

knowledge snapshot



The influences of Langer's illusion of control on gambling research and intervention

What this article is about

Ellen J. Langer published a research paper in 1975 describing the illusion of control. The illusion of control describes when people over-estimate their ability to control the outcome of a situation. In this article, the authors described how Langer's work on the illusion of control has greatly influenced the cognitive model in gambling research and intervention. The cognitive model proposes that erroneous beliefs and ways of thinking lead to the development and maintenance of gambling problems. Yet, little is known about the mechanisms or mental processes underlying the illusion of control.

What was done?

The authors discussed the influences of Langer's work on the cognitive model of gambling.

What you need to know

Langer's research and the cognitive model

Langer's (1975) paper described a series of six experiments. In one well-known experiment, participants either chose a lottery ticket or were given a ticket. They then had the opportunity to sell the ticket back to the experimenter. Participants who chose their ticket set a higher price than participants who were given their ticket. The last experiment added a twist by revealing three lottery numbers to participants over successive days (high involvement) or at once on the day of purchase (low involvement). On the day of the draw, participants could exchange their ticket for a different lottery ticket which had a higher odds of winning. Participants with high involvement were more confident that their original ticket would win and were more likely to keep it.

Why is this article important?

The illusion of control describes when people over-estimate their ability to control the outcome of a situation. Ellen J. Langer's publication in 1975 on the illusion of control has greatly influenced gambling research and intervention. The authors described Langer's work and how it has inspired the cognitive model of gambling. They also outlined the research to explore the mechanisms or mental processes underlying the illusion of control.

Langer identified four factors that could foster the illusion of control: choice, involvement, competition, and familiarity. While Langer noted the link between the illusion of control and gambling, she stopped short from making any links to excessive gambling. Langer's work had great impact on the emerging field of gambling studies at the time. For instance, Robert Ladouceur and his team in Canada employed the 'think-aloud' procedure in which participants spoke aloud their thoughts during the experiments. They noticed that participants made statements that blurred the line between skill and chance.

Langer's work on the illusion of control is one of the foundational pieces of the cognitive model. This model proposes that people with gambling problems have more erroneous beliefs, also called cognitive distortions. Several questionnaires have been developed to measure these cognitive distortions. Later studies have linked the illusion of control to disordered gambling, cravings to gamble, and motivations to gamble despite losses.

Policy and intervention

At a clinical level, cognitive restructuring may be used as part of cognitive behavioural therapy. Cognitive restructuring aims to help people identify and change the specific cognitive distortions that they have.

Educational programmes to prevent disordered gambling have focused on youth and people who are at risk. In many jurisdictions, information booths are set up in casinos as part of broader responsible gambling programmes. To date, little is known about how effective these programmes are. Some studies have found that training in statistics does not transfer to real-world gambling. Prevention programmes also face other challenges. Specific to the illusion of control, different forms of gambling involve different levels of skill. For instance, poker, blackjack, and sports betting require players to have some knowledge and skill. Players often develop arguments that rationalize their beliefs about their control over the game.

The gambling industry has used technologies to heighten players' sense of control in chance-based games. For example, slot machines may have the 'stop' button to stop the reel from spinning. While it does not have any impact on the game outcome, players may mistakenly think that their behaviour has an impact. It is important for policy makers and regulators to understand how features of gambling products may foster cognitive distortions.

Mechanisms

Langer's research implies that people misjudge their personal success to influence the outcome. Later research has also noted the role of emotion. For instance, 'regret anticipation' proposes that people expect regret if their chosen ticket ends up winning and they have exchanged it. Also, people learn whether their behaviour can trigger a desired outcome. Behaviours that are seen as having high rates of positive outcomes can fuel an illusion of control. Recent research by Klusowski and colleagues revisited the issue of choice in the illusion of control. A major insight of their research is that people's pre-existing beliefs guide their choice, not vice versa. The illusion of control is still relevant to the current public health approach to gambling. Understanding its

mechanisms can help to develop better policies, treatments, and prevention programmes.

Who is it intended for?

This article can be relevant for researchers, treatment providers, and other stakeholders.

About the researchers

Luke Clark is affiliated with the Centre for Gambling Research at UBC in the Department of Psychology and the Djavad Mowafaghian Centre for Brain Health at the University of British Columbia in Vancouver, BC, Canada. **Michael J. A. Wohl** is affiliated with the Department of Psychology and the Mental Health and Well-being Research and Training Hub at Carleton University in Ottawa, ON, Canada. For more information about this research, please contact Luke Clark at luke.clark@psych.ubc.ca.

Citation

Clark, L., & Wohl, M. J. A. (2021). Langer's illusion of control and the cognitive model of disordered gambling. *Addiction*. Advance online publication. <https://doi.org/10.1111/add.15649>

Study funding

This research was supported by the core funding of the Centre for Gambling Research at UBC.

About Greo

Greo has partnered with the Knowledge Mobilization Unit at York University to produce Research Snapshots. Greo is an independent knowledge translation and exchange organization with almost two decades of international experience in generating, synthesizing, and mobilizing research into action across the health and wellbeing sectors. Greo helps organizations improve their strategies, policies, and practices by harnessing the power of evidence and stakeholder insight.

Learn more about Greo by visiting greo.ca or emailing info@greo.ca.

