

# How Concerned Should We Be About Selection Bias, Hawthorne Effects and Retrospective Evaluations?

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## Abstract

While impact evaluations can be used to measure the causal effect of a program, there are several potential factors that could challenge their external validity. First, it is possible that the projects that are selected for evaluation respond differently to treatment. If this is the case, the results of these evaluations will poorly predict the performance of future programs. Further, while Hawthorne effects could occur within a study, project implementers could also act differently when their project is being evaluated. In this case, the effect of the program would be confounded with the effect of the impact evaluation. Retrospective studies could also facilitate specification searching and be particularly selected. While others have considered these issues in individual cases, it has been difficult to gauge to what extent the problems are systemic. I use World Bank data on projects that did and did not receive impact evaluations and find a large gap in performance ratings between the projects that received impact evaluations and those that did not. Part of this difference may be a direct effect of the impact evaluations themselves improving project performance, however, part appears due to selection bias. Biases due to retrospective analysis appear largest of all.

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