

The WAGER Vol. 9(6) - Attribution, Addiction, and Gambling: Seeing What We Expect to See

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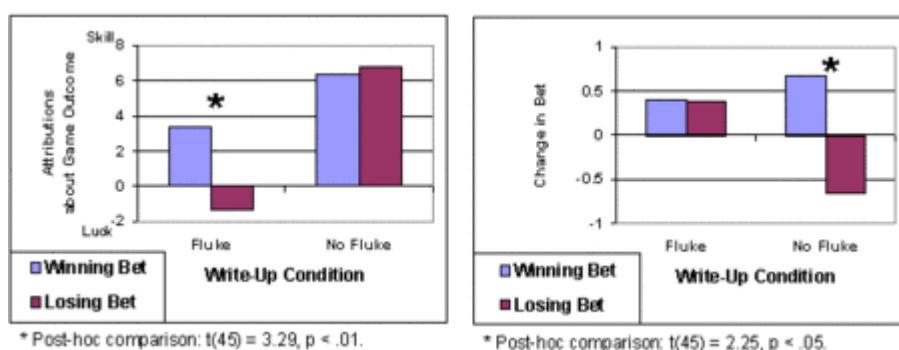
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If you have followed the race for the United States democratic presidential nomination, you are probably familiar with the “Dean Scream.” The Dean Scream is the footage of Howard Dean’s uninhibited rally cry after losing the Iowa caucus: television, the Web, and even radio promos have played it repeatedly. One might argue that the excessive coverage and Dean’s consequent decline in popularity demonstrate a confirmation bias (see Nickerson, 1998, for a full review of the confirmation bias). Before his speech, Dean already had a reputation for his temper and failure to hold his tongue. The rally cry confirmed this reputation and it, not the footage of calm interviews or conversations with voters that could disconfirm the reputation, attracted media attention. Whatever people’s political orientation, whichever candidate they back, the confirmation bias holds that people tend to seek out evidence that supports their view and discount evidence that calls it into question. Applied to gambling, the confirmation bias explains the tendency to discount losses and highlight wins to justify continued gambling. Research suggests that those who develop gambling problems might display a pronounced confirmation bias, overemphasizing wins as reflections of their own skill and losses as random flukes. This week’s *WAGER* reviews a classic article by Gilovich (1983) on the role of this bias in the persistence of gambling behavior.

In one of several experiments on biased evaluations in gambling, Gilovich asked a group of 49 people, all either athletes or football fans, to bet on the outcome of an NFL football game from a past season (long enough ago that the outcome of the game was not memorable to any subjects). Participants had the opportunity to read about the players and teams for the given season and then bet up to \$1 on either team (Baltimore or Cleveland) from \$3 provided to them by the experimenter. After betting, the participants read a fabricated newspaper write-

up about the game. All participants read the same general description and final score (Baltimore 27-14 over Cleveland by scoring two touchdowns in the last 8 minutes of the game). However, half of the participants read that Baltimore outplayed Cleveland in those last 8 minutes (nofluke condition) and half read that they scored because of two unforced fumbles by Cleveland (fluke condition). Participants then rated the influence of luck and skill on the outcome of this game before betting on a rematch between the two teams during the same season. For their second bet, participants could again bet up to \$1 from the original \$3 provided by the experimenter and could switch teams if they chose. Participants' ratings of luck and skill are presented in the left chart. Their second bets, adjusted for the size of their original bet and whether they switched teams¹, are presented in the chart on the right.

Figure 1. Attributions for Game Outcome and Consequent Rematch Betting Behavior (adapted from Gilovich, 1983).



As the left chart shows, the fluke win was interpreted quite differently by participants who bet on the winning team and those who bet on the losing team. When given the opportunity to explain an outcome as a fluke, losing bettors embraced that opportunity but winning bettors ignored it. In both cases attributions influenced future betting behavior, as shown in the chart on the right. In the no fluke condition, those who had lost their first bet (and could not attribute the loss to luck) placed lower bets than before and were more likely to switch teams. But in the fluke condition, losers supported their original team and placed bets that were just as high (relatively) as the winners' bets. Winners, on the other hand, did not adjust their bets significantly in the fluke condition: winners in both conditions bet similarly.

These results demonstrate how, assuming a belief in their ability to win bets, people can make attributions about outcomes in a way that perpetuates their

expectations of betting success. One limitation of these results is the artificial nature of the experiment; participants were betting on a game that had already happened, were not able to watch the events of the game unfold, and stood to lose nothing (and gain only \$3). However, Gilovich later demonstrated the generalizability of his findings, showing that flukes and their contribution to the confirmation bias also apply to games of chance (see Gilovich, 1986). It is not difficult to imagine how a run of numbers in bingo, a ball bouncing out of a space in roulette, or a near-miss on a slot machine can be construed as flukes in the same way as the fumbles in the Baltimore-Cleveland game.

Gilovich (1983) suggests that given an expectation of success in gambling, the greater a person's tendency to exhibit the confirmation bias, the more vulnerable that person is to excessive gambling behavior.² His findings suggests that gambling prevention and treatment programs need to help gamblers assess the false expectations and biased attributions they use to perpetuate their gambling behavior in the face of negative consequences. Although their effectiveness is still being evaluated, several gambling treatment programs now use cognitive strategies to address gamblers' attributional biases. For example, the Quebec Program raises disordered gamblers' awareness of erroneous perceptions and cognitive misconceptions about gambling, and the Sydney Program uses cognitive restructuring to correct false expectations (see Ladouceur & Walker, 1996, for a review of cognitive gambling treatments).

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Notes

1 Participants' second bets were divided by their first bets in order to measure change. For those participants who switched teams, their adjusted second bets were multiplied by negative one to reflect the change.

2 This raises the question of whether people's expectations of betting success influence their susceptibility to the confirmation bias (or the form that bias takes). Recent research has shown that dispositional optimists might be particularly vulnerable to the confirmation bias. They tend to hold high expectations for gambling success and continue to hold those expectations and bet despite evidence to the contrary. Pessimists are much more likely to change their expectations and reduce their bets as a result of their losses (see Gibson & Sanbonmatsu, 2004).

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