

# Problem gambling and crime appear co-symptomatic, not causal

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New research from a University at Buffalo sociologist is providing valuable insight into better understanding the association between criminal behaviors and problem gambling.

"We're finding that it's not so much that problem gambling causes crime, but rather that the same background characteristics that contribute to predicting the likelihood of someone being a problem [gambler](#) also predict that they'll engage in crime," says Christopher Dennison, an assistant professor of sociology in UB's College of Arts and Sciences.

Accounting for existing differences between problem gamblers and non-problem gamblers weakens the widely held assumption that points to a strong causal relationship—that gambling disorders can lead to criminal outcomes.

In the case of problem gambling—which is indicated by traits including a preoccupation with gambling; an inability to scale back; or when gambling becomes a vehicle for escaping negative emotional states, like depression—it's a matter of general deviance, according to Dennison.

It's not that one causes the other, but rather that the two are co-symptomatic.

Socioeconomic status, prior substance use, and involvement with delinquent peers early in life are part of a set of variables associated with both criminal behavior and problem gambling.

Dennison categorizes these variables collectively in his research as confounding bias.

"On the surface, problem gambling might be observed as a direct x-to-y relationship, but confounding bias is saying there might be another variable, z for instance," notes Dennison, who conducted the research with co-authors Jessica Finkeldey, an assistant professor at the State University of New York at Fredonia, and Gregory Rocheleau, an assistant professor at Ball State University.

"Something in between that x-to-y pathway might explain gambling and might also explain crime," he says. "If you ignore those variables—if you ignore confounding bias—you might overestimate the relationship."

The findings, which appear in the *Journal of Gambling Studies*, could lead to the development of new treatments that account for how these background characteristics influence behavior. Addressing these issues early in the [life course](#) can be beneficial for decreasing the likelihood of both problem gambling and crime later in life.

"From a co-symptomatic perspective, we can provide interventions that address both behaviors at the same time rather than pursuing separate treatments, one for gambling and another for crime," Dennison says.

Dennison's team is not the first research group to look at this association, but unlike previous studies that relied on small, non-random, and cross-sectional samples that provide a snap shot view, the current paper is based on the Add Health data set. The nationally representative study interviewed more than 21,000 adolescents in the early 1990s, and subsequently re-interviewed them between the ages of 18-26 and 26-34.

In addition to relying on a rich data set for their research, Dennison and his co-authors wanted to statistically balance differences in background characteristics between problem gamblers and non-problem gamblers in hopes to simulate a gold standard experiment.

The social sciences present research challenges that make it difficult to isolate a control group. Medical sciences, for instance, can provide a treatment to one group, a placebo to a control group, and look at the outcome. But in the case of the current research, it's not possible to simply compare problem gamblers with non-problem gamblers, because of the differences in background characteristics.

"We created two groups that were statistically equal—problem gamblers who look like non-[problem gamblers](#) in the data," says Dennison. "This helped us shed light on the question of general deviance by examining the relationship between problem [gambling](#) and crime net of pre-existing differences."

**More information:** Christopher R. Dennison et al. Confounding Bias in the Relationship Between Problem Gambling and Crime, *Journal of Gambling Studies* (2020). [DOI: 10.1007/s10899-020-09939-0](https://doi.org/10.1007/s10899-020-09939-0)

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