







# Matti Vuorre

## » Curriculum vitae

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 2024-06-04 [[latest](#)]

I am a psychological scientist at the Tilburg School for Social and Behavioral Sciences at Tilburg University, where I study how digital environments relate to cognition and well-being using experimental, data science, and statistical methods.

## Academic Positions

- 2023 - now *Assistant Professor*, Department of Social Psychology, Tilburg University
- 2020 - 2022 *Postdoctoral Researcher*, Oxford Internet Institute, University of Oxford
- 2018 - 2020 *Postdoctoral Research Scientist*, Department of Psychology, Columbia University

## Education

- 2018 PhD, Columbia University, USA
- 2015 M.A, Columbia University, USA
- 2013 BSc (HONS), Victoria University of Wellington, New Zealand

## Research Funding

- 2024 Understanding the associations between online video game play and well-being in a representative Dutch sample. Tilburg University. (*Co-PI with M. Klinecicz. €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)

## Publications & Academic Contributions

See [Zotero](#) or [Google Scholar](#) for the most up-to-date list of my publications.

### Preprints

Ballou, N., Hakman, T., Vuorre, M., Magnusson, K., & Przybylski, A. K. (2024). How do video games affect mental health? A narrative review of 13 proposed mechanisms. *PsyArXiv*. <https://doi.org/10.31234/osf.io/q2kxg>

Johannes, N., Masur, P. K., Vuorre, M., & Przybylski, A. K. (2021). How should we investigate variation in the relation between social media and well-being? *PsyArXiv*. <https://doi.org/10.31234/osf.io/xahbg>

### Journal articles

- 2024 Vuorre, M., Ballou, N., Hakman, T., Magnusson, K., & Przybylski, A. K. (2024). Affective Uplift During Video Game Play: A Naturalistic Case Study. *Games: Research and Practice*. <https://doi.org/10.1145/3659464>
- Vuorre, M., & Przybylski, A. K. (2024). A Multiverse Analysis of the Associations Between Internet Use and Well-Being. *Technology, Mind, and Behavior*. <https://doi.org/10.1037/tmb0000127>
- Zloteanu, M., & 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>
- Metcalf, J., Xu, J., Vuorre, M., Siegler, R., Wiliam, D., & 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>
- 2023 Vuorre, M., & Przybylski, A. K. (2023). Global Well-Being and Mental Health in the Internet Age. *Clinical Psychological Science*. <https://doi.org/10.1177/21677026231207791>

- Weinstein, N., Vuorre, M., Adams, M., & Nguyen, T. (2023). Balance between solitude and socializing: Everyday solitude time both benefits and harms well-being. *Scientific Reports*. <https://doi.org/10.1038/s41598-023-44507-7>
- Miller, J., Mills, K. L., Vuorre, M., Orben, A., & Przybylski, A. K. (2023). Impact of digital screen media activity on functional brain organization in late childhood: Evidence from the ABCD study. *Cortex*. <https://doi.org/10.1016/j.cortex.2023.09.009>
- Vuorre, M., Magnusson, K., Johannes, N., Butlin, J., & Przybylski, A. K. (2023). An intensive longitudinal dataset of in-game player behaviour and well-being in PowerWash Simulator. *Scientific Data*. <https://doi.org/10.1038/s41597-023-02530-3>
- Vuorre, M., & Przybylski, A. K. (2023). Estimating the association between Facebook adoption and well-being in 72 countries. *Royal Society Open Science*. <https://doi.org/10.1098/rsos.221451>
- 2022 Syed Sheriff, R. J., Vuorre, M., Riga, E., Przybylski, A. K., Adams, H., Harmer, C. J., & 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*. <https://doi.org/10.1177/00048674221115648>
- Metcalf, J., Vuorre, M., Towner, E., & 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>
- Vuorre, M., Johannes, N., Magnusson, K., & Przybylski, A. K. (2022). Time spent playing video games is unlikely to impact well-being. *Royal Society Open Science*. <https://doi.org/10.1098/rsos.220411>
- Johannes, N., Vuorre, M., Magnusson, K., & Przybylski, A. K. (2022). Time spent playing two online shooters has no measurable effect on aggressive affect. *Collabra: Psychology*. <https://doi.org/10.1525/collabra.34606>
- Vuorre, M., Johannes, N., & Przybylski, A. K. (2022). Three objections to a novel paradigm in social media effects research. *PsyArXiv*. <https://doi.org/10.31234/osf.io/dpuya>
- 2021 Vuorre, M., Orben, A., & Przybylski, A. K. (2021). There Is No Evidence That Associations Between Adolescents' Digital Technology Engagement and Mental Health Problems Have Increased. *Clinical Psychological Science*. <https://doi.org/10.1177/2167702621994549>
- Vuorre, M., Zendle, D., Petrovskaya, E., Ballou, N., & 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*. <https://doi.org/10.1037/tmb0000048>
- Metcalf, J., Kennedy-Pyers, T., & Vuorre, M. (2021). Curiosity and the desire for agency: Wait, wait ... don't tell me! *Cognitive Research: Principles and Implications*. <https://doi.org/10.1186/s41235-021-00330-0>

- Johannes, N.\*, Vuorre, M.\*, & Przybylski, A. K.\* (2021). Video game play is positively correlated with well-being. *Royal Society Open Science*. <https://doi.org/10.1098/rsos.202049>
- Vuorre, M., & 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>
- 2020 Vuorre, M.\*, & 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>
- 2019 Metcalfe, J., Brezler, J. C., McNamara, J., Maletta, G., & Vuorre, M. (2019). Memory, stress, and the hippocampal hypothesis: Firefighters' recollections of the fireground. *Hippocampus*. <https://doi.org/10.1002/hipo.23128>
- Bürkner, P.-C., & Vuorre, M. (2019). Ordinal regression models in psychology: A tutorial. *Advances in Methods and Practices in Psychological Science*. <https://doi.org/10.1177/2515245918823199>
- 2018 Bloom, P. A., Friedman, D., Xu, J., Vuorre, M., & Metcalfe, J. (2018). Tip-of-the-tongue states predict enhanced feedback processing and subsequent memory. *Consciousness and Cognition*. <https://doi.org/10.1016/j.concog.2018.05.010>
- Vuorre, M., & Curley, J. P. (2018). Curating research assets: A tutorial on the Git version control system. *Advances in Methods and Practices in Psychological Science*. <https://doi.org/10.1177/2515245918754826>
- Heino, M. T. J.\*, Vuorre, M.\*, & Hankonen, N. (2018). Bayesian evaluation of behavior change interventions: A brief introduction and a practical example. *Health Psychology and Behavioral Medicine: an Open Access Journal*. <https://doi.org/10.1080/21642850.2018.1428102>
- Chapman, S., Colvin, L. E., Vuorre, M., Cocchini, G., Metcalfe, J., Huey, E. D., & Cosentino, S. (2018). Cross domain self-monitoring in anosognosia for memory loss in Alzheimer's disease. *Cortex*. <https://doi.org/10.1016/j.cortex.2018.01.019>
- 2017 Vuorre, M. & Bolger, N. (2017). Within-subject mediation analysis for experimental data in cognitive psychology and neuroscience. *Behavior Research Methods*. <https://doi.org/10.3758/s13428-017-0980-9>
- Sidarus, N., Vuorre, M., & Haggard, P. (2017). Integrating prospective and retrospective cues to the sense of agency: a multi-study investigation. *Neuroscience of Consciousness*. <https://doi.org/10.1093/nc/nix012>
- Vuorre, M. & Metcalfe, J. (2017). Voluntary action alters the perception of visual illusions. *Attention, Perception, & Psychophysics*. <https://doi.org/10.3758/s13414-017-1321-x>
- Vuorre, M. (2017). On time, causation, and the sense of agency. *Journal of Consciousness Studies*. <http://www.ingentaconnect.com/contentone/imp/jcs/2017/00000024/F0020003/art00011>

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\*Equal contribution.

Sidarus, N., Vuorre, M., Metcalfe, J., & Haggard, P. (2017). Investigating the prospective sense of agency: Effects of processing fluency, stimulus ambiguity, and response conflict. *Frontiers in Psychology*. <https://doi.org/10.3389/fpsyg.2017.00545>

Sidarus, N., Vuorre, M., & Haggard, P. (2017). How action selection influences the sense of agency: An ERP study. *NeuroImage*. <https://doi.org/10.1016/j.neuroimage.2017.02.015>

2016 Vuorre, M. & Metcalfe, J. (2016). The relation between the sense of agency and the experience of flow. *Consciousness and Cognition*. <https://doi.org/10.1016/j.concog.2016.06.001>

2013 Michael, R. B., Newman, E. J., Vuorre, M., Cumming, G., & Garry, M. (2013). On the (non)persuasive power of a brain image. *Psychonomic Bulletin & Review*. <https://doi.org/10.3758/s13423-013-0391-6>

### PhD thesis

2018 Vuorre, M. (2018). Using visual illusions to examine action-related perceptual changes. <https://academiccommons.columbia.edu/catalog/ac:73n5tb2rdf>

### Scientific software

2017 Vuorre, M. (2017). bmlm: Bayesian Multilevel Mediation. R package version 1.3.4. <https://cran.r-project.org/package=bmlm>

### Talks

2023 What can psychological science tell us about video games and their effects? *Missing Link: How Video Games Impact Culture and Individuals*, Tilburg.

Intensive longitudinal dataset of video game play, well-being, and motivations: Case study of PowerWash Simulator. *International Convention of Psychological Science*, Brussels.

Frontiers in Video Game Science. *International Convention of Psychological Science*, Brussels.

2022 Time spent playing video games is unlikely to impact well-being. *International Communication Association meeting*, Paris.

2018 Within-subject mediation analysis for experimental data in cognitive psychology and neuroscience. *Columbia University*.

2017 A meta-analytic review of agency cues. *European Society for Cognitive Psychology meeting*, Potsdam, Germany.

2016 The pragmatist's guide to studying free will. *Science of Consciousness meeting*, Tucson, Arizona.

Voluntary actions cause a temporal rate-shift in visual awareness: Evidence from visual illusions. *Science of Consciousness meeting*, Tucson, Arizona.

2015 Voluntary action and time perception. *Toward a Science of Consciousness meeting*, Helsinki, Finland.

## Other articles

- 2016 Vuorre, M. (December 5, 2016). Introduction to data analysis using R. *JEPS Bulletin*. <http://blog.efpsa.org/2016/12/05/introduction-to-data-analysis-using-r/>
- 2014 Vuorre, M. (April 29, 2014). What your name says about how believable you are. *Scientific American*. <https://www.scientificamerican.com/article/what-your-name-says-about-how-believable-you-are/>

## Public Engagement & Media

- 2023 Teknologia ei tuhonnut kansan psyykettä (December 25, 2023). Interview at *Helsingin Sanomat* (Finland)
- Ny studie: Inga bevis för att internet skadar vårt välmående (December 17, 2023). Interview at *SVT* (Sweden)
- 2021 6 Minute English: Is technology harmful to youngsters? (September 6, 2021). Interview at *BBC Learning English* (UK)
- Tech does not impact teenage mental health (May 4, 2021). Interview at *BBC Digital Planet* (UK)

## Teaching

### Courses

- 2024- Experimental research (Tilburg University)
- 2023- Consumer Analytics using Big Data (Tilburg University)
- 2021-2022 Experiments for Social Data Science (University of Oxford)

### 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 & 2016 The Science of Psychology (Columbia University)
- 2013 Visual Perception (Victoria University of Wellington)
- 2011 & 2013 Introduction to Psychology (Victoria University of Wellington)

### Workshops

- 2023 Data visualization workshop (Tilburg University; Tilburg PhD Platform)
- 2020 Bayesian regression modelling with brms (University of Zürich; <https://mvuorre.github.io/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>)

## Service to the profession

Member of [Tilburg Young Academy](#)

Recommender at [Peer Community In Registered Reports](#)

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. I always sign my reviews.