

DOCUMENT RESUME

ED 133 668

CG 011 038

AUTHOR Hartley, Wynona S.  
 TITLE Preventive Outcomes of Small Group Education with School Age Children. An Epidemiologic Follow Up of the Kansas City School Behavior Project.  
 SPONS AGENCY National Inst. of Mental Health (DHEW), Bethesda, Md.  
 PUB DATE [15 Mar 76]  
 NOTE 8p.  
 EDRS PRICE MF-\$0.83 HC-\$1.67 Plus Postage.  
 DESCRIPTORS \*Behavior Problems; Delinquency Prevention; Dropout Prevention; Elementary Education; Elementary School Students; Followup Studies; \*Interaction Process Analysis; Mental Health Programs; \*Small Group Instruction; \*Student Behavior; \*Student Development; Teacher Workshops; \*Teaching Styles  
 IDENTIFIERS \*Kansas City School Behavior Project

ABSTRACT

The Kansas City School Behavior Project was an experiment intended to enhance the social-emotional development of individual pupils through treatment of mild behavioral disturbances and primary prevention programs; utilizing the teachers in their roles as group leaders. The teachers in the experimental group received summer training in the methods and techniques of small group interaction, and were given support through the school year by project staff in weekly meetings. An epidemiologic follow-up indicated more positive teacher ratings of work habits and fewer absences. Data from family files demonstrated prevention effects, whereas school data varied, showing limited positive effects and some negative effects. Community data from police and juvenile court tend to confirm the prevention effect, though police data's positive effect wore off in the final year. Recommendations for future implementation and evaluation of this approach are suggested. (KS)

\*\*\*\*\*  
 \* Documents acquired by ERIC include many informal unpublished \*  
 \* materials not available from other sources. ERIC makes every effort \*  
 \* to obtain the best copy available. Nevertheless, items of marginal \*  
 \* reproducibility are often encountered and this affects the quality \*  
 \* of the microfiche and hardcopy reproductions. ERIC makes available \*  
 \* via the ERIC Document Reproduction Service (EDRS). EDRS is not \*  
 \* responsible for the quality of the original document. Reproductions \*  
 \* supplied by EDRS are the best that can be made from the original. \*  
 \*\*\*\*\*

ED 133668

Wynona S. Hartley, Ph.D.  
Department of Community Health  
University of Kansas Medical Center, Kansas City

U.S. DEPARTMENT OF HEALTH,  
EDUCATION & WELFARE  
NATIONAL INSTITUTE OF  
EDUCATION  
THIS DOCUMENT HAS BEEN REPRO-  
DUCED EXACTLY AS RECEIVED FROM  
THE PERSON OR ORGANIZATION ORIGIN-  
ATING IT. POINTS OF VIEW OR OPINIONS  
STATED DO NOT NECESSARILY REPRESENT  
OFFICIAL NATIONAL INSTITUTE OF  
EDUCATION POSITION OR POLICY

## PREVENTIVE OUTCOMES OF SMALL GROUP EDUCATION WITH SCHOOL AGE CHILDREN

### An Epidemiologic Follow Up of the Kansas City School Behavior Project

#### Problem Definition

The impetus for the Kansas City School Behavior Project derived from difficulties posed for the schools by pupils who did not function successfully or satisfactorily with their fellow human beings. Efforts to solve these problems through clinical service arrangements had proven inadequate to the need. A committee composed of representatives of the Kansas City School District, the Greater Kansas City Mental Health Foundation, and the School of Education at the university met to explore the nature of the problem, assess needs and develop ideas for action programs. The committee developed a primary prevention strategy which would deal with existing problems, and prevent the development of serious behavioral disturbances in future years. This work culminated in an action-research proposal to NIMH.

The program was initiated by Homer Wadsworth, then president of the school board, who asked the newly formed mental health foundation if some real prevention could be done, instead of just talked about. He offered a \$25,000 seed-money grant for the purpose. The foundation director, Dr. Robert Barnes, accepted the challenge. NIMH was active in the early planning process, largely in the person of Dr. William Hollister.

#### Goals and Objectives

The Kansas City School Behavior project was an experiment intended to enhance the social-emotional development of individual pupils. The program was expected to treat mild behavioral disturbances in children in the school setting, to prevent severe behavioral disturbances among these children in the adolescent years, and to have this effect in the total community as well as in the school setting. The design was to be executed within the resources of the personnel and time budget of the regular school system, utilizing the teachers in their roles as group leaders. People in Kansas City felt that any long range solution would require extensive effort on the prevention of behavioral problems rather than on treatment after the problem became serious. Such efforts were to be directed toward the development of classroom methods and techniques in which teachers could be trained. These methods and techniques were intended to produce learning conditions in the classroom which would be more emotionally healthful for all children.

CG 011018

## Intervention

Teachers in the experiment were regular sixth grade teachers in the Kansas City school system. Sixty teachers were selected from a pool of 90 volunteers, and divided into an experimental and a control group. The teachers in the experimental group received summer training in the methods and techniques of small group interaction, and were given support throughout the experimental school year by project staff directed toward assisting the teachers in their efforts to implement the new approach in the classroom.

A multi-disciplinary approach was used, derived from concepts in educational sociology, group dynamics, psychology and psychotherapy. The exploration of feelings, the use of small groups as a vehicle for social and academic motivation, and the recognition of and dealing with social system and social class differences were three central themes in the training program. The teacher was taught to relinquish her authoritative position and to become a resource person and group member.

The two week summer workshop, primarily training in small group techniques, included daily problem-oriented sessions. After the workshop, teachers met as small groups with project staff once a week throughout the school year, discussing problems and techniques of implementation. Advanced seminars were offered the following year by popular demand.

The children said school was more fun than it was in straight rows. Pupils had more opportunities for verbal interaction, and felt they had a better understanding of themselves and others. Peer support was valued highly, as well as opportunities to lead, and to be open. Behavior of disruptive pupils improved, as did that of the withdrawn. Appropriate flexibility seemed to be the general outcome for all of the children.

## Implementation

In terms of the effort involved for teachers, school administrators and students, the program is well within the reach of any school system. Teacher training and support for the schools at all levels could be accomplished through community mental health centers. The intervention process can be used very effectively without any significant expenditure of funds.

## Evaluation and Results

The Kansas City School Behavior project was intended to devise and test the effectiveness of a program of action for primary prevention. Early data indicated there might be positive results for one segment of the pupil population three years after the experiment took place. This pattern of differences was observed in referrals, suspensions, absence rates and teacher ratings.

We proposed an epidemiologic follow-up to answer our questions about the outcome of the project. The strategy for the analysis was: 1) to test again for positive or negative outcome, with emphasis on the ninth grade year, but also checking for earlier findings which might tie outcome more closely to intervention; 2) to test whether the apparent ninth grade year finding could be shown to persist into the following two grade years; 3) to test whether this apparent prevention effect could be buttressed with data from outside the school system, giving it both greater credence and value; and 4) to attempt to specify epidemiologic conditions under which the prevention effect was valid or invalid, or was more or less pronounced. If the data produced answers in these areas, we felt we could reasonably make recommendations for the design of future intervention efforts for the health of children and youth consistent with our findings and our understanding of the relationships among the important factors delimited in our analysis.

Our attempt to answer these questions required data collection: 1) of absence rates, teacher ratings and family file referrals for behavior problems for two further school years, extending the time of the follow up to five years, or the eleventh grade year; and 2) police records and juvenile court records for the entire life of each child in the socio-economic cohort up to and including the eleventh grade year. Many other indicators might have been used. Our concern was that we duplicate the earlier data on a longer time line, and that we utilize real-life variables; records which are kept as an ordinary process, not conjured up for our benefit, and records which are consequential in the lives of children in their communities.

In order to give the most conservative answer to these questions we assumed the null hypothesis, pooled the experimental and control group frequencies, and compared the experimental condition with the (pooled) expected frequencies. We also made the standard experimental/control comparisons characteristic by characteristic, for investigators more familiar with that process and its outcome properties.

Processing the data from previous follow up investigations, and some new data from our search indicated that the Experimental and Control groups were indeed comparable. Differences in the outcome charts should not be attributed to loss in follow up, or dropping out, or social and economic differences. Loss rates were well within acceptable limits (less than 10% over five years) and a review of the

characteristics of remaining pupils does not suggest any special bias. There were no statistically significant differences in dropping out, in the Experimental and Control comparisons. The neighborhoods the elementary schools served were carefully matched for socio-economic status. All neighborhoods involved were in one socio-economic category, the lowest in Warners five category breakdown. Bussing had not yet begun. Stanford-Binet scores produced means for the two groups within .3 of each other. Behavior problem data recorded in the schools, juvenile court and the police files, if anything, favored the control condition.

Early analysis for comparability of the Experimental and Control groups suggested three epidemiologic variables which might affect outcome: 1) sex, 2) race, or ethnic identification and 3) later school environments in junior and senior high. The experiment took place in sixth grade. From there, most students went on to junior highs, scattering somewhat in the various schools in their part of the school district.

Once we were satisfied that the control group and the experimental group were sufficiently comparable for analysis, we divided the study population into six study groups which were homogeneous for sex, race or ethnic classification and schools attended after the experimental year.

We found that you could do something about what happens to a kid in high school, in terms of social behavior, by teaching certain skills to a sixth grade teacher.

School data indicate a prevention effect dating from the experimental year, demonstrated in Teacher Ratings of work habits, taking responsibility, getting along with others and self-control. By teacher estimate then, the experiment worked. Absences from school suggest that the students estimated a positive effect as well. Absence rates indicate a prevention effect in our largest study group in the Experiment, (Group #2) immediately following the experiment, and for the total group by the following year. Differences reach statistical significance two years after the experiment, but the pattern is evident from the sixth grade on. Family File data demonstrate prevention effects beginning in the experimental year, and continuing through the four years which follow. The effect tends to disappear the fifth year of the follow up, suggesting a need for reenforcement of the intervention about that time. School Data confirms the report of a positive ninth grade finding, and extends that positive report back to the experimental year and forward into the tenth and eleventh grade years by most measures.

Data are subjected to the most conservative test our consultants could recommend, and presented also in more typical fashion as a direct experimental/control comparison. They are further tested against epidemiologic variables, chosen in early analysis of the cohort for comparability of the Experimental and Control groups.

School Data also indicates that the prevention effect may be pretty well confined to appropriate later school environments, and that it may have been dysfunctional in others. The positive effect for the Experimental group is often reversed at Lincoln School.

Community Data also indicate a prevention effect which may date from the experimental year, although this effect is not as clear at that point in time as the Family File Data effect. Statistically significant differences in the proper direction begin two years after the experiment, in the ninth grade year, in both Police and Juvenile Court data, and continue into the tenth grade year in the Police Data. The pattern is clear throughout the Juvenile Court data: the lines begin to converge after the experiment, cross about a year later, and then remain in proper relationship to each other throughout the follow up period. Police data present a very similar set of curves, but the positive effect seems to wear off in the final year of the follow up, in that data. However, at the very least, Juvenile Court and Police Data tend to 1) confirm the prevention effect, particularly the ninth grade finding, and 2) extension of the prevention effect into later years, 3) buttressing the School Data findings with findings from social systems of the larger community.

The prevention effect appears to be 1) real, 2) lasting, 3) generalizable to the community.

### Recommendations

The major recommendation suggested by our data is that small group techniques from the mental health field be incorporated in the school classroom. If these behavioral outcomes can result from one year of such teaching, it is possible that implementation K-12 would change the face of our problem. The Report of the Joint Commission on the Mental Health of Children and Youth suggested we have 95,000,000 children in need of remedial help. If official records are an adequate index, behavior problems are outracing our capacity to deal with them. Prevention is the key to the future.

What works? In a broad sense the teacher training program which constituted the independent variable in the Kansas City School Behavior Project represents a way in which community mental health centers and local schools might more deliberately and explicitly attempt to meet their obligation in the area of the social and emotional development of children and youth. If successful, these programs would both reduce the need for help and increase the effective manpower ratio.

### Successes and Failures

The prevention effect and the change in teacher operations which made it possible were major successes.

The major problems associated with the Kansas City School Behavior project seem to have been those generally associated with planning, operating and evaluating social action programs: meeting the sometimes conflicting needs of the participating interest groups; planning, operating and evaluating as we went along; and a limited perspective which controlled the data gathered. Most of these problems were a result of the experimental nature of the project, and its relationship to the real school world. For instance, it would not be necessary in future implementations, to keep the principals out of the classrooms, as was done in the original project. This procedure removed an important source of support teachers were used to having, and needed.

Data suggests reinforcement would be useful for the pupils at about the 10th grade level. Problems associated with the evaluation also need not recur. Tools had to be developed, and methodology built, which can now be utilized by others as needed. Any new experiment in this area should incorporate data on the later school environments, to make recommendations about the nature of the most effective environments for reinforcing the press of the intervention.

Any experimental work should be planned on a basis which can be maintained for at least five years, incorporating studies of the later environments, if our experience is meaningful.

Direct implementation need not be accompanied by such an extensive research design. A very few, very simple outcome factors would suffice to establish accountability.

Funding  
Sources

The Kansas City School Behavior Project was a pilot experimental project. As such, there was a tremendous amount of staffing and research for planning and evaluative purposes. That part of the project is not necessary to the operational aspects of the intervention. The actual techniques and approaches of the intervention can be used very effectively without any significant expenditure of funds. The project originated with a \$25,000 planning grant from local sources. Both the school system and the mental health foundation held NIMH grants to operate and evaluate the project during the decade of the 1960s. The Institute for Community Studies completed that grant sequence in about 1967. The Greater Kansas City Mental Health Foundation reclaimed the project under its contract with NIMH to operate the first Epidemiologic Field Station for Mental Health in 1968. At the Field Station, the project was assigned to Dr. Hartley, who later joined the faculty of the University of Kansas Medical School, and completed the project evaluation funded by a grant from the NIMH Center for Epidemiologic Studies.

Wynona S. Hartley, Ph.D.  
Principal Investigator  
Department of Human Ecology  
and Community Health  
University of Kansas Medical Center  
Rainbow Blvd. at 39th St.  
Kansas City, Kansas 66103  
Phone: (913) 831-7175

March 15, 1976