

# ACADEMIC CV - OLMO VAN DEN AKKER

## PERSONAL INFORMATION

Name: Olmo van den Akker  
Born: 2 October 1989 (Amsterdam, the Netherlands)  
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## RESEARCH INTERESTS

- Meta-research
  - Preregistration
  - The interpretation of statistical results
  - Scholarly publishing
  - Peer review
  - Authorship practices
  - Citation practices
- Evolutionary psychology
- Human cooperation
- Behavioral economics

## EDUCATION

### Master degrees:

2015-2017 Research Master in Psychology at the University of Amsterdam (cum laude)  
2014-2017 Master in Behavioral Economics and Game Theory at the University of Amsterdam

### Bachelor degrees:

2011-2014 Honors Bachelor in Psychology at the University of Amsterdam (cum laude) – My bachelor thesis can be found here:  
[https://www.academia.edu/18919901/The\\_evolution\\_of\\_religion\\_Mixed\\_signals\\_regarding\\_the\\_costly\\_signaling\\_theory\\_of\\_religion](https://www.academia.edu/18919901/The_evolution_of_religion_Mixed_signals_regarding_the_costly_signaling_theory_of_religion)

2007-2014 Bachelor in Economics and Business Administration at the University of Amsterdam – My bachelor thesis can be found here:  
[https://www.academia.edu/18920002/The\\_AE\\_Algorithm\\_Author\\_name\\_disambiguation\\_for\\_large\\_Web\\_of\\_Science\\_datasets](https://www.academia.edu/18920002/The_AE_Algorithm_Author_name_disambiguation_for_large_Web_of_Science_datasets)

## RESEARCH POSITIONS

- Sep 2017 - Present      PhD-student at the meta-research group at Tilburg University under supervision of Jelte Wicherts, Marcel van Assen, and Marjan Bakker (studying researchers' interpretations of statistical results and the efficacy of preregistration). Our meta-research group was featured in a special issue in Science on 'research about research':  
<http://science.sciencemag.org/content/361/6408/1189>
- Oct 2016 – Aug 2017      Research assistant at VU University Amsterdam under supervision of Daniel Balliet (collecting data for a databank with information about all studies on human cooperation). Information about the databank can be found here:  
<https://amsterdamcooperationlab.com/databank>
- Feb 2016 – Apr 2016      Research internship at the Human Generosity Project at Arizona State University under supervision of Athena Aktipis and Lee Cronk (developing a theoretical paper about the link between kinship terms and fitness interdependence – currently published). A blogpost about my time there can be found here:  
<http://www.humangenerosity.org/my-experience-american-generosity>
- Apr 2013 – Jan 2016      Research assistant at the University of Amsterdam under supervision of Michiel van Elk (experimental research, cognitive research, physiological research, and field research). More information about Michiel van Elk's lab can be found here:  
<https://www.relcoglab.com>

## PAPERS

- Cronk, L., Steklis, H. D., Steklis, N., **Van den Akker, O. R.**, Aktipis, A. (2019). Kinship and fitness interdependence. *Evolution and Human Behavior*, 40(3), 281-291.  
<https://doi.org/10.1016/j.evolhumbehav.2018.12.004>

In this theoretical paper, we try to explain why people use kinship terms, even in situation where they are not genetically related. We believe that kinship terms not only come about through situations of genetic interdependence, but through situations of fitness interdependence in general – situations where someone's fitness depends on the behavior of another.

- Sznycer, D., Ayers, J. D., Sullivan, D., Beltran, D. G., **Van den Akker, O. R.**, Gervais, M. M., Munoz, A. E., Hruschka, D. J., Cronk, L., Aktipis, A. (under review). A new measure of perceived fitness interdependence: Factor structure and validity.

**Van den Akker, O. R.,** Van Vugt, M., Van Assen, M. A. L. M., Wicherts, J. M. (under review). *Sex differences in trust and trustworthiness: A meta-analysis of the trust game and the gift-exchange game.*

The meta-analyses for the trust game included 174 effect sizes from 77 papers and 17,082 participants from 23 countries, while the meta-analyses for the gift-exchange game included 35 effect sizes from 15 papers and 1,362 participants from 19 countries. We found that men send more in the trust game and in the gift-exchange game only if their transfers in those games cause an efficiency gain. We label this finding the “male multiplier effect”.

Preprint: <https://psyarxiv.com/5zbja>

Data and materials: <https://osf.io/4k2wm>

**Van den Akker, O. R.,** Dominguez Alvarez, L., Bakker, M., Wicherts, J. M., Van Assen, M. A. L. M. (under review). *How do academics assess the results of multiple experiments?*

Among other things, we carried out a preregistered analysis of individual researcher data to examine which heuristics academics use to assess the results of multiple experiments. Only 6 out of 312 (1.9%) participants used the normative method of Bayesian inference, whereas the majority of participants used vote counting approaches. Our findings highlight that most academics structurally undervalue the validity of the underlying theory when assessing the results of scientific papers with multiple experiments.

Preprint: <https://osf.io/g3fwm>

Data and materials: <https://osf.io/2g4wf>

**Van den Akker, O. R.,** Weston, S., Campbell, L., Chopik, W., Damian, R., Davis-Kean, P., Hall, A., Kosie, J., Kruse, E., Olsen, J., Ritchie, S., Valentine, K., Van 't Veer, A., & Bakker, M. (under review). *Preregistration of secondary data analysis: A template and tutorial.*

In this tutorial, we present a template specifically designed for the preregistration of secondary data analyses, and provide comments and a practical example that may help with using the template effectively.

Preprint: <https://psyarxiv.com/hvfmr>

Data and materials: <https://osf.io/ghtyc>

Bakker, M., Veldkamp, C. L. S., Van den Akker, O. R., van Assen, M. A. L. M., Cromptoets, E. A. V., Ong, H. H., & Wicherts, J. M. (2019, May 15). We have the (1-b)! Requirements in preregistrations and IRB proposals promote formal power analyses.

We investigated whether the statistical power of a study is higher when researchers are asked to make a formal power analysis before collecting data. We compared the sample size descriptions from two sources: (i) a sample of preregistrations created according to the

guidelines for the Center for Open Science Preregistration Challenge (PCRs) and a sample of institutional review board (IRB) proposals from Tilburg School of Behavior and Social Sciences in which a power analysis is advised, and (ii) a sample of preregistrations created according to the guidelines for Open Science Framework Standard Pre-Data Collection Registrations (SPRs) in which no guidance on sample size planning is given. We found that PCRs and IRBs (72%) more often included sample size decisions based on power analyses than the SPRs (45%). However, this did not result in larger planned sample sizes.

Preprint: <https://psyarxiv.com/b3uwd>

Data and materials: <https://osf.io/94f2w>

Van Assen, M. A. L. M., **Van den Akker, O. R.**, Augusteijn, H. E. M., Bakker, M., Nuijten, M. B., Olsson-Collentine, A., Stoevenbelt, A. H., Wicherts, J. M., Van Aert, R. C. M. (under review). *The meta-plot: A graphical tool for interpreting the results of a meta-analysis.*

The meta-plot is a descriptive visual tool for meta-analysis that provides information on the primary studies in the meta-analysis and the results of the meta-analysis. More precisely, the meta-plot portrays (i) the precision and statistical power of the primary studies in the meta-analysis, (ii) the estimate and confidence interval of a random-effects meta-analysis, (iii) the results of a cumulative random-effects meta-analysis yielding a robustness check of the meta-analytic effect size with respect to primary studies' precision, and (iv) evidence of publication bias.

Schweinsberg, M., Feldman, M., Staub, N., ..., **Van den Akker, O. R.**, ..., & Uhlmann, E.L. (Under review). *Radical dispersion in estimates when independent scientists operationalize and test the same hypothesis with the same data.*

In this crowdsourced initiative, independent analysts used the same dataset to test two hypotheses regarding the effects of scientist gender and status on verbosity in intellectual debates. Not only the analytic approach but also the operationalization of key variables was left unconstrained and up to individual researchers. Researchers reported radically dispersed estimates, in a number of cases obtaining significant effects in opposite directions for the same research question.

## CONFERENCES

### Talks / posters:

"Sex differences in trust and trustworthiness: A meta-analysis of the trust game and the gift-exchange game"

- CEBN Conference, Leiden University (27-11-2017) – Poster
- ICSD, Taormina, Italy (22-06-2017) – Poster
- HBES Conference, University of Amsterdam (07-07-2018) – Talk

*"How do academics assess the results of multiple experiments?"*

- NRIN Conference on Research Integrity, Utrecht (20-04-2018) – Talk
- IOPS Summer Conference, University of Amsterdam (14-06-2018) – Poster
- MTO Research Sandwich, Tilburg University (19-06-2018) – Talk
- Perspectives on Scientific Errors, Groningen (29-10-2018) – Talk
- ZPID Open Science Conference (14-03-2019) – Talk

*"Statistical errors in science"*

- Skeptics in the Pub, Amsterdam (19-11-2018) – Talk

*"Preregistration of secondary data analyses: A template and tutorial"*

- ICPS, Paris, France (08-03-2019) – Talk

*"The future of meta-research"*

- Meta-Research Day, Tilburg University (22-11-2019) - Unconference

*"Preregistration in practice: Comparing published papers to their preregistrations"*

- Metascience Symposium, Stanford University (05-09-2019) – Poster
- REWARD – EQUATOR conference, Berlin (21-02-2020) - Poster

*"The academic conference of the future"*

- SIPS conference, Rotterdam (09-07-2019) - Unconference

*"Introducing the Platform for Young Meta-Scientists"*

- SIPS conference, Rotterdam (08-07-2019) - Unconference

*"Introduction to Preregistration"*

- SIPS conference, Rotterdam (08-07-2019) - Workshop

### **Organizational:**

- Organizing committee of the International Conference on Social Dilemmas 2017 in Taormina, Italy
- Session chair at the Society for the Improvement of Psychological Science (SIPS) Conference 2018 in Grand Rapids, Michigan, United States
- Session chair at the Human Behavior and Evolution Society (HBES) Conference 2018 at the University of Amsterdam
- Volunteer at the Society for the Improvement of Psychological Science (SIPS) Conference in 2019 in Rotterdam, The Netherlands
- Organizing committee of the Meta-Research Day in November 2019

### **OTHER PUBLICATIONS**

#### **Blog posts:**

“Plan S: Are the concerns warranted?” (My opinion about the hotly debated Plan S that aims to make all research funded by European funding agencies Open Access)

Dutch: <https://www.scienceguide.nl/2019/02/plan-s-zorgen-terecht>

English: <https://metaresearch.nl/blog/2019/2/14/plan-s-are-the-concerns-warranted>

“Why I think open peer review benefits PhD students” (Part of an initiative of Nature Human Behavior to give early career researchers a voice in the debate surrounding the culture of publish or perish in academia)

English: <https://socialsciences.nature.com/channels/2140-is-it-publish-or-perish/posts/54659-why-i-think-open-peer-review-benefits-phd-students>

## **AD HOC REVIEWING**

### **Journals:**

- Psychological Science (1x)
- Basic and Applied Social Psychology (1x)
- Royal Society Open Science (1x)
- Psychonomic Bulletin & Review (1x)
- European Journal for Philosophy of Science (1x)

## **TEACHING ACTIVITIES**

Currently, I am halfway through getting my university teaching qualification (UTQ). The UTQ is a proof of teaching skills for university teaching staff, which allows you to demonstrate a proven ability to develop and teach courses at university level. It is recognized by all Dutch universities.

Feb 2020 – Mar 2020	Responsible for the English tutorials of ‘Construction and Analysis of Questionnaires’ at Tilburg University
Feb 2020	Lectures about covariances, correlations, linear transformations, and reliability for the course of ‘Construction and Analysis of Questionnaires’ at Tilburg University
Dec 2019	Guest lecture about common errors in science at the Rythovius College (High school – 4VWO: fourth year, highest level)
Dec 2018	Guest lecture about common errors in statistics for the course ‘Good science practices’ that is part of the Research Master in Psychology at the University of Amsterdam.
Feb 2018 – Mar 2018	Responsible for the Dutch tutorials of ‘Construction and Analysis of Questionnaires’ at Tilburg University

Oct 2017 – Dec 2017	Responsible for the Dutch tutorials of 'Techniques for Causal Analysis' at Tilburg University
Nov 2014 – Aug 2017	Freelance thesis supervisor at the Business Administration department of the University of Applied Sciences Amsterdam.
Jun 2011 – Oct 2014	Freelance tutor of high school students in mathematics, economics, Dutch, and English.

## **GRANTS AND AWARDS**

Publications Travel Grant to travel to the Metascience Symposium at Stanford University

Metascience Symposium Grant for the project "Preregistering your meta-analysis: A template and tutorial" - \$10,500

Metascience Symposium Grant for Part 2 of the project "The AE-algorithm: Author name disambiguation for large Web of Science datasets" - \$12,500

Best poster award at the IOPS Summer Conference in 2018

Towards my research internship at Arizona State University:

- Amsterdam University Fund
- Internationalization Fund Psychology
- ASC Academy Scholarship
- Bekker – la Bastide Fund