More than 50 years ago, the Cambridge-Somerville Youth Study provided services to a randomly selected half of matched pairs of young boys living in congested urban environments. This "model intervention program" is analyzed in this paper. Between 1935 and 1939, information on approximately 1800 boys was gathered. This information was used to match pairs of boys similar in age, intelligence, physiques, family environments and backgrounds, social environments, and delinquency-prone histories. The treatment team included social workers, a psychologist, tutors, a shop instructor, consulting psychiatrists, and medical doctors. The project was funded well enough to provide assistance over an average of more than 5 years and records were complete enough to enable location of 98% of the subjects 30 years after treatment ended. Results indicate that the treatment program was not beneficial. Evidence suggests that parts of it were even harmful. Recently it has come to light that a feature that seems to have been particularly detrimental is the use of summer camps. Among boys sent to summer camps at least two times, 2 turned out better than their matched mate and 20 turned out worse. It is hypothesized that the boys in the study encouraged one another in deviant values. (RJM)
Some Unanticipated Consequences of Summer Camps

Joan McCord

Some Unanticipated Consequences of Summer Camps

Joan McCord

More than half a century ago, Richard C. Cabot laid the foundation for a scientific approach to studying intervention programs. The Cambridge-Somerville Youth Study provided services to a randomly selected half of matched pairs of young boys living in congested urban environments.

Treatment began in 1939 and, for those in the evaluation, continued an average of 5.5 years. Case workers assigned to particular boys visited an average of twice a month. They sought to provide friendly guidance to the boys, counseled parents and assisted them in a variety of ways, and referred cases to specialists when that seemed advisable.

When the program terminated in 1945, over half the treatment boys had been tutored in academic subjects; over 100 received medical or psychiatric attention; almost half had been sent to summer camps; and most of the boys had participated with their counselors in such activities as swimming, visits to local athletic competitions, and woodwork in the project's shop. Boys in the treatment group were encouraged to join the Y.M.C.A. and other community youth programs. The boys and their parents called upon the social workers for help with a variety of problems including illness and unemployment.

Meanwhile, boys in the control group had not been assisted through the program. Cabot had designed the study with matched
pairs of boys so that its effects could be measured. Because they had been similar at the start of treatment, a reasonable measure of the program's effects in relation to particular features could be based on comparisons of these matched pairs.

Let me begin by briefly discussing the sample and the extent of matching. To avoid stigmatizing participants, "average" boys as well as those who seemed headed for trouble were solicited for the project. The names of approximately 1,800 young boys were garnered from the schools, churches, social agencies, and community organizations serving the area. Giving priority to the younger boys, between 1935 and 1939, the Youth Study staff collected information from schools, neighborhoods, courts, physicians, and families. This information was used to match pairs of boys similar in age, intelligence, physiques, family environments and backgrounds, social environments, and delinquency-prone histories.

Among the 325 pairs, a toss of a coin determined which boy would be placed in the treatment group. The other boy in the pair was then placed in the control group. In the absence of intervention, both boys in a pair would be expected to have similar lives.

By May 1939, each boy in the treatment group had been assigned to a social worker who was expected to build close relations with the boy and to help the boy and his family. Ten social workers, a psychologist, tutors, a shop instructor,
consulting psychiatrists, and medical doctors formed the treatment staff. Boys were seen in their homes, on the streets, or in the headquarters of the project.

By the time the matching had been completed and counselors assigned, the average age of the boys was 10.5 years. Counselor turnover and recognition that case loads were too heavy led to dropping some of the cases. By 1942, 253 boys remained in the treatment program. When a boy was dropped from the treatment program, his "matched mate" was dropped from the control group as well. Therefore, in 1942, 253 boys remained in the control group. These 506 males, divided into 253 pairs, provided the basis for evaluating effects of the treatment program. To reassess equivalence, the groups were compared after the reduction in cases.

No reliable differences were discovered in comparisons of age, IQ, whether referral to the Youth Study had been as "difficult" or "average," or the delinquency prediction scores assigned by the Selection Committee on the basis of the boys' family histories and home environments. No reliable differences appeared in comparisons regarding the boys' physical health as rated by the doctor after a medical examination, or in mental health, social adjustment, acceptance of authority, or social aggressiveness as reflected by teachers' descriptions of the boys. Nor were reliable differences found in rating of adequacy of the home, disruption of the home, delinquency in the home,
Unanticipated Consequences

adequacy of discipline, standard of living, occupational status of the father, "social status level" of the elementary school attended by the boy (a measure based on the occupational levels of fathers whose children attended the school), or quality of the neighborhood in which the boys resided.

Between 1975 and 1981, I retraced both treatment and control boys. About equal proportions of the two groups had died and about equal proportions were found living in Massachusetts.

In order to avoid possible reporting biases, my primary evaluation was based on official records. Throughout this paper I refer to results as "bad" if official records indicated that the individual had been convicted for a serious crime on the FBI Index, had been treated for alcoholism, schizophrenia, or manic-depressive psychoses, or had died before reaching the age of 35 years. If both members of a pair or neither member or a pair had a bad outcome, I assume the treatment had no effect. Prior reports have reported the results:

Those who had been in the treatment program were more likely to have been convicted for a crime indexed by the F.B.I., died prior to age 35, or to have received a medical diagnosis as alcoholic, schizophrenic, or manic-depressive (McCord, 1978, 1981, 1992).

Indications that the treatment program, rather than an unmeasured difference between the samples, had affected the outcome of those in the treatment group comes from two
comparisons: First, the differences between treatment and control group outcomes occurred only among those who cooperated with the Cambridge-Somerville Youth Study staff.2

Among the 60 whose families were uncooperative, 12 did better than their matched mates and 12 did worse. Among the 193 whose families were cooperative, however, 27 did better and 52 did worse than their matched mates in the control group.

Second, there appeared to be a dose-response from both intensity and length of treatment. Boys whose counselors more frequently visited them, and those in the treatment program the longest were most likely to fare badly as compared with their matched mates in the control group. I use an adverse odds ratio computed by dividing the number of pairs in which the treatment boy did worse than his match by the number of pairs in which the treatment boy did better than his match.

The adverse odds ratio for boys in the program longest was 2.16 (41/19), indicating that among pairs that differed in outcome, the boy in the treatment group was about twice as likely to do worse. The adverse odds ratio for boys seen most intensively was 3.8 (19/5), indicating that among pairs that differed in outcome, the boy in the treatment group was almost four times as likely to have a bad outcome.

I computed adverse odds ratios for each of the major emphases of the treatment program. The odds ratio for bad outcomes for a focus on providing academic help was 1.91 (42/22);
that for encouraging the boy to participate in group activities such as boy scouts and YMCA was 1.75 (35/20); that for a focus on personal problems 3.5 (28/8); and 3.75 (30/8) for a focus on family problems. Although there were differences, with emphasis on problems seeming worse than those on activities, the differences were not dramatic.

Though I suspected that the boys in treatment had somehow received endorsement for their dysfunctional choices, there seemed to be no clear identification of the grounds for an adverse effect from treatment. In the last few years, however, several intervention programs have converged to show that peer affiliation may be harmful to youngsters at high risk for delinquency. Some of this work has been carried out by the Oregon Social Learning Center, and though I have long respected the work that they do, I resisted their conclusion that increased affiliation might engender increased difficulties. Nevertheless, the invitation to test their results by using data from the Cambridge-Somerville Youth Study was irresistible.

Treatment had specifically included summer camp. Describing this part of the program, Powers and Witmer (1951/1972) explained: "When it was believed that two or more weeks at some well-managed summer camp would benefit a boy, the Study sent a special application to the local camping organization, underwriting the necessary expenses" (p. 117). Among the 253 matched pairs assessed for follow-up, 125 of the treatment boys
had been sent to summer camp. These boys were clearly placed in a position of close association with peers.

The fact that some children were sent to summer camps for several summers permitted further identification of possible mechanisms of influence. If any association with peers either increased or decreased the likelihood of an effect from intervention, summer camp might be expected to affect outcomes regardless of the frequency of attendance. If, on the other hand, peer affiliation influences outcome through affecting values, one would expect to find differences occurring particularly among those sent to camp more than once.

Among the 128 boys never sent to summer camp, 25 turned out better and 28 turned out worse than their matched pairs. Among the 59 boys sent to summer camp once, 12 turned out better and 16 turned out worse than their matched pairs. Among the 41 boys sent to summer camp twice, 2 turned out better and 12 turned out worse than their matched pairs. Among the 25 boys sent to summer camp at least three times, none turned out better and 8 turned out worse than their matched pairs.

Attendance at camp for at least two summers (though not for just one) differentiated those for whom treatment was criminogenic from those for whom it was benign.

I used a stepwise discriminant analysis (SAS) to identify the intervention strategies most likely responsible for adverse effects of the Cambridge-Somerville Youth Study. Comparisons
among effects of camp attendance (at least twice), tutoring, counseling, family assistance, and encouragement of general participation in group activities clearly suggests that summer camp had the greatest adverse effect, accounting for 9.6% of the variance ($F=10.673$, $p=.0015$). Only family assistance ($F=4.465$, $p=.0371$) added significantly to the 13.4% of variance accounted for by these treatment modalities.

Summary and Discussion

I have described what in many ways can be considered a model intervention program. The project was designed with matched pairs of boys, using random selection for treatment. It was funded well enough to provide assistance over an average of more than five years. And the records were complete enough to enable location of 98% of the subjects thirty years after treatment ended.

The results show that the treatment program was not beneficial. Indeed, a fair reading of the evidence suggests that parts of it were harmful. Only recently, has it come to light that one of the features that seems to have been particularly harmful is the use of summer camps. Among boys sent to summer camps at least twice, 2 turned out better than their matched mate and 20 turned out worse -- for an adverse risk ratio of 10.

We are a long way from understanding how this result came about. I strongly suspect that the boys from the Youth Study tended to bond together, encouraging one another’s deviant values
in much the style that deviant parents encourage their sons’ deviance (Bandura & Walters, 1959; Dishion & Poe, 1993).
Elsewhere (McCord, in press), I have suggested that both change and continuity in behavior can best be understood by understanding what descriptions serve as potentiating reasons, as motives, for further actions. By encouraging one another to retell stories about their deviance, peer affiliations among misbehaving children can provide potentiating reasons for additional dysfunctional behavior.
References


McCord, J. (in press). "He Did It Because He Wanted To ..." In W. Osgood (Ed.), Nebraska Symposium on Motivation. Lincoln, NE.

Footnotes

1 An exception to random assignment was made for eight cases who were matched after their treatment began. In addition, brothers were assigned to that group to which the first of the siblings was randomly assigned. This involved 21 boys in the treatment group and 19 in the control group.

2 Lack of cooperation was a measure based on the counselors' statement that the family refused to cooperate or having a case record of less than 25 pages.

3 Among the 128, in 58 of the pairs neither turned out badly and in 17 pairs, both turned out badly.

4 Among the 59, in 22 of the pairs neither turned out badly and in 9 pairs, both turned out badly.

5 Among the 41, in 18 of the pairs neither turned out badly and in 9 pairs, both turned out badly.

6 Among the 25, in 11 of the pairs neither turned out badly and in 6 pairs, both turned out badly.
August 22, 1997

Dear Colleague:

After doing a blanket solicitation for papers at the 62nd Biennial Meeting of the Society for Research in Child Development held in Washington, D.C., April 3-6, 1997, I am now contacting individual presenters, particularly in our scope of early childhood through early adolescence, to consider sending two copies of your presentations for possible inclusion in the ERIC database. As you may know, ERIC (the Educational Resources Information Center) is a federally-sponsored information system for the field of education. Its main product is the ERIC database, the world’s largest source of education information. The Clearinghouse on Elementary and Early Childhood Education is one of sixteen subject-specialized clearinghouses making up the ERIC system. We collect and disseminate information relating to all aspects of children’s development, care, and education.

Ideally, your paper should be at least eight pages long and not have been published elsewhere at the time of submission. Announcement in ERIC does not prevent you from publishing your paper elsewhere because you still retain complete copyright. Your paper will be reviewed and we will let you know within six weeks if it has been accepted.

Please complete and sign the reproduction release on the back of this letter and return it with two copies of your presentation to ERIC/EECE. If you have any questions, please call me at (800) 583-4135 or by (e-mail at ksmith5@uiuc.edu). I look forward to hearing from you soon.

Sincerely,

Karen E. Smith
Acquisitions Coordinator

Enclosures

http://ericps.crc.uiuc.edu/ericeece.html
http://ericps.crc.uiuc.edu/npin/npinhome.html