Research suggests using neuroscience in law may face political resistance
24 February 2015

A first of its kind study conducted by researchers at the University of Minnesota and the Wharton School, University of Pennsylvania has found that Republicans and Independents are more likely to disapprove of neuroscience-based legal reforms if the reforms are perceived as being too lenient on criminal defendants.

The finding is important because of the recent and extensive efforts to integrate neuroscience into the law in the new field of "neurolaw."


Recent years have seen courts (including the U.S. Supreme Court) and legislatures relying upon brain evidence. The potential implications of neurolaw are broad. For example, future developments in brain science might allow the following: criminal law to better identify recidivists; tort law to better differentiate between those in actual pain and those who are faking pain; insurance law to more accurately and adequately compensate those with mental illness; and end-of-life law to more ethically treat patients who might be able to communicate only through their thoughts.

But Dr. Francis Shen, lead author of the article and Director of the Shen Neurolaw Lab, cautions that, "If neuroscience is going to transform law and policy, it must be in accord with basic tenets of the American electorate. At present, neuroscience remains above partisan politics. But our study suggests that could change."

Shen and co-author Dr. Dena Gromet, of the University of Pennsylvania, ran an experiment using a nationally representative telephone sample of 1,000 Americans. They found that 9% of the public strongly disapproves, 9% strongly approves, 40% are undecided, and the rest are split between disapproval and approval of neurolaw. There were no significant differences between Republicans and Democrats in this baseline support for neurolaw.

But the research then tested how these patterns of support change when neurolaw is framed as primarily helping prosecutors obtain harsher sentences, versus primarily helping criminal defendants obtain lighter sentences.

When framed as being helpful to criminal defendants, both Republicans and Independents reported significantly greater disapproval of using neuroscience in law. Democrats, however, supported neurolaw equally across the prosecution and defense conditions. This finding is consistent with previous research demonstrating the nuanced reaction to advances in science based on individuals' political or cultural leanings.

Dr. Gromet, who has also studied the effect that partisan framing has on justice issues and energy choices, observes that, "These results highlight that using neuroscience in the justice system has the potential to become a partisan issue depending on which potential outcome of neurolaw is emphasized."

The study makes clear that neuroscience is not yet a polarizing political issue. To keep it that way Shen suggests that we "must pay careful attention to the ways in which neuroscience, and its application to the legal system, is framed and presented to the public."

More information: http://ann.sagepub.com/content/658/1/86.abstract

Provided by University of Minnesota