

Nick Ballou

Behavioural Data Science 🎮 Media Psychology 📱 Digital Wellbeing

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Academic Positions

- 2026– **Early Career Research Fellow** Imperial College London
2030 • Huo Family Foundation ECR Fellow & Imperial College Research Fellow
• PI of the Digital Kaleidoscope lab
• Topic: Curating open video game behaviour data in children and adolescents
• Digital trace data from Roblox, Fortnite, and beyond
DSDE
- 2023– **Postdoctoral Researcher** University of Oxford
• Group: Digital Wellbeing Lab led by [Professor Andrew Przybylski](#)
• Topic: Video games' effects on mental health, using digital trace data
• Open source and industry-partnered (e.g., Nintendo & Xbox) data collection
Oxford Internet Institute

Education

- 2023 **PhD in Intelligent Games & Game Intelligence, *no corrections*** Queen Mary
• **Thesis:** The Basic Needs in Games (BANG) Model of Video Games and Mental Health
• Supervisors: Dr Laurissa Tokarchuk, Dr David Zendle, and Prof Sebastian Deterding
University of London
- 2018 **MPhil in Applied Linguistics, *with distinction*** University of Cambridge
- 2016 **BS in Linguistics, *magna cum laude*** Tulane University

Skills

Statistical Programming	R, Quarto, GL(M)Ms, Monte Carlo simulation, data visualization
Behavioural Data Science	Digital trace data, user analytics, predictive modelling, longitudinal data
Media effects	Displacement, player experience, self-determination theory, disordered gaming
Research Methods	Causal inference, qualitative, quantitative, secondary data use
Open Science	Open data/materials/code, preregistration, questionable research practices, open access

Publications

An up-to-date record is always available at [Google Scholar](#). All my first-author articles are available open access by clicking the [📄](#) icons.



Preprints and Forthcoming

- 2026 **Ballou N**, Földes TA, Vuorre M, Hakman T, Magnusson K & Przybylski AK.
All BANG, Little Buck: Need-Related Experiences Are Weakly Linked with Behavior in the Video Game Domain.
PsyArXiv, [10.31234/osf.io/wqr6u_v1](https://doi.org/10.31234/osf.io/wqr6u_v1). [📄](#)
- 2025 **Ballou N**, Földes TA, Vuorre M, Hakman T, Magnusson K & Przybylski AK.
Open Play: A Longitudinal Dataset of Multi-Platform Video Game Digital Trace Data and Psychological Measures.
PsyArXiv, [10.31234/osf.io/nz96c_v1](https://doi.org/10.31234/osf.io/nz96c_v1).
- 2025 Karhulahti VM, Huntington-Klein N & **Ballou N**.
Claims for No Evidence Also Need Evidence.
PsyArXiv, [10.31234/osf.io/n2rka_v3](https://doi.org/10.31234/osf.io/n2rka_v3). [📄](#)










Journal Articles

- 2026 **Ballou N**, Bowman ND, Hakman T & Przybylski AK.
Reliving 10 Years Old: Descriptive Insights into Retro Gaming.



- 2025 **Ballou N**, Hakman T, Vuorre M, Magnusson K & Przybylski AK.
How Do Video Games Affect Mental Health? A Narrative Review of 13 Proposed Mechanisms.
Technology, Mind, and Behavior, [10.1037/tmb0000152](https://doi.org/10.1037/tmb0000152). 
- 2025 **Ballou N**, Vuorre M, Hakman T & Przybylski AK.
Perceived Value of Video Games, but Not Hours Played, Predicts Mental Well-Being in Casual Adult Nintendo Players.
Royal Society Open Science, [10.1098/rsos.241174](https://doi.org/10.1098/rsos.241174). 
- 2025 Mansfield KL, Ghai S, Hakman T, **Ballou N**, Vuorre M & Przybylski AK.
From Social Media to Artificial Intelligence: Improving Research on Digital Harms in Youth.
The Lancet Child & Adolescent Health, [10.1016/S2352-4642\(24\)00332-8](https://doi.org/10.1016/S2352-4642(24)00332-8). 
- 2024 **Ballou N**, Denisova A, Ryan R, Rigby CS & Deterding S.
The Basic Needs in Games Scale (BANGS): A New Tool for Investigating Positive and Negative Video Game Experiences.
International Journal of Human-Computer Studies, [10.1016/j.ijhcs.2024.103289](https://doi.org/10.1016/j.ijhcs.2024.103289). 
- 2024 **Ballou N** & Deterding S.
The Basic Needs in Games Model of Video Game Play and Mental Health.
Interacting with Computers, [10.1093/iwc/iwae042](https://doi.org/10.1093/iwc/iwae042). 
- 2024 **Ballou N**, Sewall CJR, Ratcliffe J, Zendle D, Tokarchuk L & Deterding S.
Registered Report Evidence Suggests No Relationship Between Objectively-Tracked Video Game Playtime and Wellbeing Over 3 Months.
Technology, Mind, and Behavior, [10.1037/tmb0000124](https://doi.org/10.1037/tmb0000124). 
- 2024 Vuorre M, **Ballou N**, Hakman T, Magnusson K & Przybylski AK.
Affective Uplift During Video Game Play: A Naturalistic Case Study.
Games: Research and Practice, [10.1145/3659464](https://doi.org/10.1145/3659464). 
- 2023 **Ballou N**.
A Manifesto for More Productive Psychological Games Research.
Games: Research and Practice, [10.1145/3582929](https://doi.org/10.1145/3582929). 
- 2023 Zendle D, Flick C, Gordon-Petrovskaya E, **Ballou N**, Xiao LY & Drachen A.
No Evidence That Chinese Playtime Mandates Reduced Heavy Gaming in One Segment of the Video Games Industry.
Nature Human Behaviour, [10.1038/s41562-023-01669-8](https://doi.org/10.1038/s41562-023-01669-8). 
- 2023 Zendle D, Flick C, Halgarth D, **Ballou N**, Cutting J & Drachen A.
The Relationship Between Lockdowns and Video Game Playtime: Multilevel Time-Series Analysis Using Massive-Scale Data Telemetry.
Journal of Medical Internet Research, [10.2196/40190](https://doi.org/10.2196/40190). 
- 2023 Zendle D, Flick C, Halgarth D, **Ballou N**, Demediuk S & Drachen A.
Cross-Cultural Patterns in Mobile Playtime: An Analysis of 118 Billion Hours of Human Data.
Scientific Reports, [10.1038/s41598-022-26730-w](https://doi.org/10.1038/s41598-022-26730-w). 
- 2022 **Ballou N** & Zendle D.
“Clinically Significant Distress” in Internet Gaming Disorder: An Individual Participant Meta-Analysis.
Computers in Human Behavior, [10.1016/j.chb.2021.107140](https://doi.org/10.1016/j.chb.2021.107140). 
- 2021 **Ballou N** & Van Rooij AJ.
The Relationship between Mental Well-Being and Dysregulated Gaming: A Specification Curve Analysis of Core and Peripheral Criteria in Five Gaming Disorder Scales.
Royal Society Open Science, [10.1098/rsos.201385](https://doi.org/10.1098/rsos.201385). 
- 2021 Vuorre M, Zendle D, Petrovskaya E, **Ballou N** & Przybylski AK.
A Large-Scale Study of Changes to the Quantity, Quality, and Distribution of Video Game Play during a Global Health Pandemic.
Technology, Mind, and Behavior, [10.1037/tmb0000048](https://doi.org/10.1037/tmb0000048). 

- 2020 Zendle D, Meyer R & **Ballou N**.
 “The Changing Face of Desktop Video Game Monetisation: An Exploration of Trends in Loot Boxes, Pay to Win, and Cosmetic Microtransactions in the Most-Played Steam Games of 2010-2019”.
PLOS ONE, [10.1371/journal.pone.0232780](https://doi.org/10.1371/journal.pone.0232780). 
- 2020 Zendle D, Meyer R, Cairns P, Waters S & **Ballou N**.
 “The Prevalence of Loot Boxes in Mobile and Desktop Games”.
Addiction, [10.1111/add.14973](https://doi.org/10.1111/add.14973). 





Conference Papers

- 2026 **Ballou N**, Földes TA, Hakman T & Przybylski AK.
 From Breakups to Lethargy: Player Accounts of Third Variables Affecting Video Game Playtime and Well-being
CHI '26 Conference on Human Factors in Computing Systems, <https://doi.org/10.1145/3772318.3791417>. 
- 2024 Kao D, **Ballou N**, Gerling K, Breitsohl H & Deterding S.
 How Does Juicy Game Feedback Motivate? Testing Curiosity, Competence, and Effectance
CHI '24 Conference on Human Factors in Computing Systems, [10.1145/3613904.3642656](https://doi.org/10.1145/3613904.3642656). 
- 2023 **Ballou N** & Deterding S.
 ‘I Just Wanted to Get It Over and Done With’: A Grounded Theory of Psychological Need Frustration in Video Games
CHI PLAY '23 Symposium on Computer-Human Interaction in Play, [10.1145/3611028](https://doi.org/10.1145/3611028). 
- 2023 **Ballou N**, Zendle D, Cutting J & Gordon-Petrovskaya E.
 Four Grand Challenges for Video Game Effects Scholars: How Digital Trace Data Can Improve the Way We Study Games
ICA '23: International Communication Association, [10.31234/osf.io/ua6nr](https://osf.io/ua6nr). 
- 2022 **Ballou N**, Deterding S, Iacovides I & Helsby L.
 Do People Use Games to Compensate for Psychological Needs During Crises? A Mixed-Methods Study of Gaming During COVID-19 Lockdowns
CHI '22 Conference on Human Factors in Computing Systems, [10.1145/3491102.3501858](https://doi.org/10.1145/3491102.3501858). 
- 2022 **Ballou N**, Gbadamosi C & Zendle D.
 “The Hidden Intricacy of Loot Box Design: A Granular Description of Random Monetized Reward Features”.
DiGRA '22, [10.31234/osf.io/xecbk](https://osf.io/xecbk). 
- 2021 **Ballou N**, Breitsohl H, Kao D, Gerling K & Deterding S.
 Not Very Effective: Validity Issues of the Effectance in Games Scale
CHI PLAY '21 Extended Abstracts, [10.1145/3450337.3483492](https://doi.org/10.1145/3450337.3483492). 
- 2021 **Ballou N**, Warriar VR & Deterding S.
 “Are You Open? A Content Analysis of Transparency and Openness Guidelines in HCI Journals”
CHI '21 Conference on Human Factors in Computing Systems, [10.1145/3411764.3445584](https://doi.org/10.1145/3411764.3445584). 
- 2021 Ratcliffe J, **Ballou N** & Tokarchuk L.
 Actions, Not Gestures: Contextualising Embodied Controller Interactions in Immersive Virtual Reality
Proceedings of the 27th ACM Symposium on Virtual Reality Software and Technology, [10.1145/3489849.3489892](https://doi.org/10.1145/3489849.3489892). 

Team Science and Consortia







- 2022 Parsons S, Azevedo F, Elsherif MM & **110 others including Ballou N**.
 A Community-Sourced Glossary of Open Scholarship Terms.
Nature Human Behaviour, [10.1038/s41562-021-01269-4](https://doi.org/10.1038/s41562-021-01269-4). 
- 2022 Stewart S, Pennington CR & **8 other UKRN leads including Ballou N**.
 Reforms to Improve Reproducibility and Quality Must Be Coordinated across the Research Ecosystem: The View from the UKRN Local Network Leads.
BMC Research Notes, [10.1186/s13104-022-05949-w](https://doi.org/10.1186/s13104-022-05949-w). 

Commentaries and Juried Work

- 2025 Xiao LY, **Ballou N** & Eben C.
Fundamental Flaws in the Design and Reporting of Chew and Neo (2024).
Trends in Psychology, [10.1007/s43076-025-00486-4](https://doi.org/10.1007/s43076-025-00486-4). 
- 2023 Xiao LY & **Ballou N**.
Pinpointing the Problem: Providing Page Numbers for Citations as a Crucial Part of Open Science.
PsyArXiv, [10.31219/osf.io/2um67](https://doi.org/10.31219/osf.io/2um67). 
- 2022 **Ballou N** et al.
Self-Determination Theory in HCI: Shaping a Research Agenda
CHI '22 Workshop Extended Abstracts, [10.1145/3491101.3503702](https://doi.org/10.1145/3491101.3503702). 
- 2022 Zendle D, Cairns P, Meyer R, Waters S & **Ballou N**.
Response to Xiao et al.: If Everything Is a Loot Box, Nothing Is.
Addiction, [10.1111/add.15976](https://doi.org/10.1111/add.15976). 

Grants

Principal Investigator

- 2026– **£381k** Family-led gaming interventions  *Huo Family Foundation*
2028 *Status: Starting up* *Early Career Fellowship*
- 2026– **£270k** Rapid Youth Media Use Interventions with Open Behavioural Data, Family Partici- 
2030 *Status: Starting up* *Imperial College*
Research Fellowship
- 2024 **£25k** Effects of gaming reduction using actigraphy  *Huo Family Foundation*
Status: RCT completed w/ n = 80, manuscript in prep *Small Pilot Grant*
- 2023 **£10k** Media use and mental health in identity construction  *Uni of Oxford*
Status: TikTok data donations collected from 300 young adults
- 2022 **£3k** For research on data donation and loot boxes  *AFSG*
Status: Pokemon Go data donation platform created; manuscript in prep
- 2021 **£6k** For research on logging Xbox play  *Centre for Future Health*
Status: Published in Technology, Mind & Behavior

Co-Investigator

- 2023 **£366k** Capturing the Digital Footprints of Video Game Play [ES/Y010736/1]  *ESRC*
Status: Ongoing, platform available at <https://gameplay.science/>

Teaching

- 2025 Myths & Misconceptions about Media and Mental Health *Lady Margaret Hall, Oxford*
Designer & Instructor • Undergraduate Seminar (2h) • **Satisfaction: 4.62/5**
- 2021–24 Peer Review and Scientific Incentives *QMUL Researcher Development*
Designer & Instructor • Postgraduate Workshop (6h) • **Satisfaction: 4.45/5**
- 2021–24 Statistical (Mal)practice *QMUL Researcher Development*
Designer & Instructor • Postgraduate Workshop (4h) • **Satisfaction: 4.74/5**

Supervision

Primary Supervisor

- 2024 Romina Karkalou - Play Time, Basic Psychological Needs and Well-being among Nintendo Switch Players *MSc Social Data Science, Oxford*
- 2023 Richard Delacruz - Player Personality Modelling for Dynamic Game Design *MSc Computer Games, QMUL*
- 2022 Jonathan Hong - The Effect of Characters and Rarity Systems on Motivation in Gacha Games *MSc Computer Games, QMUL*

Informal Supervision and Mentorship

2024–	Thomas McGrath - Time Use and Displacement: A Literature Map and Simulation Modelling Approach	<i>MRes Psychiatry, Oxford</i>
2023–	Thomas Hakman - Gameplay matters: The relationship between in-game player behaviour, performance, and well-being	<i>DPhil Social Data Science, Oxford</i>

External Examination

2024	Eleni Yoda Gill - The Role of Digital Play in the Development of Children's Moral Self-Concept	<i>MPhil Child Development Queensland Uni. of Technology</i>
2024	Tomasz Piasek - Virtual Escapes and Real-world Struggles: A Qualitative Inquiry into Internet Gaming Disorder	<i>MRes Psychology Uni. Bedfordshire</i>

Service

2025	CHI Programme Committee Member	<i>CHI 2026, Games and Play Track</i>
2023	Local Network Lead	<i>UK Reproducibility Network</i>
2022	Papers Chair & Organizer	<i>IGGI Student Conference</i>
2021–23	Student Representative	<i>QMUL Scientific Misconduct Committee</i>
2021–23	Local Founder and Organizer	<i>ReproducibiliTea Journal Club</i>

Invited Talks

2025	Findings from the largest open-source dataset of gaming behaviour & health	<i>Oxford Internet Institute</i>
2025	5 Fun Facts From the New Generation of Games & Health Research	<i>GDC - Game Developer's Conference</i>
2024	Causal Theory Meets Digital Trace Data	<i>University of Southern California</i>
2024	Science Speakeasy: Mindgames	<i>Newcastle Life Science Centre</i>
2024	Scientific Misconduct on Steroids: Generative AI and Fraud	<i>QMUL Festival of Open Science in AI</i>
2024	10 Ways Media Use Can Affect Mental Health, through a Causal Lens	<i>Barts & the London Psychiatry Society</i>
2024	Mechanisms of Gaming and Child Mental Health	<i>University of Hamamatsu</i>
2023	Three Paths Forward for Games and Mental Health Research	<i>University of York</i>
2023	Six Methods Reforms for the Social Sciences	<i>KU Leuven</i>
2023	Untangling the Effects of Games with Open Science	<i>University of York</i>

Conference Presentations

The following are talks delivered at conferences that do not publish proceedings; all other conference presentations are detailed in the Publications section.

2025	Data Data Everywhere, but Not A Drop to Reuse: Why is Secondary Data Analysis Still So Rare?	<i>Society for the Improvement of Psychological Science</i>
2024	The Next Generation of Open Behavioral Data	<i>Society for the Improvement of Psychological Science</i>
2023	5 Ways to Collect Digital Trace Data in Video Games	<i>International Conference Psychological Science</i>
2022	A Platform For Scalable and Accessible Games Research	<i>Video Games Research Framework Launch Conference</i>
2022	10 Reasons The Research Ecosystem is Less Trustworthy Than You Think	<i>IGGI Conference</i>

Media Features

My proudest media appearance is a [BBC Ideas](#) short video about my work and gaming history.

Work I've led or contributed to has been featured in written outlets such as [BBC Bitesize](#), [New Scientist](#) [1, 2], [Toronto Star](#), [The Guardian](#), [The South China Morning Post](#) [1, 2], [The Independent](#), [London Standard](#), [Irish Exam-](#)

ner, Science Vega, Perspective Media, GameStar, CS4FN, BGR, Inside Hook, PC Gamer, PC Games Insider, Science X, Scientas NL, and PsyPost [1, 2, 3].

I've been interviewed for live news, video, and audio outlets including Al Jazeera, Times Radio [1:38:00], Children and Screens, Pixel Parenting [1, 2], School Health Pulse, The Last Radio Show, TRT World, the Vol Breakfast Show, and Play Aid.