Amanda Kvarven

METRICS Stanford University 1265 Welch Road Stanford, CA 94305 akvarven@stanford.edu amandakvarven.com

RESEARCH INTERESTS Experimental and Behavioural Economics, Research methods, Meta-analysis, Meta-

science

CURRENT **POSITION**

METRICS, Stanford University

Postdoctoral Scholar, two-year position September 2022 -

Advisors: Professor John Ioannidis (Stanford University) and Professor Steven

Goodman (Stanford University)

EDUCATION

University of Bergen

Phd, Economics July 2017 - June 2022

Supervisors: Professor Sigve Tjøtta (University of Bergen) and Professor Anna Dreber

Almenberg (Stockholm School of Economics)

Master of Science, Economics

August 2013 - June 2017

JOB MARKET **PAPER**

Using Unbiased Many-Teams Replication Data to Evaluate Meta-Analytic **Estimators for Economics**

Andrews & Kasy (2019) introduces an approach for correcting meta-analytic effect sizes for publication bias. This paper applies the Andrews-Kasy estimator to correct the result from 15 meta-analyses and compare the adjusted results to 15 large-scale many labs replications on the same topic. In addition, I also perform a placebo test where I apply the methods to the replication data to assess costs in terms of statistical power. The pre-registered replications provide precisely estimated effect sizes, without being affected by publication bias. The Andrews-Kasy approach yields a moderate reduction of the inflated effect sizes in the meta-analyses with a low cost in terms of reduced statistical power. Nonetheless, the symmetric variant still overestimates effect sizes by a factor of about two and a half and has a false positive rate of 71 %, while the unsymmetric variant has a lower false-positive rate it still produces large differences. In addition, the unsymmetric version also comes with a larger reduction in statistical power.

PUBLICATIONS Comparing Meta-Analyses and Pre-Registered Multiple Labs Replication Projects (2020) with Eirik Strømland & Magnus Johannesson Nature Human Behaviour

> Many researchers rely on meta-analysis to summarize research evidence. However, there is a concern that publication bias and selective reporting may lead to biased meta-analytic effect sizes. We compare the results of meta-analyses to large-scale preregistered replications in psychology carried out at multiple labs. The multiple labs replications provide precisely estimated effect sizes, which do not suffer from publication bias or selective reporting. Searching the literature, 15 meta-analyses on the same topics as multiple labs replications are identified. We find that the meta-analytic effect sizes are significantly different from the replication effect sizes for 12 out of the 15 meta-replication pairs. These differences are systematic and on average meta-analytic effect sizes are almost three times as large as the replication effect sizes. We also implement three methods of correcting meta-analysis for

bias, but these methods do not substantively improve the meta-analytic results.

The Intuitive Cooperation Hypothesis Revisited: A Meta-analytic Examination of Effect-size and Between-study Heterogeneity (2020) with Eirik Strømlande, Conny Wollbrant, David Andersson, Magnus Johannesson, Gustav Tinghög, Daniel Västfjäll, & Kristian Ove R. Myrseth JESA

The hypothesis that intuition promotes cooperation has attracted considerable attention. Although key results in this literature have failed to replicate in pre-registered studies, recent meta-analyses report an overall effect of intuition on cooperation. We address the question with a meta-analysis of 82 cooperation experiments, spanning four different types of intuition manipulations—time pressure, cognitive load, depletion, and induction—including 29,315 participants in total. We obtain a positive overall effect of intuition on cooperation, though substantially weaker than that reported in prior meta-analyses, and between studies the effect exhibits a high degree of systematic variation. We find that this overall effect depends exclusively on the inclusion of six experiments featuring emotion-induction manipulations, which prompt participants to rely on emotion over reason when making allocation decisions. Upon excluding from the total data set experiments featuring this class of manipulations, between-study variation in the meta-analysis is reduced substantially—and we observed no statistically discernable effect of intuition on cooperation. Overall, we fail to obtain compelling evidence for the intuitive cooperation hypothesis.

Extending the cooperative phenotype: Assessing the stability of cooperation across countries (2017) with Eirik Strømland & Gustav Tinghög Frontiers in psychology

This paper studies whether individual cooperation is stable across settings and over time. Involving more than 7,000 subjects on two different continents, this study documents positive correlation in cooperative behavior across economic games in Norway, Sweden, Austria, and the United States. The game measures also correlate with a tendency to make deontological judgments in moral dilemmas, and display of general trust toward strangers. Using time-variation in the data, we test whether temporal stability of behavior is similar in the United States and Norway, and find similar stability estimates for both the American and Norwegian samples. The findings here provide further evidence of the existence of a stable behavioral inclination toward prosociality – a "cooperative phenotype," as it has recently been termed. Also in line with previous research, we find that punishment and cooperation seem to be uncorrelated.

WORK IN PROGRESS

Multiverse Robustness tests in Macroeconomic Models with John Lilletvedt, Eirik Strømland & Magnus Johannesson

Estimating Heterogeneity in Intuitive Prosociality with Eirik Strømland $\mathscr E$ Gaute Torsvik

Empirical Evaluation of Meta-Analytic Models using Data from Pre-Registered Replication Projects with John P. A. Ioannidis, Magnus Johannesson & Eirik $Str\phi mland$

An investigation into the Candidates of the Econ Job Market with John P. A. Ioannidis

Investigating the Research Productivity of Deans with John P. A. Ioannidis & Maximilian Siebert

Measuring Adverse Effects in Short versus Long-Term Psychiatric Drug Trials with Chinasa Anokwuru, Brett Cardenas, John P. A. Ioannidis, Giuliano Lobos, Mary Catherine Mantler & Eirik Strømland

INVITED **TALKS**

2023: University of Coimbra (seminar), The Methodological Challenges of Meta-

Analysis in the Social Sciences (workshop) **2021**: University of Copenhagen (seminar)

2019: DIGGSCORE (seminar), University of Bergen (seminar)

GRANTS AND AWARDS

Meltzer Foundation: 60 000 NOK 2019 Meltzer Foundation: 40 000 NOK 2018

TEACHING

Team Lead/Mentor (Stanford University)

MAVERICS Summer 2023

Lecturer (Stanford University)

CHPR 206/EPI 206/MED 206/STATS 211: Winter 2023 Meta-research: Appraising Research Findings, Bias, and Meta-analysis

Guest lecturer (Western Norway University of Applied Sciences)

SIK101-1: Environmental Science Fall 2020-2021

Supervision (University of Bergen)

Bachelor students Spring 2018, Spring 2020, Fall 2020, Spring 2021

Teaching Assistant (University of Bergen)

ECON330: Macroeconomic Analysis Fall 2017-2020 ECON340: Econometrics I Fall 2018 ECON110: Basic Concepts of Spring 2016-2017

Microeconomics and Market Theory

ECON210: Welfare and Economic Policies Fall 2016 ECON230: International Macroeconomics Fall 2015

OTHER ROLES Organizer

2023

Meta-Research Innovation Center at Stanford (METRICS) International Forum (seminar series)

 ${\bf Internal\ Meetings-Meta-Research\ Innovation\ Center\ at\ Stanford\ (METRICS)}$

 $\begin{array}{ll} \textbf{COMPUTER} & \quad \text{STATA, R, MATLAB, Python, z-Tree, Bash, I} \\ \textbf{LANGUAGES} & \quad \end{array}$

LANGUAGES Norwegian: Native, English: Fluent