

Online appendix for the paper

Where Am I? A Meta-Analysis of Experiments on the Effects of Progress Indicators for Web Surveys

Ana Villar, Mario Callegaro and Yongwei Yang

Social Science Computer Review published online 19 August 2013

DOI: 10.1177/0894439313497468

Abstract

The use of progress indicators seems to be standard in many online surveys. Researchers include them in surveys in the hope they will help reduce drop-off rates. However, there is no consensus in the literature regarding their effects. In this meta-analysis, we analyzed 32 randomized experiments comparing drop-off rates of an experimental group who completed an online survey in which a progress indicator was shown to drop-off rates of a control group to whom the progress indicator was not shown. In all the studies, a drop-off was defined as a discontinuance of the survey (at any point) after it has begun, resulting in failure to complete the survey. Three types of progress indicators were analyzed: constant, fast-to-slow, and slow-to-fast. Our results show that, overall, using a constant progress indicator does not significantly help reduce drop-offs and that effectiveness of the progress indicator varies depending on the speed of indicator: Fast-to-slow indicators reduced drop-offs, whereas slow-to-fast indicators increased drop-offs. We also found that among the studies in which a small incentive was promised, showing a constant progress indicator increased the drop-off rate. These findings question the common belief that progress indicators help reduce drop-off rates.

Table A Study characteristics coding scheme

- Publication year
- Experiment number
- Year of the study
- Country of study
- Sampling design (such as river, convenience, or random online intercept sampling)
- Incentives (Yes, No)
- Was incentive contingent on response? (Yes, No)
- Speed of progress indicator (constant, slow-to-fast, fast-to-slow)
- Progress indicator visual design (e.g., progress bar, textual indicator or table)
- Position of the progress indicator on the survey page (top vs. bottom, left, center, or right)
- Color of progress bar
- Number of screens (or pages) per survey
- Expected length communicated? (Yes, No)
- Was the length communicated underestimated, overestimated, neither?
- Median time in control group (no progress indicator)
- Median time in experimental group(s)
- Progress indicator always shown? (Yes, No)
- Population Type (general population, students)
- Topic of the survey (e.g., omnibus, health, lifestyle)
- Type of publication (peer reviewed, conference presentation, dissertation)

Figures A1 to A4 Examples of visual designs of progress indicators

You are now at question 23 of 79

Figure A1. Example of textual progress indicator



Figure A2. Example of graphic-only progress indicator

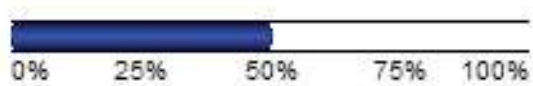


Figure A3. Example 1 of textual-and-graphic progress indicator

Overall evaluation	Lectures	Assignments	Grading	Final comments
--------------------	----------	-------------	---------	----------------

Figure A4. Example 2 of textual-and-graphic progress indicator

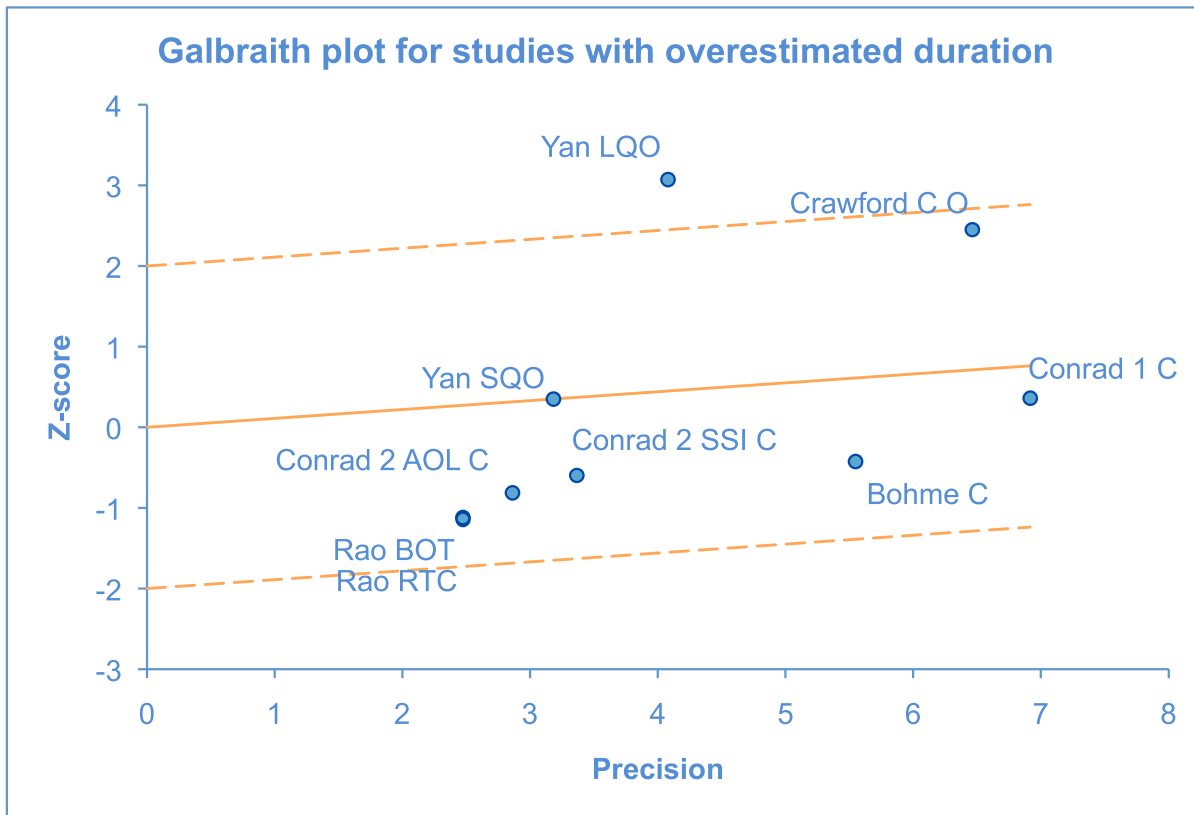


Figure B1. Outlier analysis plot for the constant rate progress indicator for studies where survey duration was overestimated

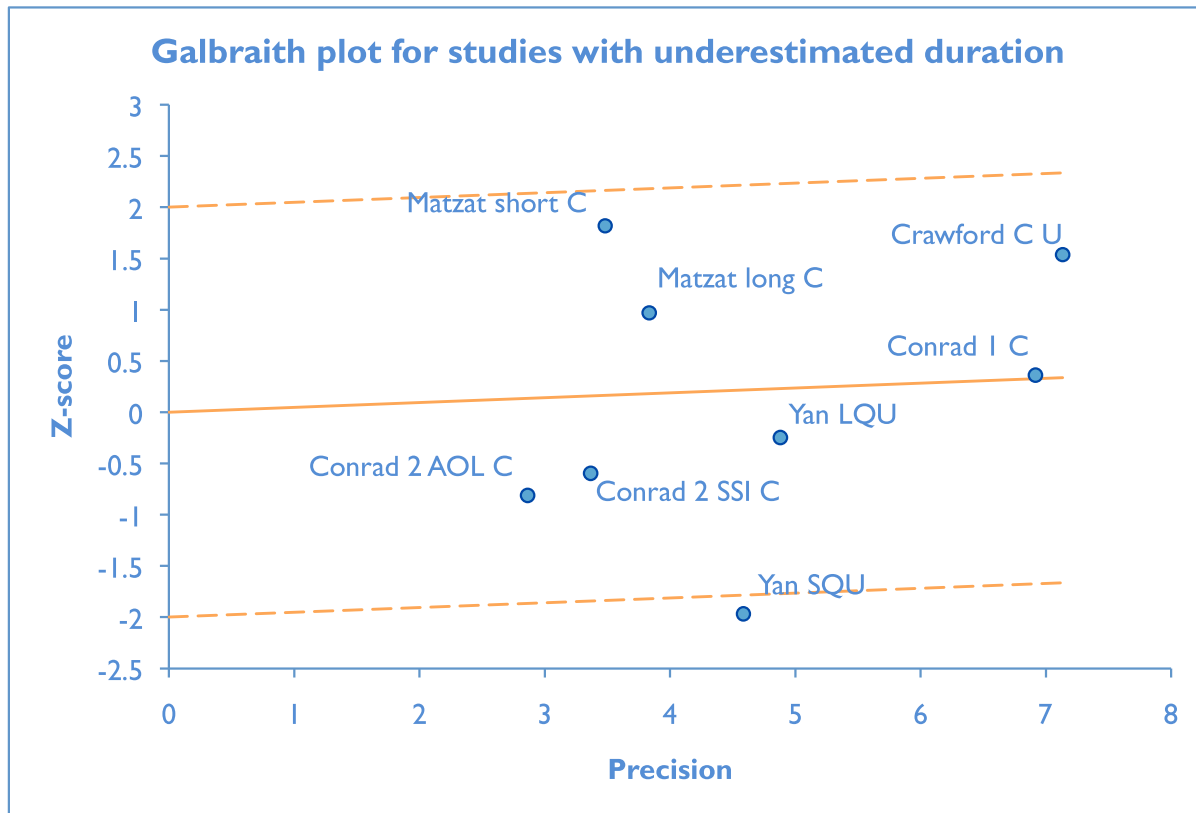


Figure B2. Outlier analysis plot for the constant rate progress indicator for studies where survey duration was underestimated

To identify the contribution of each study to the observed heterogeneity, the z score (the ratio of the odds ratio (LogOR) to its standard error) is plotted against the reciprocal of the standard error (precision). Each study is represented by a dot and a regression line runs through the plot together with two other lines representing the lower and upper boundaries of the 95% confidence interval. Dots outside the confidence interval lines indicate studies that contribute most to the heterogeneity (Xu, Platt, Luo, Wei, & Fraser, 2008, p. 19).

Xu, H., Platt, R. W., Luo, Z.-C., Wei, S., & Fraser, W. D. (2008). Exploring heterogeneity in meta-analyses: needs, resources and challenges. *Paediatric and Perinatal Epidemiology*, 22 Suppl 1,

Constant progress bar by communicated length

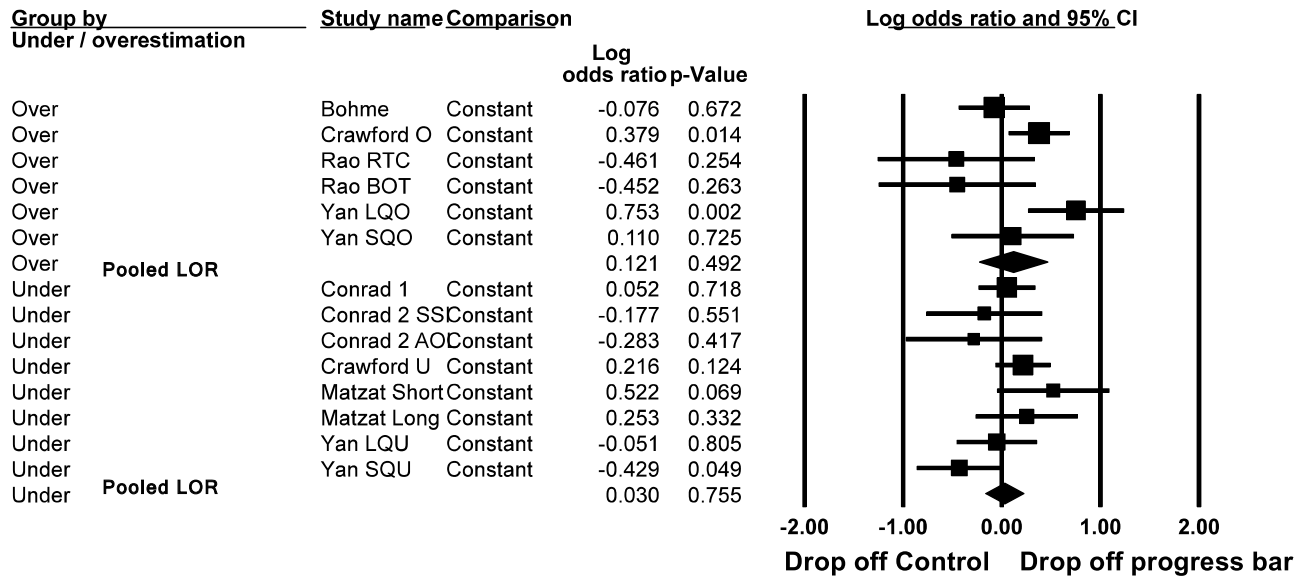


Figure C. Constant speed progress indicator forest plot: subgroup analysis by over/underestimation of length.

Constant progress bar by incentive group

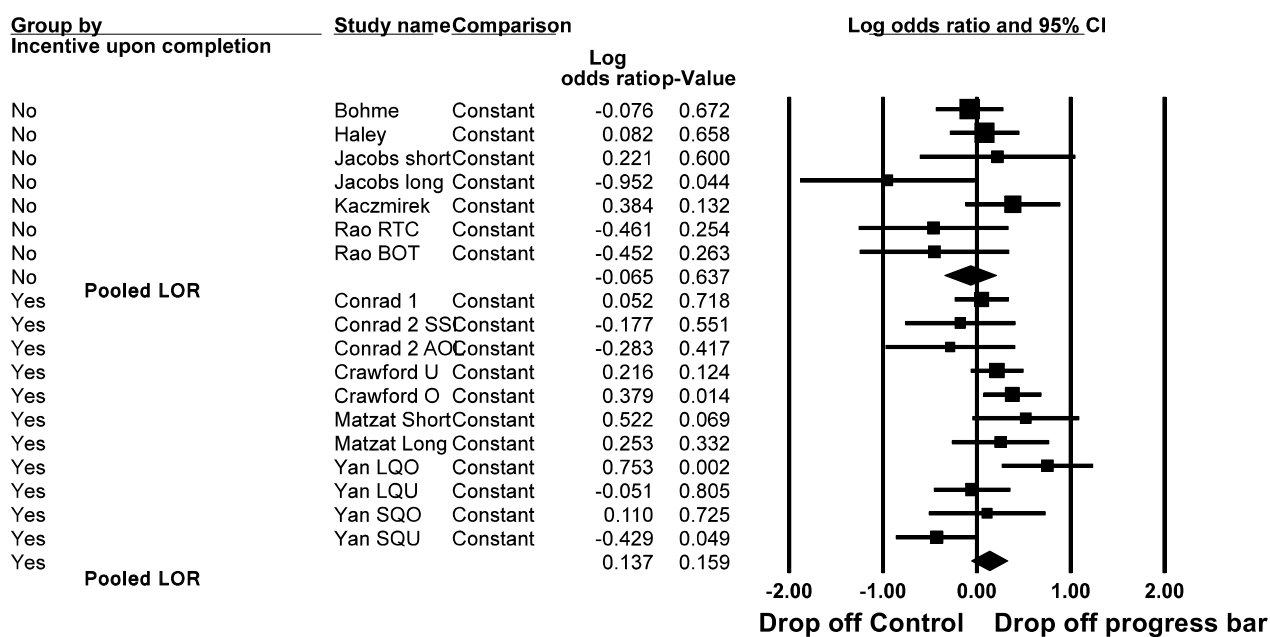


Figure D. Constant speed progress indicator forest plot: subgroup analysis by presence/absence of an incentive upon completion

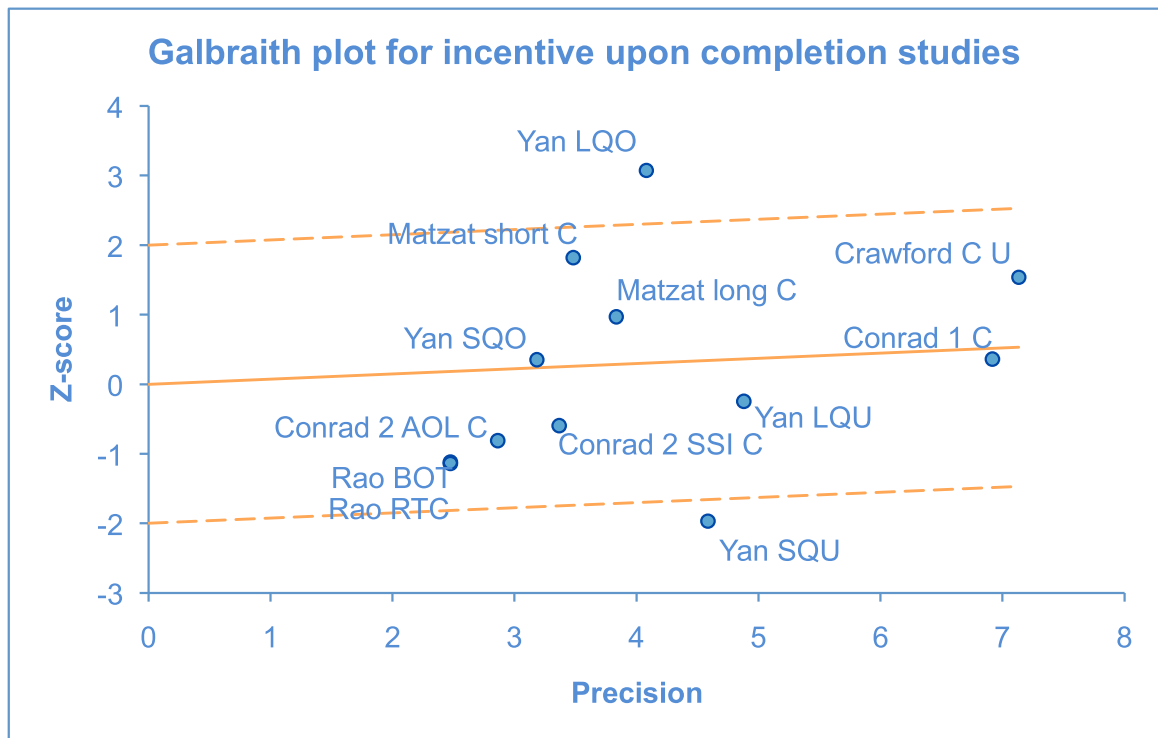


Figure E. Outlier analysis of the incentive upon completion studies

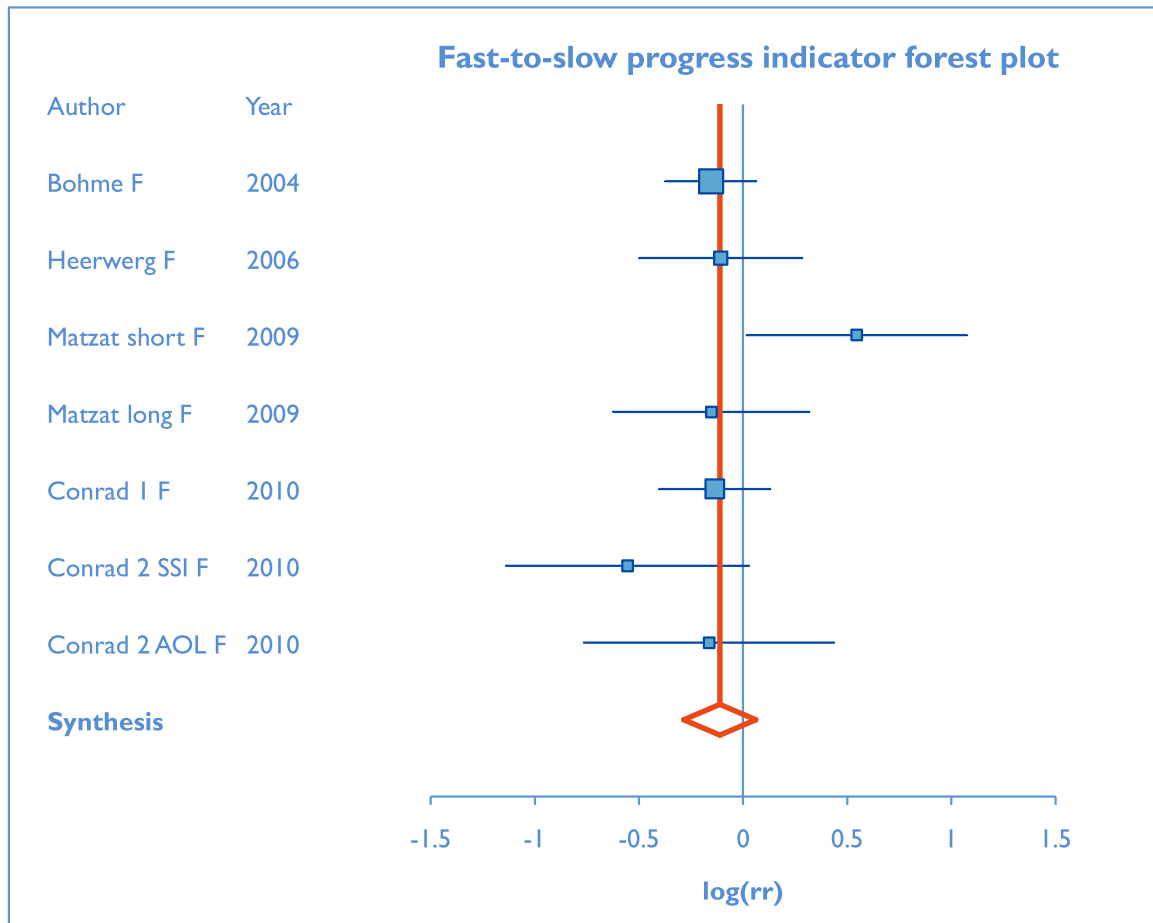


Figure F. Fast-to-slow progress indicator forest plot

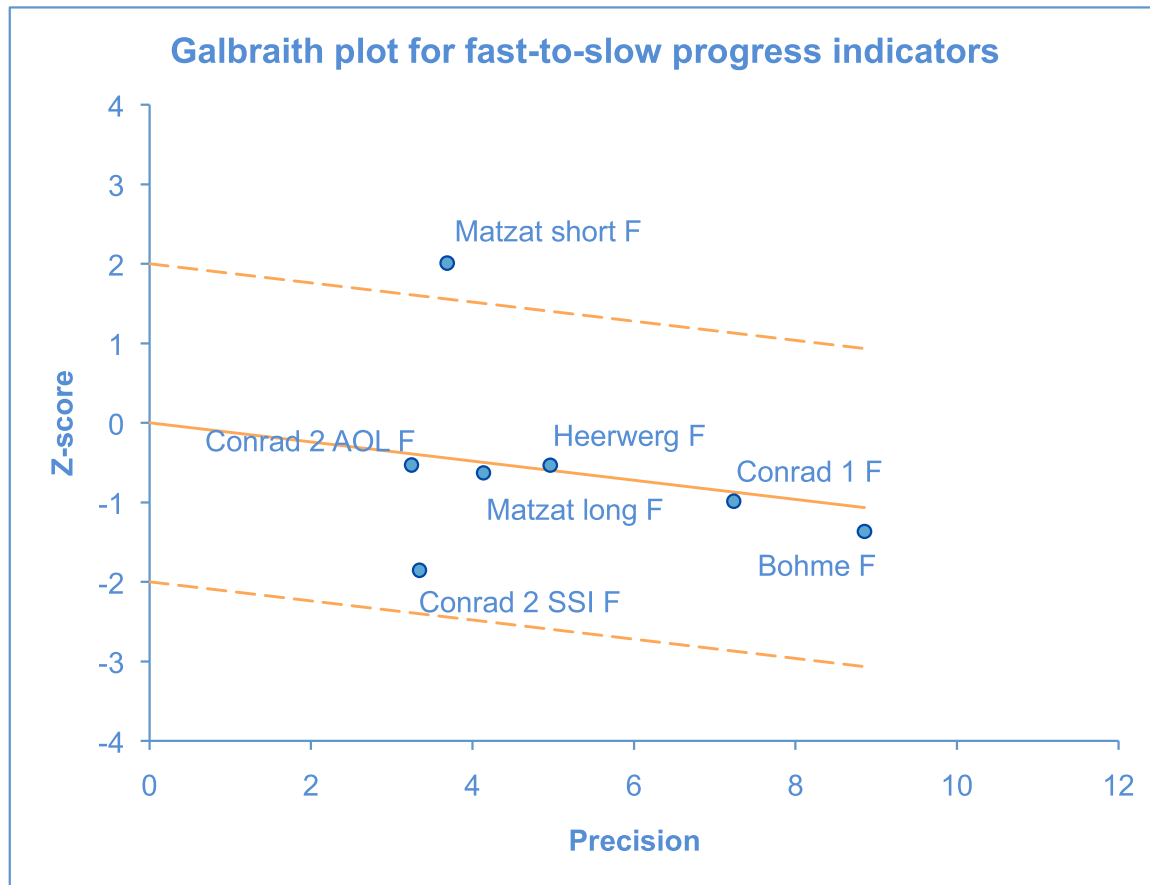


Figure G. Outlier analysis plot for the fast-to-slow progress indicator

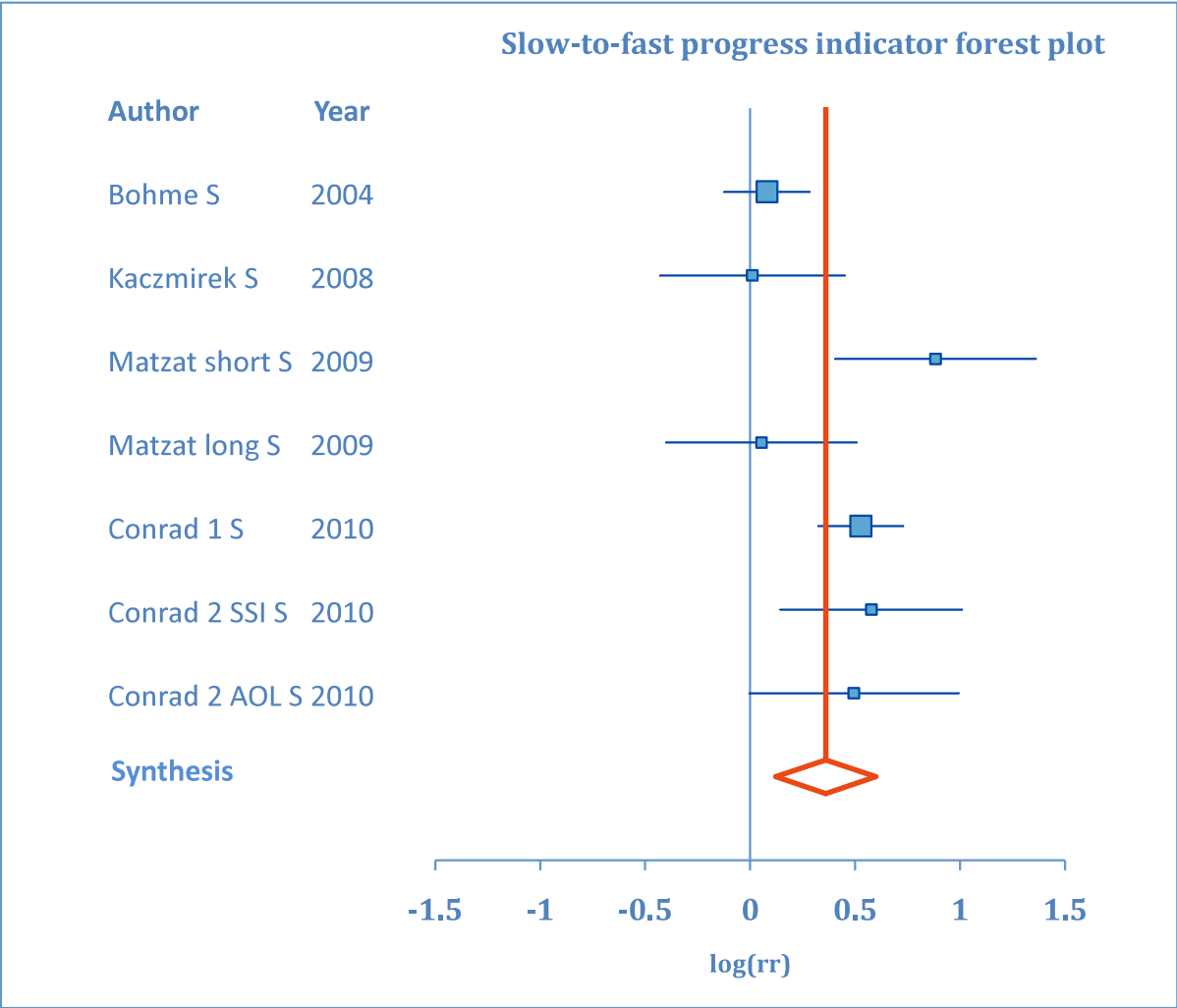


Figure H. Slow-to-fast progress indicator forest plot