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The effect of cognitive dissonance on gambling behaviour

What this research is about

One way to get gamblers to gamble more responsibly is to give them personalized feedback about their gambling behaviour, including the amount of money spent. Past research has found that gamblers receiving personalized feedback go on to spend less money and time gambling than those who did not receive personalized feedback.

Providing information to gamblers about the amount of money spent gambling may result in cognitive dissonance. Cognitive dissonance refers to a mismatch between attitudes and beliefs. For example, the mismatch between what gamblers have actually spent and what they think they have spent. To reduce cognitive dissonance, gamblers may change their behaviour, such as gambling less.

The current study explored changes in gambling behaviour by giving gamblers personalized information and asking whether the amount of money lost to gambling was (i) more than expected, (ii) about as much as expected, or (iii) less than expected. The researchers expected that gamblers who spent more money than they thought they had would experience cognitive dissonance and gamble less.

What the researchers did

Participants were 11,829 players who had played at least one game in the past six months on the *Norsk Tipping* online gambling website. The participants only included players who had lost money.

The researchers sent players an email that said: "How much do you think you spent on gambling recently? Our records show that you lost [XXX] dollars last month." Players could click on a link in the email to

What you need to know

The researchers of the current study predicted that gamblers who claimed the amount of money lost to gambling was more than they expected would experience cognitive dissonance and gamble less. However, the results showed that players without any cognitive dissonance decreased their gambling spending more than players who experienced cognitive dissonance. A detailed analysis of the playing patterns of six different types of gamblers explained the unexpected results.

view their personalized information. Out of the 11,829 players, 4045 players viewed their personalized information. After players viewed their personal loss, they indicated whether they thought the amount lost was (i) more than expected, (ii) about as much as expected, or (iii) less than expected.

The researchers measured gambling behaviour (amount of money wagered) seven days before and seven days after participants read about their gambling losses. The researchers also analyzed the playing patterns of six different types of gamblers to further explain the results.

What the researchers found

For 63% of players, the amount lost was about as much as they expected. Three in 10 players (30%) reported they had lost more than expected, and 7% had lost less than expected.

Contrary to what the researchers expected, players who reported that the amount of money they lost was

more than they expected decreased their gambling spending less than those who reported the amount was about as much as they expected. Players who reported that the amount spent was even less than they expected decreased their gambling behaviour the most. This means that players without any cognitive dissonance decreased their gambling spending more than players who experienced cognitive dissonance.

To explain the unexpected results, the researchers analyzed the playing patterns of six different types of gamblers. Players who had above average losses and likely to have self-excluded from gambling in the past (Group 1) and female players with above average losses (Group 2) had large decreases in gambling spending. These two groups were most likely to have experienced cognitive dissonance. Other players who had large decreases were lottery players who had low losses or who played infrequently (Group 4 and Group 6). These players reported that they lost as much as they expected. Their decreases in gambling spending were likely due to their low involvement in gambling. Therefore, the unexpected results were likely due to many players who recently experienced a win (Group 5) and highly involved casino players who did not appear to experience cognitive dissonance despite their big losses (Group 3).

How you can use this research

Clinicians and treatment providers should provide tailored treatment and education for clients who are unlikely to experience cognitive dissonance and motivate them to change their gambling behaviours. These may include gamblers with recent wins or highly-involved casino players. The current study used objective information collected through tracking data to inform players about their gambling behaviour. Future research should build on the current findings with self-reported information about gamblers' cognitive beliefs and motivations to gamble.

About the researchers

Michael Auer is affiliated with neccton Ltd. in London, United Kingdom. **Mark D. Griffiths** is affiliated with the International Gaming Research Unit at

Nottingham Trent University in Nottingham, United Kingdom. For more information about this study, please contact Mark D. Griffiths at mark.griffiths@ntu.ac.uk.

Citation

Auer, M., & Griffiths, M. D. (2017). Cognitive dissonance, personalized feedback, and online gambling behavior: An exploratory study using objective tracking data and subjective self-report. *International Journal of Mental Health and Addiction*. Advance online publication. https://doi.org/10.1007/s11469-017-9808-1

Keywords

Behavioral tracking, gambling, cognitive dissonance, gambling expenditure, online gambling

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Information item	Value
Title	Cognitive dissonance, personalized feedback, and online gambling behavior: An exploratory study using objective tracking data and subjective self-report
Article URL	https://link.springer.com/article/10.1007/s11469-017-9808-1
Authors	"Auer, Michael", "Griffiths, Mark D."
Journal	International Journal of Mental Health and Addiction
Year published	2017
Keywords	Behavioral tracking, gambling, cognitive dissonance, gambling expenditure, online gambling
Geographic coverage	Norway
Study population	Players (N=11,829) who had played at least one game for money in the past six months on the *Norsk Tipping* online gambling website during April 2015.
DOI	https://doi.org/10.1007/s11469-017-9808-1
Citation	Auer, M., & Griffiths, M. D. (2017). Cognitive dissonance, personalized feedback, and online gambling behavior: An exploratory study using objective tracking data and subjective self-report. *International Journal of Mental Health and Addiction*. Advance online publication. https://doi.org/10.1007/s11469-017-9808-1
Unit of analysis	Group
Sampling procedure	The participants were drawn from the population that had played at least one game for money on the *Norsk Tipping* online platform during April 2015. The participants were randomly selected from 69,631 players.
Response rate	34.2%
Study design	Observational (cohort)
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