The End of Barroom Brawls: Study Shows Alcohol can Reduce Aggression

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The link between alcohol and aggression is well known. What's not so clear is just why drunks get belligerent. What is it about the brain-on-alcohol that makes fighting seem like a good idea? And do all intoxicated people get more aggressive? Or does it depend on the circumstances?

University of Kentucky psychologist Peter Giancola and his student Michelle Corman decided to explore these questions in the laboratory. One theory about alcohol and aggression is that drinking impairs the part of the brain involved in allocating our limited mental resources—specifically attention and working memory. When we can only focus on a fraction of what's going on around us, the theory holds, drunks narrow their social vision, concentrating myopically on provocative cues and ignoring things that might have a calming or inhibiting effect.

The scientists tested this idea on a group of young Kentucky men. Some of the men drank three to four screwdrivers before the experiment, while others stayed sober. Then they had them all compete against another person in a somewhat stressful game that required very quick responses. Every time they lost a round, they received a shock varying in intensity. Likewise, when they won a round they gave their opponent a shock. The idea was to see how alcohol affected the men's belligerence, as measured by the kinds of shocks they chose to hand out.

But there was more to it. Giancola and Corman also deliberately manipulated some of the volunteers' cognitive powers. They required them—some drinkers, some not—to simultaneously perform a difficult memory task. The idea was to see if they could distract those who were "under the influence" from their "hostile" situation. If they could tax their limited powers of concentration, perhaps they wouldn't process the fact that someone was zapping them with electricity.

And that's exactly what happened. As reported in the July issue of *Psychological Science*, the drunks who had nothing to distract them were predictably mean, exhibiting aggression towards their adversaries. However, the drunks whose attention was focused elsewhere were actually less aggressive than the sober non-drinkers. This seems counterintuitive at first, but it's really not: The sober men were cognitively intact, so they would naturally attend to both provocations and distractions in the room, resulting in some low level of aggression.

It appears that alcohol has the potential to both increase and decrease aggression, depending on where's one's attention is focused. The psychologists speculate that working memory is crucial not only to barroom behavior, but to all social behavior, because it provides the capacity for self-reflection and strategic planning. Activating working memory with salient, non-hostile, and health-promoting thoughts, in effect reduces the "cognitive space" available for inclinations towards violence.