the religious adherents more evenly than in other parts of the country. The million-plus metro with the highest Simpson Index of diversity is Washington, DC-VA-MD-WV.

If we include the unclaimed group as a distinct religious category, then the Great Plains would be the most diverse section of the country. The unclaimed population is not significantly larger than several other religious traditions in this area, creating a higher diversity level. The million-plus metro with the largest Simpson Index of diversity is Memphis, TN-AR-MS.

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1 The “Bible Belt,” often mentioned in analyses of religious differences in the nation, is best described as that area where Conservative Protestants make up at least 25% of the population.


3 Gallup poll, June, 2011

4 Gallup poll, December, 2009

5 Gallup poll, December, 2010