

How lucky charms really work

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Wade Boggs, the former Red Sox slugger and third baseman, was very ritualistic about his warm-ups. For night games, he took batting practice at precisely 5:17 and ran wind sprints at exactly 7:17. He fielded 150 ground balls before every game, never more nor less, and always ended his infield practice by stepping—in the same order—on third, second and first base, then the baseline, followed by two steps in the coaching box and four more steps into the dugout. He ate chicken before every game, and even though he was not Jewish, he scratched the Hebrew word for “life” in the dirt before every at-bat.

Boggs had a career batting average of .328, earning him a spot on the Hall of Fame.

Coincidence? Most scientists dismiss superstitions as inconsequential fictions, the creations of irrational minds. Yet many people—and not just ball players—firmly believe in lucky charms and rituals, from rabbits’ feet to crossed fingers to expressions like “break a leg.” Boggs may have been more elaborate in his magical thinking, but his belief in the supernatural was far from unusual.

Psychologists have long been fascinated with such thinking, but most research so far has focused on the sources of superstition—where magical beliefs come from. Recently, however, a few scientists have begun to explore the heretical idea that lucky charms may actually work. Is it possible that such irrational thinking really does improve performance? And if so, what is the psychological mechanism at work?

Psychologist Lysann Damisch of the University of Koln, Germany, is among those who believe that lucky charms may indeed be effective, and she has an idea about why. She suspects that the activation of superstitious thinking directly prior to a task may boost a person’s confidence in his or her ability to succeed—what’s known as self-efficacy—which in turn boosts expectations and persistence, thus improving performance. She decided to test this idea in a series of experiments.

The first two experiments were similar. In one, Damisch had a group of volunteers putt golf balls about four feet into the hole—so not hugely difficult but definitely missable. But before they attempted this, she told about half of them that they were playing with a “lucky” ball, while the others just got a regular golf ball. Similarly in a second experiment, the volunteers attempted a difficult hand-held dexterity game; but before they did, half were told: “I’m keeping my fingers crossed for you.” In other words, in each study, only some of the volunteers had their superstitious thinking sparked, while the others simply performed the task. And the results were the same in both tests. Those “feeling lucky” did much better than did those with no magic on their side.

So good luck charms did clearly improve performance, but how? Damisch ran a couple more experiments to test her ideas about confidence, expectations and persistence. She again had volunteers perform difficult tasks—in this case memory and anagram tests. And again, she made only some of the volunteers “lucky”—now by having them bring their own personal charms to the test site. But in these

studies she also measured the volunteers' confidence and effectiveness; their expectations for their performance; and how long they persevered before giving up.

The results were unambiguous. As [reported on-line last week](#) in the journal *Psychological Science*, those with their personal lucky charms in their possession were much more confident going into the performance. This confidence in turn caused the players to set higher personal goals and expectations and to persist longer at the task—all of which added up to excellent performance. In short, nothing magical about it.

Lucky charms are prevalent in most world cultures, and have been for eons. This evidence for their potency may help explain why this is so. All-Star performances no doubt require much more than talismans. Wade Boggs combined exceptional talent and years of hard work, but apparently those chicken dinners and wind sprints at precisely 7:17 didn't hurt.

Wray Herbert's book, [On Second Thought: Outsmarting Your Mind's Hard-Wired Habits](#), will be published by Crown in September. Excerpts of "We're Only Human" appear regularly in the magazine *Scientific American Mind* and in *The Huffington Post*.