

Effects of Comparison to a Random Sample from the General Population

- I. There are two fundamental designs used to evaluate programs. Experimental and Observational research designs.
 - a. Experimental designs are characterized by the use of randomized assignment to research groups to control for the effects of influences, other than the program's, that would confound one's understanding of the program effects. Practical and ethical problems with the use of experimental designs in the evaluation of the effectiveness of programs with human subjects.
 - i. It isn't always possible to randomly assign subjects to research groups because individuals ultimately can decide whether they want to participate or not.
 - ii. In many instances it may not be fair to randomly allocate subjects to research groups without consideration of the individuals interests and needs.
 - b. Observational designs do not impose on the process (program) being evaluated but instead attempt to observe and utilize the natural variation in the process to statistically control for effects that might otherwise confound an understanding of how the program affects the outcome. Threats to the validity of studies of human subjects with observational designs.
 - i. Inadequate sample selection.
 - ii. Biased results due to self-selection of subjects into, or out of the study group.
- II. Construction of the comparison group.
 - A. We chose to use an observational design because we felt the problems of observational studies were fundamentally less problematic. Our principle method for reducing the limitations of the observational approach was to model the self selection process.
 1. Presumes there were individuals in the population who were interested in training but for whatever reason did not have the opportunity. Since inferences can only be made to individuals who would be interested in participating in a program, our matching objective was to identify these individuals in the population, based on predisposed characteristics that tended to be associated with individuals who had selected themselves into prison industries, or VT or apprenticeship courses. The BOP has far more demand for industries positions than it has positions to fill, so this is a very reasonable assumption.
 - A. Matched individuals who obtained 6 months or more industries experience, or who had successfully completed a VT or apprenticeship program, with individuals who did not have those experiences.

- B. Assume the effects hold or are stronger for commitments. Additionally, assume that secondary labor markets favor younger over older workers, and that there are relationships between wages and employment retention, and employment and involvement in criminal activity.
1. Individuals who select themselves into prison training programs are generally older, possibly they have decided that the life of crime is not working out and that having a job skill may help remedy their problem.
 2. If a comparison is made between this older group and a random sample of the general population at that prison, the random sample from the general inmate population will probably be younger than the training group.
 3. If previous study and comparison groups were composed in such a manner, then it seems plausible that assessments of program effectiveness, based on comparisons of group member's abilities to find and hold a job, legal earnings, and their rates of re-arrest or re-commitment, may be confounded by the same influences that Nagin and his colleagues observed.
 4. That is, outcome comparisons are being made between generally older study observations and generally younger comparison observations, who are competing for jobs in a labor market which generally favors younger individuals. Furthermore, younger individuals may be better able to sustain themselves on a more meager spot labor market income, because they are less likely to have as many financial obligations.
 5. If there is a relationship between wages and employment retention, and employment and crime, as previous studies have demonstrated, this may lead to higher rates of criminal involvement and revocations among the study observations and to conclusions that the programs are ineffective.

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William "Bo" G. Saylor
Director of Research
Office of Research and Evaluation
Federal Bureau of Prisons
320 First Street, N.W.
(400 Bldg., Room 3014)
Washington, D.C. 20534

1. wsaylor@bop.gov
Voice (202) 305-4171
Fax (202) 307-5888

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