

IS YOUR CHILD GAMBLING?

HOW LOOT BOXES CAN
LEAD TO PROBLEM
GAMBLING





WHAT ARE LOOT BOXES?

- “Loot boxes” (aka “loot crate”, “lock box” or “booster pack”) are virtual boxes that a player pays to open to reveal other virtual items, usually to improve play or change the look of an avatar. (2,7)
- Unlike other virtual play items, the player does not know what the box contains or the likelihood of receiving a rare or desirable item. (2,7)
- Loot boxes were first introduced in 2010 as a way to monetize online games. Loot Box revenues are now estimated at \$30 billion annually. (12)

Researchers found nearly 1 billion installations of games deemed suitable for children “age 7+” contained loot boxes.(12)



A FORM OF GAMBLING?

- Loot Boxes are similar to gambling in that the player pays blindly to receive an unknown (but hopefully better) outcome. (2,7)
- The odds of winning a desirable loot box item are unknown and often extremely low, worse than the odds of winning at a slot machine. (2)
- Research suggests teens spending money on loot boxes acts as a pathway to gambling and potential gambling issues (6,11)

In some European countries, loot boxes have been regulated or banned as a form of gambling targeted to children. (10)

WHY ARE TEENS VULNERABLE TO GAMBLING?



By age 15, most teens can reason but factors that help control actions, like being able to delay gratification or resist peer influence, take longer to develop making them more vulnerable to poor decision making. (9)



Teens are more sensitive to variations in rewards and less sensitive to costs than adults. They are attracted by the potential of winning a reward without as much thought to the downside. (9)



Teens are susceptible to the same gambling fallacies as adults, like believing they can accurately predict the odds of winning a special item or that a certain item is “due” to appear. (11)



Problem gambling starts young. Problem gamblers report gambling well before their peers. 50% say they started by age 17. 20% by age 10. (5)

WHAT DOES THE RESEARCH SAY?



The question: Do loot boxes lead to gambling issues for teens?
What motivates teens to buy loot boxes? (11)



Hypothesis: 12 hypotheses in three broad categories, relating to paid & unpaid openings of loot boxes, loot box features, and impulsivity.



Design

- International online survey
- 1155 participants, aged 16 to 18
- Survey gathered data about participants
 - How much they spent and how quickly.
 - If different features of loot boxes affected play.
 - If participants met criteria for problem gambling
 - How impulsive are the participants.
 - What motivated them to buy loot boxes.

WHAT THE RESEARCHERS FOUND:



Adolescents who paid money for loot boxes in the recent past had much higher gambling severity scores compared to those who had not bought loot boxes recently. (11)



The more adolescents spent on loot boxes, the higher their gambling severity scores.



The adolescents' gambling severity score could predict how much they would spend on loot boxes.



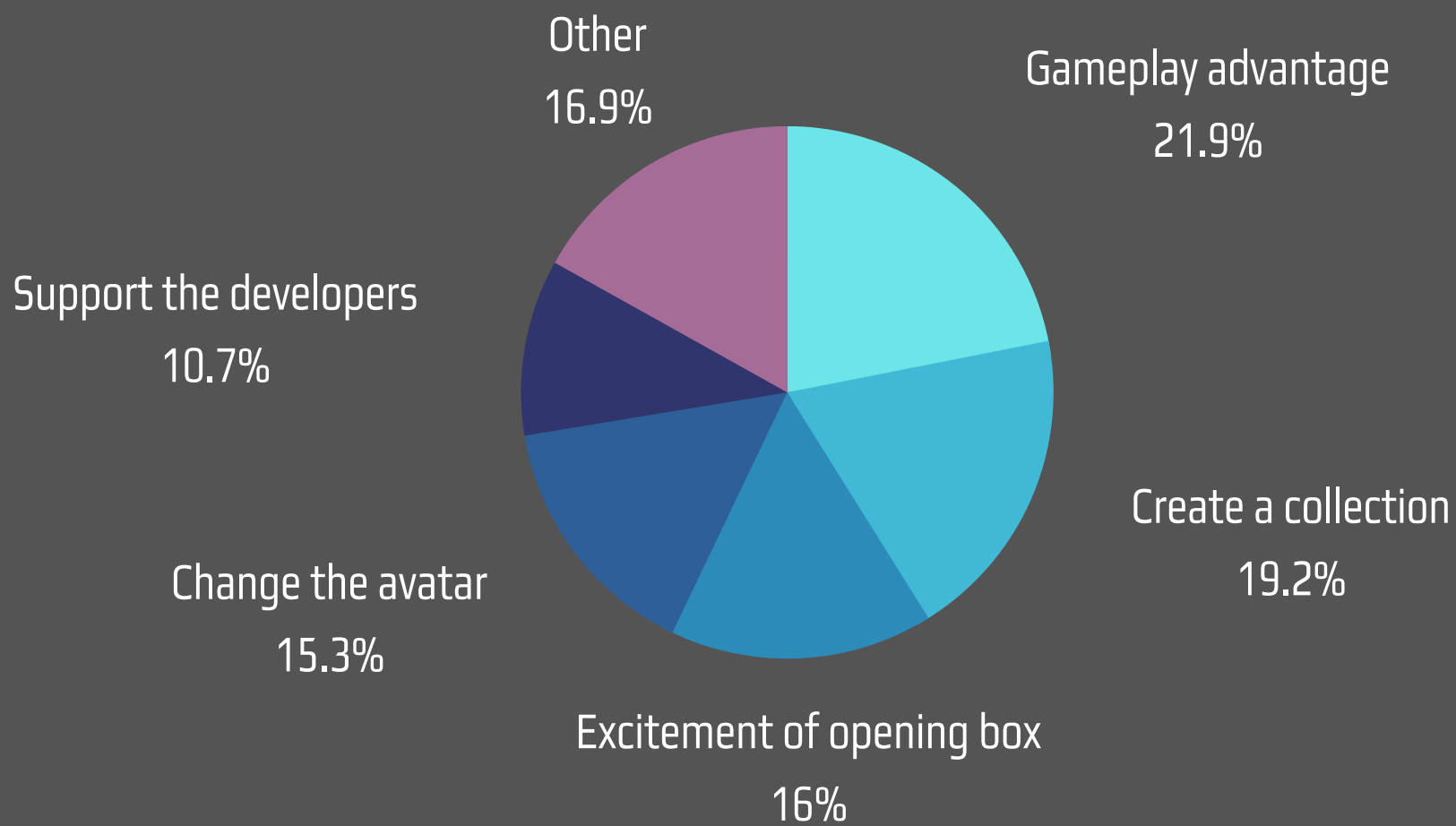
And importantly, these findings only related in-game purchase of loot boxes, not other virtual items that enhance play.

THE RESEARCHERS CONCLUDED:

SPENDING MONEY ON LOOT BOXES IS LINKED TO PROBLEM GAMBLING IN OLDER ADOLESCENT POPULATIONS.



THE TOP REASONS THE PARTICIPANTS GAVE FOR BUYING LOOT BOXES:



Limitations:

- Correlation does not equal causation! It's possible something as yet undiscovered could be causing the results.
- The participants were 16 to 18, so it's not clear if the same results would be seen in younger children.

DOES MY CHILD HAVE A PROBLEM WITH GAMBLING?

WARNING SIGNS TO LOOK FOR: (1)



WARNING

- Borrowing or taking money from you or others.
- Spending less on things used to be important to them, like clothes or hobbies.
- Acting moodier than usual, particularly when they are not able to play online.
- Hiding their gaming or how much they are playing.
- Getting into trouble at school and / or declining grades.
- Not spending as much time with their friends.
- Changes in day to day routine, changes in sleep patterns, more fatigue, eating more or less and / or trouble focusing.
- Taking drugs or alcohol. Problem gambling and substance use are related in teens and adults. (7,11)

WHAT CAN I DO TO HELP MY CHILD?



- Talk to your teen about loot boxes and the connection to gambling. (4,2,7,11)
- Many teens believe it is more cost effective to buy loot boxes than to pay directly for a character upgrade. Explain to your teen this is not true and help them set a budget for upgrade purchases. (4,11)
- Consider reasonable time limits for online gaming. Research suggests excessive gaming (more than 30 hours per week) is associated with an increased risk of problem gambling. (7)
- Encourage your teen to come to you if they are struggling with loot boxes. Research from teen media use suggests that warm and engaging parenting (rather than strict controls) encourages teens to self-disclose when they have a problem. (8)
- Be aware of the signs of problem gambling. Seek professional guidance if you suspect your teen has a gambling problem. (1)
- Write to your MLA to ban predatory gambling targeted to children. Legislation should include mechanisms for turning off loot boxes within games and/or player self-exclusion.(4)

REFERENCES

- (1) American Psychiatric Association, & PsychiatryOnline Premium Package. (2022). *Diagnostic and statistical manual of mental disorders: DSM-5-TR* (Fifth, text revision. ed.). American Psychiatric Association Publishing.
https://doi.org/10.1176/appi.books.9780890425787.x16_Substance_Related_Disorders
- (2) Brooks, G. A., & Clark, L. (2023). The gamblers of the future? Migration from loot boxes to gambling in a longitudinal study of young adults. *Computers in Human Behavior*, 141, 107605. <https://doi.org/10.1016/j.chb.2022.107605>
- (3) Gardner, M., & Steinberg, L. (2005). Peer influence on risk taking, risk preference, and risky decision making in adolescence and adulthood: An experimental study. *Developmental Psychology*, 41(4), 625-635. <https://doi.org/10.1037/0012-1649.41.4.625>
- (4) Gong, L., & Rodda, S. N. (2022). An exploratory study of individual and parental techniques for limiting loot box consumption. *International Journal of Mental Health and Addiction*, 20(1), 398-425. <https://doi.org/10.1007/s11469-020-00370-5>
- (5) Kessler, R., Hwang, I., LaBrie, R., Petukhova, M., Sampson, N. ., Winters, K. ., & Shaffer, H..(2008). DSM-IV pathological gambling in the national comorbidity survey replication. *Psychological Medicine*, 38(9), 1351-1360.
<https://doi.org/10.1017/S0033291708002900>
- (6) Kristiansen, S., & Severin, M. C. (2020). Loot box engagement and problem gambling among adolescent gamers: Findings from a national survey. *Addictive Behaviors*, 103, 106254-106254. <https://doi.org/10.1016/j.addbeh.2019.106254>

REFERENCES

- (7) Li, W., Mills, D., & Nower, L. (2019). The relationship of loot box purchases to problem video gaming and problem gambling. *Addictive Behaviors*, 97, 27-34. <https://doi.org/10.1016/j.addbeh.2019.05.016>
- (8) May, L. (2023, March 8). *Youth and New Media*. Psychology 319 Lecture, University of British Columbia, Vancouver, BC.
- (9) Steinberg, L. (2007). Risk taking in adolescence: New perspectives from brain and behavioral science. *Current Directions in Psychological Science : A Journal of the American Psychological Society*, 16(2), 55-59. <https://doi.org/10.1111/j.1467-8721.2007.00475.x>
- (10) Xiao, L. Y. (2023). Breaking ban: Belgium's ineffective gambling law regulation of video game loot boxes. *Collabra. Psychology*, 9(1) <https://doi.org/10.1525/collabra.57641>
- (11) Zendle, D., Meyer, R., & Over, H. (2019). Adolescents and loot boxes: Links with problem gambling and motivations for purchase. *Royal Society Open Science*, 6(6), 190049-190049. <https://doi.org/10.1098/rsos.190049>
- (12) Zendle, D., Meyer, R., Cairns, P., Waters, S., & Ballou, N. (2020). The prevalence of loot boxes in mobile and desktop games. *Addiction* (Abingdon, England), 115(9), 1768-1772. <https://doi.org/10.1111/add.14973>