# Matti Vuorre

# » Curriculum vitae

I am a psychological scientist at the Oxford Internet Institute, where I study how digital environments relate to psychological well-being and cognition using experimental, data science, and statistical methods.

# **Academic Positions**

2020 - now 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

# Grants, Honors & Awards

John Fell Fund award (University of Oxford)

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**

For the most up-to-date list of my publications, see **Z**otero or **Y**oogle Scholar.

## Works in progress

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

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

Syed Sheriff, R., Vuorre, M., Riga, E., Przybylski, A., Adams, H., Harmer, C. J., & Geddes, J. (2021). An Online Cultural Experience for Mental Health in People Aged 16-24 Compared to a Typical Museum Website: A Randomised Controlled Trial. *SSRN*. https://doi.org/10.2139/ssrn.3934229

## Journal articles

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., 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

Metcalfe, 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.

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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

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

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

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

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-

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<sup>\*</sup>Equal contribution.

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

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

- 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
- 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

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

#### Scientific software

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

### **Talks**

- Vuorre, M. (2018, February). Within-subject mediation analysis for experimental data in cognitive psychology and neuroscience. Talk presented at Columbia University.
- Vuorre, M., Sidarus, N., & Metcalfe, J. (2017, September). A meta-analytic review of agency cues. Talk presented at the *European Society for Cognitive Psychology* meeting, Potsdam, Germany.
- Vuorre, M. (2016, April). The pragmatist's guide to studying free will. Talk presented at the *Science of Consciousness* meeting, Tucson, Arizona.
  - Vuorre, M. (2016, April). Voluntary actions cause a temporal rate-shift in visual awareness: Evidence from visual illusions. Talk presented at the *Science of Consciousness* meeting, Tucson, Arizona.

Vuorre, M. & Metcalfe, J. (2015, June). Voluntary action and time perception. Talk presented at the *Toward a Science of Consciousness* meeting, Helsinki, Finland.

#### Other articles

- 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/
- 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/

# Teaching

#### **Courses**

2021-2022 Experiments for Social Data Science (University of Oxford)

## Workshops

- Bayesian regression modelling with brms (University of Zürich; https://mvuorre.github.io/brms-workshop/)
- 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)
- 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)
- Analysis of Change (Columbia University)
  - The Science of Psychology (Columbia University)
- 2015 Experimental Psychology: Human Behavior (Columbia University)
- 2014 The Science of Psychology (Columbia University)
- <sup>2013</sup> Visual Perception (Victoria University of Wellington)
  - Introduction to Psychology (Victoria University of Wellington)
- 2011 Introduction to Psychology (Victoria University of Wellington)

# Service to the profession

## Peer review service

Advances in Methods and Practices in Psychological Science

Acta Psychologica

Attention, Perception, & Psychophysics

International Journal of Psychology

Journal of Adolescence

Journal of Consciousness Studies

Journal of the Experimental Analysis of Behavior

Psychology of Consciousness

Royal Society Open Science

# Languages

Natural languages	Programming languages

Finnish (native) R

English (fluent) Python
Swedish (basic) Stan

HTML & CSS & JavaScript