

# knowledge snapshot



Review of Internet gambling research that uses behavioural tracking to explore gambling behaviour

## What this article is about

This article reviews research studies that investigate the real-world behaviour of Internet gamblers using behavioural tracking data. Such data are collected by gambling websites and can be used to track gamblers' online playing records. Since Internet gambling is becoming more popular, it is important to describe Internet gambling behaviour and identify factors that may encourage problem gambling so that appropriate responsible gambling policies can be put in place. Researchers are just starting to use gamblers' online playing records to understand their gambling behaviour. A past review of Internet gambling noticed that most research studies were limited by the use of self-report. In this review, the authors cover more recent studies that were published since then. They focus their review on studies that use behavioural tracking data to analyze gambling behaviour. The authors also identify gaps in current research and provide suggestions for future topics of study.

## What was done?

The authors searched for research studies using behavioural tracking data to analyze gamblers' Internet gambling behaviour. The search was limited to the period from January 2000 to January 2017. They identified 120 studies in their search, and included 55 studies in their review. To be included, a study must examine real-world Internet gambling behaviour using tracking data and was peer-reviewed.

## What you need to know

Behavioural tracking information includes user account data such as birthday and gender, game data such as the game type played and amount won, responsible gaming data such as time and spend

## Why is this article important?

Although Internet gambling is becoming more common, few studies have been done to understand online gambling behaviour using real-world gambling data. The authors reviewed 55 research studies published between 2000 and 2017. Their review shows that the use of behavioural tracking data has greatly contributed to the field of gambling research. Although the authors identify benefits to using real-world data to explore gambling behaviour, they also outline limitations to the use of such data. The authors suggest several areas that need more research.

limits, and other information such as length of playing session. Studies that use behavioural tracking data to investigate Internet gambling behaviour have often relied on the same databases (e.g., the database provided through Bwin). This finding suggests that only certain gambling operators are collecting gamblers' playing data, or that data are not made widely available. To date, most studies have relied on data collected from European and Australian players.

Studies have used gambling involvement and gambling intensity to assess players' gambling activity. But there is a debate among researchers on how best to define involvement and intensity. The authors argue that each study must find the appropriate methods and tools to measure gambling involvement and intensity. Online gambling should be assessed based on its circumstances such as the type of games, players, data, and other factors under study.

Some studies compared questionnaire data self-reported by gamblers with real-world behavioural

tracking data. These studies found that many gamblers incorrectly estimated their losses and gains. Heavily involved gamblers tended to underestimate their losses more often than less involved gamblers. Some researchers have used behavioural tracking data to identify early signs of gambling problems.

The Internet allows for the implementation of responsible gambling tools, such as limit settings on time and money. Only a few studies have investigated the usefulness of these tools. There is some evidence that setting time and money limits can reduce gambling behaviour. Behavioural feedback, including pop-up messages, lets players know when they reach their limits. Such messages appear to help gamblers play more responsibly. For example, it had been reported that players who saw pop-up messages were more likely to reduce the amount of time and money spent on gambling. On self-exclusion, some studies found that players who closed their accounts tended to have gambling problems, wager more money, make riskier bets, and be young adult males.

There are several benefits to using behavioural tracking data. This method allows researchers to objectively study gambling behaviour under real-world conditions. Accessing this type of data is not costly, and data can be collected from larger groups of more diverse players. It also prevents issues related to self-report questionnaires, such as response bias. On the other hand, data tend to come from one website and researchers do not have information regarding players' gambling behaviour on other websites or offline. Furthermore, researchers do not have information on why people gamble or why they engage in a particular gambling activity.

The authors suggest that future research using behavioural tracking data should:

1. Explore gambling patterns when players are approaching their time and money limits;
2. Combine self-report and behavioural tracking data to better understand gambling behaviour;
3. Investigate how responsible gaming tools influence gambling behaviour; and

4. Examine players' gambling motivations and beliefs.

### Who is it intended for?

This review is useful to researchers as they can use it to understand where more research into Internet gambling is needed. It is also useful to gambling providers and regulators since it offers insights into evidence surrounding online protection measures to prevent problem gambling.

### About the researchers

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### Keywords

Consumption, consumer behaviour, online gambling, Internet gambling, behavioural tracking, tracking data, big data

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