Matti Vuorre

» Curriculum vitae

- Department of Social Psychology
  Tilburg University
  Prof. Cobbenhagenlaan 225
  5037 DB Tilburg
  The Netherlands
- mjvuorre@uvt.nl
- vuorre.com
- tilburguniversity.edu/staff/m-j-vuorre
- orcid.org/0000-0001-5052-066X
- github.com/mvuorre

I am a psychological scientist at the Tilburg School of Social and Behavioral Sciences at Tilburg University, where I study cognition and well-being particularly in the context of digital environments using experimental, data science, and statistical methods.

Academic positions

2023 - now • *Assistant Professor*, Department of Social Psychology, Tilburg University
2020 • *Postdoctoral Researcher*, Oxford Internet Institute, University of Oxford
2018 • *Postdoctoral Research Scientist*, Department of Psychology, Columbia University

Education

2018 • *PhD*, Columbia University, USA
2017 • *MPhil*, Columbia University, USA
2015 • *M.A*, Columbia University, USA
2013 • *BSc (Hons)*, Victoria University of Wellington, New Zealand
2012 • *BSc*, Victoria University of Wellington, New Zealand

Research Funding

2024 • Capturing the Digital Footprints of Video Game Play. Economic and Social Research Council. (*Co-I with K. Magnusson and PI A. Przybylski. £263,696.*)
• Understanding the associations between online video game play and well-being in a representative Dutch sample. Tilburg University. (*Co-PI with M. Klincewicz. €8,577.*)
• How does digitalization associate with brain aging? Tilburg University. (*Co-PI with S. M. Kia. €12,000.*)
2023 • Does the nose know? Validating immersive multisensory VR food environments to study eating behaviour. Tilburg University. (*Co-I with PI R. de Vries. €16,344.*)
2022 • Understanding video game play and mental health. Economic and Social Research Council. (*Co-I with Co-I K. Magnusson and PI A. Przybylski. £935,050.*)
2021 • The association between video game play and cognition. University of Oxford. (*PI. £10,000*)

Honors & Awards

2016 • Leo Rubinstein Endowed Fellowship (Columbia University)
• Graduate Student Travel Award (Psychonomic Society)
2015 • Leo Rubinstein Endowed Fellowship (Columbia University)
• Edward E. Smith Memorial Award in Cognitive Neuroscience (Columbia University)
• Best Student Poster Award (Association for the Scientific Study of Consciousness)
2013 • Dean's Fellowship (Columbia University),
2012 • Postgraduate Research Scholarship (Victoria University of Wellington)
• School of Psychology Graduate Prize (Victoria University of Wellington)
• Victoria University Graduate Award (Victoria University of Wellington)

Teaching

Courses

2024 - now • Experimental research (Tilburg University)
2023 - now • Consumer Analytics using Big Data (Tilburg University)
2021 • Experiments for Social Data Science (University of Oxford)

Workshops

2024 • Bayesian regression modelling (University of Basel; https://vuorre.com/workshop/)
2023 • Data visualization workshop (Tilburg University)
2020 • Bayesian regression modelling with brms (University of Zürich; https://vuorre.com/brms-workshop/)
2019 • Bayesian modelling with the Stan probabilistic programming language (Columbia University; https://github.com/mvuorre/ulam)
2018 • Hierarchical modelling of change over time (University of Aberdeen)
2017 • Within-subject mediation analysis for experimental data in cognitive psychology and neuroscience (Rutgers University; https://github.com/mvuorre/2017-rutgers-mediation)

Teaching Assistantships

2018 • Statistics for Behavioral Scientists (Columbia University)
2017 • Introduction to Statistical Modeling in Psychology (Columbia University)
2016 • Analysis of Change (Columbia University)
2015 • Experimental Psychology: Human Behavior (Columbia University)
2014 • The Science of Psychology (Columbia University)
2013 • Visual Perception (Victoria University of Wellington)
2011 • Introduction to Psychology (Victoria University of Wellington)

Service to the Profession

• Member of the Tilburg Young Academy
• TSB Faculty ambassador to the Tilburg Open Science Community
• Recommender at Peer Community In Registered Reports
• Editor for the Instagram Data Access Pilot for Well-being Research

I have acted as a peer reviewer for Advances in Methods and Practices in Psychological Science; Acta Psychologica; Attention, Perception, & Psychophysics; British Journal of Mathematical and Statistical Psychology; Communication Research; International Journal of Psychology; John Templeton Foundation; Journal of Adolescence; Journal of Consciousness Studies; Journal of the Experimental Analysis of Behavior; Journal of Experimental Psychology: General; Nature Human Behaviour; Peer Community In Registered Reports; Psychological Science; Psychology of Consciousness; and Royal Society Open Science.

My future peer-review services are directed toward diamond OA outlets and open peer-reviews. I always sign my reviews.

Publications & Academic Contributions

See Zotero or Google Scholar for the most up-to-date list of my publications.

Publications

1. Vuorre, M. (2025). Estimating Signal Detection Models with Regression Using the Brms R Package. https://doi.org/10.31234/osf.io/vtfc3_v1
2. Ballou, N., Vuorre, M., Hakman, T., Magnusson, K., and Przybylski, A. K. (2025). Perceived Value of Video Games, but Not Hours Played, Predicts Mental Well-Being in Casual Adult Nintendo Players. Royal Society Open Science *12*, 241174. https://doi.org/10.1098/rsos.241174
3. Mansfield, K. L., Ghai, S., Hakman, T., Ballou, N., Vuorre, M., and Przybylski, A. K. (2025). From Social Media to Artificial Intelligence: Improving Research on Digital Harms in Youth. The Lancet Child & Adolescent Health. https://doi.org/10.1016/S2352-4642(24)00332-8
4. Leeuwen, F. van, Jaeger, B., Axelsson, J., Becker, D. V., Hansson, L., Lasselin, J., Lekander, M., Tybur, J. M., and Vuorre, M. (2024). The Smoke-Detector Principle of Pathogen Avoidance: A Test of How the Behavioral Immune System Gives Rise to Prejudice (Stage 1 Registered Report). https://doi.org/10.31234/osf.io/e874s
5. Vuorre, M., Kay, M., and Bolger, N. (2024). Communicating Causal Effect Heterogeneity. https://doi.org/10.31234/osf.io/mwg4f
6. Vuorre, M., Ballou, N., Hakman, T., Magnusson, K., and Przybylski, A. K. (2024). Affective Uplift During Video Game Play: A Naturalistic Case Study. ACM Games *2*, 1–14. https://doi.org/10.1145/3659464
7. Johannes, N., Masur, P. K., Vuorre, M., and Przybylski, A. K. (2024). How Should We Investigate Variation in the Relation between Social Media and Well-Being?. Meta-Psychology *8*. https://doi.org/10.15626/MP.2022.3322
8. Ballou, N., Hakman, T., Vuorre, M., Magnusson, K., and Przybylski, A. K. (2024). How Do Video Games Affect Mental Health? A Narrative Review of 13 Proposed Mechanisms. https://doi.org/10.31234/osf.io/q2kxg
9. Zloteanu, M., and Vuorre, M. (2024). A Tutorial for Deception Detection Analysis or: How I Learned to Stop Aggregating Veracity Judgments and Embraced Signal

Detection Theory Mixed Models. Journal of Nonverbal Behavior. https://doi.org/10.1007/s10919-024-00456-x

10. Metcalfe, J., Xu, J., Vuorre, M., Siegler, R., Wiliam, D., and Bjork, R. A. (2024). Learning from Errors versus Explicit Instruction in Preparation for a Test That Counts. British Journal of Educational Psychology. https://doi.org/10.1111/bjep.12651
11. Vuorre, M., and Przybylski, A. K. (2024). A Multiverse Analysis of the Associations Between Internet Use and Well-Being. Technology, Mind, and Behavior *5*. https://doi.org/10.1037/tmb0000127
12. Weinstein, N., Vuorre, M., Adams, M., and Nguyen, T.-v. (2023). Balance between Solitude and Socializing: Everyday Solitude Time Both Benefits and Harms Well-Being. Scientific Reports *13*, 21160. https://doi.org/10.1038/s41598-023-44507-7
13. Miller, J., Mills, K. L., Vuorre, M., Orben, A., and Przybylski, A. K. (2023). Impact of Digital Screen Media Activity on Functional Brain Organization in Late Childhood: Evidence from the ABCD Study. Cortex *169*, 290–308. https://doi.org/10.1016/j.cortex.2023.09.009
14. Vuorre, M., and Przybylski, A. K. (2023). Global Well-Being and Mental Health in the Internet Age. Clinical Psychological Science, 21677026231207791. https://doi.org/10.1177/21677026231207791
15. Vuorre, M., Magnusson, K., Johannes, N., Butlin, J., and Przybylski, A. K. (2023). An Intensive Longitudinal Dataset of In-Game Player Behaviour and Well-Being in PowerWash Simulator. Scientific Data *10*, 622. https://doi.org/10.1038/s41597-023-02530-3
16. Vuorre, M., and Przybylski, A. K. (2023). Estimating the Association between Facebook Adoption and Well-Being in 72 Countries. Royal Society Open Science *10*, 221451. https://doi.org/10.1098/rsos.221451
17. Syed Sheriff, R. J., Vuorre, M., Riga, E., Przybylski, A. K., Adams, H., Harmer, C. J., and Geddes, J. R. (2022). A Co-Produced Online Cultural Experience Compared to a Typical Museum Website for Mental Health in People Aged 16–24: A Proof-of-Principle Randomised Controlled Trial. Australian & New Zealand Journal of Psychiatry, 00048674221115648. https://doi.org/10.1177/00048674221115648
18. Vuorre, M., Johannes, N., Magnusson, K., and Przybylski, A. K. (2022). Time Spent Playing Video Games Is Unlikely to Impact Well-Being. Royal Society Open Science *9*, 220411. https://doi.org/10.1098/rsos.220411
19. Vuorre, M., Johannes, N., and Przybylski, A. K. (2022). Three Objections to a Novel Paradigm in Social Media Effects Research. https://doi.org/10.31234/osf.io/dpuya
20. Johannes, N., Vuorre, M., Magnusson, K., and Przybylski, A. K. (2022). Time Spent Playing Two Online Shooters Has No Measurable Effect on Aggressive Affect. Collabra: Psychology *8*, 34606. https://doi.org/10.1525/collabra.34606
21. Metcalfe, J., Vuorre, M., Towner, E., and Eich, T. S. (2022). Curiosity: The Effects of Feedback and Confidence on the Desire to Know. Journal of Experimental Psychology: General. https://doi.org/10.1037/xge0001284

22. Vuorre, M., Zendle, D., Petrovskaya, E., Ballou, N., and Przybylski, A. K. (2021). 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 *2*. https://doi.org/10.1037/tmb0000048
23. Metcalfe, J., Kennedy-Pyers, T., and Vuorre, M. (2021). Curiosity and the Desire for Agency: Wait, Wait … Don't Tell Me!. Cognitive Research: Principles and Implications *6*, 69. https://doi.org/10.1186/s41235-021-00330-0
24. Vuorre, M., Orben, A., and Przybylski, A. K. (2021). There Is No Evidence That Associations Between Adolescents' Digital Technology Engagement and Mental Health Problems Have Increased. Clinical Psychological Science, 2167702621994549. https://doi.org/10.1177/2167702621994549
25. Johannes, N., Vuorre, M., and Przybylski, A. K. (2021). Video Game Play Is Positively Correlated with Well-Being. Royal Society Open Science *8*, 202049. https://doi.org/10.1098/rsos.202049
26. Vuorre, M., and Metcalfe, J. (2021). Measures of Relative Metacognitive Accuracy Are Confounded with Task Performance in Tasks That Permit Guessing. Metacognition and Learning. https://doi.org/10.1007/s11409-020-09257-1
27. Vuorre, M., and Crump, M. J. C. (2020). Sharing and Organizing Research Products as R Packages. Behavior Research Methods. https://doi.org/10.3758/s13428-020-01436-x
28. Metcalfe, J., Brezler, J. C., McNamara, J., Maletta, G., and Vuorre, M. (2019). Memory, Stress, and the Hippocampal Hypothesis: Firefighters' Recollections of the Fireground. Hippocampus *29*, 1141–1149. https://doi.org/10.1002/hipo.23128
29. Bürkner, P.-C., and Vuorre, M. (2019). Ordinal Regression Models in Psychology: A Tutorial. Advances in Methods and Practices in Psychological Science *2*, 77–101. https://doi.org/10.1177/2515245918823199
30. Bloom, P. A., Friedman, D., Xu, J., Vuorre, M., and Metcalfe, J. (2018). Tip-of-the-Tongue States Predict Enhanced Feedback Processing and Subsequent Memory. Consciousness and Cognition *63*, 206–217. https://doi.org/10.1016/j.concog.2018.05.010
31. Vuorre, M., and Curley, J. P. (2018). Curating Research Assets: A Tutorial on the Git Version Control System. Advances in Methods and Practices in Psychological Science *1*, 219–236. https://doi.org/10.1177/2515245918754826
32. Vuorre, M. (2018). Using Visual Illusions to Examine Action-Related Perceptual Changes.
33. Chapman, S., Colvin, L. E., Vuorre, M., Cocchini, G., Metcalfe, J., Huey, E. D., and Cosentino, S. (2018). Cross Domain Self-Monitoring in Anosognosia for Memory Loss in Alzheimer's Disease. Cortex *101*, 221–233. https://doi.org/10.1016/j.cortex.2018.01.019
34. Heino, M. T. J., Vuorre, M., and Hankonen, N. (2018). Bayesian Evaluation of Behavior Change Interventions: A Brief Introduction and a Practical Example. Health Psychology and Behavioral Medicine *6*, 49–78. https://doi.org/10.1080/21642850.2018.1428102

35. Vuorre, M., and Bolger, N. (2017). Within-Subject Mediation Analysis for Experimental Data in Cognitive Psychology and Neuroscience. Behavior Research Methods, 1–19. https://doi.org/10.3758/s13428-017-0980-9
36. Vuorre, M., and Metcalfe, J. (2017). Voluntary Action Alters the Perception of Visual Illusions. Attention, Perception, & Psychophysics *79*, 1495–1505. https://doi.org/10.3758/s13414-017-1321-x
37. Sidarus, N., Vuorre, M., and Haggard, P. (2017). Integrating Prospective and Retrospective Cues to the Sense of Agency: A Multi-Study Investigation. Neuroscience of Consciousness *3*. https://doi.org/10.1093/nc/nix012
38. Sidarus, N., Vuorre, M., and Haggard, P. (2017). How Action Selection Influences the Sense of Agency: An ERP Study. NeuroImage *150*, 1–13. https://doi.org/10.1016/j.neuroimage.2017.02.015
39. Sidarus, N., Vuorre, M., Metcalfe, J., and Haggard, P. (2017). Investigating the Prospective Sense of Agency: Effects of Processing Fluency, Stimulus Ambiguity, and Response Conflict. Frontiers in Psychology *8*, 545. https://doi.org/10.3389/fpsyg.2017.00545
40. Vuorre, M. (2017). On Time, Causation, and the Sense of Agency. Journal of Consciousness Studies *24*, 203–215.
41. Vuorre, M., and Metcalfe, J. (2016). The Relation between the Sense of Agency and the Experience of Flow. Consciousness and Cognition *43*, 133–142. https://doi.org/10.1016/j.concog.2016.06.001
42. Michael, R. B., Newman, E. J., Vuorre, M., Cumming, G., and Garry, M. (2013). On the (Non)Persuasive Power of a Brain Image. Psychonomic Bulletin & Review *20*, 720–725. https://doi.org/10.3758/s13423-013-0391-6

Software

1. Vuorre, M. (2025). PDF-Direct. https://github.com/mvuorre/pdf-direct
2. Vuorre, M. (2024). Bmlm: Bayesian Multilevel Mediation. https://github.com/mvuorre/bmlm

Public Engagement & Media

1. Masnick, M. (2024). Yet Another Study Finds That Internet Usage Is Correlated With GREATER Wellbeing, Not Less. https://www.techdirt.com/2024/05/17/yet-another-study-finds-that-internet-usage-is-correlated-with-greater-wellbeing-not-less/
2. Holcombe, M. (2024). Internet Access Is Linked to Higher Well-Being, New Global Study Reveals. https://www.cnn.com/2024/05/15/health/internet-greater-well-being-study-wellness/index.html
3. Nyheter, S. (2023). Ny studie: Inga bevis för att internet skadar vårt välmående. https://www.svt.se/nyheter/inrikes/ny-studie-inga-bevis-for-att-internet-skadar-vart-valmaende%E2%80%93x52qwt
4. BBC (2021). Is Technology Harmful to Youngsters?. https://www.bbc.co.uk//learningenglish/english/features/6-minute-english/ep-210906
5. BBC (2021). Tech Does Not Impact Teenage Mental Health. https://www.bbc.co.uk/programmes/w3ct1lry

6. Storås, N. Teknologia ei tuhonnut kansan psyykettä. https://www.hs.fi/visio/art-2000010069351.html

Presentations

1. Vuorre, M. (2025). Collaborative Science in the Age of Software.
2. Vuorre, M. (2025). Digital Risks and Harms: From Social Media to Artificial Intelligence.
3. Vuorre, M. (2025). Understanding Psychological Heterogeneity with Bayesian Hierarchical Models.
4. Vuorre, M. (2024). Communicating Causal Effect Heterogeneity.
5. Vuorre, M. (2024). Understanding Psychological Heterogeneity with Bayesian Hierarchical Models Using the Brms R Package.
6. Vuorre, M. (2024). Investigating Video Game Player Behavior and Well-Being.
7. Vuorre, M. (2024). Video Games and Well-Being.
8. Vuorre, M. (2024). Big Data, Small Transparency: Limits to Understanding, and Addressing Effectively, Concerning Behaviors in the Online Era.
9. Vuorre, M. (2024). Understanding the Roles of Digital Technologies in Psychological Functioning.
10. Vuorre, M. (2024). Internet Technology and Well-Being.
11. Vuorre, M. (2023). What Can Psychological Science Tell Us about Video Games and Their Effects.
12. Vuorre, M. (2023). Understanding the Roles of Digital Technologies in Psychological Functioning.
13. Vuorre, M. (2023). Intensive Longitudinal Dataset of Video Game Play, Well-Being, and Motivations: A Case Study of PowerWash Simulator.
14. Vuorre, M. (2022). Time Spent Playing Video Games Is Unlikely to Impact Well-Being.
15. Vuorre, M. (2018). Within-Subject Mediation Analysis for Experimental Data in Cognitive Psychology and Neuroscience.
16. Vuorre, M. (2017). A Meta-Analytic Review of Agency Cues.
17. Vuorre, M. (2016). The Pragmatist Guide to Studying Free Will.
18. Vuorre, M. (2016). Voluntary Actions Cause a Temporal Rate-Shift in Visual Awareness: Evidence from Visual Illusions.
19. Vuorre, M. (2015). Voluntary Action and Time Perception.

Other writing

1. Vuorre, M. (2019). How to Analyze Visual Analog (Slider) Scale Data?. https://vuorre.com/posts/2019-02-18-analyze-analog-scale-ratings-with-zero-one-inflated-beta-models/
2. Vuorre, M. (2016). Introduction to Data Analysis Using R. https://blog.efpsa.org/2016/12/05/introduction-to-data-analysis-using-r/
3. Vuorre, M. (2014). What Your Name Says About How Believable You Are. https://www.scientificamerican.com/article/what-your-name-says-about-how-believable-you-are/