

*AN EVALUATION OF TEACHING-FAMILY
(ACHIEVEMENT PLACE)
GROUP HOMES FOR JUVENILE OFFENDERS*

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Juvenile crime is a serious problem for which no treatment approach has been found to be reliably effective. This outcome evaluation assessed during and posttreatment effectiveness of Teaching-Family group home treatment programs for juvenile offenders. The evaluation included the original Achievement Place program, which was the prototype for the development of the Teaching-Family treatment approach, 12 replications of Achievement Place, and 9 comparison group home programs. Primary dependent measures were retrieved from court and police files and included number of alleged offenses, percentage of youths involved in those alleged offenses, and percentage of youths institutionalized. Other dependent measures were subjective ratings of effectiveness obtained from the program consumers, including the group home residents. The results showed difference during treatment favoring the Teaching-Family programs on rate of alleged criminal offenses, percentage of youths involved in those offenses, and consumer ratings of the programs. The consumer ratings provided by the youths and their school teachers were found to be inversely and significantly correlated with the reduction of criminal offenses during treatment. There were no significant differences during treatment on measures of noncriminal offenses (e.g., truancy, runaway, and curfew violations). In the posttreatment year, none of the differences between the groups was significant on any of the outcome measures. The results are discussed in terms of measurement and design issues in the evaluation of delinquency treatment programs and in relation to the evaluation of Teaching-Family group homes by Richard Jones and his colleagues.

DESCRIPTORS: program evaluation, group homes, adolescents, delinquents, Achievement Place, Teaching-Family model

Juvenile crime is a persistent national problem. In recent years, juvenile offenders between 10 and 17 years of age have accounted for nearly 50% of all arrests for serious offenses

(Uniform Crime Reports, 1979). Moreover, FBI statistics over the past several years have shown a steady increase in juvenile arrest rates. Gibbons (1976) found the acceleration in juvenile crime from 1965 to 1975 to be four times greater than the growth rate for the youth population.

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In response to the problem of delinquency, President Johnson established a Commission on Law Enforcement and Criminal Administration to review the status of delinquency treatment. In 1967, the commission concluded that institutionalization, the main treatment approach of the time, had not been demonstrated to be effective at rehabilitation, was often expensive and sometimes inhumane, and was providing secure confinement for many youths who were not seri-

ous threats to their communities. Therefore, the commission recommended that a wide variety of community-based treatment programs be developed and evaluated.

Overall, the outcomes of the commission's recommendations have not been encouraging. According to a national survey by Vinter and Sarri (1976), in most states there has been only limited development of community-based programs as alternatives to institutional treatment. Moreover, results have not been positive from evaluations of some of the attempted community-based intervention including social case work (Berleman, Seaberg, & Steinburn, 1972), intensive parole services (Lerman, 1975; Palmer, 1974), community residential treatment (Empey & Lubeck, 1971), or youth diversion programs designed to keep youths out of the juvenile court system (Klein & Carter, 1976). In a review of 170 experimental studies of delinquency intervention programs, Romig (1978) reported that the most consistent finding was *no significant difference* between treated and comparison groups either during treatment or in subsequent follow-up years. Of the evaluation studies included in Romig's review, 15 were of behavioral intervention programs. Only four of these studies reported some measure of delinquency and the findings generally supported Romig's no difference conclusion. In a more recent review of program evaluations of delinquency treatment, Elliott (1980) concluded that, "There is no clear evidence to support the effectiveness of any specific treatment approach for reducing involvement in criminal behavior" (p. 507). In the absence of promising solutions and with an apparently escalating problem of juvenile crime, there remains a critical need for continued program innovation and experimental evaluation.

For the past several years, the Achievement Place project has been developing and evaluating a community-based, behavioral intervention program for the treatment of juvenile offenders within a group home setting. The goal has been to develop humane, effective, and practical

treatment procedures that could be replicated by group home programs in other communities. Since 1967, the Achievement Place group home in Lawrence, Kansas, has served as the prototype program for the development of the Teaching-Family approach (Phillips, Phillips, Fixsen, & Wolf, 1974). The treatment approach is based on behavioral principles and the premise that deviant behavior might be reduced or prevented by providing youths with relationships with adults who have high reinforcing value, who provide differential consequences for youth behavior, and who teach requisite social, academic, and self-care skills for successful community living (Braukmann, Kirigin, & Wolf, 1980). The treatment program incorporates skill teaching, self-government, motivation, relationship development, and youth advocacy procedures applied by a married couple (the teaching parents) in a structured family setting (Wolf, Phillips, Fixsen, Braukmann, Kirigin, Willner, & Schumaker, 1976).

Many of the treatment elements have been subjected to careful experimental evaluation. These investigations have demonstrated the effectiveness of the token system (Phillips, 1968); the self-government system (Fixsen, Phillips, & Wolf, 1973; Phillips, Phillips, Wolf, & Fixsen, 1973); the teaching procedures used to develop the youths' social, academic, and self-care behaviors (Maloney, Harper, Braukmann, Fixsen, Phillips, & Wolf, 1976; Minkin, Braukmann, Minkin, Timbers, Fixsen, Phillips, & Wolf, 1976; Werner, Minkin, Minkin, Fixsen, Phillips, & Wolf, 1975); the home-based report card system (Bailey, Wolf, & Phillips, 1970; Kirigin, Phillips, Timbers, Fixsen, & Wolf, 1977); and vocational training procedures (Braukmann, Maloney, Fixsen, Phillips, & Wolf, 1974).

Since 1972, the treatment approach has been disseminated to other community-based group homes through the development of a year-long training program designed to provide couples with the necessary skills to implement the treatment program (Braukmann, Fixsen, Kirigin, Phillips, Phillips, & Wolf, 1975). The year long,

in-service training sequence consists of two 1-wk workshops, frequent telephone and periodic in-home consultation session, and regular formal evaluations (Braukmann, Kirigin, & Wolf, Note 1). The training is facilitated by training manuals and handbooks that present the specific treatment procedures in great detail (Braukmann & Blase, 1979; Phillips et al., 1974). As of January, 1981, there were six regional training sites and approximately 170 Teaching-Family group homes operating throughout the country. To ensure quality control of the group home treatment provided, a national association of Teaching-Family programs has been established to evaluate and to certify each regional training site and its affiliated group homes.

With the dissemination of the program, we have attempted to evaluate the overall effectiveness of Teaching-Family programs. This study compared the effectiveness of the prototype program at Achievement Place and of several replication programs with the effectiveness of programs not using the Teaching-Family model. The study involved comparisons based on outcome measures obtained from police and court records and from consumer evaluations.

METHOD

Description of Sample

The group homes selected for this evaluation consisted of the original Achievement Place program directed by Lonnie and Elaine Phillips, 12 later replications, and nine conventional community-based residential programs in Kansas. The selection of the sample was not random. Because of the time and expense involved in conducting the research, we asked those Teaching-Family homes closest to the research site to participate; all consented. The Teaching-Family homes were located in the northeast and central portions of Kansas. The comparison homes were selected by two Kansas state agencies that funded youth services. The agencies chose homes that they considered to be representative non-Teaching-Family residential programs. All the

selected comparison homes agreed to participate. With the exception of one home in western Kansas, comparison homes were located in the same geographic areas as the Teaching-Family homes.

Although the programs were not selected at random, the Teaching-Family and the comparison programs appeared to be similar on several dimensions. Each program had a majority of youths who were from the community where the program was located. In addition, each program (with one exception) served six to eight court-adjudicated youths between 12 and 16 years of age and was staffed by live-in, married, houseparent couples. None of the programs admitted youths with histories of violence such as murder, forcible rape, or armed robbery. All programs were supported for the most part by funds from the Kansas Department of Social and Rehabilitation Services and their operation costs were essentially the same.

Although the youths were not assigned randomly, it appeared that the youths were often assigned to programs in a haphazard way, based on available space. Our analysis of the characteristics of the youths showed the groups to be comparable. The characteristics of the youths in the sample are presented separately for the boys' programs and the girls' programs in Table 1. The variables include race, age at first offense, age at entry into treatment, and age at exit from treatment. Separate *t*-test comparisons of the means showed the groups to be generally comparable, with two exceptions. The boys in the comparison group were younger at age of first offense than Teaching-Family program boys, $t(122) = 2.70, p = .01$. The girls in the Teaching-Family programs were younger at entry into the program than comparison program girls, $t(64) = 2.19, p = .03$.

Because treatment in the group homes was subject to change in quality as a function of staff turnover, our focus was on the child care couple within a given group home rather than on the home itself. If there were successive couples within a group home, we considered each cou-

Table 1

Characteristics of youths in Teaching-Family and non-Teaching-Family programs.

Boys	Teaching-Family	Non-Teaching-Family
N	102	22
Race		
White	78 (76%)	17 (77%)
Non-White	24 (24%)	5 (23%)
Age		
At First Offense	12.9 yr	11.5 yr
At Treatment Entry	14.1 yr	14.1 yr
At Treatment Exit	15.0 yr	14.8 yr

Girls	Teaching-Family	Non-Teaching-Family
N	38	30
Race		
White	31 (82%)	25 (83%)
Non-White	7 (18%)	5 (17%)
Age		
At First Offense	13.6 yr	13.2 yr
At Treatment Entry	14.8 yr	15.3 yr
At Treatment Exit	15.4 yr	15.8 yr

ple a separate program. Consequently, in some cases, it was possible to have several successive programs within a home during the period of the evaluation. In the case of the one program using shift work staff, it was not possible to delineate programs on the basis of staff turnover. In that case all the youths ($n = 6$) were considered to be in one program. The 13 Teaching-Family programs in this study were implemented within seven group homes, and the nine comparison programs were implemented in four group homes and one larger residential facility. Of the 13 Teaching-Family programs, nine served boys and four served girls. Of the nine comparison programs, four served boys and five served girls. At the time the evaluation was initiated, homes in the Teaching-Family sample had been in operation for a median of 12 mo, and the comparison homes had been in operation for a median of 18 mo.

Data Collection

Offenses and institutionalization. The youths' court and police records provided the primary

sources for outcome measures. Trained evaluation assistants reviewed each youth's records and retrieved information specific to the number and nature of any reported alleged offenses, and any occurrence of institutional commitment. For those 11 youths who were 18 years of age and older during the posttreatment year, adult criminal records were also reviewed. To ensure consistency in the data collection, the evaluation assistants used the standardized and comprehensive recording procedures described in *An Evaluation Manual for Collecting Follow-Up Information on Youths in Trouble* (Kirigin, Fixsen, Phillips, & Wolf, Note 2). Only the records of those program participants who had been out of the treatment program for at least 1 yr (regardless of their length of stay or the circumstances of their departure) and who resided in the county where the program was located were included. These restrictions were imposed for practical reasons of data collection and to ensure comparable availability of youth information across pre-, during, and posttreatment intervals.

Reported alleged offenses included any illegal behavior or act recorded in a youth's court or police files regardless of whether formal action was taken. Although alleged offenses contained in court and police records also represented the reporting behavior of the agencies, there was reason to believe that use of both police and court data sources and inclusion of all charges against the youth would provide the most sensitive (Hawkins, Cassidy, Light, & Miller, 1977) and least discretionary (Lerman, 1975) measures of program effects. The alleged offenses included criminal offenses such as burglary, theft, assault, and vandalism, as well as status offenses such as truancy, curfew violations, and running away from home. To be recorded as an alleged offense, the date the offense occurred had to appear in the police and court files. Information on the date of the offense was needed to permit assignment of the offense to the appropriate pre-, during, and posttreatment interval, and to preclude double re-

ording of offenses that were reported in both court and police files.

Average offense rates per month for the year preceding treatment, for the period during treatment, and for the first year following treatment were computed for both Teaching-Family and non-Teaching-Family programs. Offense rates for the pre- and posttreatment intervals were computed on the basis of a youth's time *at risk* in the community. A youth was considered at risk if there was no record of institutionalization or departure from the community.

Because time in treatment varied for each youth, as did time at risk in the community during the pretreatment and posttreatment years, the offense rates were expressed as average offenses per month. To compute the offense rates, the number of offenses for the given interval was divided by the number of months at risk. For the during treatment interval, months in treatment was always used as the denominator in calculating the offense rates.

Institutional confinement was determined from commitment documents contained in the court records.

Reliability

Reliability assessments were obtained on the information retrieved from the youths' police and court files by having a second evaluation assistant independently review a random sample of files. For each group home program, at least 20% of the files were reviewed to assess the reliability of the measurement procedures. Occurrence reliability was obtained by comparing the two observers' records for agreement on the occurrence of an offense. An agreement was scored if both evaluators recorded the same offense and the recorded date of occurrence deviated by no greater than one day. Reliability percentages for offenses were computed by dividing the number of agreements by the number of agreements plus disagreements and multiplying by 100. Across all Teaching-Family and comparison programs, occurrence reliability on the offenses contained within a youth's file

ranged from 73% to 87% with a mean of 82%. Agreement was not perfect because the records of many courts were not orderly or well maintained. Sometimes offenses were recorded on official forms and sometimes they were briefly described on slips of paper. Some files contained as many as 70 items.

Consumer Satisfaction Measures

Subjective consumer evaluation measures were obtained for each Teaching-Family program, and for five of the nine comparison programs according to procedures described in the *Teaching-Family Handbook* (Phillips et al., 1974). For both types of programs, questionnaires were sent to the relevant consumer groups associated with each program (i.e., members of the board of directors, juvenile court and social welfare personnel, and the youths' parents and teachers) and were administered to the youth participants during interviews. The questionnaires used a 7-point Likert (1932) scale format to obtain ratings of consumer satisfaction with various dimensions of the treatment program including staff effectiveness, cooperation, and the quality of the treatment environment provided. In addition, the youth consumers rated the program staff on dimensions that included fairness, concern, pleasantness, and effectiveness in helping the youth learn to solve his or her problems. In all cases, raters were assured that their anonymity would be protected. For each program, average ratings for each consumer group were computed, and an overall consumer rating for each program was obtained by averaging the ratings for all consumer groups.

DATA ANALYSIS AND RESULTS

Several analyses were conducted to compare Teaching-Family and non-Teaching-Family programs. Two sets of these analyses considered boys' and girls' programs separately across pre-, during, and posttreatment periods. In the first of these analyses, the dependent measure was

the percentage of youths with any recorded offense. In the second set, the dependent measure was average offense rate. The Teaching Family and non-Teaching Family programs were also compared on rate of institutionalization and on ratings of consumer satisfaction. A final analysis correlated consumer ratings with offense data across programs to test the validity of the consumer ratings.

Effect on Percentage of Youth Involved in Offenses During and Posttreatment

Figure 1 shows the percentage of youth involved in any offenses pre-, during, and post-treatment for both Teaching-Family and non-Teaching-Family programs. The boys' programs were quite comparable in the pretreatment years. However, there were marked differences during treatment ($\chi^2 = 7.1, p = .008$). For the girls' programs in the pretreatment year, there was a slightly higher and statistically significant percentage of Teaching-Family program youth who had offenses reported ($\chi^2 = 6.1, p = .01$). However, during treatment, fewer Teaching-Family girls were involved in offenses ($\chi^2 = 7.5, p = .006$). In the posttreatment year, the Teaching-Family programs for boys and for girls also showed lower percentages of youths involved in offenses. The posttreatment differences, however, were not statistically significant.

Effect on Criminal Offense Rate

To determine the impact of the group homes on criminal offense rates, boys' programs and girls' programs were analyzed separately. The boys' and girls' analyses involved nested designs with subjects nested within programs (couples) and programs nested within condition (Teaching-Family or non-Teaching-Family) by time period (during and posttreatment). A program was defined by the tenure of each child care couple. All youths leaving the group home during a couple's stay were assigned to that couple (i.e., program). The residential program with shift work staff was treated as a single program. Comparisons of offense rates during and post-

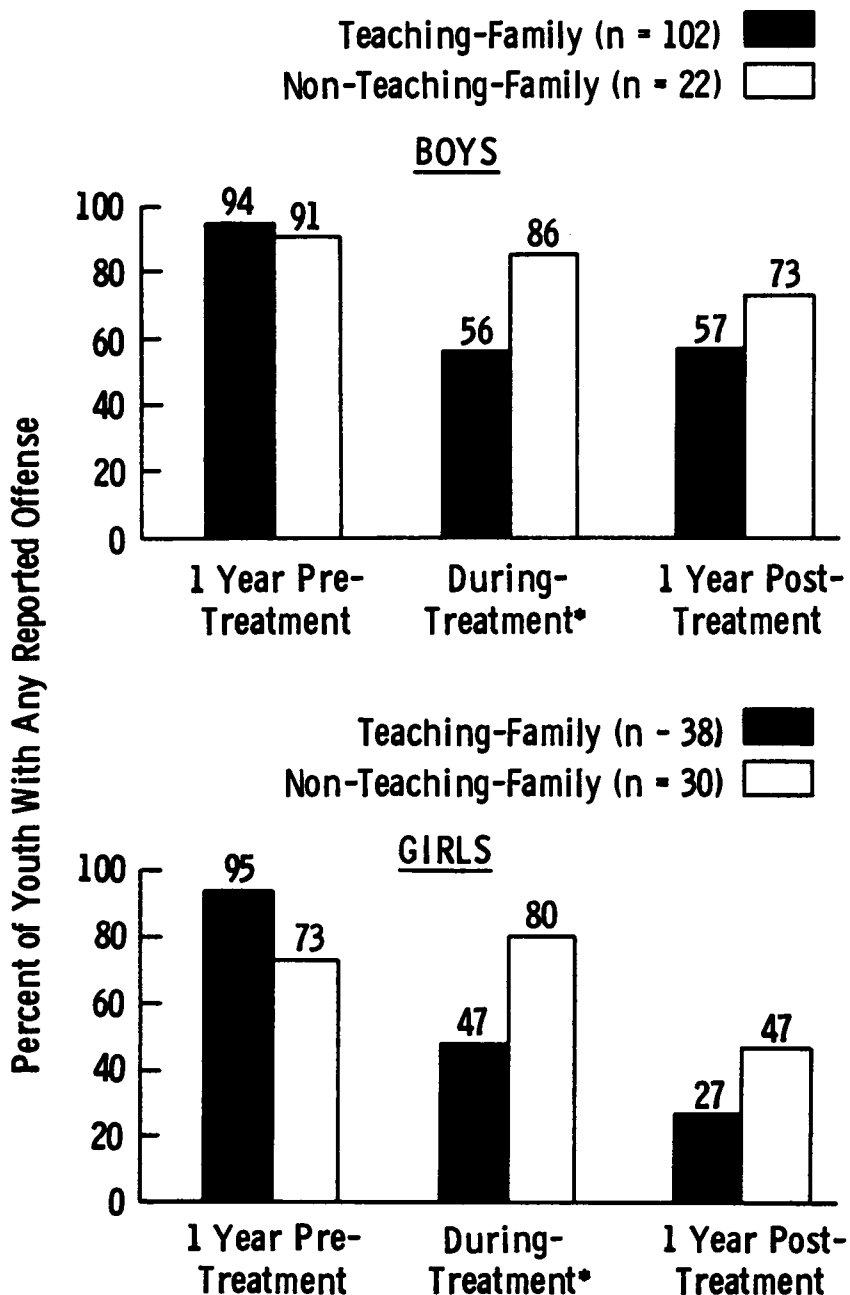
treatment were carried out using the MULTIVARIANCE computer program (Finn, 1978). This multivariate program was selected for its flexibility in handling a repeated measures nested design with group home programs of unequal size. Thus, programs with few youths were weighted less in the analysis than programs with many youths. In these analyses, the during and posttreatment offense rates were treated as separate response variables. Criminal offense rates and noncriminal offense rates were analyzed separately. The statistical analyses were conducted using offense rates per month. However, for ease of understanding and for presentation in the text and in the figures, the data were prorated to offenses per year by multiplying monthly rates by 12.

Exploratory analysis of the offense data indicated that assumptions of normality were not seriously violated. To adjust for pretreatment variables that were significantly related to the during and posttreatment outcomes, covariates were added in subsequent analyses.

Boys. The average criminal offenses for the pre-, during, and posttreatment years for boys in Teaching-Family and comparison programs are shown in Figure 2. In the pretreatment year, Teaching-Family boys' programs averaged 2.8 criminal offenses per youth while comparison boys' programs averaged 1.6 criminal offenses. These pretreatment differences were not statistically significant, $t(11) = 1.46, p = .17$. During treatment, mean criminal offense rates for the Teaching-Family boys' programs decreased to 1.3 (a 54% reduction from pretreatment levels). The pattern of decreases in criminal offenses from pre- to during treatment was representative of seven of the nine Teaching-Family programs.

In contrast, mean criminal offense rates during treatment for non-Teaching-Family boys' programs showed an increase from 1.6 to 2.9 (an 81% increase over pretreatment levels). These increases in criminal offense rates from pre- to during treatment were evident in three of the four comparison programs. In the post-

EFFECTS OF GROUP HOME TREATMENT ON PERCENT OF YOUTHS INVOLVED IN OFFENSES



* $p \leq .01$ (χ^2 Analysis)

Fig. 1. The percentage of youths involved in offenses one year pretreatment, during treatment, and one year posttreatment.

treatment year, criminal offense rates for Teaching-Family and non-Teaching-Family boys' programs averaged 1.5 and 1.6, respectively.

The statistical significance of observed differences were determined using a multivariate analysis of variance with age at first offense and age of treatment entry as covariates and criminal offense rates as the single response variable. These covariates were used because of all pretreatment variables measures (including offense levels) only age at first offense and age at entry showed a significant relationship to during and posttreatment offenses. The source table for the boys' program analysis is shown in Table 2. The analysis supports the display of during treatment differences in Figure 2. There was a significant multivariate F , $F(2,8) = 12.36$, $p = .003$) for between program comparisons, and a significant main effect, $F(2,8) = 9.97$, $p = .01$, for during treatment differences. There was no significant difference for posttreatment offenses.

Girls. The average criminal offense rates for the pre-, during, and posttreatment years for girls in Teaching-Family and comparison programs are shown in Figure 3. Rates of criminal offenses for girls were considerably lower than corresponding rates for the boys' programs. A comparison of girls' programs, however, showed patterns of criminal offense rate that were similar to those of the boys. Offense rates for Teaching-Family girls' programs decreased from .65

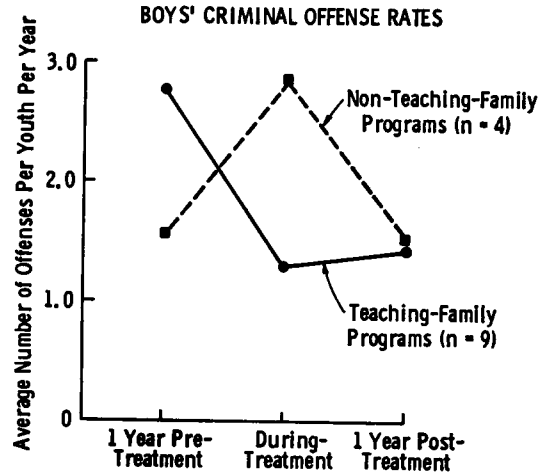


Fig. 2. The average criminal offenses per youth for the one year pretreatment, the during treatment, and the one year posttreatment periods for boys in Teaching-Family programs and in non-Teaching-Family comparison programs.

offenses in the pretreatment year to .37 during treatment. This pattern was evident in three of the four Teaching-Family girls' programs. In contrast, four of the five comparison girls' programs showed increases from the pre- to during treatment. In the first posttreatment year, the criminal offense rates were similar and low (about .10 per year) for both Teaching-Family and comparison programs.

In the multivariate analyses for the girls' programs, age at first offense was entered as a covariate due to its significant correlation with criminal offense rates during treatment. The

Table 2

Boys' Criminal Offenses—Multivariate analysis of covariance with age at first offense and age at entry into treatment as covariates and during treatment and posttreatment offense rate as response variables.

Source	df	MS	F	Multivariate F
Mean	(2,8)			3.42 ($p = .08$)
During treatment	(1)	.0207	1.44 ($p = .26$)	
Posttreatment	(1)	.0423	2.57 ($p = .14$)	
Teaching-Family vs. Non-Teaching-Family	(2,8)			12.36 ($p = .003$)
During treatment	(1)	.1429	9.97 ($p = .01$)	
Posttreatment	(1)	.0771	4.69 ($p = .06$)	
Programs within Group Homes				
During treatment	(9)	.0143		
Posttreatment	(9)	.0164		

source table for the multivariate analysis is shown in Table 3. As can be seen, there was a significant main effect, $F(2,5) = 6.61, p = .04$, for the during treatment comparison but not for the overall between program comparison. Posttreatment offenses showed no difference.

Effect on Status Offense Rates

Multivariate analyses showed no significant differences between the groups on status offenses pre-, during, or posttreatment for either boys' or girls' programs.

Effect on Institutionalization

Measures of institutionalization were obtained from the youths' court records. A youth was considered institutionalized if records showed commitment at any time during treatment or in the first year following treatment. By the end of the first posttreatment year, 25% of boys in Teaching-Family programs had spent some time in institutions compared to 27% for comparison program boys. For girls' programs, 12% of Teaching-Family girls spent some time in an institution compared to 17% for the comparison girls. The differences were not statistically significant in either case.

Consumer Satisfaction

The average consumer satisfaction ratings for the Teaching-Family and comparison programs are shown in Table 4. As the table shows, with one exception, consumer groups provided con-

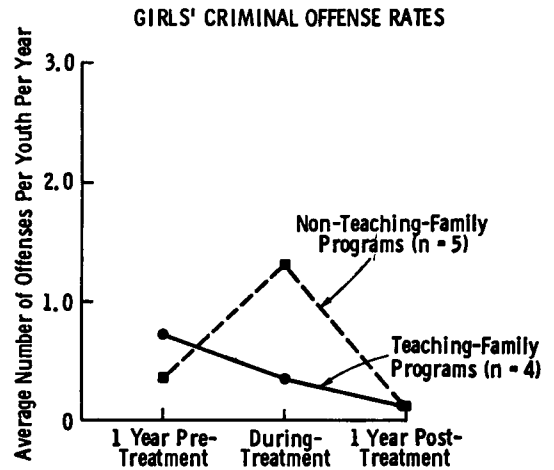


Fig. 3. The average criminal offenses per year for the one year pretreatment, the during treatment, and the one year posttreatment periods for girls in Teaching-Family programs and in non-Teaching-Family comparison programs.

sistently higher ratings of Teaching-Family programs. A one-way ANOVA showed a significant F for the between program comparison, $F(1,83) = 18.1, p \leq .05$. Individual t tests were run to compare individual consumer group ratings. In the cases of ratings by the youths, ratings by their teachers (i.e., school), and the overall average ratings, the differences were statistically significant.

Validation of Outcome Measures

In order to assess the relationship between the subjective consumer ratings and the offense measures, Pearson product moment correlation

Table 3

Girls' Criminal Offenses—Multivariate analysis of covariance with age at first offense as the covariate and during treatment and posttreatment offenses as response variables.

Source	df	MS	F	Multivariate F
Mean	(2,5)			2.71 ($p = .16$)
During treatment	(1)	.0795	5.90 ($p = .05$)	
Posttreatment	(1)	.0015	2.70 ($p = .15$)	
Teaching-Family vs. Non-Teaching-Family	(2,5)			3.40 ($p = .12$)
During treatment	(1)	.0890	6.61 ($p = .04$)	
Posttreatment	(1)	.0000	0.03 ($p = .86$)	
Programs within Group Homes				
During treatment	(6)	.0135		
Posttreatment	(6)	.0005		

Table 4
Mean Ratings of Consumer Groups

<i>Consumer Group</i>	<i>Teaching-Family Programs</i> (<i>n</i> = 13)	<i>Non-Teaching-Family Programs</i> (<i>n</i> = 5)	
Overall Evaluation	6.4	5.6	$t(14.2) = 4.72, p = .01$
Youth	6.5	5.0	$t(12.1) = 11.99, p = .01$
School	6.1	5.3	$t(5.3) = 2.53, p = .05$
Juvenile Court	6.7	6.6	$t(5.0) = .65, p = .55$
Social Welfare	6.3	6.3	$t(13.8) = -.88, p = .88$
Parents	6.4	5.9	$t(5.1) = .95, p = .39$
Board	6.4	6.1	$t(7.7) = .98, p = .36$

coefficients were computed. To adjust for differences in pretreatment offense rates for each program, treatment effectiveness ratios were obtained for criminal offenses and for total offenses by dividing offense rates during treatment by offense rates in the pretreatment year. The effectiveness ratios during treatment for each Teaching-Family and comparison program were then correlated with the ratings obtained from each program's consumer groups (e.g., board of directors, juvenile court personnel, the youths' teachers, and the youths).

Correlations for both criminal offenses and total offenses are presented in Table 5. Of the two effectiveness ratios used, those obtained using criminal offenses were more highly correlated with consumer ratings. Of the consumer groups surveyed, the youths' ratings of the group home staff were the most highly correlated ($r = -.66$) with reduction in criminal offenses from the pretreatment to the during treatment interval. Specifically, the higher the youths' ratings of the fairness, concern, effectiveness, and pleasantness of the staff, the lower the criminal offense ratios. The ratings provided by the youths' teachers provided the second best indicator of program effectiveness ($r = -.56$). The correlations for other consumer groups were not statistically significant.

The correlations obtained when total offense rates (which included status offenses) were used in the computations were consistently weaker than those obtained with criminal offenses; however, the youths' ratings were again most highly

correlated with effectiveness ($r = -.56, p = .01$). Similar analyses were done using posttreatment effectiveness ratios, but no significant correlations were found.

DISCUSSION

The results of this evaluation of Teaching-Family programs are somewhat encouraging on the one hand and discouraging on the other. Teaching-Family programs for boys and for girls were superior to non-Teaching-Family programs on during treatment measures of percent-

Table 5
Correlation of Consumer Ratings with
During/Pre Criminal Offense Ratios

<i>Consumer Group</i>	<i>r</i>	<i>p</i>
Overall Evaluation	-.49	.01
Youth	-.66	.001
School	-.56	.01
Social Welfare	-.51	.01
Juvenile Court	-.32	.08
Parents	+.15	.27
Board of Directors	+.05	.42

Correlation of Consumer Ratings with
During/Pre Offense Ratios for Total Offenses

<i>Consumer Group</i>	<i>r</i>	<i>p</i>
Overall Evaluation	-.34	.07
Youth	-.56	.01
Juvenile Court	-.36	.06
School	-.32	.09
Social Welfare	-.31	.10
Parents	-.08	.38
Board of Directors	+.13	.30

age of youths involved in alleged offenses, rates of alleged criminal offenses, and youth and teacher ratings of the quality of treatment. Although not reported in the results, analyses were also conducted without the original Achievement Place program. These analyses were done to remove the effects of a program that was unique due to extensive involvement in program development and research activities. Without the original program, the group differences remained. Thus, the differences we report in the results were not dependent upon any unique effect of the original program. Although the data must be considered cautiously given the limitations of design and measurement to be discussed later, it appears that the Teaching-Family programs provided a set of conditions that reduced delinquent behavior during treatment to a greater degree than the comparison programs, and did so in a manner that produced more positive ratings by the youth participants. The increased rates of delinquency seen during treatment in a majority of the comparison programs seem to illustrate that placement in some group homes may exacerbate the problem it is intended to solve. A similar increase in officially recorded rates of delinquency during treatment has also been found in an evaluation of group homes in the state of Washington (O'Connell, Note 3). Thus, our findings of increases in delinquency during group home treatment are not unique. Increases in deviance during treatment have also been reported in delinquency programs other than group homes (e.g., Berleman et al., 1972).

In contrast to the during treatment differences, the posttreatment differences seen in the percentage of youths involved in offenses were not statistically significant nor were there significant differences in the rates of criminal offenses or in the percentage of youths institutionalized. As described in the introduction, the history of evaluation of delinquency treatment has been one with few positive or promising results either during or posttreatment. Findings of no significant differences have been the rule.

Although the posttreatment results of this evaluation appear to be generally consistent with this history, the during treatment effects are not.

The conclusions of this evaluation must be stated tentatively due to limitations in the design of the study, the small sample size, and the outcome measures. The design did not incorporate random selection of programs or random selection of youths for those programs. However, the selection of comparison programs by state agency personnel appeared to result in comparison programs that were similar to those Teaching-Family programs that we selected on the basis of proximity to our research site. On the issue of random selections of youths, we should point out that in spite of several attempts to achieve random selection of youths into group homes, we were unsuccessful in gaining the needed cooperation of the judges and social workers making those placements. This experience is quite consistent with that reported for many evaluators conducting field experiments in social service (Wortman, 1975). Although randomization was not possible in this study, assignment of youths to homes appeared to be on a space-available basis and our measurement of youth characteristics indicated that youths were generally comparable. The Teaching-Family youths did have higher rates of offenses in the pretreatment year and the percentage of youths involved in those offenses was also higher for Teaching-Family youths. During treatment, both measures were significantly lower than for the comparison group. This cross-over effect has been described as one of the more interpretable outcomes in nonequivalent group designs (Cook & Campbell, 1979).

The analysis would have been strengthened by the use of a no-treatment control group. Such a group would have told us what likely would have happened to the youths had no intervention occurred. Although a no-treatment group might have been possible if the youths had been mild, first-time offenders (cf. Alexander & Parsons, 1973), the more serious histories of the youths in the present study precluded welfare

and court officials allowing such a control group for practical as well as ethical reasons. Our design was therefore a "best available therapy" comparison (O'Leary & Borkovec, 1978).

In this evaluation, our primary measures of effectiveness were derived from official police and court records. Officially reported delinquency has been the most common measure used in evaluations of intervention programs for juvenile offenders. However, as Elliott and Voss (1974) have pointed out, court and police records of offenses are of limited usefulness as an index of actual delinquent behavior. Official records underestimate the volume of delinquency because not all delinquent acts are officially recorded. Those acts that are officially recorded are probably not a random sample of the acts that occur. Elliott and Voss (1974) reviewed the empirical research on official records and concluded that official records are often biased on the basis of the youth's socioeconomic status, ethnic background, demeanor, age, sex, and size. However, we would expect any biases in official measures to be equally distributed across the groups in this study, and thus it should still be possible to examine group contrasts.

Some investigators have recommended the use of self-reported measures in delinquency research since this should avoid many of the biases of official records (Nye & Short, 1958). However, self-reported delinquency measures have their own methodological problems of reliability and validity (Elliott & Voss, 1974). The best solution would seem to involve collection of both self-reported and officially recorded offense data. Several authors have reported a convergence between official and self-report measures supporting the general validity of each (Elliott & Voss, 1974; Gold, 1970). We have recently begun to use self-report measures of delinquency in addition to officially recorded measures as part of a current longitudinal study of a new sample of Teaching-Family and non-Teaching-Family programs in Kansas. Preliminary findings indicate that Teaching-Family pro-

gram youth report significantly fewer offenses during treatment than comparison program youth. We do not yet have posttreatment data on these new samples. These preliminary results add support to the findings of our present study based on officially recorded offenses.

The official measures in this study were supplemented by subjective consumer ratings of program quality. Although consumer measures have their limitations and may be affected by the conditions under which they are obtained (Wolf, 1978), we found overall consumer ratings and the ratings of two consumer groups in particular to be correlated with officially reported offenses, supporting the validity of both consumer and official measures. The validity of the consumer measures has been further supported by two recent studies which found youth consumer ratings to be correlated ($r = -.82$ and $-.50$, respectively) with self-reported delinquency (Solnick, Braukmann, Bedlington, Kirigin, & Wolf, 1981; Bedlington, Solnick, Braukmann, Kirigin, & Wolf, Note 4).

In looking at the rank order of correlations for each consumer group, we found what appears to be a fairly direct relationship between the predictiveness of the ratings and the level of direct contact the group had with the program. That is, the youths and their teachers (who were in almost daily contact with the youths) appeared to provide the best indicators of a program's effectiveness in reducing criminal offenses. The ratings provided by the board of directors, who typically had little direct contact with a treatment program or with the youths, showed a near zero correlation with effectiveness. We also found that program consumer ratings were more highly correlated with criminal offenses than with overall offenses suggesting that consumers may have been more sensitive to a treatment program's effect on criminal offenses than on the total volume of offenses.

As stated earlier, the during treatment differences between groups favored the Teaching-Family programs on measures of criminal of-

fenses and consumer satisfaction. However, there were variations across the Teaching-Family programs on both measures, with some programs performing better than others. In attempting to understand these during treatment differences across Teaching-Family programs, we have conducted several analyses. The first analysis examined the role that amount of teaching parent training played in affecting the youth outcomes. In this analysis, we found that those youths who left their programs at a time when their teaching parents were further along in the Teaching-Family training sequence had better outcomes during treatment than did the youths who left their programs when their couples had less training. Experience alone accounted for less of the outcome than did amount of formal training. These general findings have been supported by Jones (Note 5) as part of his independent evaluation of Teaching-Family programs.

In our recent attempts to understand outcome variations in Teaching-Family programs we have employed self-reported delinquency measures and direct behavioral observations of treatment interactions between teaching parents and youths. Our initial findings suggest that measures of amount of teaching provided by teaching parents (which includes praise, description of appropriate behavior, rationales, skill rehearsal, and feedback), as well as measures presumed to indicate the amount of teaching parent reinforcing value, are strongly and inversely related to self-reported delinquency (Solnick et al., 1981; Bedlington et al., Note 4). Such findings are helping us to identify important treatment variables and may help us to refine further the treatment approach. Such findings also suggest an interpretation concerning the during treatment differences in delinquency found between Teaching-Family and comparison programs. These differences might have been due in part to differences between the two sets of programs in those variables that we have found to be related to outcomes in Teaching-Family programs: namely, staff training and treatment in-

teractions. In this regard, the amount of training provided by the staff in the comparison programs in the present study appeared less extensive and systematic than training provided to teaching parents. Furthermore, preliminary direct observations of comparison and Teaching-Family programs have found that there are indeed differences between the groups on directly observed measures of staff treatment interactions (Bedlington, Braukmann, Kirigin, & Wolf, Note 6).

Declines from the pre- to the posttreatment periods in percentage of youths offending and in offense rates were seen across all groups. Such declines are often reported in delinquency evaluation studies and may be uncritically taken as a sign of effective treatment (Maltz, Gordon, McDowall, & McCleary, 1980). However, such declines may be due to the likelihood that youths with recent high rates of offenses will be selected by agencies for intervention, thereby increasing the chance of a regression artifact. Additionally, cross-sectional and longitudinal research both suggest that arrest rates peak at mid-adolescence and decline thereafter (Glaser, 1975; Wolfgang, Figlio, & Sellin, 1972). Such declines with age are also indicated by self-report data that find a mid-adolescence peak in proportion of youths admitting delinquent activity (Elliott, Note 7). The combined problems of regression and maturation mean that it is difficult to interpret the pre-to-post decreases in offenses. One solution to the limitations of delinquency rate measures might be the use of additional measures, including more positive and perhaps more sensitive measures. For example, self-reported delinquency measures might not be as subject to serious maturational effects as officially reported delinquency.

The limitations in offense rate data described here, as well as those limitations described earlier in this discussion, suggest the need for cautious interpretation of differences between the groups posttreatment. Nevertheless, the data show no differential lasting impact of the Teaching Family programs. We might expect such a

result to the extent that the posttreatment environments of both groups of youths are likely to have been similar. To obtain differential effects during the posttreatment period may well require further study of and intervention within the posttreatment environment.

A recent report by Jones, Weinrott, and Howard (Note 8) described the results of a national evaluation of the Teaching-Family model that began in 1975. The evaluation involved 26 community-based programs that were using the Teaching-Family Model at the time the study began, and 25 comparison programs. The comparison programs were located within the same regions and were likely alternative placements had the Teaching-Family programs not existed. Three-year follow-up data were reported. For Teaching-Family and comparison programs, nearly equivalent impacts were found on measures of official offense rates, self-reported offense rates, institutionalization, self-esteem, and acquisition of adult roles. However, on the positive side, the Teaching-Family programs were significantly better on measures of school grades during treatment and on measures of consumer ratings of effectiveness and satisfaction. Also, the costs per youth for the Teaching-Family programs were 20% less than for the comparison programs.

The Teaching-Family group home programs in the Jones *et al.* study were sponsored by three different Teaching-Family training sites, including ours at Kansas. Each of the sites worked exclusively with community-based programs. Both non-Kansas sites were new when the study began and, unfortunately, one of the sites never was implemented adequately due primarily to insufficient staff. For example, for a significant portion of the study period, no one trained in the model was supervising the site and its training and quality-control activities. In their final report, Jones and his colleagues did not present the data analyzed by training site. However, earlier in their research efforts (at a time when approximately 80% of the subjects were in the study), Jones provided us with court-

record offense data that were analyzable by site (Jones, Note 9). The court data indicated that as of that time, the homes from the Kansas site had during treatment levels of criminal offenses that were about half the levels of their comparison programs. (The pretreatment levels of offenses were comparable for these groups.) These during treatment data are consistent with the findings we have reported here and with those in our more recent self-report data on Kansas homes.

Those court data (Jones, Note 9) also indicated that the during treatment differences in court data favoring the Teaching-Family homes in the Kansas site were not evident at the other two sites. This failure to find that Teaching-Family programs were better (at least on court measures) than comparisons at these first two replication sites is reminiscent of initial difficulties in replicating the original Achievement Place group home program when we first began working with other group homes in Kansas (Phillips, Phillips, Fixsen, & Wolf, 1973). It should be emphasized that these replication sites were relatively new, and involved youths who were in treatment several years ago. The differences favoring the Kansas site may no longer hold for current replication sites for a number of reasons, including the quality control procedures of the National Teaching-Family Association. Those of us associated with the Teaching-Family approach look forward to the opportunity of trying to improve our effectiveness in Kansas as well as at other sites, and are directing our current research efforts toward that end.

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