

Uvedení do replikační krize v psychologii

Marek Vranka

FSV UK

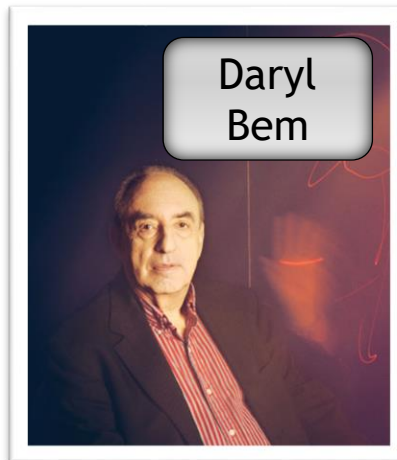
marek.vranka@fsv.cuni.cz / www.pless.cz

Feeling the Future: Experimental Evidence for Anomalous Retroactive Influences on Cognition and Affect

Daryl J. Bem
Cornell University

The term *psi* denotes anomalous processes of information or energy transfer that are currently unexplained in terms of known physical, biological, or psychological processes. This article reports experimental evidence for anomalous retroactive influences on cognition and affect. In a series of experiments, participants were exposed to a stimulus (e.g., a word or image) and then, after a delay, to a second stimulus. The second stimulus was either the same as the first or different. Participants' responses to the second stimulus were compared to their responses to the first stimulus. The results showed that participants' responses to the second stimulus were significantly different from their responses to the first stimulus, even when the second stimulus was different from the first. This suggests that the first stimulus had an anomalous retroactive influence on the second stimulus. This article reports 9 experiments, involving more than 1,000 participants, that provide experimental evidence for anomalous retroactive influences on cognition and affect.

údajný důkaz pre-kognice



Psychology's Ongoing Credibility Crisis

New studies have intensified the debate over psychology's "reproducibility" problems.

By John Horgan on March 7, 2016  3

Every
talk
should
start
with...

Speaking of Science

No, science's reproducibility problem is not limited to psychology

The Washington Post
Democracy Dies in Darkness

POLITICS & POLICY

In Medicine, the Science Has Stopped Working

By PASCAL-EMMANUEL GOBRY | November 15, 2017 4:25 PM



Can Reproducibility in Chemical Research be Fixed?

BY ANDY COCKBURN, PIERRE DRAGICEVIC,
LONNI BESANÇON, AND CARL GUTWIN

Threats of a Replication Crisis in Empirical Computer Science

AUGUST 2020 | VOL. 63 | NO. 8

The replication crisis has engulfed economics

November 3, 2015 11:31am AEDT

COMMENT · 12 APRIL 2021

Quantum computing's reproducibility crisis: Majorana fermions

FROM SLATE, NEW AMERICA, AND ASU

Cancer Research Is Broken

There's a replication crisis in biomedicine—and no one even knows how deep it runs.

1956

De Groot

1975

Greenwald

1979

Rosenthal

1987

Newcombe

1993

Dickersin
& Min

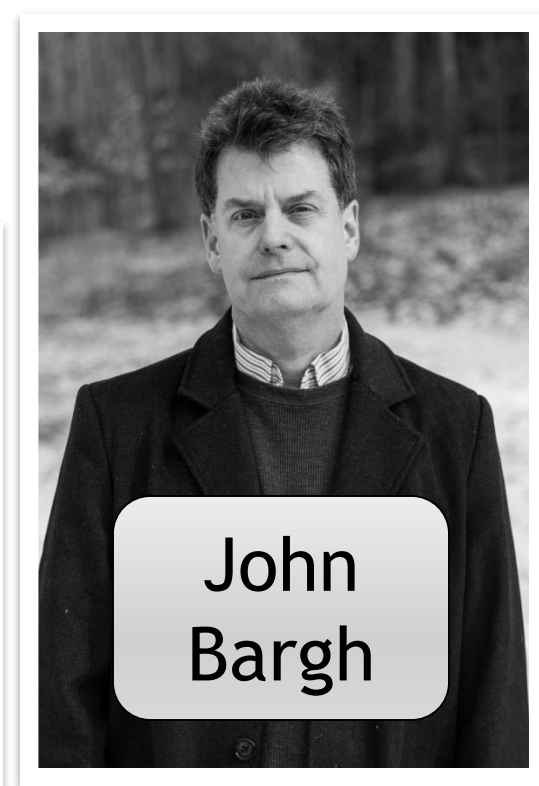
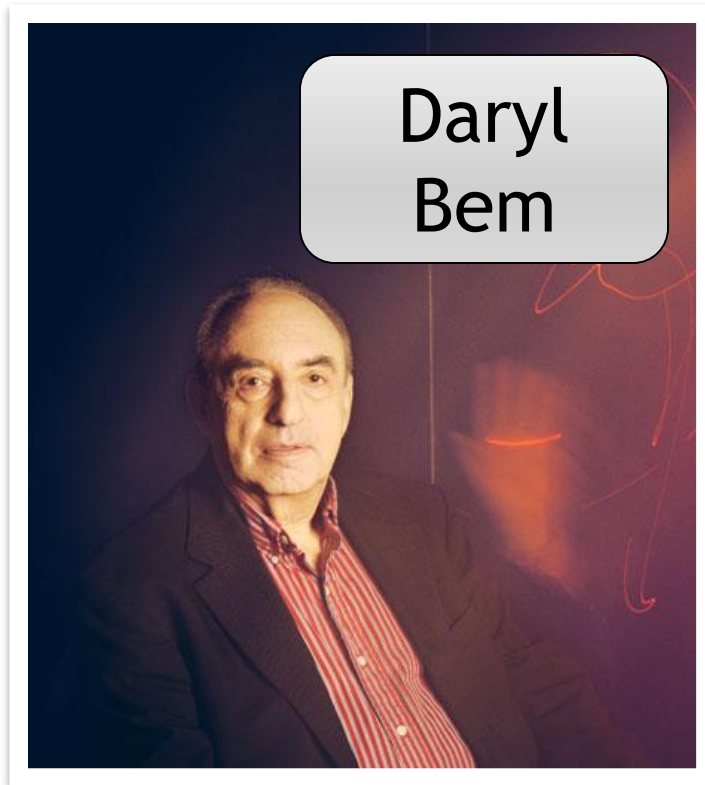
+ spousta dalších, Meehl,
Cohen, Sterling, Vul....

Failure to distinguish between
hypothesis-testing and
hypothesis-generating
(exploratory) research
-> misuse of statistical tests



Adriaan de
Groot

2011 - 2012



Bem, D. J. (1987). Writing the empirical journal article.

Which Article Should You Write?

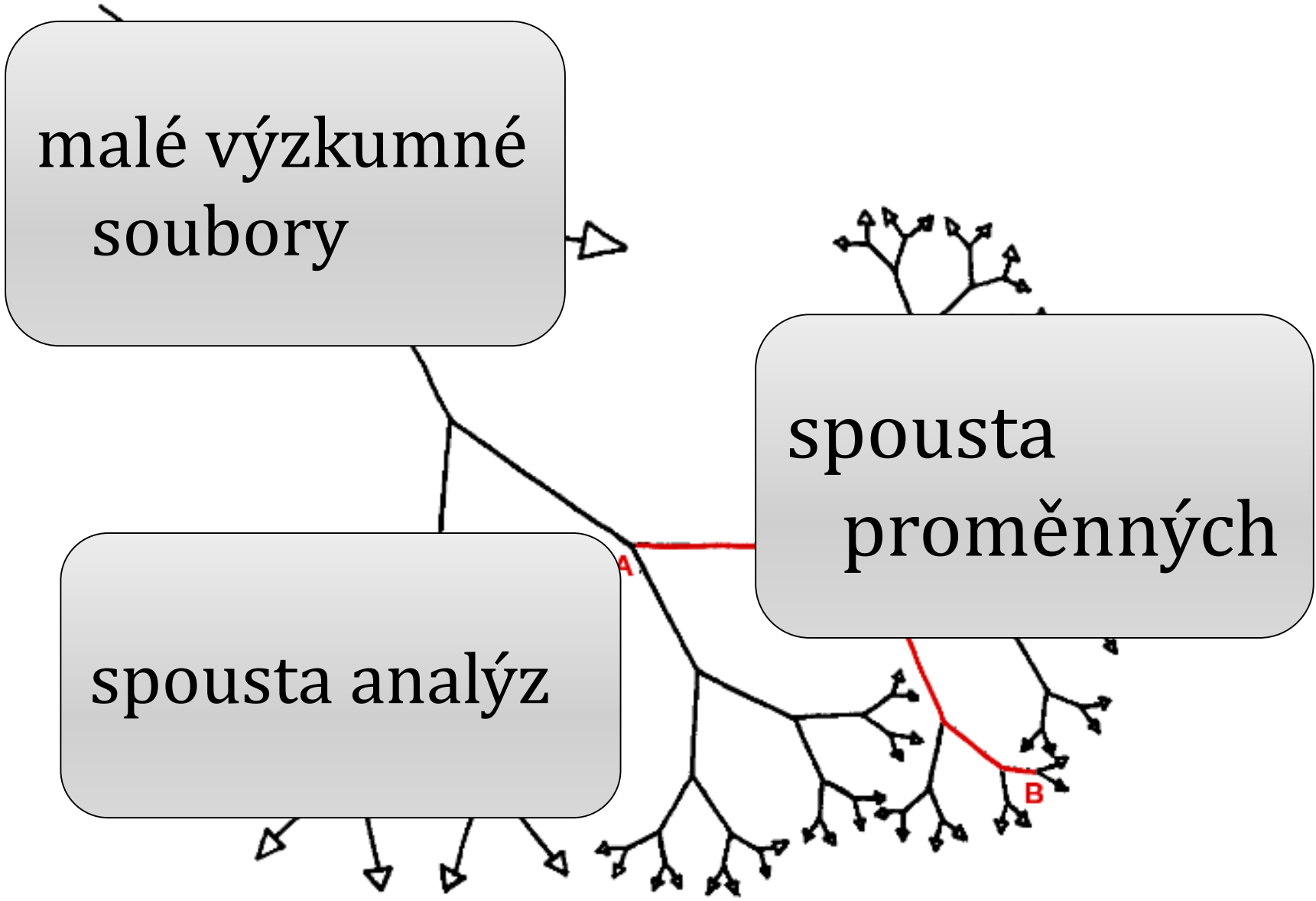
writ
now
ans

the article that makes the most sense now that you have seen the results.

to
se
ect

let us at least become intimately familiar with the record of their behavior: the data. Examine them from every angle. Analyze the sexes separately. Make up new composite indices. If a datum suggests a new hypothesis, try to find further evidence for it elsewhere in the data. If you see dim traces of interesting patterns, try to reorganize the data to bring them into bolder relief. If there are participants you don't like, or trials, observers, or interviewers who gave you anomalous results, drop them (temporarily). Go on a fishing expedition for something—anything—interesting.

No, this is not immoral.



„Flexibilita“ výzkumníků

- Simmons, Nelson, Simonson, False Positive Psychology
 - koncept „researchers degrees of freedom“

až 61% false positive rate

Table 1. Likelihood of Obtaining a False-Positive Result

Degrees of freedom	Significance level		
	$p < .1$	$p < .05$	$p < .01$
1 dependent variable ($r = .50$)	17.8%	9.5%	2.2%
10 dependent variables (addition of 10 more observations)	14.5%	7.7%	1.6%
1 dependent variable (10 observations per cell)			
Situation A: controlling for gender or interaction of gender with treatment	21.6%	11.7%	2.7%
Situation B: dropping (or not dropping) one of three conditions	23.2%	12.6%	2.8%
Combine Situations A and B	26.0%	14.4%	3.3%
Combine Situations A, B, and C	50.9%	30.9%	8.4%
Combine Situations A, B, C, and D	81.5%	60.7%	21.5%

Vohs et al. (2006)
“the authors conducted 2
additional studies that
showed no effects“
and „did not report 19
additional measures that
were statistically
unchanged”.



Vohs

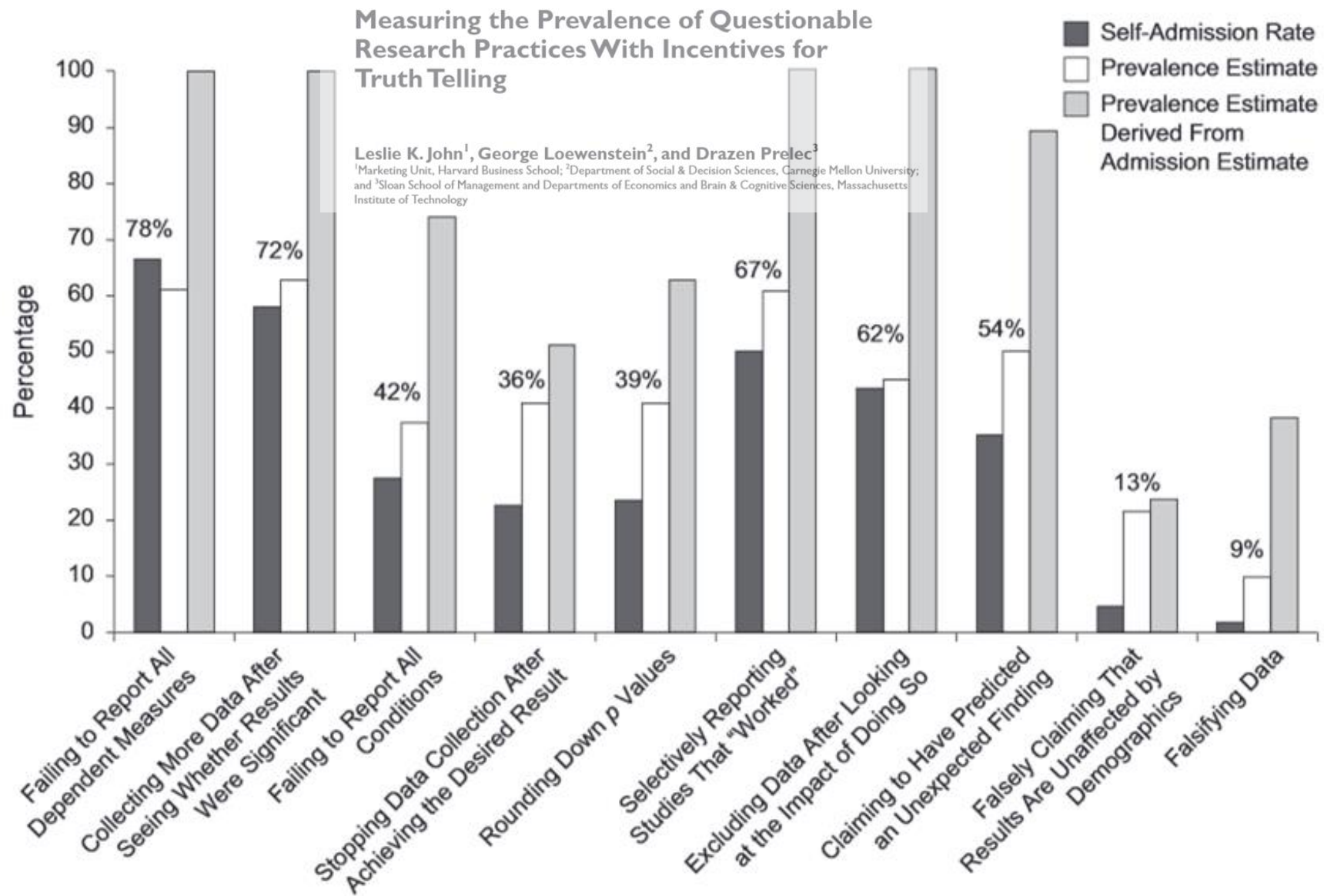


Fig. 1. Results of the Bayesian-truth-serum condition in the main study. For each of the 10 items, the graph shows the self-admission rate, prevalence estimate, prevalence estimate derived from the admission estimate (i.e., self-admission rate/admission estimate), and geometric mean of these three percentages (numbers above the bars). See Table 1 for the complete text of the items.

„I'm not cynical about researchers' intentions - I truly believe that almost nobody thinks they're p-hacking and almost everybody believes their effects are real.“



Simine
Vazire

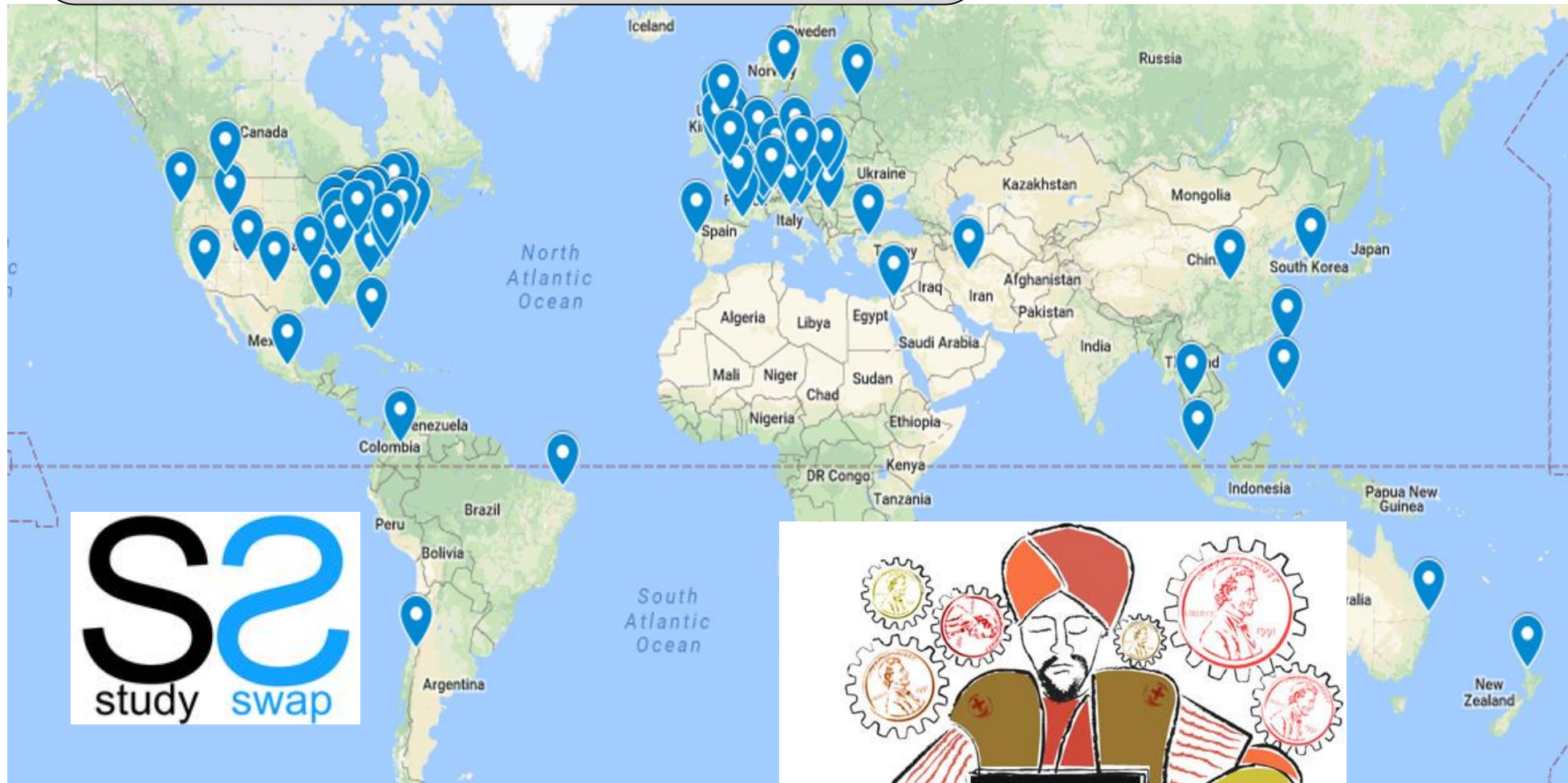
transparentnost

„We report how we determined our sample size, all data exclusions (if any), all manipulations and all measures in the study.“

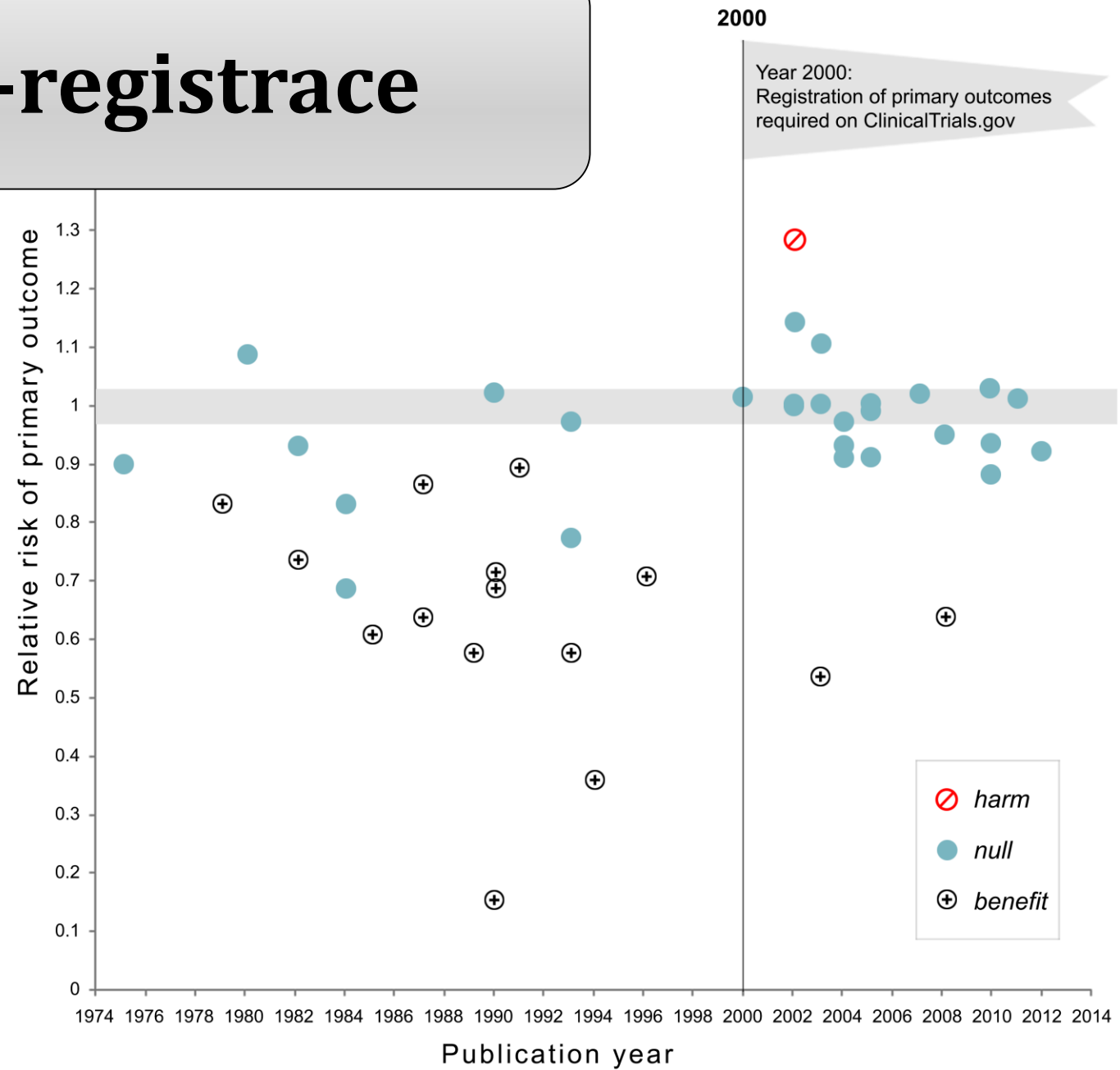


— CENTER FOR —
OPEN SCIENCE

větší datové soubory



před-registrace



více studií / replikací

COLLECTIONS

ABOUT

SIGN UP

Curated Evidence Collections

Social Priming / Embodiment

Cleanliness priming – Replications (7)

Schnall, Benton, & Harvey (2008a)

With a Clean Conscience: Cleanliness Reduces the Severity of Moral Judgments

DOI:10.1111/j.1467-9280.2008.02227.x 

Original Studies & Replications

		N
Schnall et al. (2008a) Study 1		40
 Arbesfeld et al. (2014)		60
 Besman et al. (2013)		60
 Huang (2014) Study 1		189
Lee et al. (2013)		90
 Johnson et al. (2014a) Study 1	  	208
 Johnson et al. (2014b)	 	736

Current meta-analytic estimate of replications of SBH's Study 1 (random-effects):

