Childrens' decision making—Rules of thumb are learned with time

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Credit: AI-generated image (disclaimer)

Children as young as nine years old use rules of thumb systematically when making decisions. But they are not as good as older children at telling when it is helpful to do so. Researchers at the Max Planck Institute for Human Development and the University of California, Berkeley, have investigated decision-making behavior in children and

adolescents. Their findings have been published in *Developmental Psychology*.

Which city has the larger population: Chicago or Akron? If you don't know, you might base your judgment on which of the two names you recognize. This "recognition heuristic" often leads to astonishingly good results. After all, we are more likely to have read or heard about bigger cities or about more successful athletes, companies, or universities. There has been much research on the strategic use of the recognition heuristic in adults. But developmental psychological research investigating younger people's use of the heuristic is rare. Researchers at the Max Planck Institute for Human Development and the University of California, Berkeley, have investigated whether and how well children and young people are able to use the recognition heuristic when they don't immediately know the answer to a question.

Over one hundred Italian schoolchildren aged 9, 12, and 17 years participated in the study. In a series of tasks, they were asked to judge which of two cities had a larger population, or which of two diseases occurred more frequently in their country. In addition, they were asked which of the cities and diseases they had heard of before the experiment.

The accuracy and speed of their judgements increased with age. "Nine- and twelve-year-olds are already able to use the recognition heuristic systematically. But older adolescents are better able to adapt their use of the strategy to the situation," says Sebastian Horn, lead author of the study and researcher at the Max Planck Institute for Human Development. In other words, nine- and twelve-year-olds are not yet able to distinguish between situations in which using a recognition strategy is beneficial and situations in which it is not. For example, the recognition heuristic is less helpful in estimating the occurrence of diseases than it is in gauging the size of cities.

This is because how widely a disease is known has little to do with how often it occurs. For example, everyone has heard of the plague, but it is practically extinct. But only the 17-year-olds took that factor into account in the study. Participants in this age group knew when they could successfully apply the recognition strategy and when not: They used the recognition heuristic about three times more often in the city context than in the disease context. This finding also reflects the 17-year-olds' larger base of knowledge and experience.

More information: Sebastian S. Horn et al. The development of adaptive decision making: Recognition-based inference in children and adolescents., *Developmental Psychology* (2016). DOI: 10.1037/dev0000181

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