

## Decision-making can and must be learned -new test measures risk intelligence

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(Medical Xpress) -- Tests exist for evaluating personality, intelligence and memory. However, up to now, it was not easily possible to find out how good someone is at making decisions in risky situations.

"Yet this is an important skill that has an enormous influence on many of our decisions," says psychologist Edward Cokely, who came up with the idea of developing a quick test for this skill at the Max Planck Institute for Human Development in 2007. In the intervening five years, he has carried out 21 sub-studies in 15 countries with colleagues from Max Planck Director Gerd Gigerenzer's group at the Institute in Berlin and the Michigan Technological University. One of the results of the studies is the first quick test for establishing an individual's risk intelligence. The "Berlin Numeracy Test" has been available at the riskliteracy.org website in German, English, Spanish and Dutch since early April 2012.

The test works twice as well as previous methods and only takes three minutes. Traditional tests, which tend to determine general cognitive capacities, like intelligence or attention control, provide little information about a person's risk competency. A high level of intelligence does not necessarily mean that the person is equally skilled in all areas. "My doctor may be very intelligent, but that does not mean that she can repair my car particularly well or can fill out my tax return," explains Cokely.

To develop their tests, the psychologist and his colleagues carried out experiments with several thousand subjects in North America, Europe



and Asia. The test participants had to complete tasks from different areas. For example, 300 participants in a sub-study in Berlin were faced with psychological tasks that were intended to establish, among other things, their personal emotional stability, general life-satisfaction and exam anxiety. They also had to interpret information about risks. "We wanted to find out how well they understand weather forecasts, for example," says Cokely.

It emerged from these tests that highly-educated individuals often also have difficulty interpreting information on risk probabilities. "However, if we want to have educated citizens who make decisions based on information, we need people who understand information about risks," explains the scientist. Seen in this way, risk intelligence is just as important a skill as reading and writing. "Fortunately," he adds, "it can also be learned." In fact, as the researchers discovered over the five years of testing various tasks, risk intelligence is closely linked with mathematical skills. They designed their test accordingly: all three tasks are based on the field of percentage calculation.

**More information:** "Berlin Numeracy Test" Are you risk literate? Take this three-minute test and find out!

## Provided by Max-Planck-Gesellschaft

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