

Organizational Culture

Overconfidence Is Contagious

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Summary. Recent research shows that overconfidence within an organization can be contagious. That social contagion can shed new light on relatively recent events, such as the fall of Enron in 2001, which has many lessons to teach about the dangers of... [more](#)

When the Enron scandal broke in 2001, it shook Wall Street to its core and left thousands of people, who had lost billions of dollars in pensions and stocks, disillusioned and angry. People still wonder how

the once-revered Wall Street giant, at the time the seventh-largest company in the U.S., crumbled almost overnight.

So what did go wrong? The search for answers leads consistently to Enron's top executives, Jeffrey Skilling and Kenneth Lay, whose massive acts of accounting fraud, corruption, and deception covered up the company's weaknesses until their exposure led to its downfall.

But a deeper analysis reveals the dysfunctional corporate culture that made it all possible. A "culture of arrogance" permeated the organization, and many employees felt like they were part of an elite group and believed they were smarter than everybody else. This culture of bravado drove employees to aggressively negotiate deals with questionable financials and take on increased risks under the illusion of invincibility.

How does such hubris become so entrenched within a company? And, more broadly, how do cultures of overconfidence emerge and become infused in any organization? We recently conducted research to help answer these questions, and our findings reveal that social contagion may play a crucial yet hidden role.

It comes as no surprise that teams and organizations possess distinct cultures and exhibit firm-specific values and norms, some of which are products of personnel selection and reward systems. For example, a company may offer large financial or prestige incentives to employees who flaunt competitive or risk-taking behavior, thereby fueling and rewarding feelings of invincibility. But another equally important (and less-obvious) force at play is the firm's *social* environment — in other words, who's around? Humans are exceptionally social creatures. We rely on learning from others, from language and religious rituals to food preferences and moral values. When we enter a social environment where overconfidence is rampant, we too may acquire an overconfident mindset.

In our research, we found that people are more likely to become overconfident when others around them express overconfidence. We call this the *transmission of overconfidence*, or the tendency to more closely align one's self-assessments to the confidence level of others. If people can "catch" overconfidence from others, this effect may scale up within a company and generate widespread norms.

We found evidence of overconfidence transmission across six studies. To measure overconfidence, we compared participants' beliefs about their relative performance to their *actual* relative performance. The more people's beliefs exceeded reality, the more overconfident we could say they were. We found evidence of overconfidence transmission in many different settings, ranging from in-person interactions to mere exposure to information about how others think.

In one study, for example, we brought a pair of strangers to our lab and asked them to work alone on guessing people's personalities based on photographs. We then introduced each person to a partner and had them work together on a similar task. In scoring performance, we compared how close their guesses came to the actual personality ratings supplied by friends and coworkers of the people in the photographs. Before collaboration, one partner's overconfidence level was unrelated to that of the other, as we would expect. But after their 15-minute collaboration, overconfidence levels converged: When one partner was highly overconfident about their performance, so too was the other person. In fact, even those whose accuracy was high before partnering up became more overconfident upon interacting with an overconfident partner, indicating that social transmission had taken place. This is especially remarkable as neither partner was informed of the other's level of confidence.

In another study, participants learned the extent to which a peer (who was a previous participant in the study) was overconfident through reading how that person assessed their own performance. Some participants were exposed to an overconfident peer, some to an accurate peer, and others to an underconfident peer. To simulate the sometimes-costly nature of overconfidence (such as the risk of

mistakes fueled by overconfidence), we offered extra money for accurate self-assessments. Again, people became overconfident after observing someone else who was overconfident; those who had an underconfident partner, by contrast, erred toward underconfidence. Remarkably, overconfidence can transmit even when it pays to be accurate.

But just how contagious is overconfidence? In our other study, participants observed a peer expressing overconfidence in one task domain: this time, guessing the weight of strangers depicted in photographs. We then measured the participants' overconfidence a few days later in a game of Boggle, where the goal is to visually search a random array of letters to create words. We found that if a peer had expressed overconfidence in the weight-guessing game, participants' overconfidence even days later in Boggle was elevated compared to if they were exposed to an accurate peer. Surprisingly, however, when probed, participants were oblivious to the impact of overconfident peers and reported that the peer had little sway over them.

To find out when overconfidence is especially contagious, we examined whether in- versus out-group boundaries matter. We conducted a similar weight-guessing game study with university students, except we now described the peer as being from the same university (in-group) or from a different university that's also their biggest rival in college football (out-group). We found that overconfidence was only infectious when it came from a member of one's in-group, not when from someone from an out-group. Indeed, people tend to selectively conform to the practices, strategies, and beliefs of those who are similar and share their social identity or group membership. As such, our findings suggest that people may be most prone to "catching" overconfidence from their direct supervisors and teammates.

An abundance of research reveals that overconfident leaders put their firms at risk. But, as our studies show, the havoc they can wreak extends beyond their own reckless decision making — they may be the first domino to fall, influencing their employees who in turn

influence their peers. Inspiring a culture of overconfidence in this way fuels greater peril. One lesson from the story of Enron is that the success of an organization depends on cultivating the right social climate and norms — norms that promote grounding in reality and freedom from delusions of grandeur. Understanding the danger of having even a few overconfident employees, whose undue optimism may rub off on us and inhibit our ability to make accurate and informed decisions, can help us identify the roots of dysfunction, and hopefully cultivate more prudent decision making and design thriving organizations.

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