

Curriculum Vitae

Michèle B. Nuijten, MSc

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Personal Information

Born	February 9th 1990, Utrecht, The Netherlands
Work Address	Tilburg University, Department of Methodology and Statistics, P.O. Box 90153, 5000 LE, Tilburg, The Netherlands
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Academic Appointments and Research

2018 – present	Assistant Professor, Tilburg University Assistant Professor (tenure track) at Tilburg University.
2012–2017	PhD Methodology and Statistics, Tilburg University Project title: <i>Research on Research: A Meta-Scientific Study of Problems and Solutions in Psychological Science</i> . Supervisors: prof. dr. Jelte M. Wicherts and prof. dr. Marcel A. L. M. van Assen. Tilburg University.
April – May 2017	Research Visit to METRICS at Stanford University A three week visit to the Meta-Research Innovation Center at Stanford (METRICS), California, USA. Together with prof. dr. John P. A. Ioannidis, dr. Daniele Fanelli, and their colleagues I worked on several research projects concerning meta-science.
March – Dec 2012	Research Assistant Aiding in designing and monitoring an automatized tracking system that analyzes and reports longitudinal patient data. Supervisor: prof. dr. Denny Borsboom. University of Amsterdam.

Education

2012–2017	PhD Methodology and Statistics, Tilburg University Defense date: May 30, 2018.
2011–2012	MSc Psychology (<i>cum laude</i>), University of Amsterdam Specialization: Psychological Research Methods. Thesis: <i>A Default Bayesian Hypothesis Test for Mediation</i> , supervisor: prof. dr. Eric-Jan Wagenmakers.

2008–2011 | **BSc Psychology (*cum laude*), University of Amsterdam**
 Specialization: Psychological Research Methods. Thesis: *The Use of the Sobel Test in Mediation Analysis*, supervisor: dr. Jelte M. Wicherts.
Honours Programme of Psychology
 30 ECTS in addition to the regular Bachelor. University of Amsterdam.

Teaching

University Teaching Qualification

2017 | **University Teaching Qualification: Module TEST**
 Completing the UTQ module TEST, focused on designing valid and reliable exams based on learning goals.

2015 | **University Teaching Qualification: Module PLAN**
 Successfully completed the UTQ module PLAN, focused on formulating learning goals and designing a course or a lecture according to them.

2014 | **University Teaching Qualification: Module TEACH**
 Successfully completed the UTQ module TEACH, focused on acquiring insight into student behavior during classes and the influence of the lecturer behavior on these interactions.

Lecturer

2016 – present | **Lecturer**
 Lecturer and co-coordinator for the first years psychology course on methodology and research methods: “MTO-A-PSY”. Tilburg University.

2013– 2016 | **Teaching Assistant**
 Supervising tutorials for the second year’s psychology course on correlational research methods: “MTO-D PSY”. Tilburg University.

March 2012 – July 2012 | **Teaching Assistant**
 Designing and grading assignments, supervising practical sessions for a first year’s Beta Gamma course on research methods and statistics in R: “Social Sciences in Perspective”. University of Amsterdam.

Feb – March 2012 | **Teaching Assistant**
 Supervising practical sessions, grading assignments for the Bachelor of Psychology course “SPSS Psychology”. University of Amsterdam.

Jan 2012 | **Teaching Assistant**
 Supervising practical sessions, grading assignments for the Research Master of Psychology course “Programming Skills: R”. University of Amsterdam.

Supervising

- Jan –
March 2014 | **Supervisor Research Internship**
Supervising the research internship of Research Master student Chris Hartgerink.
Project: *statcheck programming internship*. Tilburg University.
- June –
Dec 2013 | **Supervisor Research Internship**
Supervising the research internship of Research Master student Jeroen Borghuis.
Project: *Does recommended data sharing decrease statistical misreporting?*
Tilburg University.

Academic Activities and Memberships

- July 2017 –
present | **Advisory Board of Curate Science**
Member of the Advisory Board of Curate Science (<http://curatescience.org>). Curate Science is a unified framework to quantify internal and external trustworthiness of empirical research over time.
- 2016 –
present | **Executive Committee SIPS**
Member of the executive committee of the Society for the Improvement of Psychological Science (SIPS). SIPS is a service organization aiming to make psychological science higher quality and more cumulative.
- 2016 –
present | **Program Committee Replication Research NWO**
Advising NWO (The Netherlands Organization for Scientific Research) on distributing funding for replication research.
- Dec 2014 –
Dec 2015 | **PhD Representative Interuniversity Graduate School of Psychometrics and Sociometrics (IOPS)**
Among other things, activities consist of attending IOPS board meetings, selecting reviewers for new IOPS proposals, chairing the IOPS PhD student meeting, and maintain the IOPS website.
- Oct 2013 –
Sept 2014 | **Member of Organizing Committee**
Member of the organizing committee for the seminar ‘Improving Scientific Practice: Dealing with the Human Factors’.
- Dec 2013 –
Dec 2014 | **Assistant PhD Representative IOPS**
Assisting the PhD representative with her activities. Among other things, these activities consist of attending IOPS board meetings, selecting reviewers for new IOPS proposals, chairing the IOPS PhD student meeting, and build and maintain the IOPS website.
- Jan 2013 –
present | **Member of IOPS**
Student member.
- Sept 2011 –
Nov 2012 | **Methodology Shop Consultant**
The Methodology Shop is a help desk for free methodological and statistical advice. The clients usually are undergraduate students who need help with their research, but there are also clients from outside the university who ask for methodological advice. University of Amsterdam.

Editorial Activities

Jan 2018	Editor at Collabra: Psychology Editor for the open access journal <i>Collabra: Psychology</i> , the official journal of the Society for the Improvement of Psychological Science (SIPS).
2017 – present	Board of Consulting Editors at PSPB Consulting Editor for the <i>Personality and Social Psychology Bulletin</i> .
April 2017	SSMART 2017 Review Committee Member of the review committee of the Social Science Meta-Analysis and Research Transparency (SSMART) grants, initiated by the Berkeley Initiative for Transparency in the Social Sciences (BITSS). In total there was \$ 60,000 in funding to award.
2013 – present	Ad Hoc Reviewing Psychological Methods PNAS Behavior Research Methods Personality and Social Psychology Bulletin Review of General Psychology PLoS Biology Journal of Cross-Cultural Psychology Journal of Experimental Social Psychology Educational Psychology and Measurement Journal of Media Psychology Journal of Official Statistics Journal of Mathematical Psychology Journal of Open Psychology Data.

Grants & Awards

Sep 2017	Publons' Sentinel Award: Runner-Up statcheck was named runner-up for Publons' Sentinel Award for outstanding advocacy, innovation or contribution to scholarly peer review.
April 2017	Campbell Methods Grant (\$20,000) A \$20,000 methods grant from the Campbell Collaboration for the project “ <i>Verifying the accuracy of statistical significance testing in Campbell Collaboration systematic reviews through the use of the R package statcheck</i> ”, together with Joshua R. Polanin.
Nov 2016	Leamer-Rosenthal Prize for Open Social Science: Emerging Researcher (\$10,000) A joint cash award of \$10,000 together with Sacha Epskamp from the Berkeley Initiative for Transparency in the Social Sciences (BITSS) for our work on “statcheck”.
Sep 2016 – present	Rackspace Sponsorship (\$2,000 per Month) Rackspace sponsors me for \$2000 per month in hosting costs for the web app http://statcheck.io .

- July 2014 | **Best Presentation by a PhD Student**
 Nuijten, M. B., Van Assen, M. A. L. M., Veldkamp, C. L. S., & Wicherts, J. M. (2014, July). *The replication paradox: Combining studies can decrease accuracy of effect size estimates*. Paper presented at the 6th European Congress of Methodology, Utrecht, The Netherlands.

Publications

- preprints | Colombo, M., Duev, G., **Nuijten, M. B.**, & Sprenger, J. (2017). Statistical reporting inconsistencies in experimental philosophy. *Preprint retrieved from <https://osf.io/preprints/socarxiv/z65fv/>*.
- Nuijten, M. B.**, Van Assen, M. A. L. M., Hartgerink, C. H. J., Epskamp, S., & Wicherts, J. M. (2017). The validity of the tool statcheck in discovering statistical reporting inconsistencies. *Preprint retrieved from <https://psyarxiv.com/tcaaj/>*.
- 2017 | **Nuijten, M. B.** (2017). Share analysis plans and results. *Nature*, *551*, 559. URL
- Nuijten, M. B.**, Borghuis, J., Veldkamp, C. L. S., Dominguez-Alvarez, L., Van Assen, M. A. L. M., & Wicherts, J. M. (2017). Journal data sharing policies and statistical reporting inconsistencies in psychology. *Collabra: Psychology*, *3*(1), 1-22. DOI: 10.1525/collabra.102. URL
- 2016 | **Nuijten, M. B.**, Deserno, M. K., Cramer, A. O. J., & Borsboom, D. (2016). Mental disorders as complex networks: An introduction and overview of a network approach to psychopathology. *Clinical Neuropsychiatry*, *13*(4/5), 68-76. URL
- Nuijten, M. B.**, Deserno, M. K., Cramer, A. O. J., Costantini, G., & Borsboom, D. (2016). Disturbi mentali come complex network: Un' introduzione e una panoramica all' approccio network in psicopatologia. *Cognitivismo clinico*, *13*(2), 135-149. URL
- Nuijten, M. B.** (2016). Vals positieven: Geen gebrek aan integriteit, maar een teveel aan flexibiliteit. *Tijdschrift voor Taalbeheersing*, *38*(2), 175-180. URL
- Nuijten, M. B.**, Hartgerink, C. H. J., Van Assen, M. A. L. M., Epskamp, S., & Wicherts, J. M. (2016). The prevalence of statistical reporting errors in psychology (1985-2013). *Behavior Research Methods*, *48*, 1205-1226. DOI: 10.3758/s13428-015-0664-2. URL
- Nuijten, M. B.** (2016). Preventing statistical errors in scientific journals. *European Science Editing*, *42*(1), 8-10. URL
- Hartgerink, C. H. J., Van Aert, R. C. M., **Nuijten, M. B.**, Wicherts, J. M., Van Assen, M. A. L. M. (2016). Distributions of p -values smaller than .05 in Psychology: What is going on? *PeerJ*, *4*, e1935, DOI: 10.7717/peerj.1935. URL
- 2015 | Open Science Collaboration (2015). Estimating the reproducibility of psychological science. *Science*, *349*(6251). DOI: 10.1126/science.aac4716. URL
- Nuijten, M. B.**, Van Assen, M. A. L. M., Veldkamp, C. L. S., & Wicherts, J. M. (2015). The replication paradox: Combining studies can decrease accuracy of effect size estimates. *Review of General Psychology*, *19*(2), 172-182. URL

- Nuijten, M. B.**, Wetzels, R., Matzke, D., Dolan, C. V., & Wagenmakers, E.-J. (2015). A default Bayesian hypothesis test for mediation. *Behavior Research Methods*, *47*, 85-97. DOI: 10.3758/s13428-014-0470-2. URL
- 2014 Veldkamp, C. L. S., **Nuijten, M. B.**, Dominguez-Alvarez, L., Van Assen, M. A. L. M., & Wicherts, J. M. (2014). Statistical reporting errors and collaboration on statistical analyses in psychological science. *PLoS One*, *9*(12), e114876. URL
- Nuijten, M. B.**, Van Assen, M. A. L. M., Van Aert, R. C. M., & Wicherts, J. M. (2014). Standard analyses fail to show that US studies overestimate effect sizes in softer research *Proceedings of the National Academy of Sciences*, *111*(7), E712-E713.
- Van Assen, M. A. L. M., Van Aert, R. C. M., **Nuijten, M. B.**, & Wicherts, J. M. (2014). Why publishing everything is more effective than selective publishing of statistically significant results. *PLoS One*, *9*(1), e84896. DOI:10.1371/journal.pone.0084896. URL

Book Chapters

- 2017 Lunansky, G., **Nuijten, M. B.**, Deserno, M. K., Cramer, A. O. J., & Borsboom, D. (2017). *Een symptoom komt nooit alleen: Psychologische stoornissen als complexe netwerken* [A symptom never comes alone: Psychological disorders as complex networks]. To appear in: *Handboek Persoonlijkheidspathologie* [Handbook of Personality Pathology].

Software

- 2014 Epskamp, S., & **Nuijten, M. B.** (2014). *statcheck*: Extract statistics from articles and recompute p values. R package version 1.0.0. <http://CRAN.R-project.org/package=statcheck>. See the web app at <http://statcheck.io> and the developmental version at <https://github.com/michelenuijten/statcheck>.
- Nuijten, M. B.**, Wetzels, R., Matzke, D., Dolan, C. V., & Wagenmakers, E.-J. (2014). *BayesMed*: Default Bayesian hypothesis tests for correlation, partial correlation, and mediation. R package version 1.0. <http://CRAN.R-project.org/package=BayesMed>. See the developmental version at <https://github.com/michelenuijten/BayesMed>

Popular Press

- 2017 **Nuijten, M. B.** (2017). Journal policies that encourage data sharing prove extremely effective. *LSE Impact Blog*.
- Nuijten, M. B.** (2017). *BayesMed* and *statcheck*. *The APS Observer*.
- 2013 **Nuijten, M. B.**, Deserno, M., Cramer, A. O. J., & Borsboom, D. (2013). Een symptoom komt nooit alleen: Psychologische stoornissen als complexe netwerken. *De Psycholoog*.

Publicity

- 2017 Singh Chawla, D. (2017). Controversial software is proving surprisingly accurate at spotting errors in psychology papers. *Science*. URL
- Keulen, J. P. (2017). Onderzoek moet gepubliceerd worden, ongeacht de uitkomst. *New Scientist*. URL
- Beek, S. (2017). Fouten filteren uit de wetenschap. *NEMO KennisLink*. URL
- McCluskey, B. (2017). Replication: how to address failure. *Technologist*. URL
- Short video on Data Sharing and Open Data for the SPSP Experts video series, created in collaboration with SIPS and the OSF. URL
- Guest on the podcast on the Guardians Science Weekly Podcast with Hannah Devlin. URL
- Guest on the podcast *PLOScast* in an episode on statcheck and the replication crisis, hosted by Elizabeth Seiver. URL
- Guest on the podcast *Everything Hertz* in an episode on statcheck and meta-science, hosted by Daniel Quintana and James Heathers. URL
- Buranyi, S. (2017). The hi-tech war on science fraud. *The Guardian*. URL
- 2016 Nature Editorial (2016). Post-publication criticism is crucial, but should be constructive: In an era of online discussion, debate must remain nuanced and courteous. *Nature*, 540, 7-8. DOI: 10.1038/540007b. URL
- Baker, M. (2016). Stat-checking software stirs up psychology. *Nature*, 540, 151152. DOI: 0.1038/540151a. URL
- Buranyi, S. (2016). Scientists are worried about ‘peer review by algorithm’. *Motherboard; VICE*. URL
- Resnick, B. (2016). A bot crawled thousands of studies looking for simple math errors. The results are concerning. *VOX*. URL
- Kershner, K. (2016). Statcheck: when bots ‘correct’ academics. *HowStuffWorks*. URL
- Keulemans, M. (2016). Worden sociale wetenschappen geterroriseerd door jonge onderzoekers?: Oorlog onder psychologen. *De Volkskrant*. URL
- 2015 Baker, M. (2015). Smart software spots statistical errors in psychology papers: One in eight articles contain data-reporting mistakes that affect their conclusions. *Nature News*. URL
- BNR Nieuwsradio (2015). Radio interview. URL
- Vermeulen, M. (2015). ‘Grove onzorgvuldigheden’ in deel psychologische studies: Gevolgen voor uitkomst in 1 op 8 papers. *De Volkskrant*. URL
- Aan de Brugh, M. (2015). Psycholoog tobt met statistiek. *NRC Handelsblad*. URL
- Keulemans, M. (2015). De psychologie van gebrekkig onderzoek. *De Volkskrant*. URL
- 2014 Huis in t Veld, E. M. J. (2014). Replication Paradox: Met Michèle Nuijten. *De Psychonoom*, 17-20. URL

Invited Presentations

- 2017 **Nuijten, M. B.** (2017, May). *Using “statcheck” to detect misreported statistics in the scientific literature*. Invited presentation for a symposium on “Evaluating the state of Psychological science”, chaired by Simine Vazire at the 29th Annual Convention of the Association for Psychological Science, Boston, MA, USA.
- Nuijten, M. B.** (2017, April). *Using “statcheck” to detect misreported statistics in the scientific literature*. Invited presentation at the San Francisco headquarters of the publisher PLOS, CA, USA.
- Nuijten, M. B.** (2017, January). *“statcheck”: Extract statistical results and recompute p-values*. A two-day invited workshop for the Winter School of the Master Program Economics and Psychology at the University Paris 1 Panthéon-Sorbonne and Paris Descartes, Paris, France.
- 2016 **Nuijten, M. B.** (2016, December). *Using “statcheck” to detect misreported statistics in the scientific literature & other ways to improve science*. Invited presentation for METRICS, Stanford University, CA, USA.
- Nuijten, M. B.** (2016, October). *“statcheck”: Extract statistical results and recompute p-values*. Invited presentation for the Young Statisticians, Utrecht, the Netherlands.
- Nuijten, M. B.** (2016, October). *Gray areas in statistics: How methodological and statistical decisions can influence conclusions*. Tilburg University, invited presentation for Research Master students and PhD students of Tilburg University.
- Nuijten, M. B.** (2016, September). *“statcheck”: Extract statistical results and recompute p-values*. University of Zurich, Switzerland, invited presentation for students and faculty of the Psychology department.
- Invited panel member for an interdisciplinary debate on the use of statistics in science and the media (May, 2016). University Day, University of Amsterdam, The Netherlands.
- Nuijten, M.B.** (2016, May). *False positives in published research: Causes & solutions*. Invited presentation for Sanquin Research, department of Donor Studies.
- Nuijten, M.B.** (2016, April). *The replication paradox*. Invited presentation for the department of Psychology. Erasmus Universiteit Rotterdam.
- Nuijten, M. B.** (2016, January). *Gray areas in statistics: How methodological and statistical decisions can influence conclusions*. Invited presentation for the department of Organization Studies. Tilburg University.
- Nuijten, M. B.** (2016, January). *“statcheck” & reporting errors in psychology*. Invited presentation. Utrecht University.
- 2015 **Nuijten, M. B.** (2015, November). *“statcheck”. Extract statistical results and recompute p-values*. Invited lecture for the Master course “Data Mining”, Tilburg University.
- Nuijten, M. B.** (2015, November). *Problemen en oplossingen rondom publication bias*. [English title: Problems and solutions concerning publication bias.] Invited talk for the department of Cognitive Neuroscience, Tilburg University.

- Nuijten, M. B.** (2015, November). *The statistical quality of published research*. Invited lecture for the Master course Journalistic Data Analysis, Tilburg University.
- Nuijten, M. B.** (2015, October). *Gray areas in statistics: How methodological and statistical decisions can influence conclusions*. Tilburg University, invited presentation for Research Master students and PhD students of Tilburg University.
- Invited panel member for an interdisciplinary debate on the replicability of scientific research (September, 2015). Studium Generale, University of Maastricht, The Netherlands.
- Nuijten, M. B.** (2015, March). *Gray areas in statistics: How methodological and statistical decisions can influence conclusions*. Tilburg University, invited presentation for PhD students of Tilburg University.
- 2014 **Nuijten, M. B.** (2014, March). *Gray areas in statistics: How methodological and statistical decisions can influence conclusions*. Tilburg University, invited presentation for Department of Human Resource Studies.
- 2013 **Nuijten, M. B.** (2013, June). *Vijftig tinten grijs in wetenschappelijk onderzoek*. [English title: “Fifty shades of grey in scientific research”.] University of Amsterdam, invited lecture for second year’s Psychology students.

Presentations

- 2017 **Nuijten, M. B.** (2017, April). *“statcheck”: An automated way to find misreported statistical results*. Presentation for the Reproducibility and Open Science Working Group at the Berkeley Institute for Data Science, CA, USA.
- 2016 Epskamp, S., & **Nuijten, M. B.** (2016, December). *“statcheck”: An automated way to find misreported statistical results*. Presentation at the fifth Annual Meeting of BITSS, Berkeley, CA, USA.
- Nuijten, M. B.** (2016, November). *“statcheck”: An automated tool do detect misreported statistics in the scientific literature*. Presentation at the Masterclass with Professor John P. A. Ioannidis, AMC/VUmc, Amsterdam, The Netherlands.
- Nuijten, M. B.**, Agusteijn, H. E. M., Cromptvoets, E. C., Van Assen, M. A. L. M., & Wicherts, J. M. (2016, May). *Publication bias in IQ research*. Paper presented at the 28th Annual Convention of the Association for Psychological Science, Chicago, IL, USA.
- 2015 **Nuijten, M. B.**, Hartgerink, C. H. J., Van Assen, M. A. L. M., Epskamp, S., & Wicherts, J. M. (2015, May). *Reporting errors in psychology and their relation with open data*. Paper presented at the 27th Annual Convention of the Association for Psychological Science, New York, NY, USA.
- Nuijten, M. B.**, Hartgerink, C. H. J., Van Assen, M. A. L. M., Epskamp, S., & Wicherts, J. M. (2015, March). *The prevalence of reporting errors in psychology: An automated approach*. Paper presented at the International Convention of Psychological Science (ICPS), Amsterdam, The Netherlands.

- 2014 **Nuijten, M. B.**, Van Assen, M. A. L. M., Veldkamp, C. L. S., & Wicherts, J. M. (2014, July). *The replication paradox: Combining studies can decrease accuracy of effect size estimates*. Paper presented at the 6th European Congress of Methodology, Utrecht, The Netherlands. **Awarded best presentation of a PhD student.**
- Nuijten, M. B.**, Van Assen, M. A. L. M., Veldkamp, C. L. S., & Wicherts, J. M. (2014, July). *The replication paradox: Combining studies can decrease accuracy of effect size estimates*. Paper presented at the 26th Annual Convention of the Association for Psychological Science, San Francisco, CA, USA.
- 2013 **Nuijten, M. B.**, Van Assen, M. A. L. M. (2013, July). *The replication paradox: Replication studies decrease bias of estimated effect sizes only if they are powerful*. Paper presented at the 78th Annual Meeting of the Psychometric Society, Arnhem, The Netherlands.
- Nuijten, M. B.**, Van Assen, M. A. L. M. (2013, August). *The replication paradox: Replication studies decrease bias of estimated effect sizes only if they are powerful*. Tilburg University, Department of Social Psychology.

Posters

- 2014 **Nuijten, M. B.**, Van Assen, M. A. L. M., Veldkamp, C. L. S., & Wicherts, J. M. (2014, September). *The replication paradox: Combining studies can decrease accuracy of effect size estimates*. Poster presented at the seminar ‘Improving Scientific Practice: Dealing with the Human Factors’, Amsterdam, The Netherlands.
- 2013 **Nuijten, M. B.**, Van Assen, M. A. L. M., & Wicherts, J. M. (2013, December). *The replication paradox: Multiple studies with low power can increase bias*. Poster presented at the 23rd Interuniversity Graduate School of Psychometrics and Sociometrics (IOPS) winter conference, Leuven, Belgium.