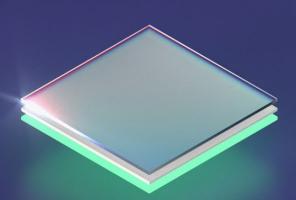




Effects of Autoplay on Player Behaviours









# Autoplay: Effects of Autoplay on Player Behaviours

## What is the topic?

Autoplay is the functionality that allows players to automatically play a number of games, slot or table, without needing to press a 'spin' button. Autoplay typically runs for a set number of spins and requires the player to select their bet size and may require setting loss limits as well. There are competing views on how using autoplay changes behaviour, with little evidence available of autoplay as used in a real-world environment. This report analyses the behaviour of online slot game players on a mixed slots/bingo platform, relating their use of autoplay to three metrics that can provide an indication of player risk – financial loss per day, number of declined deposits, and BetBuddy risk rating.

### Why is it important?

In 2021, the Gambling Commission in Great Britain introduced restrictions on a number of structural characteristics of online slot games which aimed to reduce harm to players, which included banning the use of autoplay. Autoplay remains a popular feature in regulated gambling jurisdictions. Most major regulated European jurisdictions allow it, including Italy and Spain; the largest North American jurisdiction, New Jersey, also allows it. The feature is available in regulated markets in Latin America, such as Colombia. Autoplay has attracted attention due to a study conducted by Parke & Blaszczynski (2016) where the authors posit that autoplay is a risk factor in electronic games and the regulators should consider placing restrictions on the feature. This suggestion is based on the hypothesis that faster and continuous gameplay deters informed decision making which results in uncontrolled and harmful behaviour. Whilst the relative high risk of slot games has been attributed to their rapid, continuous reinforcement by some researchers (Mentzoni, Laberg, Brunborg, Molde, & Pallesen, 2012), specific high-quality evidence using real-world player behaviour data linking the use of autoplay on slots to actual harm proxies does not exist, with the small body of peer-reviewed primary research typically based on small self-report samples rather than observations of player behaviour. This briefing aims to add evidence to this under-researched area and is particularly important when considering regulation is being shaped around evidence that may not meet the quality thresholds expected.

## What did the research do?

This study uses two months of anonymised player data from 8 Jan 2020 to 8 Mar 2020 obtained from a bingo and casino operator in Great Britain. In order to qualify for the main analysis a player must have played on at least three separate days, they must have wagered at least £10 in total and they must have wagered at least 75% of their total wager on Playtech slot games, being the games for which Playtech holds metrics to drive the analysis. This results in a sample of approximately 13,000 players. This full sample is analysed as a cross-check to the main results, with the intention on narrowing the focus to the players who have used autoplay at least once (c.19% of the sample) and players who have deposited less than £10,000 over a 2-month period, being a typical trigger at which additional scrutiny and support would be provided





by a platform and risky behaviours should be monitored more directly. The core sample size for analysis is therefore 2,458.

The first level of analysis (Analysis 1) uses a cross-sectional approach where players are compared against each other in order to understand how heavy users of autoplay compare to light users of autoplay but without considering how they might differ in terms of affordability, playing style, or other circumstances (cross-sectional analysis using linear regression).

The second level of analysis (Analysis 2) compares players against their personal usage of autoplay on a daily basis so that any deviations from their usual amount becomes the primary unit of measurement thus adjusting for player idiosyncrasies that are fixed over time (panel modelling using panel regression). Autoplay is analysed as a percentage of spins in both analyses: For example, if a player has 10 spins for the day and 2 of them used autoplay then the player has utilised autoplay 20% of the time on that day.

## What did the research find?

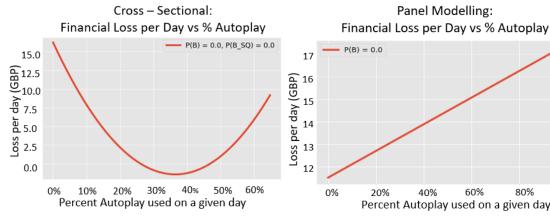


Figure 1a Effects of Autoplay on Financial Loss per day in GBP when comparing heavy to light users of the feature.

Figure 1b Effects of Autoplay on Financial Loss per day in GBP when comparing the individual's usage on a given day to their average.

60%

80%

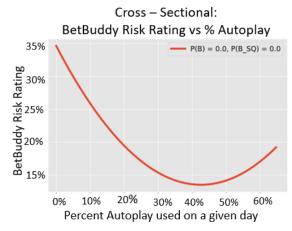
100%

Analysis 1 – Cross–sectional approach: Comparing intensive autoplay users to light users

Comparing high to low autoplay usage in the core sample of 2,458 players, there is a statistically significant u-shaped relationship (at 99% confidence level) between autoplay and the three harm proxies - financial loss, declined deposits, and BetBuddy risk ratings. Initial increases in autoplay usage are associated with reduced levels of loss, declined deposits, and risk. For example, an increase by one median from 15% to 30% in wagering on autoplay is associated with a decrease of £6 daily financial loss (Figure 1a). Beyond 30%-40% daily usage of autoplay, the relationship turns adverse where increased use of the feature leads to higher financial loss for the day. However, the increased risk typically remains at levels below the risks associated with low use of autoplay. Similar relationships exist for the declined deposits and risk rating harm proxies (see Figures 2a and 3a).

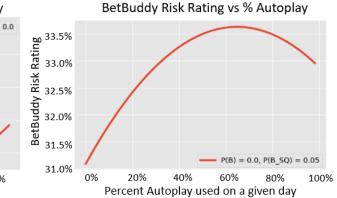






**Figure 2a** Effects of Autoplay on the BetBuddy risk rating when comparing heavy to light users of the feature.

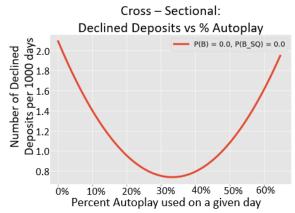
# Panel Modelling: BetBuddy Risk Rating vs % Autoplay



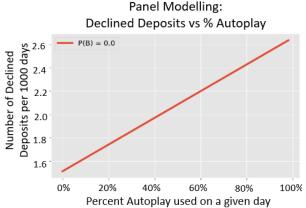
**Figure 2b** Effects of Autoplay on the BetBuddy risk rating when comparing within player betting behaviour.

## Analysis 2 – Panel approach: How do individuals' behaviours change as they start using autoplay more

Comparing deviations in players' usage of autoplay relative to their personal averages, increases in usage typically lead to small increases in the harm proxies. The observed effects are statistically significant at 99% confidence level. For example, an increase from the average level of 13% autoplay to 26% is associated with about 1 more declined deposit days per 1000, £1 greater loss per day, and 0.4%pt increase in BetBuddy risk score (Figures 1b, 2b and 3b).



**Figure 3a** Effects of Autoplay on the number of Declined Deposits when comparing heavy to light users of the feature



**Figure 3b** Effect of Autoplay on the number of Declined Deposits when comparing individual's usage on a given day to their average

In summary, the research suggests that players who use autoplay on slots tend to lose less money per day, have fewer declined deposits, and have lower risk ratings up to 30%-40% wagering on autoplay, a level only reached by 10% of players in our sample. At this high end of autoplay usage, these metrics for possible player risk worsen with increasing autoplay usage but remain lower than those who hardly ever use the feature. However, among those who use autoplay, increased usage of the feature relative to their usual amount is consistently associated with slightly higher average measures on risk proxies, but the changes are small in absolute and relative terms – such as £1-£2 more loss per day and 1-2 more days with a declined deposit per 1000 for large increases in autoplay usage e.g. +40%pts. This suggests that autoplay can be a





protective tool for players on average (although this potential may not be well exploited in current industry practice), but that sharp increases in autoplay usage among regular autoplay users is a risk indicator.

## What might the gambling industry do in response to this research?

In this study, autoplay appears to be a mechanism that could help players to control and reflect on their play because it allows opportunities to think about stop limits and the consequences of long-term/multiple-spin play. The ability of autoplay to enable such an approach to controlled, deliberate play should be leveraged and encouraged and further configurations, such as requiring players to set a loss limit is a sensible addition to autoplay as it limits the risks and maximises the benefits to players.

One further possibility is to personalise customer journeys using in-game messaging with links for more information. For example, when a player uses autoplay for the first time, a message might pop up explaining the benefits of the feature (e.g. for managing sessions, length of play, stop limits) but highlighting that it can take time to get used to the change in the pace of play and to move cautiously. Moreover, recognising the type of usage that is associated with risk, if an occasional user of autoplay becomes a heavy user, industry should explore opportunities for customer interactions explaining the risks of autoplay if over-used without appropriate spend limits. A further consideration is how options are presented to players e.g., setting lower default autoplay spins when selecting the option.

These insights are informed by real play data, but drawn primarily from one operator, with some supporting cross-sectional analysis provided in industry forums from other operators. As always, it is important to continue to test and replicate findings on additional datasets. Given this study noted some small risks when players increased their personal usage from their average, further data should be gathered, utilised, and reviewed systematically. For instance, player autoplay data, if readily accessible by operators, could be used as input variables into player risk classification algorithms and autoplay data might be monitored against threshold flags so that players who increase autoplay usage and spending rapidly might be identified and be offered support.

# How can I find out more?

To find out more please contact the research team via <a href="mailto:protect@playtech.com">protect@playtech.com</a>.

## References

Mentzoni, R.A., Laberg, J.C., Brunborg, G.S., Molde, H. & Pallesen, S. (2012). Tempo in electronic gambling machines affects behaviour among at risk gamblers. Journal of Behavioural Addictions, 1, 3, 135-139.

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