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Why Liberals and Conservatives are More Different than You Think: The Science Behind Political Opinions

Joanna Zienkiewicz

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A watercolor illustration featuring a large red elephant on the left and a large blue horse on the right. In the foreground, several stylized human figures are depicted in red and blue tones, mirroring the colors of the animals. The background is a mix of red and blue washes.

Why Liberals and Conservatives are More Different than You Think

The Science Behind Political Opinions

Written by Joanna Zienkiewicz
Illustrated by Mikaila Hoffman

From increasing education spending to increasing military spending, stricter gun laws to stricter immigration laws, environmental protection to fetal protection, there are many issues that showcase the ideological differences that separate liberals and conservatives. The disagreements that stem from these differences have long left the realm of polite debate and become hostile and, in some situations, even violent. Both sides express prejudice and intolerance toward each other, which often manifests in the form of negative stereotypes (e.g., liberals are naïve, entitled millennials who overspend on coffee and avocados, while conservatives are ignorant, wealthy, NASCAR-loving religious fanatics). Many view an individual's political ideology as stemming from personal values and moral character. Recent research, however, has shown that the differences in worldview between liberals and conservatives are significantly related to an individual's biology and psychology.

For over half a century, psychologists and sociologists have speculated on the psychological motives and tendencies that influence ideological differences between the left and the right. Investigations on this subject have shown that differences between the two groups are not superficial, but occur on a psychological level. Liberals and conservatives exhibit different personality traits and even different unconscious reactions. For example, one study found that conservatives are more sensitive to threatening facial features than liberals, while another study found that conservatives' eyes tend to linger for a longer period on disturbing images in a collage of photographs. In examining the bedrooms of college students, a team of psychologists found that liberals own more travel memorabilia and books, suggesting that they are more adventurous than conservatives, while conservatives possess more organizational and cleaning items, suggesting they are more self-disciplined than liberals.

In addition to the research psychologists and sociologists have produced on the psychological and environmental influences on political orientation, recent studies have begun to identify biological factors. It is difficult to imagine that people could be born with predispositions to certain opinions, and for a long time researchers considered this not to be a possibility. Research has shown, however, that social attitudes cannot be attributed exclusively to psychological or environmental factors, prompting further investigation into how an individual's biology may influence their political orientation. Several studies, for example, have begun examining the relationship between neuroscience and political attitudes.

A study conducted by neuroscientists at University College London found evidence that political opinions of young adults can be related to physical differences in brain structure, specifically in the volume of grey matter in different brain regions. Grey matter is a type of brain tissue that is made up of the cell bodies of neurons, which chemically communicate with one another to stimulate or inhibit brain activity. The variation in amount of grey matter can largely be attributed to genetic factors, though environmental influences have also been found to play a role. For example, some experienced taxi drivers have developed an increased volume of grey matter in a brain region associated with spatial navigation.

The University College London study utilized structural MRI scans of young adults who had confidentially self-reported their political attitudes on a five-point scale ranging from "very liberal" to "very conservative". The group found a correlation between the political orientation of these young adults and the volume of grey matter in different areas of the brain. The study concluded that greater conservatism is associated with greater grey matter volume in the amygdala, while greater liberalism is associated with greater grey matter volume in the

anterior cingulate cortex.

The amygdala has many functions related to emotional processing, but it is most active in situations that induce fear or anxiety. The fact that conservatives were found to have more grey matter in their amygdala, and therefore have greater sensitivity to fear, supports the conclusion that they are generally more anxious than liberals. The discovery that liberals tend to have more grey matter in their anterior cingulate cortex supports the idea that they are more tolerant of discord, as the anterior cingulate cortex is involved in decision making and activates in moments of conflict or uncertainty. This study therefore supports psychologists' findings that liberals tend to display a preferred mode of thinking, remembering, or problem-solving that reacts well to ambiguity and novelty. However, it is important to note that correlation is not the same as causation.

In addition to neurological differences, genetics have also been found to affect political ideology. Studying twins is a popular method among scientists in determining the heritability of psychological traits.

Essentially what this research shows is that an individual's political opinions are deeply ingrained within them, and that they are at least partially the result of genetic factors outside of their control.

Because identical twins share 100% of their genes while fraternal twins share 50% of their genes, a scientist comparing the similarities between sets of identical twins and sets of fraternal twins can attribute any excess likeness between the identical twins to genetics. This ultimately allows researchers to isolate the environmental and genetic influences on a specific trait and determine the heritability of traits.

Twin studies have demonstrated a connection between social beliefs and genetics. A group from the University of Nebraska—Lincoln expanded on this method to specifically examine the genetic heritability of political ideology. The researchers collected data on the responses of twins on a questionnaire that asked politically relevant questions and analyzed them to determine correlations and heritability. Their data showed that identical twin correlations were higher than their corresponding fraternal twin correlations. The data also showed that that political beliefs had high heritability estimates, suggesting that genes do play a role in explaining political opinions.

What benefits arise from the knowledge these studies provide? The hope is that by understanding how political opinions are influenced by psychological and biological factors, opposing sides will become more empathetic towards one another. Essentially what this research shows is that an individual's political opinions are ingrained deep within them, and that they are at least partially the result of genetic factors outside of their control. By comprehending this, people could potentially decrease the hostility between members of opposing political parties. This knowledge could also make discourse more effective because liberals could appeal to certain traits of conservatives and vice versa. Ultimately, these studies could conceivably lead to more effective discourse between conservatives and liberals and bridge the gap between opposing ideological viewpoints. ●