

Lab preview (03-07)

Matthew J. Salganik
Department of Sociology
Princeton University

Soc 596: Computational Social Science
Fall 2016



Non-Representative Surveys: Fast, Cheap, and Mostly Accurate*

Sharad Goel
Stanford University

Adam Obeng
Columbia University

David Rothschild
Microsoft Research

Probability Samples

$$P(u_i) = \frac{p_i}{(N-1) \cdots (N-n+1)} \binom{N-1}{n-1} (n-1)! \\ + \sum_{j \neq i}^N \frac{p_j}{(N-1) \cdots (N-n+1)} \binom{N-1}{n-1} (n-1)! \frac{n-1}{N-1},$$

which upon simplification becomes

$$(19) \quad P(u_i) = \frac{N-n}{N-1} p_i + \frac{n-1}{N-1}, \quad (i = 1, 2, \dots, N).$$

Similarly, it may be shown that for this case

$$(20) \quad P(u_i u_j) = \frac{n-1}{N-1} \left[\frac{N-n}{N-2} (p_i + p_j) + \frac{n-2}{N-2} \right], \\ (i \neq j: i, j = 1, 2, \dots, N).$$

Non-Probability Samples



Statistical Modeling, Causal Inference, and Social Science

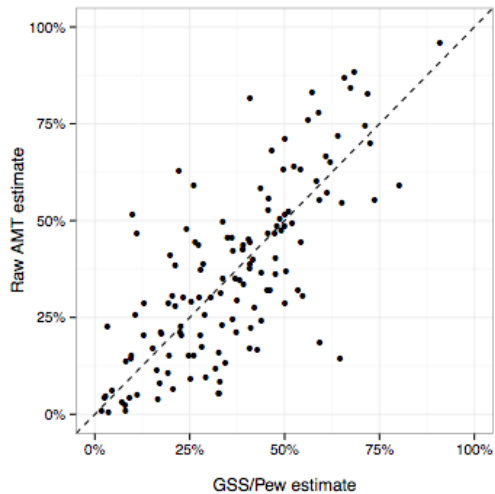
[HOME](#)[BOOKS](#)[BLOGROLL](#)[SPONSORS](#)[« Scientific communication by press release](#)[Nate Silver's website »](#)

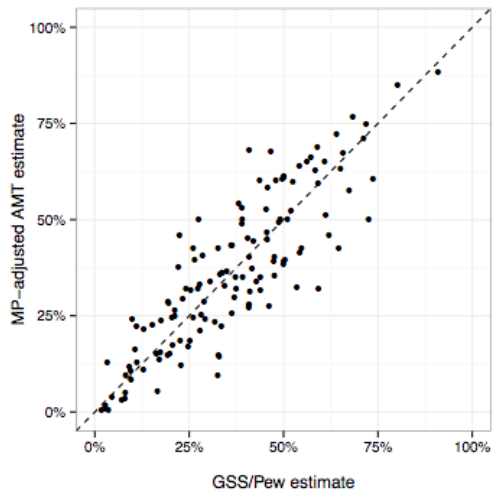
President of American Association of Buggy-Whip Manufacturers takes a strong stand against internal combustion engine, argues that the so-called “automobile” has “little grounding in theory” and that “results can vary widely based on the particular fuel that is used”

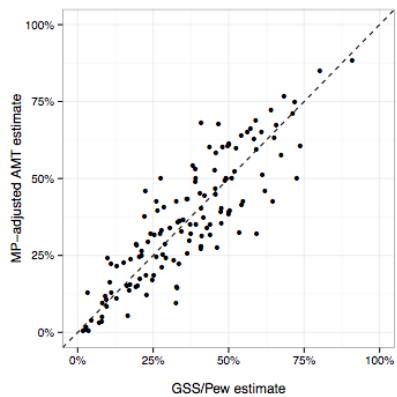
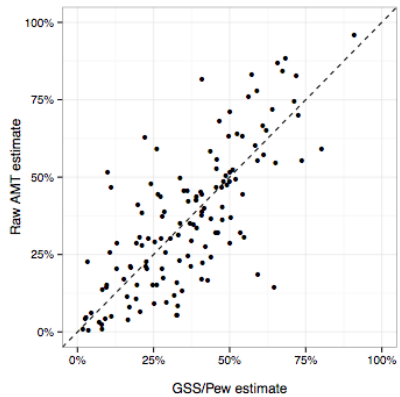
Posted by [Andrew](#) on 6 August 2014, 2:45 pm

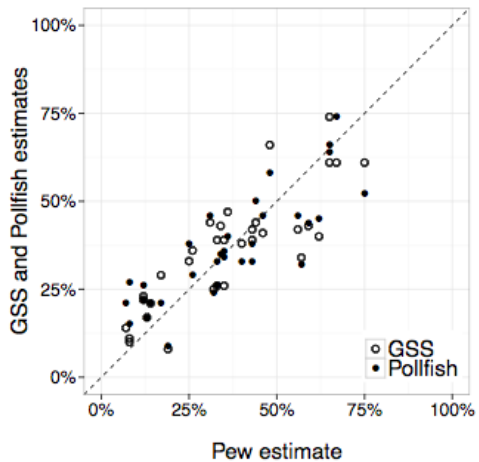


<http://andrewgelman.com/2014/08/06/president-american-association-buggy-whip-manufacturers-takes-strong-stand-internal-combustion-engine-argues-called-automobile-little-grounding-theory/>









What will happen if we try it again?