

# research snapshot

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## Exploring why slot machine gamblers use the stop button

### What this research is about

Past research has found that electronic gaming machines (EGMs) like slots machines have structural characteristics that can be addictive and, therefore, harmful. These structural characteristics include visual (e.g., lights, colours) and functional features (e.g., frequency of wins, jackpot size). One example is the stop button. Gamblers can press the stop button at any time during a spin. Pressing the stop button does not change the outcome. But it stops the spin and reveals the outcome in a shorter time frame.

Many gamblers see the stop button as an attractive feature. Some studies have reported that it contributes to the illusion of control. Using the stop button may provide gamblers with a feeling that they have control over the game's outcomes. But it is also possible that using the stop button allows gamblers to play the game at a faster speed. Both illusions of control and faster speed of play could elicit more gambling problems. Hence, this study aimed to examine how players used the stop button when gambling on a multi-line slot machine. It tested if increased illusions of control or faster speed of play explained why players used the stop button.

### What the researchers did

The researchers first examined the use of the stop button among a group of 30 undergraduate students, aged 19 or older. Students were screened for their gambling status using the Problem Gambling Severity Index (PGSI). Those who were at high risk of problem gambling were excluded from participating. The researchers then recruited a group of 31 community members who were regular slot machine gamblers.

### What you need to know

The present study examined how players used the stop button in a multi-line slot machine and why they used it. It included 30 undergraduate students and 31 community-based regular slot machine gamblers. Results did not find any evidence that using the stop button was related to having illusions of control. Those who believed the stop button to be an effective feature did not differ in how often they used it compared to those who did not have such beliefs. However, the use of the stop button was related to faster spins. Participants used it more often in situations where its previous use had resulted in a winning outcome.

On arrival at the researchers' lab, the participants completed the PGSI. Then, they entered the "casino lab" which housed four multi-line slot machines with a stop button. The researchers told the participants about the stop button and that they could use it as often as they wanted to. The participants were provided with money (\$40) and were asked to play for a set period of time (20 minutes). After the session, the participants completed a questionnaire.

The questionnaire included the Gamblers' Beliefs Questionnaire (GBQ) to assess erroneous beliefs about gambling. These included illusions of control and beliefs in luck/perseverance. The Game Experience Questionnaire (GEQ) was used to assess participants' subjective experiences with playing the game. It measured seven dimensions: Immersion, Tension/Annoyance, Competence, Flow, Negative Affect, Positive Affect and Challenge. Another

questionnaire assessed what the participants thought about the stop button. Community gamblers were asked if they used the stop button when playing in the real-world and how often they used it.

### What the researchers found

Among the students, there were 21 non-problem gamblers, six low-risk gamblers, and three moderate-risk gamblers. Only six students had played slot machines in the past year, and only one student had played regularly (six to 11 times in the past year). Six students (20%) showed some illusions of control and referred to the stop button as an effective feature. However, these students did not differ in how often they used the stop button from students who did not have such beliefs. The use of the stop button was associated with experiencing the game as a challenge.

The community gamblers included two non-problem gamblers, seven low-risk gamblers, 13 moderate-risk gamblers, and nine high-risk gamblers. Fifteen participants gambled on slot machines on a weekly basis, and eight reported playing on a monthly basis. Fifteen participants (48%) showed some illusions of control and referred to the stop button. Similar to the students, having illusions of control did not predict the use of stop button. The use of the stop button was associated with the experience of positive affect when playing the game.

The researchers tested the use of the stop button and speed of play among the community gamblers. The use of the stop button was related to faster spins. When the stop button was not used, the participants paused for longer before starting the next spin after wins, losses disguised as wins (when the win was less than the bet), and near-misses (a loss that was close to a win) as compared to losses. These pauses were shorter if the stop button had been used. The participants' use of the stop button also increased if its previous use resulted in a winning outcome.

### How you can use this research

This research could be used to enhance prevention of problematic gambling. Understanding how the stop button use contributes to problem gambling could facilitate program development. For example,

programs could target this structural characteristic by raising awareness of how it links to higher risk of problem gambling. Responsible gambling policies could be developed by further investigation of the effects of the stop button. Future research could also examine its effects in more naturalistic settings.

### About the researchers

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### Keywords

Electronic gaming machines, illusions, skill, behavior, cognition

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