

# More than loot boxes

## The role of video streams and gambling-like elements in the gaming-gambling connection among adolescents

Eva Grosemans, Rozane De Cock, Lowie Bradt, Bruno Dupont, Steven Malliet, Tim Smits, Bieke Zaman & Bart Soenens

KU Leuven, Ghent University, LUCA School of Arts  
Belgium



# SIMULATED GAMBLING

= **the blurring of lines between video gaming and monetary gambling.** As a result, elements that resemble monetary gambling are increasingly appearing in video games.

“A digitally simulated interactive gambling activity that **does not directly involve monetary gain** but is otherwise **structurally identical to the standard format of a gambling activity**”

(King, Delfabbro, Kaptsis, & Zwaans, 2014, p. 305)

## comment

### Video game loot boxes are psychologically akin to gambling

Video games are increasingly exposing young players to randomized in-game reward mechanisms, purchasable for real money — so-called loot boxes. Do loot boxes constitute a form of gambling?

Associations between loot box use, problematic gaming and gambling, and gambling-related cognitions

RESEARCH ARTICLE

### Video game loot boxes are linked to problem gambling: Results of a large-scale survey

Loot box engagement and problem gambling among adolescent gamers: Findings from a national survey

# Loot box ban?

## Belgium & The Netherlands Classify Loot Boxes As Illegal Gambling

Both Belgium and the Netherlands have now determined that video game loot boxes constitute a form of illegal gambling in the countries.

## Adopt Me shuts down in The Netherlands and Belgium over loot box woes

Roblox title ceased operations September 13, plans to make changes that "could take a long time"

 GamesIndustry.biz

### Study finds that Belgium's loot box ban isn't being enforced

A new study reveals that Belgium's ban on loot boxes within games has not been enforced. In 2018, the Belgian Gaming Commission recommended...

4 aug. 2022



 Game Rant

### Loot Box Ban in Belgium Is Not Being Enforced, Says Study

Specifically, the Belgian Gaming Commission declared that loot boxes in video games were akin to gambling and therefore subject to the country's...

8 aug. 2022



 GameSpot

### New Study Finds Belgium's Loot Box Ban Is Barely Enforced

Back in 2018, the Belgium Gambling Commission found that loot boxes were a form of gambling and recommended criminal prosecution against...

5 aug. 2022



Xiao, L. (2022, July 28). Breaking Ban: Belgium's Ineffective Gambling Law Regulation of Video Game Loot Boxes. doi:10.1525/collabra.57641

**OTHER TYPES OF  
GAMBLING-LIKE  
ELEMENTS?**

# **OTHER TYPES OF GAMBLING-LIKE ELEMENTS?**

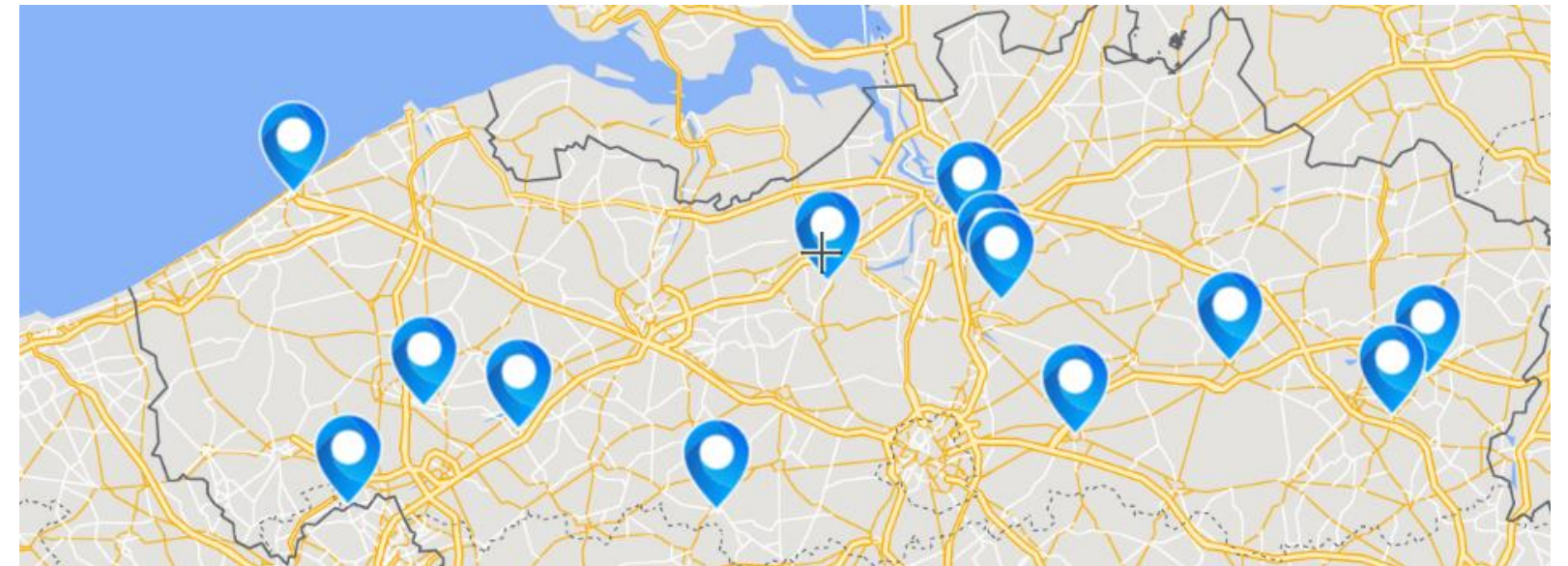
- **Social casino games**
- **Prize wheels**
- **Gambling-like elements in video game streams:**
  - **Loot box openings**
  - **Poker/gambling streams**

# Research questions

- 1** How do **loot boxes** relate to teenagers' gambling attitude, intention, and behavior?
- 2** What is the contribution of **other gambling-like activities** in this relation, next to loot boxes?

# Method - survey


- Flemish teenagers (10-19 years old)
- 13 high schools
- November 2021-March 2022
- Topics:
  - Simulated gambling behavior
  - Monetary gambling:
    - Attitude
    - Intention
    - Behavior



## **2289 teenagers**

45.4% self-identified as male, 53.1% as female, 1.5% as other/missing  
mean age = 14.1 years old



An infographic consisting of two overlapping circles. The larger, outer circle is light teal, and the smaller, inner circle is light orange. The percentage '74.6%' is written in a large, bold, dark blue font across the center of the orange circle. Below the percentage, the text 'Participation rate in simulated gambling games in the past 12 months' is written in a smaller, bold, dark blue font.

**74.6%**

**Participation rate in  
simulated gambling games  
in the past 12 months**

**simulated  
gambling  
behavior**

# Simulated gambling

(amongst video game players, in the past 12 months)

**58.5%**

SPINNING A PRIZE  
WHEEL

**51.5%**

OPENING FREE  
LOOT BOXES

**24.8%**

PAYING FOR  
LOOT BOXES

**14.6%**

SELLING ITEMS  
FROM LOOT BOXES

**8.6%**

PAYING FOR ITEMS IN  
SOCIAL CASINO GAMES

**43.1%**

WATCHING LOOT  
BOX OPENINGS

**22.3%**

WATCHING GAMBLING  
STREAMS

# Monetary gambling attitude

# 2.15

Average attitude towards  
monetary gambling amongst  
teenagers (1-6)

# 1.77

teenagers who do  
not participate in  
simulated gambling

# 2.28

teenagers who do  
participate in  
simulated gambling

# ON AVERAGE

# Monetary gambling intention

# 2.29

Average intention to gamble  
amongst teenagers (0-10)

# 1.50

teenagers who do  
not participate in  
simulated gambling

# 2.70

teenagers who do  
participate in  
simulated gambling

# ON AVERAGE



**60.3%**

Participation rate in  
monetary gambling games  
in the past 12 months

# Monetary gambling behavior

34.6% scratch  
cards



34.2% betting  
amongst friends



# BUT ARE THEY CORRELATED?

	<b>Monetary gambling attitude</b>	<b>Monetary gambling intention</b>	<b>Monetary gambling behavior</b>
<b>Opening free loot boxes</b>	.177***	.150***	.146***
<b>Paying for loot boxes</b>	.220***	.144***	.506***
<b>Selling items from loot boxes</b>	.288***	.167***	.517***
<b>Buying items within social casino games</b>	.266***	.154***	.631***
<b>Watching loot box openings</b>	.211***	.149***	.250***
<b>Watching gambling streams</b>	.296***	.251***	.451***
<b>Spinning a prize wheel</b>	.246***	.223***	.229***

\*\*\* $p < .001$

# Hierarchical multiple regression analyses

## 3 BLOCKS

- Step 1:
  - Gender
  - Age
- Step 2:
  - Opening free loot boxes
  - Paying for loot boxes
  - Selling items from loot boxes

- Step 3:
  - Buying items within social casino games
  - Watching loot box openings
  - Watching gambling streams
  - Spinning a prize wheel

Dependent: monetary gambling attitude, intention, behavior

Model	Adjusted R square	R square change	Sig. change
<b>Dependent variable: monetary gambling attitude</b>			
1. Gender and age	.005	.006	.007
2. Loot boxes	.069	.066	<.001
3. Other gambling-like activities	.124	.057	<.001
<b>Dependent variable: monetary gambling intention</b>			
1. Gender and age	.012	.013	<.001
2. Loot boxes	.037	.027	<.001
3. Other gambling-like activities	.077	.042	<.001
<b>Dependent variable: monetary gambling behavior</b>			
1. Gender and age	.016	.018	<.001
2. Loot boxes	.329	.313	<.001
3. Other gambling-like activities	.461	.130	<.001

*n = 1622 = participants that answered all questions regarding simulated gambling and monetary gambling*



# SIGNIFICANT PREDICTORS

<b>Gambling attitude</b>	<b>Gambling intention</b>
Buying items in social casino games Watching gambling streams Spinning prize wheels	Watching gambling streams Spinning prize wheels
<b>Gambling behavior</b>	
Opening free loot boxes Paying for loot boxes Selling items from loot boxes Watching gambling streams Spinning prize wheels	

**In conclusion...**

**We need more  
than loot boxes!**

# In conclusion

- Simulated gambling and monetary gambling are popular amongst Flemish teenagers
- The two activities are significantly positively correlated
- Other gambling-like elements significantly predict monetary gambling, on top of loot boxes

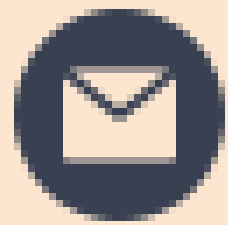
## WHAT DOES THIS MEAN?

- ✓ Loot boxes remain important
- ✓ Include other types of gambling-like elements when researching simulated gambling
- ✓ Video game streaming is influential!
- ✓ Ban on gambling-like elements?
- ✓ Longitudinal research?  
→ Wave 2 + 3 Gam(e)(a)ble survey

# Questions?



# Let's connect!



[eva.grosemans@kuleuven.be](mailto:eva.grosemans@kuleuven.be)



[@EvaGrosemans](https://twitter.com/EvaGrosemans)

[@gameable\\_youth](https://twitter.com/gameable_youth)



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