

research snapshot

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Loot box spending in video games – relationship to gambling and wellbeing

What this research is about

Traditionally, video games are purchased for a one-time cost. The player can enjoy the game in its entirety for the purchase cost. Recently, in-game purchases have been added as part of some games. The cost could be towards unlocking new content for the game or to purchase loot boxes. Loot boxes contain items the player can use in the game. The items can be cosmetic, like different outfits for the game character to wear, or items that confer an advantage (e.g., weapons).

There is growing concern that loot boxes are a form of gambling. People who buy loot boxes do not know what is inside them until after the purchase. Loot boxes vary in cost and item content by game. It is a new development in the gaming world. Therefore, there is little research on the effect of loot boxes on people who play video games. A few studies suggest that people who spend more money on loot boxes are more likely to experience gambling problems. The authors of this study wanted to know if there was a relationship between loot boxes and problematic gambling. They also wanted to know what the effect of loot boxes was on mental wellbeing.

What the researchers did

Participants were recruited from social media and Science Focus magazine advertisements. Participants needed to be over the age of 18 and to play video games to participate in the study. The study consisted of a series of online questionnaires. The Problem Gambling Severity Index (PGSI) assessed symptoms related to problem gambling. The Internet Gaming Disorder Checklist assessed symptoms related to problematic gaming. Psychological distress was

What you need to know

Loot boxes are a type of in-game purchase. People who buy loot boxes do not know the content of their “box” until they have purchased it. This has led to concerns that loot boxes are similar to gambling. Little research has been done on loot boxes. The authors of this study recruited people who play video games over the age of 18 for an online survey about problem gambling symptoms, disordered gaming symptoms, and money typically spent on loot boxes, other in-game spending, other digital spending, and gambling. The authors found that loot box spending was related to problem gambling symptoms and disordered gaming symptoms; people who spent more money on loot boxes reported more symptoms of problem gambling and disordered gambling. However, loot box spending was not related to mental wellbeing or psychological distress.

measured with the Kessler Psychological Distress Scale. The Warwick Edinburgh Mental Wellbeing Scale assessed mental wellbeing. There were also questions concerning monthly income, disposable income, loot box spending, in-game spending (excluding loot boxes), non-gambling/non-video game related digital purchases, and traditional gambling spending.

What the researchers found

There was a total of 2728 participants included in the analyses of this study. Participants hailed from 51 countries, with most participants being from the UK, Poland, Portugal, USA, and Italy. Most of the sample (72.9%) described themselves as men, and the average age was 27.9 years. The average amount

spent on loot boxes was £8.06 per month, other in-game spending was £9.68, and other digital purchases was £11.81. The average amount spent on gambling was £13.40. A large number of participants reported low or no spending on the four types of spending.

The authors found a positive association between loot box spending and problem gambling, as well as between loot box spending and disordered gaming symptoms. This means that people who spent more money on loot boxes tended to have more symptoms of problem gambling and disordered gaming.

The authors did not find a relationship between loot box spending and mental wellbeing, nor did they find a relationship between loot box spending and psychological distress.

The analyses further indicated that there was an association between non-gambling, in-game-related spending and problematic gambling and gaming. As in-game spending increased, so did symptoms of problematic gambling and gaming. Relatedly, there was a small positive association between in-game spending and psychological distress. As in-game spending increased, so did psychological distress.

The authors also found that digital spending that was not related to gambling or video games was associated with problem gambling and mental wellbeing. As spending in this category increased, so did problem gambling symptoms and mental wellbeing. But the associations were small.

Further analyses compared participants who had and had not spent any money on loot boxes in the past month. These analyses revealed that people who bought loot boxes had more symptoms of problem gambling and disordered gaming. They also spent more on gambling, other in-game purchases, and non-gambling/non-video game digital purchases.

How you can use this research

This study could be useful for researchers and policy makers interested in loot boxes and their relationship with mental wellbeing, distress, and problematic gambling symptoms. The results of the study indicated that loot box spending increases as

problematic gambling symptoms increase. However, no casual inferences can be drawn from this study. Further research is needed to understand the effects of loot box spending on gambling and wellbeing.

About the researchers

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