Losses reduce subsequent risk taking among bettors—applies to many other risky decisions, too

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Psychologically, loss is known to cause about twice as much pain as pleasure caused by similar gain. However, earlier studies focusing on how prior outcomes affect subsequent risk taking have reported conclusions that appear mutually contradictory.

A new study carried out by the University of Eastern Finland Business School among horse race bettors shows that loss reduces subsequent risk taking, and bettors also tend to avoid loss when betting money they have already won. The findings were published in *Management Science*.

The researchers observed the betting behaviour of more than 5,000 Finnish horse race bettors in a horse race meeting. The data for the study was obtained from the online betting database of Fintoto, which is a betting company with a legal monopoly for horse race betting in Finland. The anonymous individual-level data on bettors and their betting choices made it possible for the researchers to analyse the role of earlier gains and losses on subsequent betting behaviour.

"At first, we were surprised to find out that earlier losses reduced risk taking, because many earlier studies focusing on the financial and housing markets have shown that people tend to take greater risks after experiencing a loss. Researchers have suggested that one of the main explaining factors is that people are haunted by their loss and are ready to take greater risks to break even. In gambling, however, bettors become more cautious after losses," says Researcher Niko Suhonen, one of the study authors, from the University of Eastern Finland.

Bettors tend to avoid losses

The researchers also found that although horse race bettors reduced risk taking after loss, their goal was to break even at the very the least, i.e. to avoid loss at the end of the day.

"Generally speaking, the tendency to chase losses is associated with increased risk taking. Our findings, however, are different, providing additional insight into the mechanisms that affect risky decision-making," says Senior Lecturer Jani Saastamoinen from the University of Eastern Finland, the other author of the study.

"Compared to conventional stock investments, one of the key differences is that horse race bettors can reduce their bets while choosing odds of their preference, making it possible to reach a break-even point in the event of a winning bet," Suhonen adds.

The researchers observed a similar phenomenon in the event of gain: although bettors tended to increase their bets after gains, their subsequent bet (i.e. potential loss) did not exceed their earlier gains. In other words, bettors tended to bet their earlier gains while avoiding loss. This phenomenon is known as the "house money effect", as bettors regard their recent gain as the "house's money," not their "own money", which can be used more freely.

Gambling data benefits risk research

For decades, researchers studying risky decision-making have used the gambling market as a test laboratory for analysing people's behaviour in genuine, yet controlled environments. Today's online gambling and the related data constitute an important platform for testing different theories.

According to Researcher Suhonen and Senior Lecturer Saastamoinen, their findings can also be applied to many other situations involving risky decision-making.

"For example, when a stock plunges, a stock investor can think about whether or not he or she would purchase the stock at that moment. If this hypothetical thought experiment ends in the conclusion that the investor would not purchase the stock, he or she might do wisely in selling the current one. This makes it possible to illustrate the psychological burden caused by earlier losses," the researchers say.

More information: Niko Suhonen et al, How Do Prior Gains and Losses Affect Subsequent Risk Taking? New Evidence from Individual-Level Horse Race Bets, *Management Science* (2017). [DOI: 10.1287/mnsc.2016.2679](https://dx.doi.org/10.1287/mnsc.2016.2679)

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