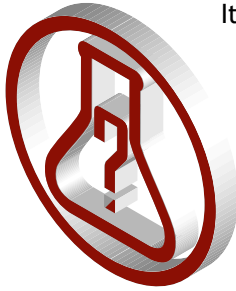


The Importance Of Identifying Jurors With Reservations About Science

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It will come as no surprise to most trial lawyers that the higher a juror's level of education and the more math and science courses the juror has taken, the better the chances are that the juror will comprehend complex scientific evidence.

But more than just a juror's level of formal education comes into play when trying to predict the juror's ability, or perhaps willingness, to comprehend scientific evidence. Recently published, peer-reviewed research confirms that jurors' attitudes about science are an important piece of the puzzle. In the research, mock jurors who expressed reservations about the value of science before hearing the trial evidence tended not to comprehend the scientific evidence as well as other jurors with similar levels of education. These negative attitudes about science operated *independently* of a jurors' level of education. So, if in jury selection you had two potential jurors with identical educational backgrounds, but one of those jurors expressed more reservations about the value of science, that juror would be predicted, based on this study, to have poorer comprehension of the scientific evidence.

A Maricopa County judge and several well-respected legal psychologists published an analysis of data collected from 480 mock jurors who deliberated in 60, eight-person mock juries. The mock jurors were recruited from Delaware citizens who had reported for jury duty but were not selected. These extra jurors were offered an opportunity to participate in a mock trial in exchange for a small payment.

The jurors were shown a prerecorded mock trial. It was a criminal trial that included dueling expert testimony regarding mitochondrial DNA evidence. Although it was a criminal trial, the results regarding comprehension may generalize to civil trials involving other types of scientific evidence.

Before viewing the trial, the mock jurors completed extensive background questionnaires, including questions developed by the National Science Board for the purpose of measuring attitudes about science. Among other questions, the mock jurors ranked their levels of

agreement with the following three statements:

- We depend too much on science and not enough on faith.
- It is not important for me to know about science in my daily life.
- Science makes our way of life change too fast.

At 64. Responses to these three questions were then averaged to create a "scientific reservations" score for each mock juror. After viewing the trial and before deliberations, the mock jurors completed additional questionnaires, including a comprehension test.

The results showed that jurors with more years of formal education performed better on the scientific evidence comprehension tests, as did jurors who had taken more coursework in math and science. Most interestingly, though, jurors who had expressed reservations about science before hearing the trial evidence later showed poorer comprehension of the scientific evidence. The researchers pointed out that "[j]urors' reservations about science . . . were linked to lower comprehension, even taking formal years of schooling and mathematics and science coursework into account, as our regression models did." At 69.

Although it would not be surprising to find that jurors with negative attitudes about science are less persuaded by scientific evidence, this study focused on comprehension, not persuasion. These data suggest that when trying to predict whether a juror will comprehend scientific evidence, it is not enough to simply know the juror's years of formal education or even the number of math and science courses the juror has taken. Instead, if you have two jurors with identical levels of education, those two jurors may have dramatically different levels of comprehension of your scientific evidence depending upon their preexisting attitudes toward science. These data do not provide a conclusive answer to why this may occur. But it seems likely that the well-educated jurors with reservations about science were *able* to understand the scientific evidence, but because of their pre-existing attitudes they were simply not *motivated* to do so.

Source: Valerie P. Hans, et al., *Science in the Jury Box: Jurors' Comprehension of Mitochondrial DNA Evidence*, 35 LAW & HUMAN BEHAVIOR 60 (2011).