

Humans' response to risk can be unnecessarily dangerous, study

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The traffic light ahead of you is turning yellow. Do you gun the engine and speed through the intersection, trusting that others will wait for their green, or do you slow down and wait your turn?

That depends more on experience than personality, according to new research from Tel Aviv University. Arnon Lotem, a behavioral ecologist from the Department of Zoology at Tel Aviv University, reports in the journal *Nature* that people adopt risk-taking behaviors similar to those of animals like rats and bees. And this behavior, Prof. Lotem and his colleagues say, might not prepare humankind for the modern dangers we face every day — like crossing the street, accepting a high-risk mortgage, or driving on the freeway.

Lotem believes that our risk-taking behavior had its advantages when we were living as cave-dwellers, but that it poses new and potentially dangerous challenges in our modern technology-driven world.

Feeling Risky

"People want to know how people make decisions, whether it's how you drive your car, or whether to invest in a mortgage. It's important to understand when and how we make those decisions, to understand the type of errors people are prone to make," says Prof. Lotem.

"What we have found is that people make decisions based on what

option 'appears' to be better most of the time. Under conditions in the natural world this would be the best strategy, but in modern life it has nothing do with the real inherent risks," he adds, citing our individual responses to that yellow light.

People are aware of the actual risks when driving through a light at an intersection, but unless they've already had a brush-with-death or a brush-with-a-traffic-cop, the perceived risk remains low, says Prof. Lotem. This is because in most cases nothing happens to the risk-taker. "You save one minute, but you can lose everything. People don't do the math," he says.

Lotem's study found that, presented with simple decision-making stimuli, people are not analyzing the complete situation based on logical rationales or statistics. Instead, they appear to be making decisions based on simple strategies for coping in nature, based mainly on personal experience.

Evolved to Fear Cobras, not Traffic Lights

During many years of evolution and under natural conditions, he says, people made decisions like other animals. This tactic worked fine for survival, but did not however evolve to survive the modern world.

"We've evolved to be afraid of snakes, but not traffic lights," he says.

The results of Lotem's research may also be used by economists, politicians and psychologists, who need to know when people will take risks, says Prof. Lotem. A wider understanding of this phenomenon can affect business decisions, the economy — and, hopefully, the number of road accidents in America each year.

In the business world, Lotem says, "If you give feedback and rewards to employees in a clear way, they might be more willing to take risks on

your behalf." He adds that this approach might help governments to cultivate the entrepreneurial activities of their citizens.

Don't Gamble On It

But the more complex the risk, the more difficult to predict how people will react. Lotem cautions that in complicated decision-making scenarios such as gambling, addiction and excitement are new variables that come into play. It is also difficult to assess whether children exhibit similar risk-taking strategies as adults, because children tend to imitate what adults around them are doing.

Source: American Friends of Tel Aviv University

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