

People who are bad with numbers often find it harder to make ends meet – even if they are not poor

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Even college-educated adults can still struggle with numbers. Prostock-Studio/Stock via Getty Images

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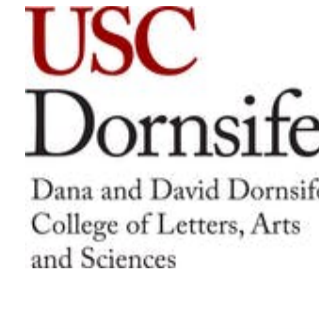
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The Research Brief is a short take about interesting academic work.

The big idea

People who are bad with numbers are more likely to experience financial difficulties than people who are good with numbers. That's according to [our analyses](#) of the [Lloyd's Register Foundation World Risk Poll](#).

In this World Risk Poll, people from 141 countries were asked if 10% was bigger than, smaller than or the same as 1 out of 10. Participants were said to be bad with numbers if they did not provide the correct answer – which is that 10% is the same as 1 out of 10. [Our analyses](#) found that people who answered incorrectly are often among the poorest in their country. Prior studies in the [United States](#), [United Kingdom](#), [the Netherlands](#) and [Peru](#) had also found that people who are bad with numbers are financially worse off. But [our analyses of the World Risk Poll](#) further showed that people who are bad with numbers find it harder to make ends meet, even if they are not poor.

When we say that they found it harder to make ends meet, we mean that they reported on the poll that they found it difficult or very difficult to live on their current income, as opposed to living comfortably or getting by on their current income.

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[Our analyses](#) also indicate that staying in school longer is related to better number ability. People with a high school degree tend to be better with numbers than people without a high school degree. And college graduates do even better. But even among college graduates there are people who are bad with numbers – and they struggle more financially.

Percentages of people in wealthy countries who struggle financially

In high-income countries, low-numerate people report having more financial issues compared to people who are numerate.

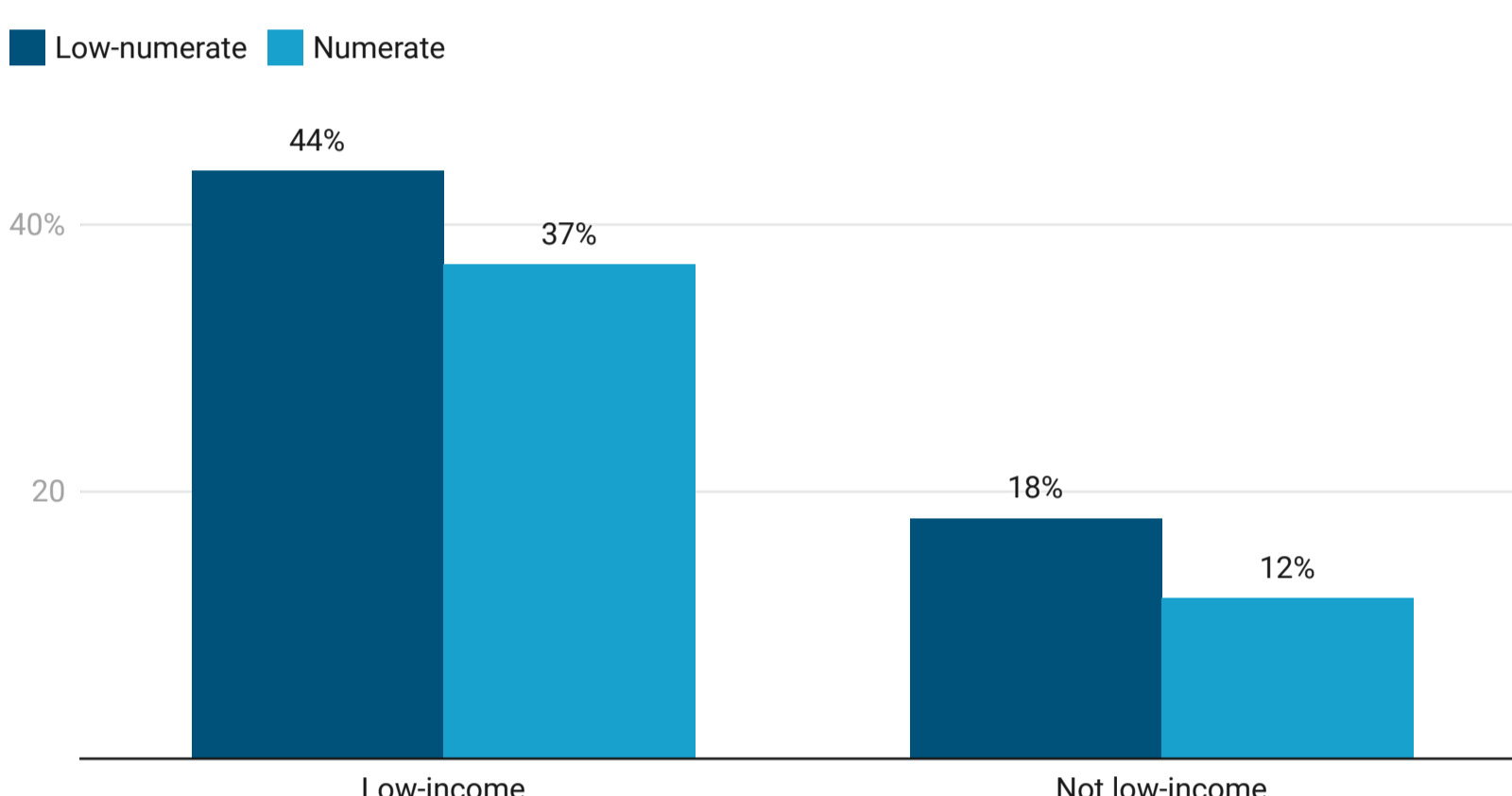


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Of course, being good with numbers is not going to help you stretch your budget if you are very poor. [We found](#) that the relationship between number ability and struggling to make ends meet holds across the world, except in low-income countries like Ethiopia, Somalia and Rwanda.

Percentages of people in low-income countries who struggle financially

Regardless of math skills, people in poorer parts of the world still struggle financially.

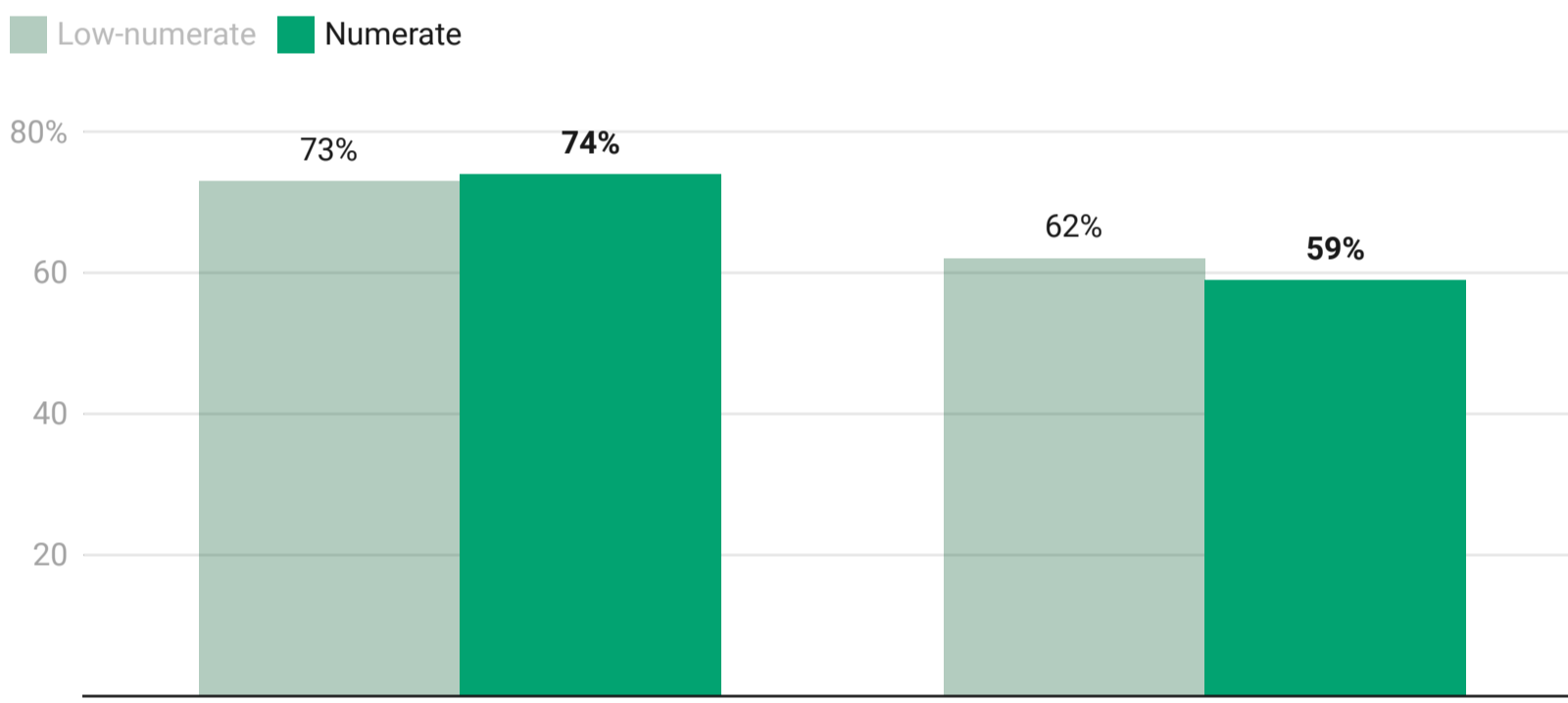


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Why it matters

The ability to understand and use numbers is also called [numeracy](#). Numeracy is [central to modern adult life](#) because numbers are everywhere.

A lot of well-paying jobs involve working with numbers. People who are bad with numbers often perform worse in these jobs, including [banking](#). It can therefore be hard for people who are bad with numbers to [find employment and progress in their jobs](#).

People who are bad with numbers are less likely [to make good financial decisions](#). Individuals who can't compute how interest compounds over time [save the least and borrow the most](#). People with poor numerical skills are also more likely [to take on high-cost debt](#). If you're bad with numbers, it is hard [to recognize](#) that paying the US\$30 minimum payment on a credit card with a \$3,000 balance and an annual percentage rate of 12% means it will never be paid off.

What still isn't known

It is clear that people who are bad with numbers also tend to struggle financially. But we still need to explore whether teaching people math will help to avoid financial problems.

What's next

In her book "[Innumeracy in the Wild](#)," Ellen Peters, director of the Center for Science Communication Research at the University of Oregon, suggests that it is important for students to take math classes. American high school students who had to [take more math courses](#) than were previously required had better financial outcomes later in life, such as avoiding bankruptcy and foreclosures.

Successfully teaching numeracy also means helping students gain confidence in using numbers. People with [low numerical confidence](#) experience bad financial outcomes, such as a foreclosure notice, independent of their numeric ability. This is because they may not even try to take on complex financial decisions.

Numerical confidence can be boosted in different ways. Among American [elementary school children](#) who were bad with numbers, setting achievable goals led to better numerical confidence and performance. Among American [undergraduate students](#), a writing exercise that affirmed their positive values improved their numerical confidence and performance.

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Other important next steps are to find out whether training in numeracy can also be provided to adults, and whether training in numeracy improves the financial outcomes of people who do not live in high-income countries.

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