

METHODOLOGICAL PROBLEMS AND TECHNIQUES IN
SOCIOLEGAL RESEARCH

The Indirect Experiment

The controlled experiment is undoubtedly the ideal instrument for testing the effectiveness of a new rule of law or legal procedure: have one random half of the cases operate under the new rule, the other half under the old rule, and see what difference there is in the outcome.

The design is simple and clean, but not easily effected in the real world of the law. To be sure, controlled experiments can be conducted under simulated conditions.¹ There is also a marginal area of the law where experimentation might meet little resistance.² On the whole, however, the law is here very cautious, probably more than it needs to be, because experimentation—involving, as it does, applying a rule to some litigants and not to others—smacks, at least superficially, of discrimination, especially when this random division would have to be made by order of a judge.

In such situations, politically and legally difficult, what one might call the *indirect experiment* becomes a viable and therefore important substitute.³ Perhaps the best way of explaining what is meant by an indirect experiment is to describe one, although this particular experiment has never been carried out. It does not concern the law but a vexing problem familiar to all: the question of whether smoking causes cancer. There are those who stubbornly, and with some technical justification, insist that the connection has not been proven. As long as one compares smokers and non-smokers as they naturally arise in the population, the

1. See, for example, R. S. JAMES, *THE JURY AND THE DEFENSE OF INSANITY* (1967).

2. See *The Case for the Official Experiment* in ZEISEL, KALVEN, BUCHHOLZ, *DELAY IN THE COURT* ch. 21 (1959).

3. The idea was first developed to overcome not legal but factual obstacles to experimentation. To test the effectiveness of television commercials, it is clearly impossible to have a random group of homes view the program while the control group refrains from viewing. An indirect experiment was designed, making non-exposure the experimental variable. See I. M. TOWERS, L. A. GOODMAN, H. ZEISEL, *A METHOD OF EXPERIMENTS* 87-110 (No. 4, *Studies in Public Communication*, U. of Chicago, 1962).

higher cancer rate of the smokers might be caused not by their smoking but by some, possibly hidden, factor that causes both smoking and cancer.

These skeptics say that only a controlled experiment could provide the ultimate answer.⁴ Clearly, such an experiment, in which people are randomly assigned to become smokers or non-smokers is not feasible; not even in a prison population could such commands be enforced.

But an indirect experiment might work. Suppose we took two random groups of smokers and then tried to persuade one group to reduce smoking or give it up altogether. It would not matter how we achieved our goal; we might persuade them, but we could also bribe them, pay them for not smoking.

If we were at all successful in reducing smoking in the experimental group, a subsequent differential incidence of cancer in the two groups could then safely be attributed to the reduction in smoking, since this was the only difference between the two groups.

In this design the direct control over the experimental variable has been abandoned; but randomization has been retained by somewhat blunting the experimental alternatives.

I shall now cite a few actual indirect experiments that have been conducted within the province of the law. We might begin with the bail experiment conducted in the Manhattan Supreme Court under the guidance of the Vera Foundation.⁵

Its purpose was to test the hypothesis that a much larger part of the defendants awaiting trial could be released without bail, on their personal recognizance, without substantially increasing the proportion of defendants who fail to appear on their appointed day in court. The direct experiment would have required the division of a group of defendants randomly, to impose bail on the one half, and release the other half without bail. In view of the constitutional roots of the bail system, this was an impossible procedure. Instead the following indirect experiment was put into action.

Vera staff members, after interviewing all defendants, were ready to recommend some of them to the judge for release without bail. At that point, they divided the group of recommendable defendants in two random halves: for the defendants in one group they transmitted the recom-

4. See *The Cross-tabulation Explains* in H. ZEISEL, *SAY IT WITH FIGURES* ch. 9 (5th ed. 1968).

5. See H. Zeisel, *The Law*, in *THE USES OF SOCIOLOGY* 81, esp. 91 n. 12 (P. F. Lazarsfeld ed. 1967).

mentation to the judge, for the other group they made no recommendation and simply left the judge to his own traditional guide lines as to whether or not to set bail. Thus, both judicial integrity and the random requirements of the controlled experiments were preserved.

In those cases where the judges received a recommendation, the rate of release without bail was four times as high as in the control group which was under the traditional bail procedure. Yet, on the appointed day in court, the proportion of defendants who willfully failed to appear was the same in both groups. The situation was similar in what to date is clearly still the most important indirect legal experiment. When it became doubtful that pre-trial of civil law suits—appearances notwithstanding—resulted in a higher settlement ratio, the state courts of New Jersey cooperated in a controlled experiment designed to test the issue. But a direct test, which would exclude some cases altogether from pre-trial while making it obligatory for others, was considered improper. Thus, an indirect design was developed in which the control group came under *obligatory* pre-trial, and the experimental group under *optional* pre-trial if at least one of the litigants asked for it.

Although only 43 per cent of the cases in the optional group were pre-tried, none of the applied yardsticks (settlement ratio, duration of trial, etc.) showed any significant difference between experimental and control group. Since pre-trial costs time and money, the experiment established optional pre-trial as clearly superior to obligatory pre-trial.⁶

Finally, there is a third legal indirect experiment to report on. The Federal District Court in Chicago wanted to find out whether the so-called split trial procedure would save trial time for the court.⁷ That rule allows the court to initially limit in a jury trial the litigation and the jury's verdict to the issue of liability. If the jury finds no liability, this ends the trial. If it does find liability, the issue of damages is litigated and adjudicated in a sequel of the first trial, before the same jury.

The ideal experiment to test this issue would be to have a random half of cases tried under the split rule, the other half under regular procedure, and see by how much, if at all, the split trials are shorter than the regular ones. Such an experiment would involve something like a judge's tossing a coin to decide under which rule each case is to be tried.

6. See M. ROSENBERG, *THE PRE-TRIAL CONFERENCE AND EFFECTIVE JUSTICE* (1964). Also H. Zeisel, *Optional vs. Obligatory Pre-trial* in 4 *TRIAL* 11 (Jan. 1968).

7. See *DELAY IN THE COURT*, *supra* note 2, at 99.

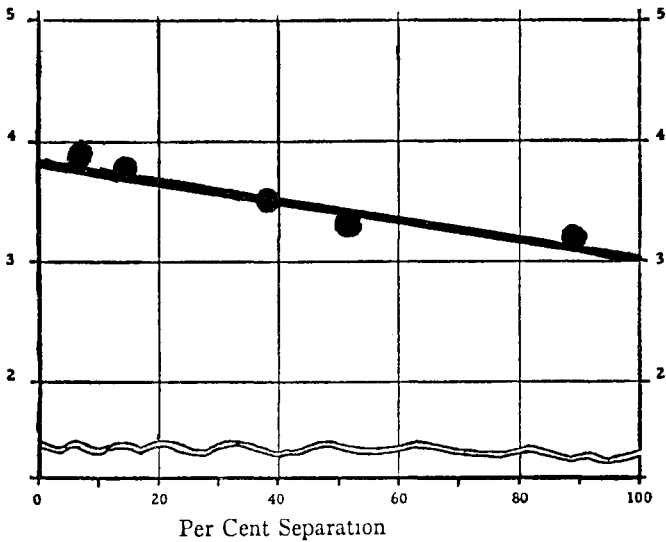
Suffice it to say that such a suggestion was not even made. But there was no need to abandon the experiment altogether. The problem was how to redesign it so that judicial discretion would not be interfered with.

This was done by simply allowing each judge to make his own decisions, case by case, as to which rule to apply. One could allow this without destroying the controlled character of the experiment because the court assigned the filed cases randomly among its judges, hence the cases assigned to each judge constituted comparable random units.

The judges obliged the analysts by applying the split trial rule with different frequencies, thereby making it possible to see whether any relationship existed between split trial rule and length of trial.

PER CENT SEPARATION AND TRIAL TIME*

Average Trial Time
(days)



● Judges with more than 14 cases

* Simplified, from H. Zeisel and Th. Callahan, *Split Trials and Time Saving: A Statistical Analysis*, 78 HARV. L. REV. 1606, 1615 (1963).

The more frequently a judge made use of the split trial rule, the shorter, on the average, the time he required for a trial. Moreover, the judges happened to group nicely around a regression line, enabling us to conclude tentatively, that the split trial would save, on the average, the difference between 3.8 and 3.0 trial days, or roughly some 20 per cent of the trial time.⁸

What then can we say in general about the indirect experiment? It makes experimentation possible where the direct design would run into legal or other obstacles. It achieves this goal by abandoning direct control over the variable to be tested.

By making this change, it runs the risk that those who now control the variable will not effectively differentiate between control and experimental group: the smokers who either do or do not give up smoking, the judge who either does or does not follow the Vera recommendation, the litigants who either do or do not opt for pre-trial, the judge who either does or does not apply the split trial rule. If, for instance, all judges would have applied the split trial rule with equal frequency, or if all litigants would have opted for pre-trial—there would have been no experiment.

Furthermore, by abandoning the direct control, the tested issue may be blunted, although it need not always be that way. Often it will leave no way of measuring the effect of the variable directly. This is but another way of saying that every indirect experiment can be reformulated as a directly controlled experiment with a somewhat different objective: *e.g.*, instead of experimenting with release without bail, Vera experimented with *recommending* release without bail, instead of experimenting with non-smoking, our hypothetical researcher would experiment with persuading not to smoke, etc.

But the possibility of such reformulation must not be permitted to obscure the very distinct features of the indirect experiment: a compromise design that makes it possible to obtain some measure of a variable which otherwise could not be measured at all.

—HANS ZEISEL

8. The result was corroborated by another important finding that explained it: that in one third of all cases the verdict against liability obviated litigation of the damages; and where liability was found, the parties were as a rule quick to settle the damages without further trial.