

Under the spotlight:

What slots features are most strongly correlated to increases in player spend, session time, declined deposits and self-exclusion?



We use longitudinal panel regression techniques on a sample of ~2.6k online slots players from the UK to relate changes in the slots game features that individual players experience to changes in those players' gambling activity. Understanding how game features relate to player outcomes and player risk is a key regulatory priority.

We report on relationship strength between ten key features of slots (RTP, hit frequency, volatility, average autoplay ratio, jackpot presence, whether a progressive jackpot, minimum bet, average bet, average spin time and variation in spin time) and five player behaviours that can indicate adverse trends in player experience and possible player harm (financial loss per day, financial loss per hour, session time per day, declined deposits per day, and self-exclusion).

A deep dive into volatility reveals that playing a game mix with increased volatility is associated with shorter sessions with faster rates of loss, but little impact on total loss and declined deposits, suggesting that the changing game mix translates – in aggregate and on average - more into shifts in playing styles than increased harmful outcomes. Moreover the relationships with volatility vary in two operators examined, suggesting that product-risk relationships can be structurally different for different types of players or different games.

This is a rare study examining the link between game features and player experience using ecologically valid data and a technique that mitigates the adverse selection bias in purely cross-sectional studies. There is significant potential for extending the technique, including additional game features and behavioural outcome markers, and we welcome a discussion at the conference about ways to improve the technique and the possible implications of findings to date. We argue that methodologies for robustly relating product features to harm are at an early stage of development, suggesting that methodological criticism and innovation are important to advance the research agenda.

By Chris Percy