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How religion is changing in America

Intro:

“One nation under God”. In 1954, President Eisenhower encouraged Congress to add the phrase “under God” to the Pledge of Allegiance in response to Communist threats. Religion, and specifically Christianity, has always been closely integrated to this country and what it means to be American. Being someone who grew up in a religious, Christian household, I find myself in a position very similar to many. A young adult who must figure out his own beliefs with this new found freedom from influence. This led me to want to study how America’s relationship with religion has changed over the years.

Research questions:

1. How does the current landscape of religion in America look different compared to America 50 years ago?
2. Does the younger generation of Americans have a different relationship with religion compared to older Americans?
3. How has America’s perspective on religion changed in recent years?

Data:

For this research study, all data was received from the General Social Survey. The GSS is a personal interview survey designed to monitor changes in both social characteristics and attitudes currently being conducted in the United states. The variables that I used in this study were:

- Respondents confidence in existence of God
- How often respondent attends religious services

How does the current landscape of Religion in America look different compared to America 50 years ago? To analyze and answer my first research question, I decided to look at the frequency that respondents attend religious services. Furthermore, I decided to only look at respondents that answered either “every week” or “multiple times a week” in the hopes to better understand the change in percentage of American’s that consistently practice a religion. The results collected by the GSS can be seen here.

Table 1: raw data of American's that consistently attend a religious service(1978, 2021)

<i>Consistently attended religious services</i>	<i>1972</i>	<i>2021</i>
<i>Yes</i>	561	710
<i>No</i>	1039	3252
<i>Total</i>	1600	3962
<i>Proportion that did attend</i>	0.351	0.179

What I found was a significant decrease in the proportions of American’s that consistently attend religious services when comparing results from 1972 to 2021. These same results can be better seen here in this visualization of the same data.

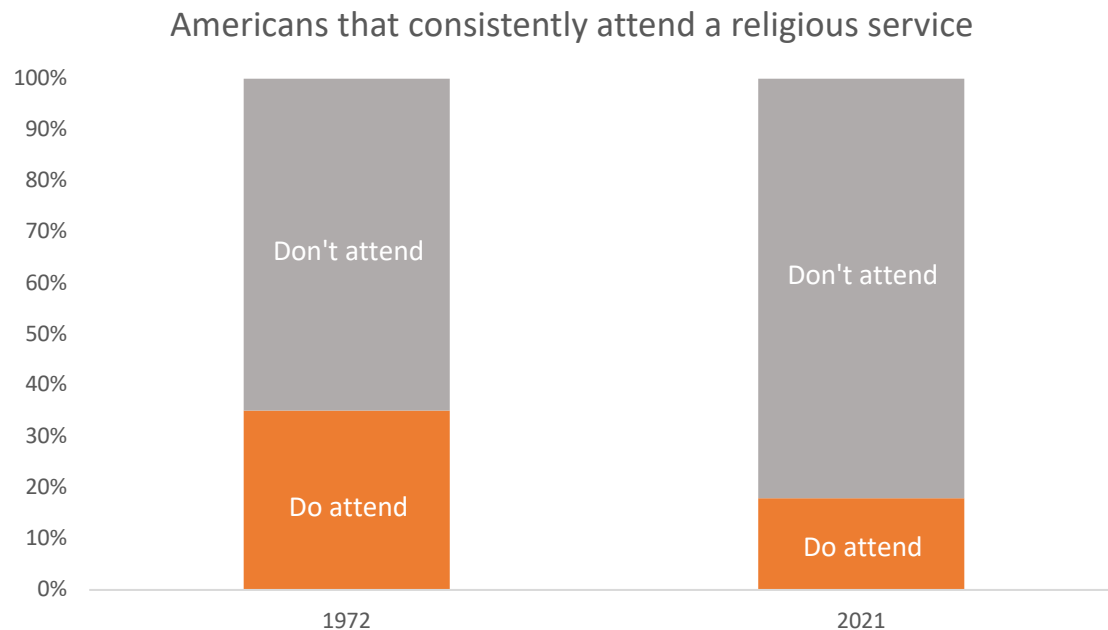


Figure 1: side by side bar plot of proportion of American's that consistently attend religious services(1972 vs 2021)

To further explore this question, I analyzed the difference between proportions with a null and alternative hypothesis to gain a p-value and confidence interval. Using “1972 = 2021” as my null hypothesis and “1972 > 2021” as my alternative, I found a p-value of less than 0.0001, giving me significant evidence that the proportion of American’s that consistently attend a religious service has diminished from 1972 to 2021. Furthermore, the confidence interval I found using the same techniques concluded a 95% certainty that the true decrease in proportions from 1972 to 2021 is between 0.145 and 0.198.

Now that I have explored this facet of what it means to be religious in America, and have proven the steady decline, I wanted to further dive into the current state of religion in America. More specifically, I wanted to explore this topic with the added variable of age. This led me to my second research question: Does the younger generation of Americans have a different relationship with Religion compared to older Americans? To study this question, I decided to use a different variable than the one I looked at previously. For this line of study, I decided to look at “Respondents confidence in existence of God”, and more specifically, the percentage of respondent’s that answered “Know God exists and no doubts” from the most recent 2021 survey. The results were as follows.

Table 2: Raw data of respondents that believe in God with no doubt

Respondent believes in God with no doubt	18-34	35-49	50-64	65+
Yes	183	287	359	484
No	316	301	311	374
Total	499	588	670	858
Proportion	.0859	.1038	.136	.1691

Here we see that the youngest age group bodes the lowest proportion of respondents that believe in God with no doubt. Moreover, to better analyze these results, I ran similar statistical procedures as with the previous study to obtain a p-value and confidence interval, combining the older 3 groups, to create a singular old group(35+) to compare with the young group. I used a null hypothesis of “young = old” and an alternative of “young<old” and ended up with a p-value of less than 0.0001. With the same techniques as before we found a confidence interval, giving us a 95% certainty that the true increase in proportion from the young to old age group is between 0.120 and 0.215.

In addition to concluding the difference with the 18-35 age group, the table also shows a general positive correlation between age and proportion, with the proportion increasing in each older age group. To better analyze and visualize this new hypothesis, I broke down the responses into individual ages rather than age ranges, these results can be seen here.

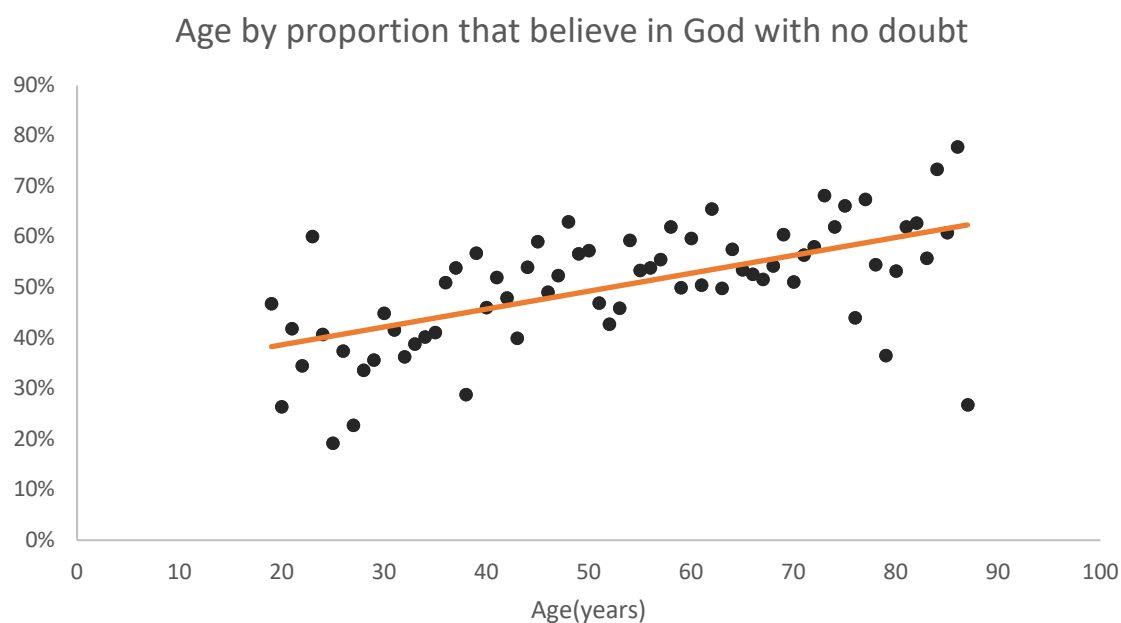


Figure 2: Scatter plot of Age by belief in God with no doubt(2021)

Now to analyze this hypothesis, I used a mixture of regression and ANOVA techniques to obtain statistics about the correlation and effect of age on belief in God. First from the ANOVA table a p-value of less than 0.0001 was found, giving statistically significant evidence of this age effect. Furthermore, from these tests I obtained an correlation value of 0.598, an intercept value of 31.584, and a slope value of 0.354%, all accompanied by a p-value of less than 0.0001. These statistics both show us the existence of the effect, but also that each year of age increased is accompanied by an increase of about 0.354% in the proportion of people that believe in God with no doubt.

As I move on to attempting to answer my third and final research question(How has America’s perspective on religion changed in recent years?), I decided to stick with this survey question, as was explored in my second research question, but this time look at the response rate for multiple answers.

In addition to the proportion of respondents that believe in God completely, I also chose to look at respondents that answered that they believe in some sort of higher power. For these proportions, I looked at data from 2006 to 2021 to get a good picture of how they have changed in recent years.

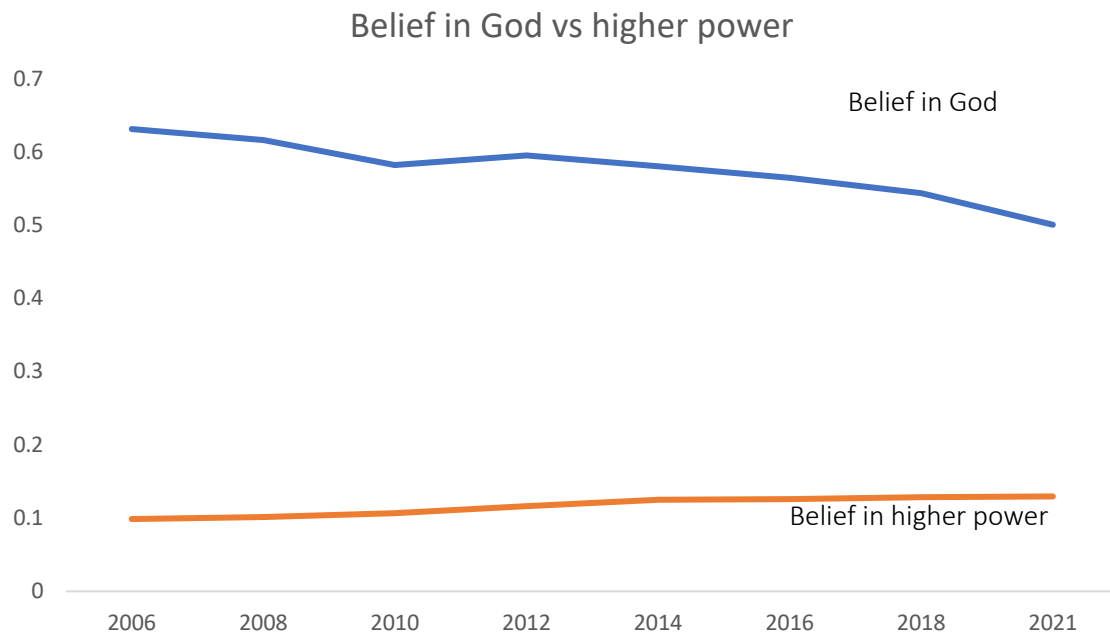


Figure 3: multiple line graph showing belief in God vs higher power, 2006-2021

What I found most interesting about this data and the reason that I chose it is the difference in trends between these two proportions over the last few years. While the proportion of Americans that believe fully in God has decreased by 13.1% since 2006, the proportion of Americans that believe in some sort of higher power has actually increased 3.1% in this same timeline, showing a steady growth every year.

Reflection:

No matter how you measure it, Americans have been, and continue, to show a steady departure from organized religion. As we saw in the first statistic, the proportion of Americans that consistently go to a religious service has shrunk to nearly half of what it was 50 years ago. Similarly, just in the past 10ish years, the proportion of Americans that fully believe in God has decreased by 13.1%. This shift can also be seen in the effect age has on religious statistics. The clear effect between age and belief in God is very representative of the shrinking wave that is taking over religion in America. But what I found when researching my last research question is that saying Americans are shying away from organized religion is not the same as saying Americans are becoming less spiritual. While the belief in God is showing a steady decline in America, the proportion of Americans that believe in some sort of higher power is actually increasing. I think what I am trying to say is that although religion seems to be shrinking away from a role it once had in America, the belief systems and central ideas that come with religion do not seem to be on this same declining path ... yet

Works Cited

<https://www.ushistory.org/documents/pledge.htm>

<https://gss.norc.umd.edu/>