

Risky business: Stressed men more likely to gamble

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Stressed out, dude? Don't go to Vegas.

New research, to be published July 1 in the journal *PLoS One*, shows that men under stress may be more likely to take risks, correlating to such real-life behavior as gambling, smoking, unsafe sex and illegal drug use.

In contrast, stressed women moderate their behavior and may be less likely to make risky choices, the study found.

"Evolutionarily speaking, it's perhaps more beneficial for men to be aggressive in stressful, high-arousal situations when risk and reward are involved," said Nichole Lighthall of the University of Southern California Davis School of [Gerontology](#) and lead author of the paper. "Applied to financial risk taking, it's akin to competition for territory or other valuable resources."

The researchers asked participants to play a game called the Balloon Analogue Risk Task in which inflating a balloon earns money (five cents per pump). Participants were told that they could cash out their earnings by clicking a "Collect \$\$\$" button at any point in the game.

However, the balloon would explode if it was inflated beyond its randomly determined breakpoint. All winnings for exploded balloons would be lost.

"One valuable aspect of the [balloon task] is its predictive validity for

real-world impulsivity," Lighthall explained. "Some risk taking was necessary to make gains, but excessive risk was associated with diminishing returns. If you always clicked and never cashed out, you would lose every time."

The balloon task has been previously used to assess tolerance for risky behavior among inner-city adolescents and substance abusers, among others.

"Obviously, there are situations in the real world where risky behavior would not be beneficial," Lighthall said. "Sometimes being conservative, thoughtful and taking it slow are good things."

In the control group, men and women displayed statistically similar levels of risk taking, inflating the balloon about 40 times on average.

However, women in the stressed group only inflated the balloon an average of 32 times - more than 30 percent less often than their stressed male counterparts, who inflated the balloon an average of 48 times.

"Men seem to enter more risky financial situations than women, which was part of the impetus for our study," Lighthall said. "But only in the stressed condition did we see any statistical differences in risky behavior between men and women."

Stressful experiences have been shown to stimulate the release of cortisol, commonly known as the "stress hormone." Participants randomly assigned to the stress group held a hand in ice-cold water, which raised cortisol levels, particularly among female participants. No participants were using hormone birth control.

According to Lighthall, future research might use neuroimaging to explore how the brain processes stress or examine whether psychological

stress, such as anticipating giving a speech, would yield similar results as the physical stress manipulation used in this study.

Mara Mather, director of the Emotion and Cognition Lab at USC and associate professor of psychology and

Source: University of Southern California ([news](#) : [web](#))

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