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## How Birth Order Affects Your Personality

For decades the evidence has been inconclusive, but new studies show that family position may truly affect intelligence and personality

By Joshua K. Hartshorne | Monday, January 11, 2010 | 58 comments

When I tell people I study whether birth order affects personality, I usually get blank looks. It sounds like studying whether the sky is blue. Isn't it common sense? Popular books invoke birth order for self-discovery, relationship tips, business advice and parenting guidance in titles such as *The Birth Order Book: Why You Are the Way You Are* (Revell, 2009). Newspapers and morning news shows debate the importance of the latest findings ("Latter-born children engage in more risky behavior; what should parents do?") while tossing in savory anecdotes ("Did you know that 21 of the first 23 astronauts into space were firstborns?").

But when scientists scrutinized the data, they found that the evidence just did not hold up. In fact, until very recently there were no convincing findings that linked birth order to personality or behavior. Our common perception that birth order matters was written off as an example of our well-established tendency to remember and accept evidence that supports our pet theories while readily forgetting or overlooking that which does not. But two studies from the past three years finally found measurable effects: our position in the family does indeed affect both our IQ and our personality. It may be time to reconsider birth order as a real influence over whom we grow up to be.

### Size Matters

Before discussing the new findings, it will help to explain why decades of research that seemed to show birth-order effects was, in fact, flawed. Put simply, birth order is intricately linked to family size. A child from a two-kid family has a 50 percent chance of being a firstborn, whereas a child from a five-kid family has only a 20 percent chance of being a firstborn. So the fact that astronauts are disproportionately firstborns, for example, could merely show that they come from smaller families—not that firstborns have any particularly astronautic qualities. (Of course, firstborns may indeed have astronautic qualities. The point is that with these data, we cannot tell.)

There are many reasons that family size could affect our predilections and personalities. More children mean that parental resources (money, time and attention) have to be spread more thinly. Perhaps more telling, family size is associated with many important social factors, such as ethnicity, education and wealth. For example, wealthier, better-educated parents typically have fewer children. If astronauts are more likely to have well-educated, comfortable parents, then they are also more likely to come from a smaller family and thus are more likely to be a firstborn.

Of the some 65,000 scholarly articles about birth order indexed by Google Scholar, the vast majority suffer from this problem, making the research difficult to interpret. Many of the few remaining studies fail to show significant effects of birth order. In 1983 psychiatrists Cecile Ernst and Jules Angst of the University of Zurich determined, after a thorough review of the literature, that birth-order effects were not supported by the evidence. In 1998 psychologist Judith Rich Harris published another comprehensive attack on the concept in *The Nurture Assumption* (Free Press). By 2003 cognitive scientist Steven Pinker of Harvard University found it necessary to spend only two pages of his 439-page discussion of nature and nurture, *The Blank Slate* (Penguin), dismissing birth order as irrelevant.

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## New Evidence

Even so, the case in 2003 against birth-order effects was mainly an absence of good evidence, rather than evidence of an absence. In fact, the past few years have provided good news for the theory. In 2007 Norwegian epidemiologists Petter Kristensen and Tor Bjerkedal published work showing a small but reliable negative correlation between IQ and birth order: the more older siblings one has, the lower one's IQ. Whether birth order affects intelligence has been debated inconclusively since the late 1800s, although the sheer size of the study (about 250,000 Norwegian conscripts) and the rigorous controls for family size make this study especially convincing.

In 2009 my colleagues and I published evidence that birth order influences whom we choose as friends and spouses. Firstborns are more likely to associate with firstborns, middle-borns with middle-borns, last-borns with last-borns, and only children with only children. Because we were able to show the effect independent of family size, the finding is unlikely to be an artifact of class or ethnicity. The result is exactly what we should expect if birth order affects personality. Despite the adage that opposites attract, people tend to resemble their spouses in terms of personality. If spouses correlate on personality, and personality correlates with birth order, spouses should correlate on birth order.

Thus, the evidence seems to be shifting back in favor of our common intuition that our position in our family somehow affects who we become. The details, however, remain vague. The Norwegian study shows a slight effect on intelligence. The relationship study shows that oldest, middle, youngest and only children differ in some way yet gives no indication as to how. Moreover, although these effects are reasonably sized by the standards of research, they are small enough that it would not make any sense to organize college admissions or dating pools around birth order, much less NASA applicants.

Still, I expect people—myself included—will continue to try to make sense of the world through the prism of birth order. It's fine for scientists to say "more study is needed," but we must find love, gain self-knowledge and parent children now. In that sense, a great deal about who we are and how we think can be learned reading those shelves of birth order-related self-help books, even if the actual content is not yet—or will never be—experimentally confirmed.

*Note this story was originally published with the title "Ruled by Birth Order?"*

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