Family size and education levels: the right support could reverse long-held theory

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Two sisters pose for a photo following a BYU graduation ceremony. New research from BYU looks at the factors contributing to educational attainment among siblings. Credit: Savanna Sorensen, BYU Photo

If you have three or more siblings, odds are that you have at least one

year less of education than someone who has no siblings.

More kids in your family. Less education. This pattern isn't new, but a team of researchers led by BYU sociology professor Ben Gibbs studied why that educational dip occurs and found that there are exceptions to the trend. One group that is a major outlier is Mormons.

Despite large family sizes, members of The Church of Jesus Christ of Latter-day Saints (Mormons) don't feel the same educational attainment effects. For Mormons, the negative relationship between years of schooling and number of siblings is 66 percent smaller than those raised in other religious groups.

"I think Mormons are an interesting case because it's one example of a faith community that has really high fertility patterns, in fact the highest fertility patterns in the U.S., who don't seem to suffer as much by having these large families when we look at educational attainment," Gibbs said.

The root of this educational issue in families goes back to a simple concept: resource dilution. In 1989, researcher Judith Blake presented the theory, which stated that children from large families don't receive as much education because the family resources are spread out over more people.

Follow up research by social scientists across the United States supported the theory, which developed into something of an iron law: the more siblings you have, the less education you will obtain.

But it turns out this iron law isn't so ironclad after all. The research by Gibbs, Ohio State professor Doug Downy and Oxford research fellow Joseph Workman was published in *Demography* last week and shows that the resource dilution theory has an exception. When the government or community helps make raising children less burdensome, the effect of

Blake's theory decreases significantly.

"Our argument would be that resource dilution is probably a law," Gibbs said, "but those resources don't have to come from the parents."

Gibbs and his colleagues came to this conclusion by extending Blake's original data to include newer cohorts of data: people born in the 1950s,1960s and 1970s. They found that the negative effect of sibship size (the amount of siblings in an immediate family) on educational attainment was cut in half between the beginning and middle of the 20th century.

"The 50s and 60s was the time of the Great Society, when we invested a lot in making higher education more expansive, accessible and affordable," Gibbs said. "From the 40s on, we had a lot of social programs (GI Bill, Medicare/Medicaid) that influenced how a family experiences childrearing and its cost in ways that may have even shaped something as important as how much education a person has."

Regardless of where support comes from, community or government, its effect is substantial in helping ease families' struggle to provide educational resources for their children. Also, support isn't just money given to families; it can include anything from childcare to education initiatives. Two decades of work by Downey has uncovered some of these more essential resources.

Gibbs explained that Mormons alleviate the responsibilities of raising kids in three main ways that could be causing this effect and helping them get more education regardless of how many children are in their family. First, about 90 percent of Mormon kids have adult mentors in their congregations that they feel give them significatn encouragement, when the national average among religious teens is about 50 percents. Second, Mormons donate income to the church, which can be used to

help families in times of need and offset some financial hardship. Third, Mormon religious ideology encourages education and recommends that individuals make it a priority.

"The presence of BYU is a great example of this—marrying the secular pursuit of education with this religious theological belief so that it's part of the same quest," Gibbs said. "As Mormons believe that the glory of God is intelligence, this often translates to get as much education as possible."

The study isn't necessarily good news for people currently from large families. The researchers are concerned that the trend might be reversing due to growing income inequality and lack of government and community investment.

"Right now, I think we're at the end of a golden era where families are under less burden and constraint," Gibbs said. "We find good evidence that growing inequality is reversing this trend."

If Gibbs is right about the turning trend, reality could contradict the American Dream and the size of the family you're born into could explain more about how far kids go in education. But knowing this could help avoid that path.

"Maybe we can borrow some of what we've learned about those time periods [when the effect was less] in today's debate about the role of the family in shaping kids' educational futures," Gibbs said. "In the name of equality, family resources could be far less of a factor for determining how much education kids obtain."

More information: Benjamin G. Gibbs et al. The (Conditional) Resource Dilution Model: State- and Community-Level Modifications, *Demography* (2016). DOI: 10.1007/s13524-016-0471-0