

research snapshot

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Loot box use is linked to online gambling and gaming disorders in Spanish adolescents and young adults

What this research is about

About 40% of people play video games, with many of them being children or adolescents. In recent years, loot boxes have become common in games. Players use real money to buy loot boxes, which give random items that the player can use in the game.

About 20 to 34% of adolescent gamers buy loot boxes. This may be concerning as some researchers consider loot boxes to be like gambling, since players spend real world money for an unknown return. Some research suggests loot box spending is associated with disordered gaming and problem gambling.

So far, the Risky Loot-Box Index (RLI) is the only tool that measures loot box use. However, the RLI may be limited as it only measures a few indicators of risky gaming behaviour. This study looked at the prevalence of loot box use in young people. It also looked for links between loot box use, online gambling disorder, and internet gaming disorder. The researchers created a clinical questionnaire to evaluate problematic loot box use.

What the researchers did

The researchers recruited 6633 participants from 24 education centres across 8 regions in Spain. Participants were 11 to 30 years old. The researchers grouped participants into minors (ages 11-17) and adults (ages 18-30). The participants completed online questionnaires while in class. First, they reported whether they bought loot boxes in the past year, and how much they spent on them in the past month.

Next, participants completed the Online Gambling Disorder Questionnaire and the Internet Gaming Disorder Scale-Short Form. These questionnaires ask

What you need to know

Loot boxes have become popular in video games. Buying loot boxes may be like gambling because their contents are random. Thus, loot box purchasing may be a risky behaviour. This study examined the links between loot box purchasing, internet gambling disorder and online gaming disorder in Spanish adolescents and young adults. The researchers also evaluated a questionnaire that was developed to measure problematic loot box use. Overall, participants who bought loot boxes were 3.66 times more likely to have internet gaming disorder than those who did not. They were also 4.85 times more likely to have online gambling disorder. Participants who spent more money on loot boxes scored higher for problematic loot box use. Finally, participants who scored higher for problematic loot box use also scored higher for gambling and gaming problems.

participants if they have difficulty controlling or stopping gambling or gaming activities, and negative consequences from these activities. Both questionnaires are based on the DSM-5 criteria.

Finally, participants completed the Problematic Use of Loot Boxes Questionnaire (PU-LB). The researchers created the PU-LB to expand on the RLI. The PU-LB has 18 items. It asks participants how much they agree with statements such as:

- I buy loot boxes to feel better/happier.
- I feel guilty about the amount of time I spend on loot boxes.
- I feel guilty about the amount of money I've spent on loot boxes.

What the researchers found

Close to 33% of adults and 29% of minors bought loot boxes. Male participants were more likely to buy loot boxes than female participants, for both minors and adults. Minors who bought loot boxes were more likely to spend a moderate amount of money on them (i.e., 11-50€ per month) than adults. However, minors and adults were similarly likely to spend little (1-10€) or a lot (50€+) on loot boxes per month.

About 18% of participants gambled online in the past year, including 13% of minors. Participants who bought loot boxes were over 1.5 times more likely to engage in online gambling.

Overall, 0.6% of minors and 1.9% of adults met the criteria for online gambling disorder. Additionally, 2.2% of minors and 2.9% of adults met the criteria for internet gaming disorder. Participants who bought loot boxes were 4.85 times more likely to meet the criteria for online gambling disorder. They were also 3.66 times more likely to meet the criteria for internet gaming disorder. Therefore, there is a link between purchasing loot boxes and experiencing online gambling disorder and internet gaming disorder.

Finally, the researchers found that PU-LB scores were associated with scores on the internet gaming disorder and online gambling disorder questionnaires. So, participants who showed more problematic loot box use also tended to have more problems with internet gaming and online gambling. Additionally, participants who spent more money on loot boxes tended to score higher on the PU-LB. These results suggest the PU-LB is likely an accurate measure of problematic loot box use.

How you can use this research

This research shows a link between buying loot boxes, and both online gambling and gaming disorders. Policy makers could consider this link when creating regulations around loot box use. The gaming industry could provide clearer labelling for games with loot boxes or other gambling-like mechanics.

About the researchers

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