

Long-term follow-ups of experimental interventions

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The book *Understanding and Controlling Crime: Toward a New Research Strategy* (Farrington et al. 1986) set out in great detail the advantages of a project in which there were several years of data collection (preferably in face-to-face interviews), followed by one experimental intervention, followed by several more years of data collection. However, as shown in the more recent reviews by Farrington (2006), Loeber and Farrington (2008), and Farrington et al. (2010), these kinds of longitudinal-experimental studies have never been carried out in criminology.

There have been a number of longitudinal-experimental studies in which an initial experimental intervention was then followed up over time. However, very few of these projects have involved really long-term follow-ups. Farrington and Welsh (2013) reviewed randomized experiments with at least 50 persons per condition initially, or at least 100 persons initially allocated to two conditions: an outcome measure of offending, and a follow-up period after the intervention of at least 10 years, with interview, questionnaire, or record data.

They found that only 12 longitudinal-experimental studies of this nature had ever been completed up to 2011. The longest-lasting projects were the Cambridge-Somerville Study (38 years; McCord 1990) and the Perry Preschool Program (36 years; Schweinhart et al. 2005). Other long-lasting studies with follow-up interviews or questionnaires were the Abecedarian project (21 years; Campbell et al. 2002), the Nurse-Family Partnership (19 years; Eckenrode et al. 2010), the Infant Health and Development Program (18 years; McCormick et al. 2006), and the Montreal Longitudinal-Experimental Study (17 years; Boisjoli et al. 2007). These were the most important six studies; other projects had shorter follow-ups (e.g., Fast Track; CPPRG 2010), had follow-ups only in records (e.g., the Missouri Delinquency

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Project: Sawyer and Borduin 2011), or had only a quasi-experimental follow-up (the Seattle Social Development Project: Hawkins et al. 2008).

Since very few experimental interventions had long-term follow-ups, we decided to edit a special issue of *Journal of Experimental Criminology* on this topic. We solicited contributions from persons that we knew had conducted such studies, and we asked them to address at least the following questions:

1. What are the advantages and problems of long-term follow-ups of experiments?
2. What has been learned from long-term follow-ups that was not known in short-term follow-ups?
3. How did the results change as the follow-up period was extended?
4. What different outcome measures were needed as the follow-up period was extended?
5. Did initial effects wear off or decay, did they persist or become greater over time, or were there delayed “ sleeper ” effects that only appeared later?
6. What are the main difficulties in having long-term follow-ups, and how can they be overcome?

We wanted to address these questions because existing studies usually provided only cumulative information at each follow-up, and we were especially interested in knowing whether experimental effects persisted during intervening time periods. For example, a study such as the Missouri Delinquency Project (Sawyer and Borduin 2011), with follow-ups in records, published cumulative offending data up to ages 19, 29, and 37, but not results for the age ranges 19–29 or 29–37. While the cumulative data always shows results favoring the (multisystemic therapy) intervention, the effects of the intervention may conceivably decrease in the intervening age ranges (e.g., ages 29–37). The main point is that information about the intervening age ranges is needed to investigate whether effects persist, increase, or decrease over time.

The first article in this special issue, by Schweinhart, reports results from the classic Perry Preschool Program, in which 123 African American children in Ypsilanti, Michigan, were randomly assigned at ages 3–4 to a preschool intellectual enrichment program or to a control group. The children were followed up to age 40 in records and by personal interviews, and the results show that the beneficial effects of the program were still apparent even in the age 28–40 period. The second article, by Vitaro, Brendgen, Giguere, and Tremblay, reports on the latest follow-up of the Montreal Longitudinal-Experimental Study. In this project, 250 Canadian boys were randomly assigned either to receive child skills and parent training between ages 7 and 9 or to a control group, and they were followed up to age 28 using self-reported delinquency questionnaires. The results show that the experimental boys committed less nonviolent delinquency in all age ranges.

In the third article, Lösel, Stemmler, and Bender report recent findings from the Erlangen-Nuremberg Development and Prevention Study. In this project, 675 German boys aged 4–5 were randomly assigned to various combinations of child skills and/or parent training or to a control group, and outcomes were measured after 3 months, 2 years, 5 years, and 10 years. The results showed that, in the latest follow-up, the program (and especially the combination of child skills and parent training) had desirable effects in reducing the number of self-reported property offenses. In the

fourth article, Sciandra and his colleagues report the latest results from the Moving To Opportunity experiment, in which deprived families in five American cities were randomly offered a housing voucher that enabled them to move to a better neighborhood. The researchers followed up 4,643 youth ages 15–25 for 10 years in arrest records. They found that youth who moved committed fewer violent crimes in the first 4 years after moving, but these effects attenuated over time. In the fifth article, Sherman and Harris report a 23-year follow-up in death records of 1,128 domestic violence suspects in Milwaukee who were randomly assigned to be arrested or warned by the police. They found that those who were arrested were three times as likely to be murdered compared with those who were warned.

The sixth article, by Jolliffe, Farrington, and Howard, describes a quasi-experimental evaluation, and contains detailed information about the numbers and costs of offenses in each successive 2-year follow-up period. This paper evaluates the “High Intensity Training” (HIT) program in a Young Offender Institution in the North of England. This 25-week program, given to young offenders aged 18–21, included not only physical training but also cognitive-behavioral skills training and a pre-release employment program. The paper compares 125 HIT offenders with 125 control offenders, individually matched case-by-case on the predicted probability of reconviction. The researchers found that the number of convictions saved by the HIT program increased steadily, from 1.35 per offender at 2 years to 3.35 per offender at 10 years. The cumulative cost savings also increased over time, and the benefit:cost ratio, based on fewer convictions, increased from 1.13 at 2 years to 3.93 at 10 years. The researchers concluded that a “boot camp”, combined with behavioral and employment programs, can be effective.

These six articles, from four countries, include two of the six most important and long-lasting studies (Schweinhart and Vitaro et al.), two randomized experiments that have recently been followed up for 10 years (Lösel et al. and Sciandra et al.), one randomized experiment that has recently been followed up for more than 20 years (Sherman and Harris), and a quasi-experimental evaluation that was followed up for 10 years to specifically address the questions listed above (Jolliffe et al.). Submitted articles were rigorously reviewed. These six articles show that a great deal can be learned from long-term follow-ups after experimental interventions. We recommend that more such studies should be carried out, in order to investigate not only whether initial effects persist, increase, or decrease but also why. These studies should help in designing future interventions that have long-lasting or increasingly desirable effects.

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