Ethics in the Game Industry

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Blog & Resources:
celiahodent.com

PUBG arrests: The Fortnite rival taking India by storm

🕐 15 March 2019

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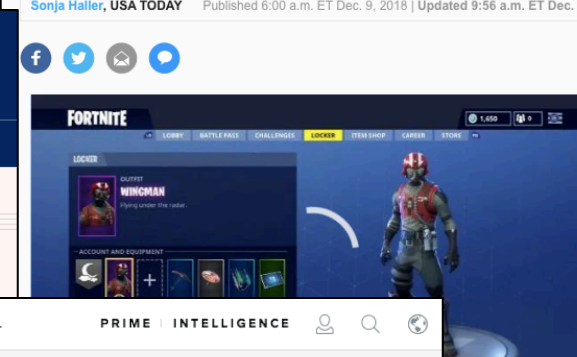## 'This game is like heroin:' Fortnite addiction sending kids to gaming rehab

Sonja Haller, USA TODAY Published 6:00 a.m. ET Dec. 9, 2018 | Updated 9:56 a.m. ET Dec. 9, 2018

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Gaming addiction under spotlight in China as regulators tighten control on industry

Zheping Huang
Published: 9:38pm, 4 Sep, 2018 ▾

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LIFE | ALL   PRIME | INTELLIGENCE

BOOK N

a video game
om the world's
sing 'unknown

Kevin Webb Mar. 6, 2019, 5:34 PM

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How to ▾   Ebooks

Compulsion Loops and Dopamine Hits: How Games Are Designed to Be Addictive

By Andrew Braun – Posted on Nov 13, 2018 in Gaming, How Things Work

Intro ⟩ Addiction ⟩ Loot boxes ⟩ Dark pattern ⟩ Violence

- Addiction
- Loot Boxes & Gambling
- Dark Patterns
- Violence

Public concern

What science says

What can we do?

Not exhaustive list!

➔ Invitation to reflect on some ethical concerns

Addiction | Loot boxes | Dark Patterns | Violence

Addiction

"Video games are 'addictive'"
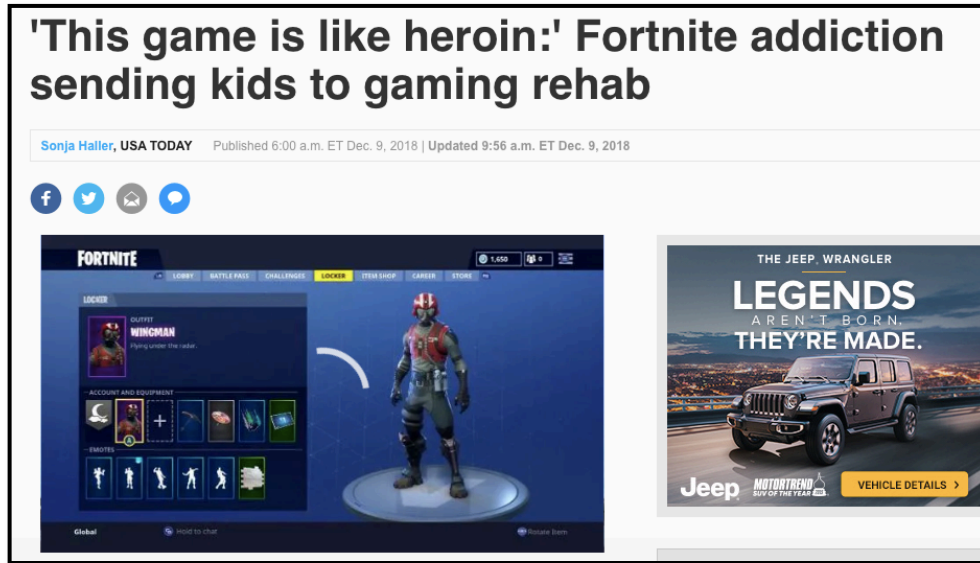
'This game is like heroin:' Fortnite addiction sending kids to gaming rehab

Sonja Haller, USA TODAY Published 6:00 a.m. ET Dec. 9, 2018 | Updated 9:56 a.m. ET Dec. 9, 2018

What science says

- "Internet gaming disorder" was added in 2013 in DSM-5 (recommending further research).
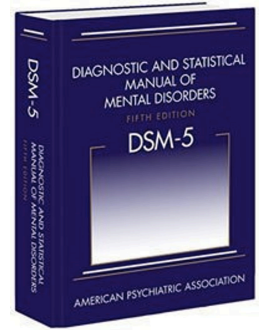
What science says

- "Internet gaming disorder" was added in 2013 in DSM-5 (recommending further research).

- Experiencing at least 5 symptoms within a year:
  - Preoccupation with gaming
  - Withdrawal symptoms (sadness, anxiety, irritability)
  - Tolerance (need to spend more time gaming to satisfy the urge)
  - Inability to reduce playing, can't quit
  - Giving up other activities
  - Continuing to game despite problems
  - Deceiving family members or others
  - The use of gaming to relieve negative moods (e.g. hopelessness)
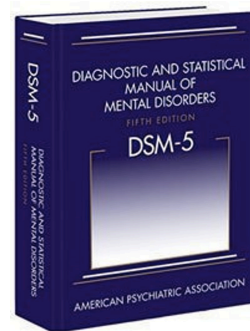 - Risk, having jeopardized or lost a job or relationship due to gaming

What science says

- "Internet gaming disorder" was added in 2013 in DSM-5 (recommending further research).

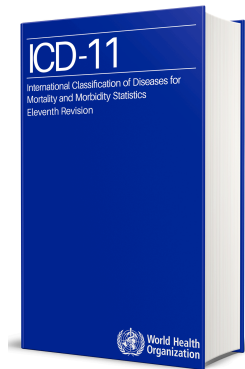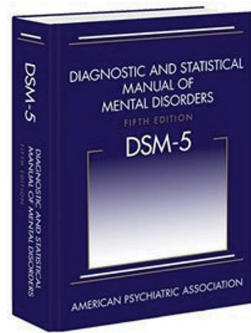- "Gaming disorder" as a new entry in the ICD, announced by the WHO late 2017.

What science says

- No consensus: lack of rigorous research to back it up, while it creates a moral panic and can stigmatize the 2+ billion gamers.

- 0.3 to 1% of the general population might qualify for a potential diagnosis of internet gaming disorder. (Przybylski *et al.,* 2017)

- "Problematic gaming is best viewed as a coping mechanism associated with underlying problems such as anxiety or depression".

THE CONVERSATION   Sign in

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Video game controller/Shutterstock

Gaming addiction as a mental disorder: it's premature to pathologise players

February 13, 2018 11.08am EST

Andy Przybylski, Amy Orben, *University of Oxford*
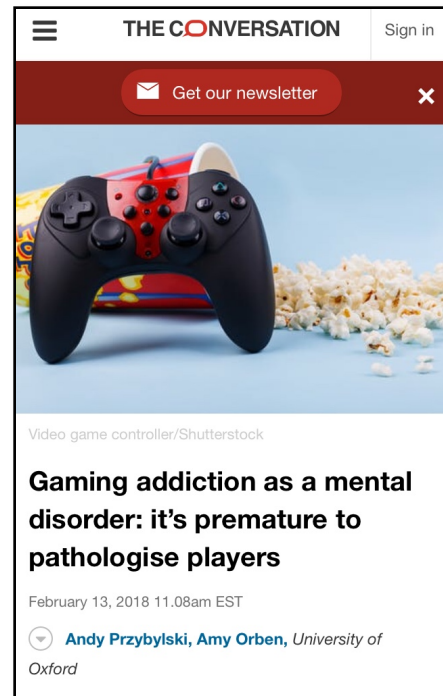
What can we do?

➢ Avoid using the term "addictive" to describe a fun and engaging game.

Popular Games

~~Best Friends~~ - Puzzle A...

FUN and ADDICTIVE Match 3

GET   In-App Purchases
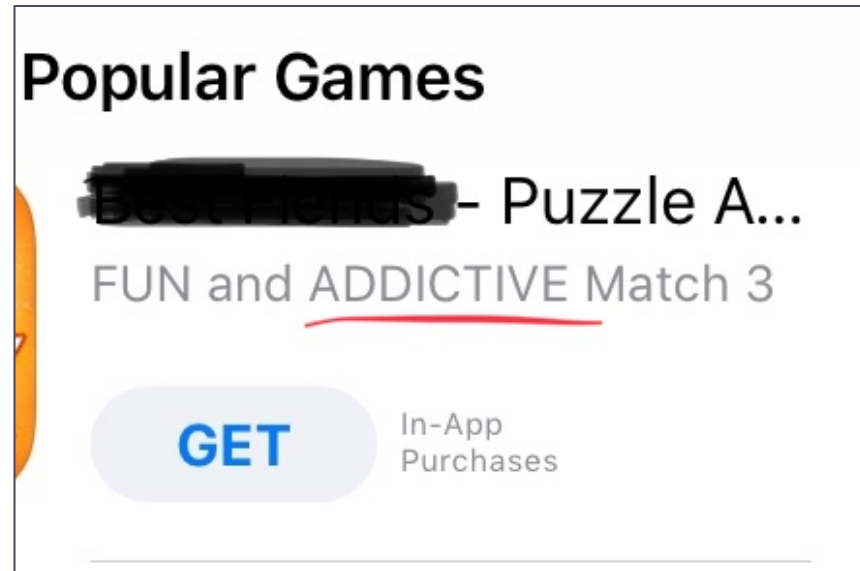
What can we do?

Children and teenagers have low self-control & difficulty delaying gratification.

➢ Protect minors: games rated T or E should have mechanics that encourage breaks.

What can we do?

Attention economy (Tristan Harris): Could we find ways to reward breaks instead of rewarding constant engagement?

➢ Avoiding punishing disengagement is a good start (e.g. WoW XP bar).
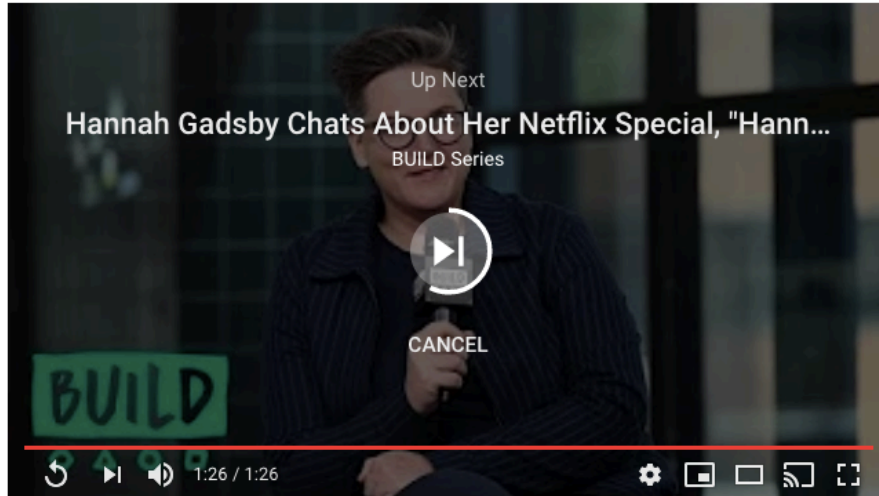
What can we do?

➢ If your game is successful, consider collaborating with psychiatrists to find ways to identify and help struggling gamers.

➢ Consider working with researchers to help them define gaming disorder.

Addiction | **Loot boxes** | Dark Patterns | Violence

Loot Boxes & Gambling

"Loot boxes are gambling"
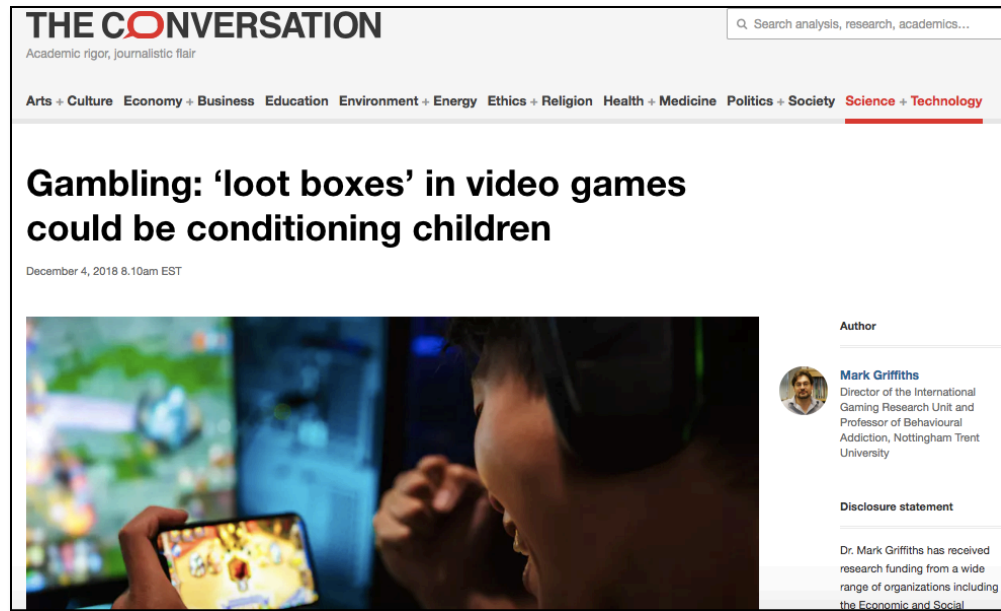
What science says

- Definition of gambling: playing a game for money or anything of value, mostly requiring an ability to cash out.

- Both gambling and lootboxes (and RNG) are a form of intermittent rewards with a variable ratio reinforcement schedule.
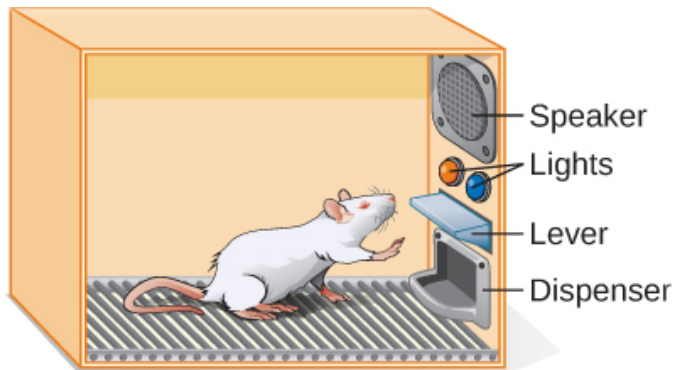
Variable ratio reinforcement schedule?

	Positive (+) → additive	**Negative (-)** → subtractive
Reward (increase behavior)	Give carrot (R+)	Remove stick (R-)
Punishment (decrease behavior)	Give stick (P+)	Remove carrot (P-)

Types of rewards

Continuous rewards

Intermittent rewards

Behavior (player action) is ALWAYS rewarded

Behavior is SOMETIMES rewarded

Intermittent rewards

- **Fixed** interval
- **Variable** interval

INTERVAL
(depends on time)

Intermittent rewards

- **Fixed** ratio
- **Variable** ratio

RATIO
(depends on behavior)
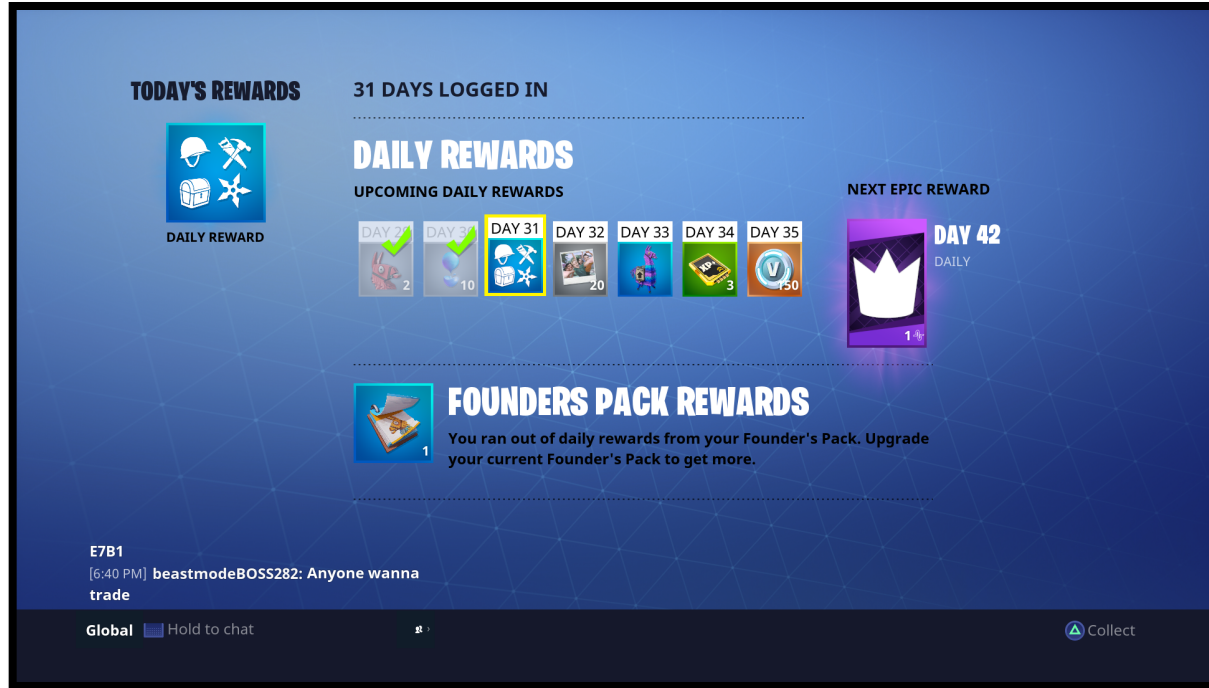
Fortnite
(Closed Alpha)

→ You get the reward after a fixed and determined amount of time.

Variable interval

World of Warcraft

→ Reward appears over time unexpectedly (e.g. rare spawns).

Fixed ratio
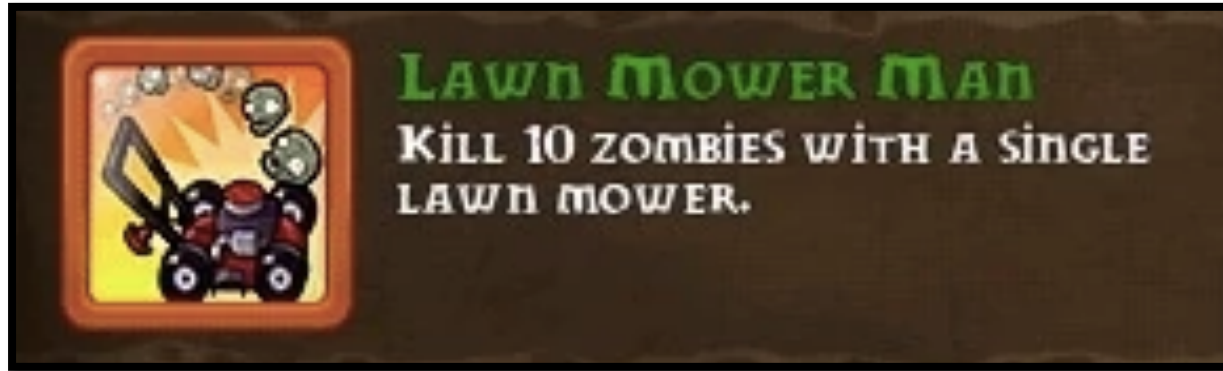
Plants vs. Zombies

→ You get the reward after a fixed and determined number of actions

Variable ratio

Hearthstone

→ You get a meaningful reward unexpectedly, after a various number of actions.

Impact on behavior
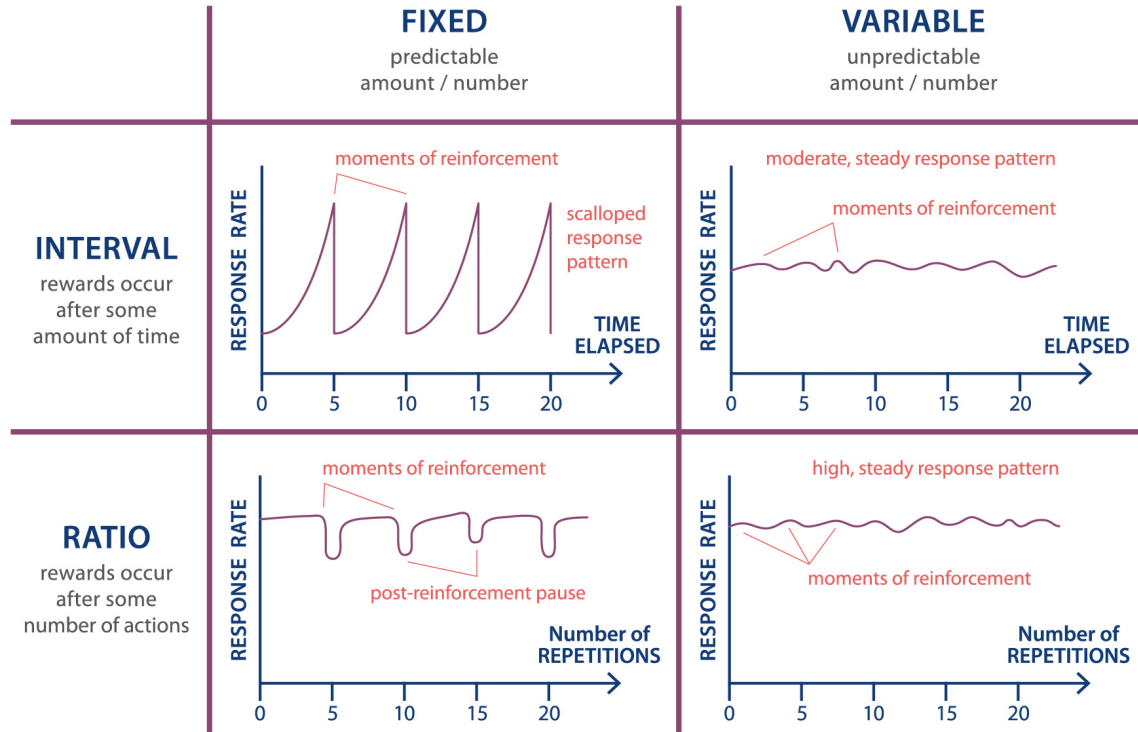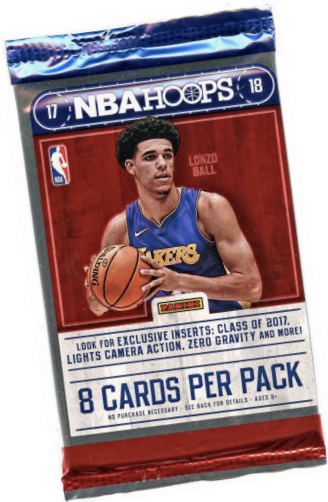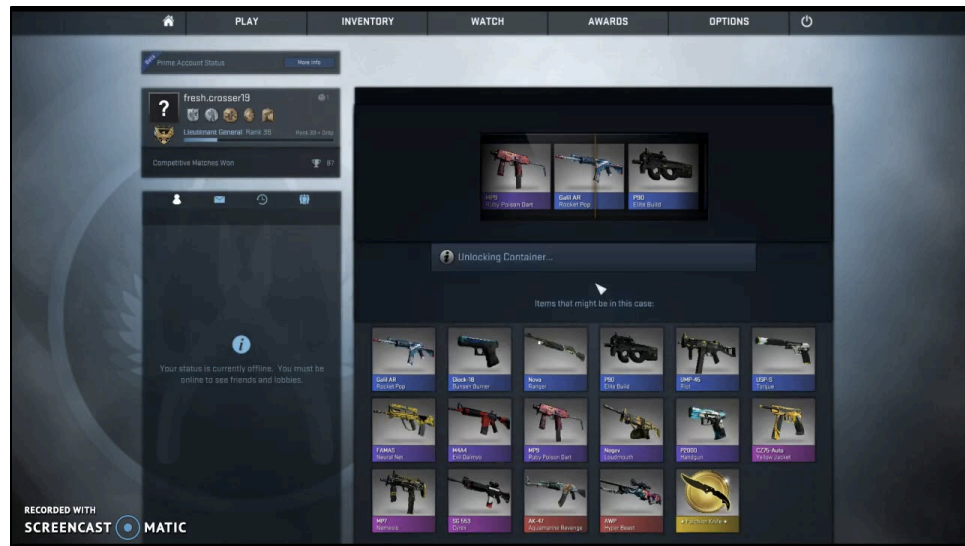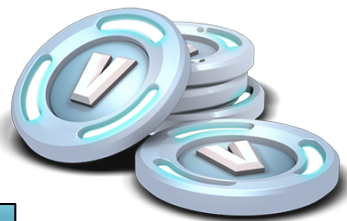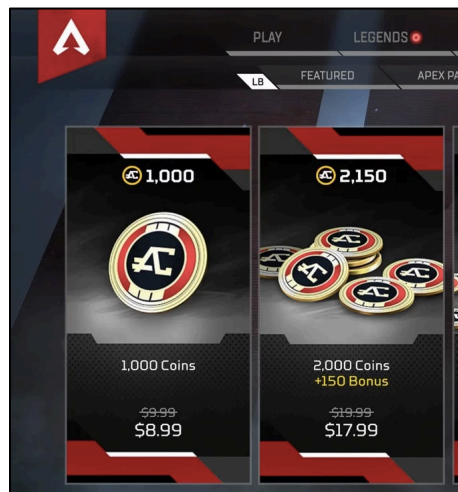
What science says

What can we do?

➢ Protect the children and teenagers: avoid lootboxes in T and E rated games.

➢ Do not allow for gambling ads on your T and E rated games.

Gambling ads to be banned from child-friendly sites and games

New rules also prohibit celebrities who look under-25 from appearing in promotions

Jim Waterson *Media editor*
16:01 PST Tuesday, 12 February 2019

What can we do?

China's new law forces Dota, League of Legends, and other games to reveal odds of scoring good loot
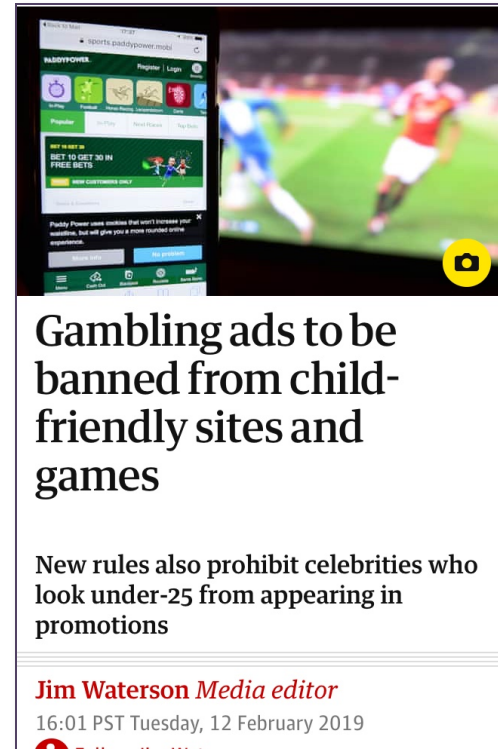
➢ Explore more transparent monetization techniques & avoid intermittent rewards with a variable ratio reinforcement in monetization.

➢ Prohibit marketplaces where lootbox items can be sold.
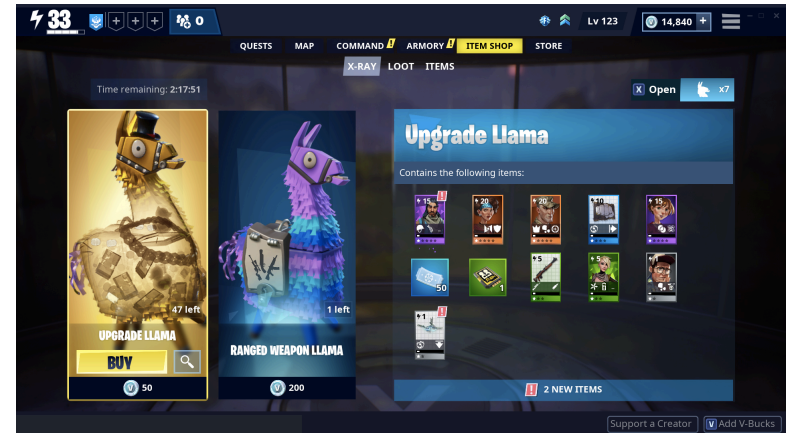
Addiction → Loot boxes → **Dark Patterns** → Violence

Dark Patterns

"Video games manipulate us"

TIME

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TECHNOLOGY

3 Ways Video Game Companies Are Getting Your Kids Hooked
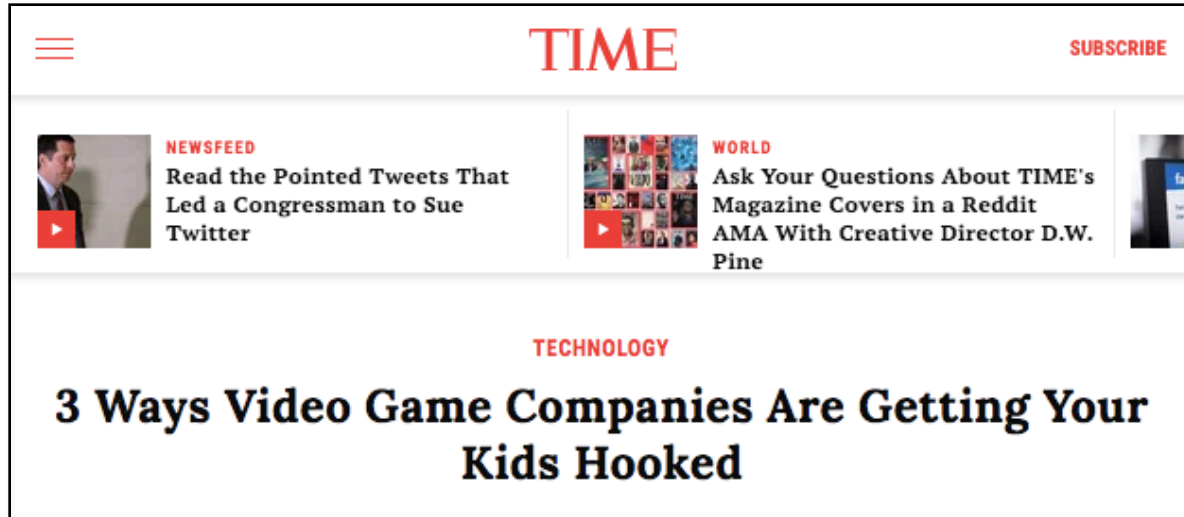
A bat and a ball cost $11 total.
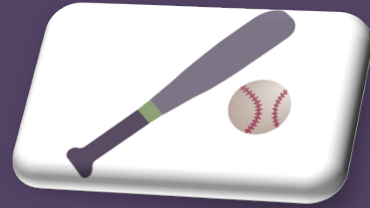
The bat costs $10 more than the ball.

How much does the ball cost?

= **$0.50** (50 cents)

Frederick (2005)

System 1
Fast
Automatic
Effortless

DANGER
bias

THE *NEW YORK TIMES* BESTSELLER

THINKING,
FAST AND SLOW

DANIEL
KAHNEMAN

WINNER OF THE NOBEL PRIZE IN ECONOMICS

"[A] masterpiece . . . This is one of the greatest and most engaging collections of
insights into the human mind I have read." —WILLIAM EASTERLY, *Financial Times*
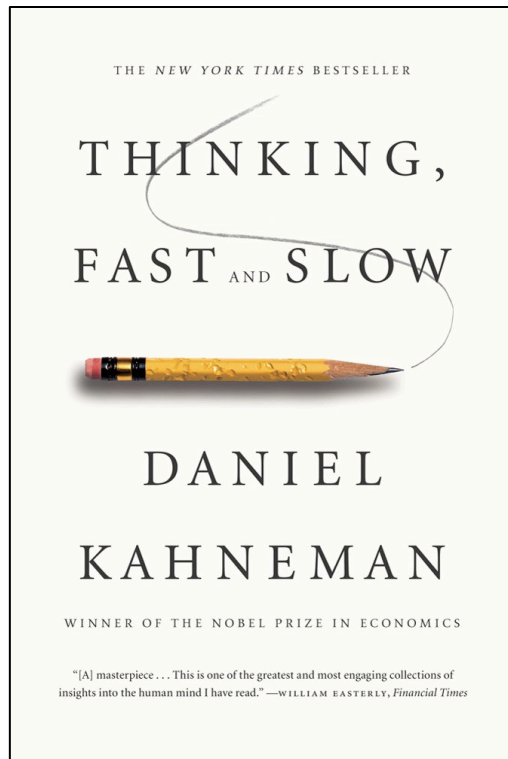
System 2
Slow
Controlled
Effortful

JUMPING TO CONCLUSIONS

COGNITIVE BIAS CODEX, 2016

What Should We Remember?

- We store memories differently based on how they were experienced
- We reduce events and lists to their key elements
- We discard specifics to form generalities
- We edit and reinforce some memories after the fact
- We favor simple-looking options and complete information over complex, ambiguous options

Too Much Information

- We notice things already primed in memory or repeated often
- Bizarre/funny/visually-striking/anthropomorphic things stick out more than non-bizarre/unfunny things
- We notice when something has changed
- We are drawn to details that confirm our own existing beliefs
- We notice flaws in others more easily than flaws in ourselves

Need To Act Fast

- To avoid mistakes, we're motivated to preserve our autonomy and status in a group, and to avoid irreversible decisions
- To get things done, we tend to complete things we've invested time & energy in
- To stay focused, we favor the immediate, relatable thing in front of us
- To act, we must be confident we can make an impact and feel what we do is important

Not Enough Meaning

- We find stories and patterns even in sparse data
- We fill in characteristics from stereotypes, generalities, and prior histories
- We imagine things and people we're familiar with or fond of as better
- We simplify probabilities and numbers make them easier to think about
- We think we know what other people are thinking
- We project our current mindset and assumptions onto the past and future

Intro

Violence

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No thanks, I do not want to save $18.95

GET STARTED
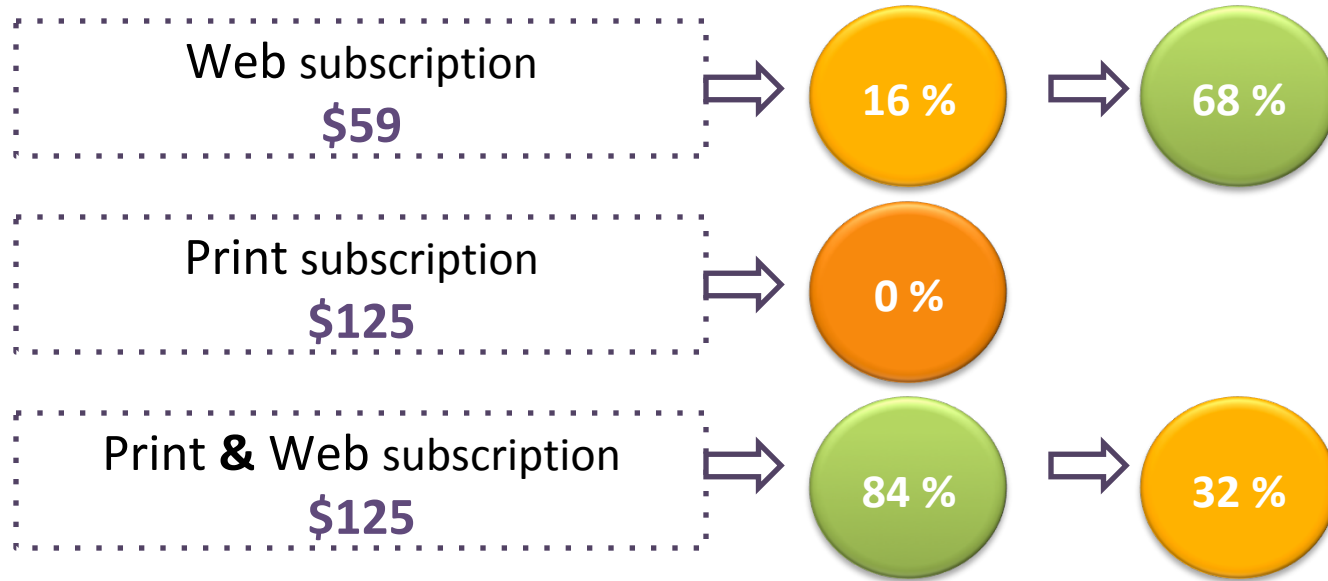
Dark pattern or good UX?

World of Warcraft

What can we do?

➢ Avoid dark patterns for T and E-rated games (and reconsider in all other games):

- Guilt-tripping
- Loss aversion
- FOMO
- Pay-to-win / Pay to remove frictions
- Social obligation
- ...

Addiction → Loot boxes → Dark Patterns → **Violence**

Violence

"Video games make us violent"
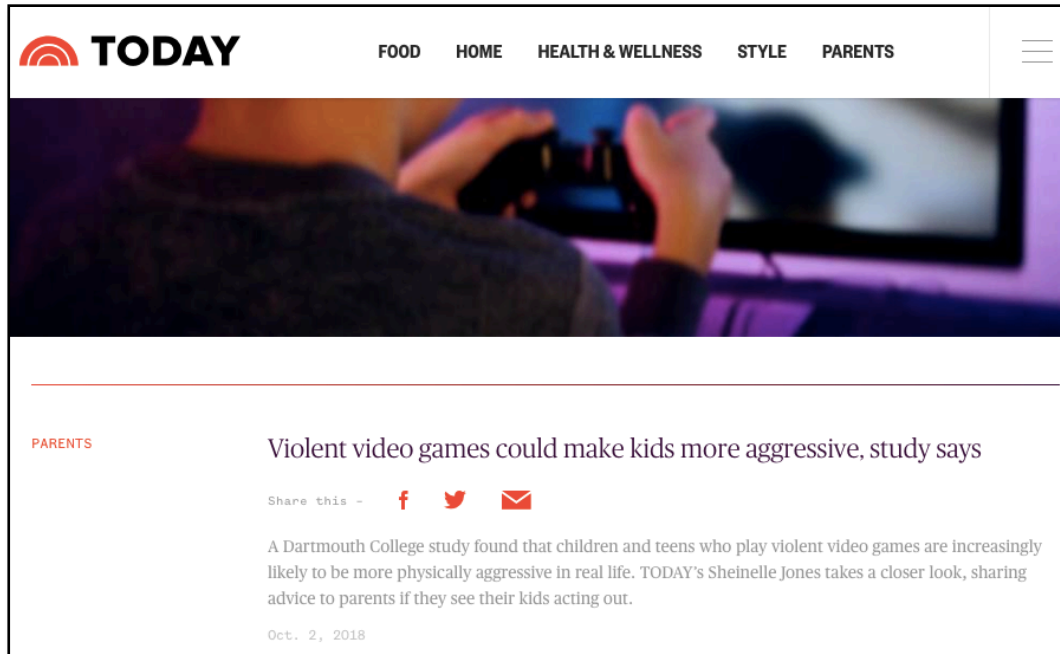
What science says

- No conclusive evidence that violent video games encourage aggressive behaviors.

- However, children & teens can be affected by violent content.

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Section

Abstract

Registered report

Violent video game engagement is not associated with adolescents' aggressive behaviour: evidence from a registered report

Andrew K. Przybylski and Netta Weinstein

Published: 13 February 2019
https://doi.org/10.1098/rsos.171474

Violent video games may not be associated with aggression, but that does not mean their content is not problematic.

COGNITIVE BIAS CODEX, 2016

What Should We Remember?

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We discard specifics to form generalities

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We favor simple-looking options and complete information over complex, ambiguous options

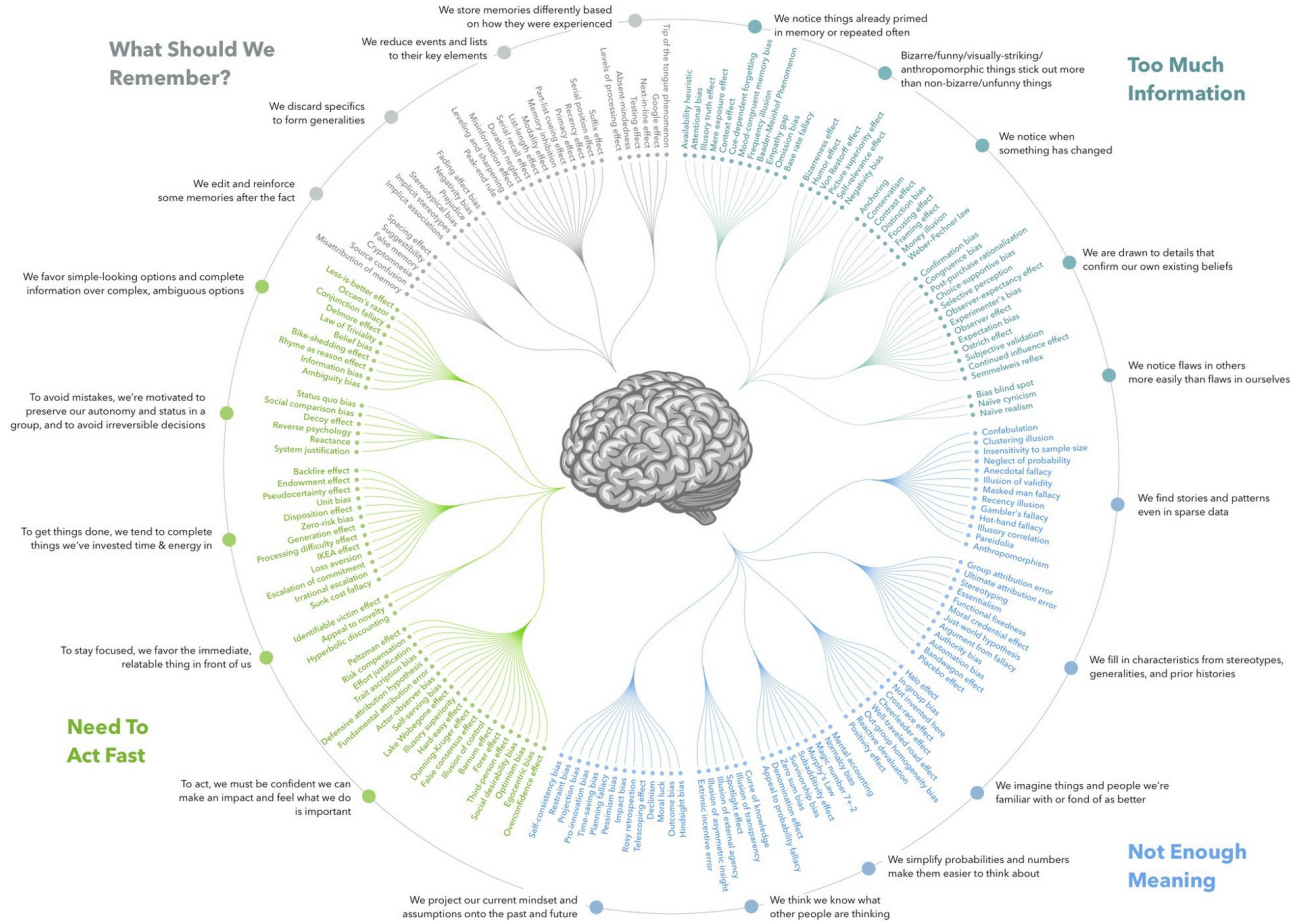To avoid mistakes, we're motivated to preserve our autonomy and status in a group, and to avoid irreversible decisions

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Too Much Information

We notice things already primed in memory or repeated often

Bizarre/funny/visually-striking/anthropomorphic things stick out more than non-bizarre/unfunny things

Choice architecture: design encourages certain behaviors while discourages or doesn't allow other behaviors.

Recommended book: *The Ethics of Computer Games*, by Miguel Sicart

	Positive (+) → additive	**Negative (-)** → subtractive
Reward (increase behavior)	Give carrot (R+)	Remove stick (R-)
Punishment (decrease behavior)	Give stick (P+)	Remove carrot (P-)

What are you encouraging & discouraging in your game?

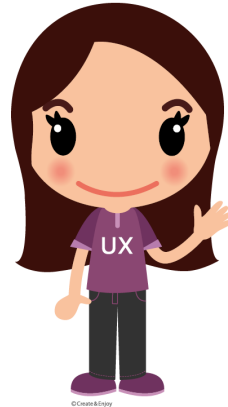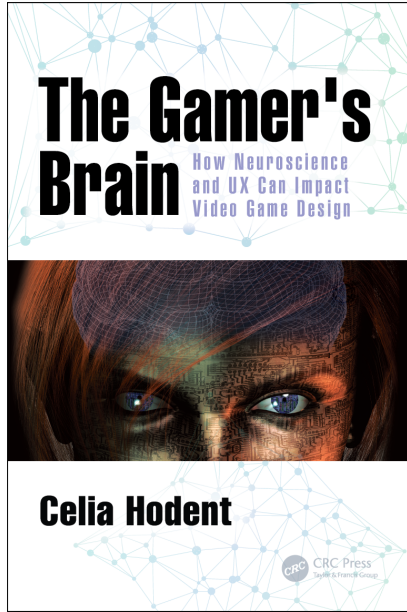**What is it normalizing in the name of fun?**

What can we do?

- Be mindful that despite ESRB ratings, minors might get access to violent games and feel **distressed** by them.

- We are **responsible** for the content in our games. Consider if your game is perpetuating discrimination or, worse, glorifying harmful behaviors.

- Protect your players from **antisocial behaviors** (check FairPlayAlliance.org).

- Be conscious that people with bad intentions will use your game and social platforms to **harm** others.

FAIR PLAY ALLIANCE

"There is no such thing as 'neutral' design."

R.H. Thaler & C.R. Sunstein, *Nudge*

THANKS!

The Gamer's Brain

How Neuroscience
and UX Can Impact
Video Game Design

Celia Hodent

CRC Press
Taylor & Francis Group

@CeliaHodent

Blog & Resources:
celiahodent.com