

*Extension &
partial replication*

Treatment Interactions, Delinquency
and Youth Satisfaction

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A relationship between parent variables and adolescent deviancy has been suggested by a variety of psychological and sociological studies (J. Conger, 1977; Glueck & Glueck, 1950; Hirschi, 1969). For example, it has been reported that youths were less likely to be deviant if their parents provided "adequate supervision," employed "consistent, love-oriented discipline," or were involved in a reciprocal "attachment" relationship with their children.

While these variables were not conceptualized in terms of social learning theory, they would seem to be related to specific, observable parenting behaviors and reinforcement contingencies. For example, supervision and discipline might be operationalized as the parents' ability to monitor, prompt, instruct, provide positive or negative consequences as well as verbal descriptions of the potential natural consequences of the child's behavior. Attachment might be viewed as a reflection of the parents' reinforcement value for the child. Thus, the inverse relationship between these variables and deviancy would be predicted, according to social learning theory, due to their role in affecting the parents ability to teach, mold, shape and reinforce appropriate behavior, and while punishing inappropriate behavior.

So in the present study we looked across a number of group homes and directly observed the parenting behaviors of the staff. We were interested in knowing whether these behaviors would be related to less delinquency, and in light of the outcome results, whether the parenting behaviors would be related to greater satisfaction among the youths.

METHOD

Subjects and Setting

Fourteen community-based Teaching-Family homes for delinquents served as settings. Couples operating the homes were at various stages of training and implementation of the treatment approach.

Measurement

Both behavioral and questionnaire measures were obtained. Behavioral measures involved the observation of teaching-parent interactions with youth occurring under natural conditions of the group home settings. Each of the 14 homes was visited once for approximately two hours. The observation session began when the youths arrived home from school and continued until dinner time. The observer circulated through the house every 10 minutes observing each teaching-parent and youth for 10 secs. Interactions between teaching-parents and youths were scored and classified as teaching, counseling, or other social interactions.

Teaching was scored when the teaching-parent engaged in any one of the following teaching behaviors while interacting with a youth. The teaching components included:

1. Praise or approval of a youth's behavior. This included positive comments regarding a youth's behavior.
2. Descriptions of the youth's appropriate or inappropriate behavior. These could be given as part of descriptive praise, instructions, or descriptive feedback.
3. Behavioral instructions. This included modeling, as well as statements which explained how to do a social, academic, maintenance, or other treatment-related skill, such as how to control one's temper, how to do math problems, or how to prepare meals.

4. Reasons. These were statements that explained why a youth's behavior should or should not occur in the future. Typically, these reasons included statements of the potential, natural consequences of the youth's behavior (e.g., "If you become angry with your teacher, you could be expelled from school.").
5. Point consequences or explanations of the token economy included the delivery or withdrawal of token economy points, as well as any discussions of the operation of the point system in general.
6. Practice and feedback included having the youth practice a new skill or giving him feedback on the practice.
7. Help with homework included quizzing a youth, listening to a youth recite, or supervising other school-related work.

Private counseling was scored when a teaching-parent and one youth were engaged in a private discussion of personal problems or treatment planning in a relatively isolated area of the house.

Other social interactions included all interactions or shared activities between teaching-parents and youths that were not teaching or counseling interactions. Thus, other social interactions included such activities as a T-P and a youth watching TV together, engaging in recreational activities, or casual conversation.

Questionnaire Procedures. Two questionnaires were administered to the youths in a private interview format, usually following the observation session.

The Self-Reported Delinquency (SRD) questionnaire (Elliot and Voss, 1974) consisted of 13 questions regarding the frequency with which the youths engaged in various delinquent acts since entering the group home. A 4-point ordinal scale was used. Examples of the deviant activities included driving

a car without the owner's permission, skipping school, running away from home, stealing, destroying public or private property, and using drugs. The validity of this instrument as a measure of delinquent behavior appears to have been demonstrated by its authors.

The Program Satisfaction Questionnaire included 15 questions regarding the degree of satisfaction that the youths felt toward the treatment program and the staff (Phillips, Phillips, Fixsen, & Wolf, 1974, Note 1). A 7-point scale was employed. Dimensions of program fairness, effectiveness, helpfulness, and overall quality, as well as the staff's pleasantness and concern were evaluated.

Test-retest reliability on both questionnaires was assessed and shown to be quite high.

Measures. For the analysis, home means were computed on each of the behavioral interaction measures. Additionally, teaching, counseling, and social interactions were combined to provide a measure of total interaction with youths.

RESULTS

Figure 1 shows the average amount of interaction occurring across the 14 homes, along with the range of interaction levels across the 14 homes. On the average the adults were interacting with the youths during 63% of the intervals (range 21% - 96%): teaching during 20% on the average, counseling in 4% of the intervals, and other social interactions during 39% of the intervals. So it appears that there is about twice as much social interaction as teaching, with very little private counseling occurring.

Analyses

Analysis of variance. In order to determine whether the ratings of delinquency and program satisfaction differed significantly across homes,

a one-way analysis of variance was conducted on each set of individual scores. These analyses showed significant between-home effects for both self-reported delinquency and youth ratings of program satisfaction.

Spearman rank order correlations. Next, the between-home effect was further examined with correlational analyses. Spearman rank order correlations (Siegel, 1956) were conducted with the home as the unit of analysis to determine whether the behavioral interaction measures were related to delinquency or youth satisfaction. Table 1 shows these correlation coefficients. A significant inverse relationship was found between self-reported delinquency and the total amount of adult interaction with youths ($r = -.63$, $p < .025$). However, when the categories of adult interaction were further examined, only the teaching measure maintained the significant relationship with delinquency ($r = -.86$, $p < .001$). Counseling and other social interactions were not significantly related ($r = .24$ and $-.23$, respectively) to delinquency. Thus, the significant relationship found in the total interaction with youths seemed to be a function of teaching, rather than counseling, or other social interactions.

Similar effects were obtained when these interaction measures were correlated with the youth satisfaction ratings. That is, of all the interaction measures, only teaching was significantly related to satisfaction ($r = .73$, $p < .013$). Thus, as teaching increased, so did satisfaction.

Parenthetically, this study was conducted initially with 5 homes (not included in this sample), where the interaction measures were correlated with satisfaction. A correlation of .90 was found between Teaching and Satisfaction. We then replicated those findings with another 5 homes, collecting delinquency measures as well. In this replication, the correlation between teaching and satisfaction was perfect, and between teaching and delinquency

was $-.90$. Then we extended this second sample of 5 to include the present 14 homes.

DISCUSSION

The results suggest the importance of the teaching-parents' teaching behavior as it related to the youths' delinquency and satisfaction. This seems to be in line with the previous findings in the social science literature that parenting behavior is related to delinquency.

Though we have suggested that teaching seems to have a significant impact on delinquency and satisfaction, alternative interpretations exist. For example, the direction of causality could be reversed, or another factor, covarying with the measured behavior, may really be the causal variable (e.g., the teaching-parents' use of humor or affectionate gestures).

Keeping in mind the limitations of correlational analysis, it is interesting to speculate why teaching might be a functional variable in the relationship. The simplest interpretation is that the teaching-parents who teach more are teaching prosocial behavior or alternatives to deviant behavior.

Yet, the positive nature of the teaching interactions suggests another interpretation: that is, that teaching might contribute to the reinforcement value of the teaching-parent. This is suggested by the reports of Willner and his colleagues (1977). These authors found that when youths were asked to rate videotaped interactions between teaching-parents and other youths, they selected many of the teaching behaviors as preferred interaction behaviors. Thus, teaching-parents who engage in these preferred behaviors may be more reinforcing to the youths.

On the other hand, the reinforcement value of the teaching-parent might be a prerequisite for teaching to be accepted by the youths. That is, having

a good relationship with the youths might motivate them to learn, might make the reinforcers offered by the teaching-parents more attractive to the youths, and might keep the youths in proximity to the teaching-parents to facilitate the occurrence of interaction (c.f., Maccoby, 1962). We suspect that in reality, there is a complex, mutual relationship between teaching and reinforcement value, where each enhances the other. That is, teaching contributes to the teaching-parent's reinforcement value and the reinforcement value of the teaching-parent increases the probability and effectiveness of teaching.

Our future research will focus on the further analysis of this relationship.

References

- Conger, J. J. Adolescence and youth. New York: Harper and Row, 1977.
- Elliott, D. S., and Voss, H. L. Delinquency and dropout. Lexington, Mass.: D. C. Heath and Co., 1974.
- Glueck, S. and Glueck, E. Unraveling juvenile delinquency. New York: Commonwealth Fund, 1950.
- Hirschi, T. Causes of delinquency. Berkeley: University of California Press, 1969.
- Maccoby, E. E. The choice of variables in the study of socialization. In R. F. Winch, R. McGinnis, and H. R. Barringer (Eds.), Marriage and Family, New York: Rinehart and Winston, 1962.

RANGE AND GRAND MEAN OF HOME MEANS (N=14) FOR THE INTERACTION MEASURES

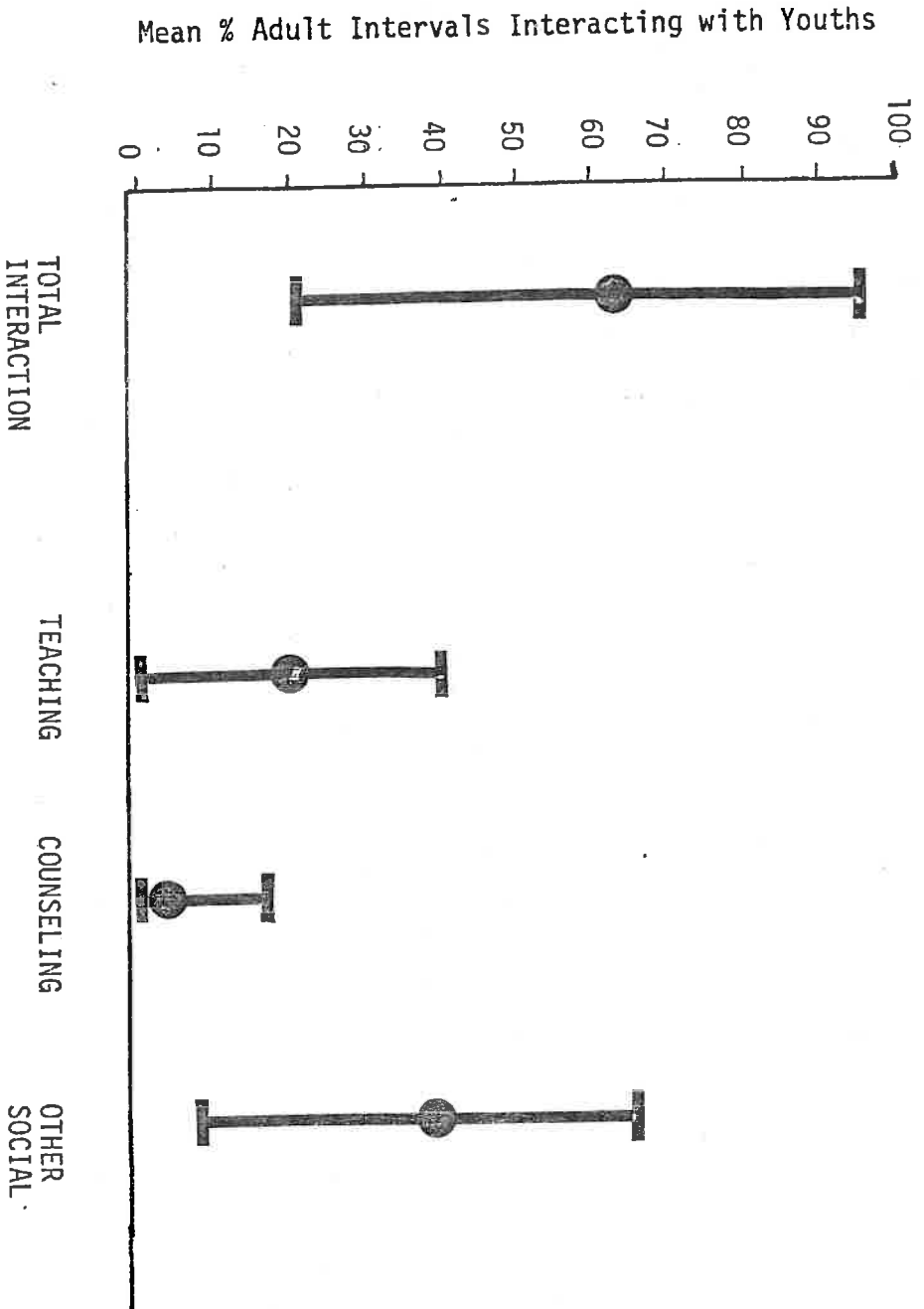


Fig. 1

Table 1

Spearman Rank Order Correlation Coefficients
of Adult Interaction Measures and Youth Ratings

% Adult Intervals	Self-reported Delinquency	Program Satisfaction
TOTAL Interaction with Youths	-.63*	.49
TEACHING Interactions with Youths	-.86***	.73**
COUNSELING Interactions with Youths	.24	-.14
OTHER SOCIAL Interactions with Youths	-.23	.20

* $p < .025$

** $p < .01$

*** $p < .001$

Process Differences and Outcome Correlates
in Teaching-Family and Comparison Programs

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One of the major objectives of our longitudinal study of Teaching-Family and comparison homes is to determine whether any outcome differences between the homes (such as those described by Kathi) are related to differences in the behavioral influences we might measure. We focused on behavior influences suggested by the social learning conceptualization described earlier. It was hypothesized that a youth's delinquency would be lowest when she or he was in an environment where there was active teaching by a prosocial adult. It was thought that this would be especially true when the adult was likely to detect and consequence the youth's illegal behavior and to teach alternatives to that behavior. Less delinquency would also be predicted if the adult had high reinforcing value for the youth. If so, the differential consequences offered by the adult (i.e., approval or disapproval) would be important to the youth. We predicted that the Teaching-Family homes would have more of these prosocial influences. This is because of the emphasis in the Teaching-Family approach on teaching skills to the youths, providing differential consequences for youth behavior, and developing reinforcing relationships with youths. Demonstrating that there were more of these prosocial influences in Teaching-Family homes than in comparison group homes would be supportive of our social learning conceptualization. In the present paper I will be describing preliminary results concerning the differences between Teaching-Family group homes and the comparison homes on measures of staff teaching and reinforcing value. The relationship of treatment influences and treatment outcome will be the focus of future analyses with larger samples. It will also be the focus of the next paper by Jay Solnick.

Method

Subjects and Setting

Fourteen community-based group homes for delinquent boys served as settings.

the youths were reinforced by the social behavior of another person, they would be more likely to engage in behavior that would produce that person's social behavior. Since being near or talking to a person was considered likely to produce that social behavior, talk and proximity seemed likely to be good reflections of the person's reinforcing value.

SLIDE 1 Staff Teaching was scored when the staff member was engaging in any one of the following teaching behaviors while interacting with a youth:

1. Praising or offering approval of a youth's behavior or personal qualities. This included making positive comments as well as giving rewards.
2. Providing explanations or instructions regarding how to do tasks, such as homework, getting along with peers, learning how to fix meals or look for jobs. This could include modeling as well as verbal description by the adult.
3. Watching and giving feedback as the youth practiced a skill.
4. Providing reasons regarding why a youth should behave in a certain way, including statements of consequences of his behavior as well as reasons regarding general knowledge issues, such as why particular laws were made.
5. Providing information regarding general knowledge, e.g., world events; public figures, news, sports, etc.

So teaching focused on several things: skill development, positive motivational techniques, and the facts and reasons surrounding everyday living. In previous research (Bedlington, Braukmann, Kirigin, & Wolf, Note 1), we found teaching to be significantly and inversely correlated with self-reported delinquency in Teaching-Family homes.

Talking was scored when the youth directed any verbalization toward an

The questionnaire measures were based on youth reports obtained in phone interviews. These interviews were given three months after a youth had entered his program. The behavioral influence questions concerned the youth's perceptions of the amount of teaching he received, and the reinforcing value of the staff to the youth. The youths responded to these questions using five-point ordinal scales.

Teaching. The questions concerning teaching surveyed the same dimensions of staff teaching behavior as were directly observed. For example, praise, instructions, feedback, and helping with academic tasks.

Reinforcing Value. The reinforcement value questions assessed the youth's relationship with the staff (e.g., how close the staff made him feel), the frequency of talking or engaging in activities together with the staff, and the importance of the staff to the youth.

Results

SLIDE 3 T-test Comparisons of Observational Measures. First, let me present the results of the t-test comparisons of the observational measures. This slide shows the mean rates for the observational measures across the Teaching-Family and comparison homes. These data are based on the first round of observations. The Teaching-Family homes are represented by the darkened bars; the comparison programs by the open bars. The top set of bars shows the rates for interactions between adults and youths (i.e., Adult Teaching Youths, Youths Talking to Adults, and Youth Proximity to Adults). The lower set of bars shows the rates for interactions between youths only (i.e., Youth Talk to Youths and Youth Proximity to Youths).

For each measure, t-tests across the two sets of group homes were conducted. As can be seen, significant differences between the Teaching-Family and comparison homes were found for Teaching and Youth Talk to Adults. More

homes to have more staff teaching than the comparison homes. Furthermore, these findings were consistent with youth reports that also indicated more teaching in the Teaching-Family homes.

We would expect Teaching-Family programs to use more Teaching behaviors because the staff had been trained to engage in these behaviors. We would also expect higher levels of teaching to be associated with less delinquency and drug use. This was, in fact, suggested by the preliminary outcome results reported by Kathi (showing significantly lower during-treatment delinquency in Teaching-Family homes). Thus, the finding of more teaching in the homes with less delinquency is one that is consistent with our conceptualization and with our previous correlational findings (Bedlington et al., Note 1). In a parallel research project we have also conducted preliminary correlations with drug use which suggest this same relationship.

Our measures of reinforcement value in the present study included the two observational measures of Youth Talk and Proximity to Adults, and the one questionnaire measure on reinforcing value. We expected significant differences between the two sets of homes on these measures. This is because the development of reinforcing value and relationships is emphasized in the Teaching-Family approach. Youth Talk to Adults did discriminate between the two sets of homes. However, Youth Proximity to Adults and the questionnaire measure of reinforcement value, while both somewhat higher in Teaching-Family homes, were not significantly different for the two sets of homes. Why is it that Youth Talk did discriminate, but Proximity and the questionnaire measure did not? It may be that youth talking to adults reflects more than just reinforcing value. It might also reflect the adult's teaching, supervision, or a combination of these variables. In other words, youth talk to adults may be a better discriminator because it reflects more of the adult's behavioral

sophisticated tests of our conceptualization, using analysis of covariance procedures. That is, the impact of the behavioral influences on outcome measures for the two sets of group homes would be tested by comparing differences in outcome and covarying for the behavioral influence measures. If we then find a significant reduction in outcome differences, we could conclude that the impact of the behavioral influences on outcome was significant. Thus, these preliminary results offer encouraging signs for our future research efforts.

OBSERVATIONAL MEASURES

ADULT TEACHING -- Praise or approval of a youth's behavior

Explanations or instructions regarding how to do academic, social, or independent living skills

Supervision of practice and feedback

Reasons for rules, youth behavior, general events

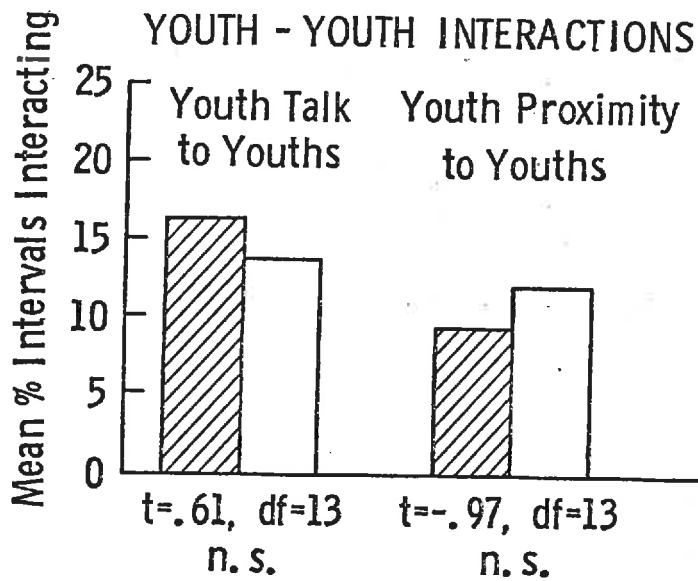
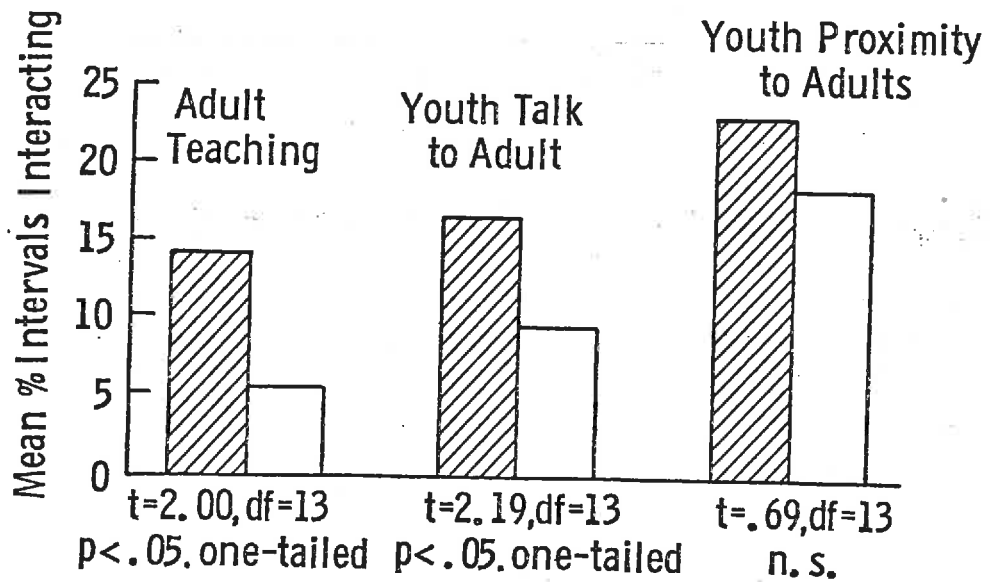
Instruction regarding general knowledge issues



YOUTH TALK -- Any verbalization said by the youth directed to another youth or an adult

YOUTH PHYSICAL PROXIMITY -- Within 3 ft of any part of any other person's body

OBSERVATIONAL MEASURES
2nd Quarter

ADULT - YOUTH INTERACTIONS



 Teaching Family Homes
 N=8 Homes; 45 Youth
 Comparison Homes
 N=7 Homes; 39 Youth