

Peer pressure? It's hardwired into our brains

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The rewards outweigh the risks – when you're in a group, anyway.

A new USC study explains why people take stupid chances when all of their friends are watching that they would never take by themselves. According to the study, the human brain places more value on winning in a social setting than it does on winning when you're alone.

Georgio Coricelli of the USC Dornsife College of Letters, Arts and Sciences led a multinational team of researchers that measured activity in the regions of the brain associated with rewards and with social reasoning while participants in the study entered in lotteries.

Their study appears this month in the *Proceedings of the National Academy of Sciences*.

The researchers found that the striatum, a part of the brain associated with rewards, showed higher activity when a participant beat a peer in the lottery, as opposed to when the participant won while alone. The medial prefrontal cortex, a part of the brain associated with social reasoning, was more activated as well. Those participants who won in a social setting also tended to engage in more risky and competitive behavior in subsequent lotteries.

"These findings suggest that the [brain](#) is equipped with the ability to detect and encode social signals, make social signals salient, and then, use these signals to optimize future behavior," Coricelli said.

As Coricelli explained, in private environments, losing can more easily be life-threatening. With no social support network in place, a bad gamble can spell doom.

In group environments, on the other hand, rewards tend to be winner-takes-all. Nowhere is this more clear than in sexual competition, where -- to borrow a phrase from racing legend Dale Earnhardt, Sr. -- second place is just first loser.

"Among animals, there are strong incentives for wanting to be at the top of the social ranking," Coricelli said. "Animals in the dominant position use their status to secure privileged access to resources, such as food and mates."

Provided by University of Southern California

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