

# Why People Believe in God

By Michael Shermer

In October 1999, I went to Sudbury, Canada to find God. With much anticipation I entered the laboratory of Michael Persinger, a neuroscientist at Laurentian University who stimulates “micro-seizures” in the temporal lobes of the brain which, in turn, produce a number of what can best be described as “spiritual” or “supernatural” experiences—the sense of a presence in the room, an out-of-body experience, and even religious feelings. Persinger calls these experiences “temporal lobe transients,” or increases and instabilities in neuronal firing patterns in the temporal lobe.

I was placed inside a sound-proof, darkened room with a motorcycle helmet strapped to my head, and electromagnetic solenoids bombarded my temporal lobes with patterns of energy. The effects were subtle. Initially, I felt giddy, as if the whole process were a silly exercise I could easily control. Then I slumped into a state of melancholy. Minutes later, still believing the magnetic field patterns were ineffectual, I felt like part of me wanted to have an out-of-body experience, but my rational mind kept holding me back. It was then that I realized the magnetic field patterns were causing these “spiritual” experiences—I had found “God.”

How do these temporal lobe transients produce religious states? Our “sense of self,” says Persinger, is maintained by the left hemisphere temporal cortex. Under normal brain functioning this is matched by the corresponding systems in the right hemisphere temporal cortex. When these two systems

---

*Michael Shermer is director of Skeptics Society and publisher of Skeptic Magazine. This article was adapted from his book, “How We Believe: The Search for God in the Age of Science,” ©2000, courtesy of WH Freeman and Company.*

become uncoordinated, such as during a seizure or a transient event, the left hemisphere interprets the uncoordinated activity as “another self,” or a “sensed presence,” thus accounting for subjects’ experiences of a “presence” in the room (which might be interpreted as an angel, a demon, an alien, or a ghost), of leaving their bodies (as in near-death experiences), or even of seeing “God.” When the brain’s amygdala is involved in the transient events, emotional factors significantly enhance the experience which, when connected to spiritual themes, can be a powerful force for intense religious feelings.<sup>1</sup>

Why would humans have such experiences? Persinger proffers an evolutionary explanation: “The God Experience has had survival value. It has allowed the human species to live through famine, pestilence, and untold horrors. When temporal lobe transients occurred, men and women who might have sunk into a schizophrenic stupor continued to build, plan, and hope.”<sup>2</sup>

Maybe; but when you consider most studies show 90 to 95% of the population believes in God, it is a stretch of the temporal lobe imagination to suggest that billions of people of all faiths the world over have experienced or are experiencing temporal lobe seizures.

A more reasonable hypothesis is that the tiny handful of fanatic religious and cult leaders throughout history who have reported hearing the voice, seeing the face, and even communicating with God, the devil, angels, aliens, or other supernatural beings can perhaps be accounted for by temporal lobe abnormalities and anomalies.

Their followers need a different explanation.

In 1998 social scientist Frank Sulloway and I conducted a national mail survey of Americans inquiring about their upbringing, religious attitudes, belief in God and, more importantly, why they believe.<sup>3</sup>

Analyzing the data we found that being raised religiously, the respondent's sex (women are more

religious than men), and parents' religiosity were the three strongest predictors of a high degree of current religiosity and belief in God. The three strongest predictors of lower religiosity and disbelief were education level, age, and the amount of conflict respondents had with their parents during childhood. In other words, older, educated, men tend to be less religious, while women raised by religious parents in a harmonious environment are more religious.

However, people do not live in a psychological laboratory where variables can be perfectly controlled. All these variables interact in ways that complicate the picture. For example, people raised religiously remain religious as adults—unless, when growing up, they experienced considerable conflict with their parents, in which case the rebellious thing to do is question their authority and become less religious. Likewise, conflict with parents leads to a significant reduction in current church attendance.

How religious attitudes change is important to understanding why people believe, or do not believe, in God. Higher education levels and aging are both associated with declines in religious attitudes. One explanation is that as people get older they invariably encounter other belief systems that broaden their horizons—either through formal education or life experience—leading to a realization that religious attitudes and belief in God are perhaps not as certain as they once seemed.

Probing further, we posed a series of questions asking respondents to what extent various factors contributed to their religious beliefs. Responses were placed on a scale, ranging from “not at all” to “completely.” Reasons for belief included “emotional comfort,” “faith,” “apparently intelligent design of the world,” “without God there is no basis for morality,” and “a desire for meaning and purpose in life.” We also asked, “To what extent does the existence of evil, pain, and suffering undermine your religious beliefs?,” “To what extent have scientific explanations of the world undermined your religious beliefs?,” and “To what extent do you believe there is concrete evidence or proof of God?”

In analyzing the data we grouped these questions into two categories: rational influences on belief (the apparent intelli-

gent design of the world; the existence of evil, pain and suffering; and other scientific explanations of the world); and emotional influences on belief (questions pertaining to emotional comfort, faith, and desire for meaning and purpose in life).

“I went to Canada to find God.”

The strongest predictor for classifying people into these two belief cat-

egories was gender—men tended to justify their beliefs with rationality, while women were inclined to offer emotional reasons. Other notable findings included a positive relationship between rational arguments for God's existence and education (as education increased, so did preferences for rational arguments for God). Further, emotional arguments for God's existence and education were negatively correlated (those with lower education levels tended to offer emotional arguments to explain God's existence). One possible explanation is that with increased education leading to decreased faith, educated believers feel the need to justify their beliefs with rational, more defensible, arguments.

Interestingly, for those people who came to their faith at an early age, rational arguments were not typically part of the belief process. We should not be surprised, then, that there were significant negative correlations between rational arguments and being raised religiously. That is, if your faith is deep, going back to childhood, there is less need to justify it with rational arguments. But these correlations, while significant, were weaker than for most we found in the study, indicating that education can override early-life experiences.

To give people an opportunity to express why they believe in God and why they think other people believe in God, we asked them to detail their thoughts in two open-ended questions. Respondents were most likely to offer intellectually-based reasons for why they believe, associated with the design of the universe or their own daily experiences with God. These reasons slid down the list, however, when respondents were asked why they thought other people believe in God. Instead, the two most common reasons given for why other people believe in God were “comfort” and “raised to believe.”

One possible explanation for this disparity is what psychologists call “attribution bias.” As pattern-seekers, we look for causes to which we can attribute our actions and the actions of others. According to attribution theory, we attribute the causes of our own and others' behaviors to either a situation or a disposition. When we make a situational attribution, we identify the cause in the environment (“My depression is caused by a death in the family”); when we make a disposi-

tional attribution, we identify the cause in the person as an enduring trait (“Her depression is caused by a melancholy personality”).

Problems in attribution may arise in our haste to accept the first cause that comes to mind.<sup>4</sup> But I suspect this is only part of the explanation. Social psychologists Carol Tavis and Carole Wade explain that there is, not surprisingly, a tendency for people “to take credit for their good actions (a dispositional attribution) and let the situation account for their bad ones.”<sup>5</sup> While we might, for example, attribute our own good fortune to hard work and intelligence, we attribute the other person’s good fortune to luck and circumstance.<sup>6</sup>

What we discovered in our study is that there is an intellectual attribution bias, by which we consider our own actions as rationally motivated while others are more emotionally driven. Our commitment to a belief is attributed to a rational decision (“I’m against gun control because statistics show that crime decreases when gun ownership increases”); whereas a competing explanation is attributed to emotion (“He’s for gun control because he’s a bleeding-heart liberal”). This intellectual attribution bias applies to religion as a belief system and to God as the subject of belief. As pattern-seekers, we find the apparent good design of the universe and the perceived action of a higher intelligence in our daily living to be powerful intellectual justification for belief. But we attribute other people’s beliefs to their emotional needs. Here are just a few examples of this bias from the open-ended portion of the surveys:

- A 30-year-old male Jewish teacher with strong religious convictions (8 on the 1 to 9 scale) says he believes in God “because I believe in the Big Bang; and when you believe in the B.B., you have to ask yourself—‘what came before that?’ A creation implies a creator.” Yet, he goes on to explain, “I think that most people believe out of an emotional need, although there is a significant minority of rational (even skeptical!) believers such as myself.”
- A 65-year-old male Catholic with moderately strong religious convictions (7 on the 1 to 9 scale) gives the standard watchmaker argument: “To say that the universe was created by the Big Bang theory is to say that you can create Webster’s Dictionary by throwing a bomb in a printing shop and the resulting explosion results in the dictionary.” Nevertheless, other people believe in God because of a “sense of security” and “blind faith.”
- A 37-year-old Baptist female with strong religious convictions (8 on the 1 to 9 scale) says she believes in God because “how else could you explain our origins? Only God could create a world and a universe out of nothing. There are

miracles every day that science cannot explain. Others believe, she says, because it “gives hope.”

Interestingly, the primary reasons people gave for not believing in God were also the intellectually-based categories of “there is no proof for God’s existence,” followed by “God is a product of the mind and culture,” “the problem of evil,” and “science provides all the answers we need.” An 18-year-old atheist wrote: “I don’t believe in God because it is impossible for a being to be what God must be in order to be a god without being obvious and undeniable. In short, God is philosophically impossible and scientifically and cosmologically unnecessary.” By contrast, he says other people believe in God because: “It’s comforting. Additionally, some people find it easier to deal with problems if they believe it is ‘God’s will.’”

**B**elief in God in the modern world is a function of a complex array of reasons. Consistently we find a fascinating distinction in belief attribution between why people believe in God and why they think other people believe in God. This distinction was not lost on the psalmists of the Old Testament. To the choirmaster of Psalms 19:1, the author proclaims: “The heavens declare the glory of God; and the firmament showeth his handiwork.” Yet in the psalm for the sons of Korah, Psalms 46:1-3, it is declared: “God is our refuge and strength, a very present help in trouble. Therefore will not we fear, though the earth be removed, and though the mountains be carried into the midst of the sea; Though the waters thereof roar and be troubled, though the mountains shake with the swelling thereof.” Are these not, in a way, two sides of the same coin? For believers, the heavens declare God’s glory; for other believers he provides strength in their time of need. Or, as Robert Browning wrote in *Pippa Passes*: “God’s in His Heaven—All’s right with the world.”

#### Endnotes

<sup>1</sup>M.A. Persinger, “Paranormal and Religious Beliefs May Be Mediated Differently by Subcortical and Cortical Phenomenological Processes of the Temporal (Limbic) Lobes,” *Perceptual and Motor Skills* 1993, Vol. 76, pp. 247-251.

<sup>2</sup>M.A. Persinger, *Neuropsychological Bases of God Beliefs* (New York: Praeger, 1987), p. 138.

<sup>3</sup>The national sample was drawn from a random listing of addresses. Compared with Census figures, the resulting demographic profile was disproportionately male and educated. However, here we discuss the relationships *between* variables, and therefore, a slightly skewed sample does not adversely affect this analysis.

<sup>4</sup>D.T. Gilbert, B.W. Pelham, and D.S. Krull, “On Cognitive Busyness: When Person Perceivers Meet Persons Perceived,” *Journal of Personality and Social Psychology* 1988, Vol. 54, pp. 733-739.

<sup>5</sup>C. Tavis and C. Wade, *Psychology in Perspective. Second Edition* (New York: Longman/Addison Wesley, 1997) p. 332.

<sup>6</sup>R.E. Nisbett and L. Ross, *Human Inference: Strategies and Shortcomings of Social Judgment* (Englewood Cliffs, NJ: Prentice-Hall, 1980).