

## **Skill Deficits and Male Adolescent Delinquency<sup>1</sup>**

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*The research literature on juvenile delinquency shows that antisocial adolescents are often lacking in academic, interpersonal, and work skills. Past research on antisocial adolescents has focused primarily on the relationship between single skill deficits and official delinquency. The present report extends this body of literature by investigating the relationship between seven measures of skill and official and self-reported delinquency in a nonclinical sample of 70 white male adolescents. Youths classified as delinquent on the basis of prior police contact had a lower multivariate profile on seven measures of academic, interpersonal, and work skills. Five of the seven measures correlated significantly with both the official and self-reported criteria of delinquency. Academic skill deficits may be the strongest covariates of antisocial behavior.*

### **INTRODUCTION**

An important aspect of maturation and social adjustment is the acquisition of skill. By adolescence, youngsters need to have mastered a wide array of basic skills to achieve conventional goals in our society. Such "survival" skills include interpersonal skills (e.g., getting along with others, forming intimate relationships), basic academic skills (e.g., reading, writing, and math), and work skills (e.g., doing chores at home or completing homework). Failure to acquire these basic skills may dramatically affect the long-term social adjustment of the adolescent. At an

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extreme form, social isolation and alienation, poor skills in reading and writing, and the inability to hold a job may all contribute to a drift into an antisocial life-style. Patterson's (1982) review of the literature on the antisocial child documents that skill deficits are associated with antisocial behavior at various age levels. The present study focuses on the extent to which these skill deficits are characteristic of the delinquent adolescent.

The literature associating survival skill deficits with delinquent adolescents is fragmented, in that many researchers have focused their studies on the relationship between single skill deficits and antisocial behavior.

There is some evidence indicating that delinquent adolescents are less diligent in their work chores at home and their homework responsibilities, and possibly less prepared when entering the job market in early adulthood. For example, Slocum and Stone (1963) reported that the antisocial youths in their sample were reported by parents as having fewer chores at home. West and Farrington (1977) followed a male cohort from age 9 to 24 in a longitudinal study in Great Britain. In early adulthood, the official delinquents tended to have jobs requiring less training, had a less stable job history, and expressed poorer attitudes about work than did nondelinquent adults. With the same sample, Knight and West (1977) report that officially delinquent adults were more likely to be welfare dependents because of chronic unemployment. Yet Hirschi's (1969) large-scale study on male juvenile delinquency revealed that self-reported delinquents were not less likely to have part-time employment outside the home than nondelinquent adolescents. On the other hand, this study did document a strong relationship between homework skills and self-reported delinquency even when controlling for achievement levels in academic subjects. It is assumed that chores at home and homework completion constitute better indices of an adolescent's work skills than part-time employment outside the home. One reason may be that a regular part-time job for an adolescent may be indicative of less commitment to school.

One direct effect of completing homework is academic achievement. A prevalent finding in the literature is that academic skill deficits often accompany adolescent delinquency. Polk, Frease, and Richmond (1974) report that 54% of the male high school sophomores with an average school grade of less than C (average) had at least one officially documented police contact, in contrast to 25% of those youths with a mean grade level above a C. Wolfgang, Figlio, and Sellin (1972) documented a longitudinal relationship between poor school grades and later official delinquency in adolescence and young adulthood. Berman and Siegal (1976) found that more than half the 47 official delinquents included in their sample were classified as learning-deficient—seriously lacking in more than one academic

skill. Reading skill deficits have also been revealed to be highly related to conduct disorders, as reported by teachers in Great Britain (Rutter, 1979).

It has been well documented that officially delinquent adolescents tend to score low on standardized measures of intelligence. In a review article on this question, Hirschi and Hindelang (1977) report a consistent relationship between low intelligence and official delinquency but a less robust relationship between intelligence and self-reported delinquency. With a sample of elementary school-aged children, Rutter, Tizard, and Whitmore (1970) revealed that school conduct problems were related to both low intelligence and academic skill deficits. These authors reported that in an analysis of a subsample of children with average intelligence, there remained a relationship between low reading skills and conduct disorders in school. This finding seems to indicate that in spite of the overlap between intelligence and academic skills, the two variables may yet account for unique variance in antisocial behavior.

Interpersonal skills also acquire increasing importance through adolescence into adulthood. The recent proliferation of social skills training in juvenile delinquency treatment procedures (e.g., Spence & Marzillier, 1981; Collingwood & Genter, 1980) demonstrates the widespread concern for the interpersonal incompetence of antisocial adolescents and its long-term effects for this group of youths. Interpersonal skill deficits may be conceptually classified into two interrelated aspects: (a) the interpersonal interaction style of the individual, which may have the effect of social rejection (e.g., abrasiveness, obnoxious behavior, or extreme shyness), and (b) the style of interpersonal problem solving, which may result in the ineffective resolution of social dilemmas (e.g., conflict with parents, resisting tempting situations, avoidance of possible problems). There is some evidence that antisocial adolescents are lacking in both these aspects. For example, in a follow-up analysis of 800 grade school boys assessed on peer nominations of sociometric status, Roff and Sells (1970) found that early peer rejection was predictive of later court-reported delinquency. West and Farrington (1973) also reported findings linking poor peer relationships with later court-reported delinquency.

Freedman, Rosenthal, Donahue, Schlundt, and McFall (1978) compared the interpersonal problem-solving skill of institutionalized delinquents to that of nondelinquents. These investigators carefully developed a role-play problem-solving task called the Adolescent Problem Inventory (API). In this study, the API was found to discriminate among three subgroups of adolescents: Leaders, Good Citizens, and Delinquents. The Leaders were students participating in several school sports and various other school activities; Good Citizens were youths maintaining a B or above grade average without a record of disciplinary actions; Delinquents were

residents of a correctional institution for boys. Interpersonal problem solving as measured on the API was also found to differentiate between low disruptive and high disruptive institutionalized delinquents. Interpersonal problem solving and social rejection both appear to be important covariates of official delinquency.

To summarize, a number of studies have found that delinquent boys tend to show deficits in academic, work, and interpersonal skills. The major emphasis of these studies has been on single skills as they relate to official delinquency; none of the reviewed studies have analyzed the relationship between multiple skill deficits and *both* official and self-reported criteria of delinquency. From this body of literature it is difficult to determine (a) if there is a general multivariate relationship between skill deficits and official delinquency, and to what extent these measures of skill are interrelated, (b) the comparative strength of the relationship between each of these skills and adolescent delinquency, and (c) whether or not skill deficits extend beyond official processing to self-report indices of antisocial behavior. In the present research involving a sample of adolescent boys, it was hypothesized that work, academic, and interpersonal skills would be found to be negatively related to both official and self-reported delinquency and that boys labeled official delinquents would have a lower profile on all seven measures of skill.

## METHOD

### *Subjects*

The data reported here are part of a 3-year planning study preparing for a longitudinal study on the development of antisocial behavior. Three high schools in the Eugene, Oregon, area provided our research staff with family names for boys in the 10th grade. Approximately 200 families with 10th grade boys initially received letters explaining the research procedures and soliciting their participation. From these 200, 60 agreed to participate fully in the research project. Ten additional families of adolescent males with multiple offenses were also recruited. These latter families were solicited primarily by advertising in local newspapers and through the local juvenile parole office. For these subjects, a minimum of three police contacts was established as the criterion for entry into the subsample. This second subsample was obtained to buttress the frequency of official delinquency within our main sample. A total of 70 white male adolescents and their families are included in this study.

One problem with studies of this kind is that families with antisocial children are the most likely to be those who either refuse participation or drop out of the research procedures (Ghodsian, Fogelman, Lambert, & Tibbenham, 1980; Lefkowitz, Eron, Walder, & Huesmann, 1977; Rutter et al., 1970). In the initial sample 20.7% of the 10th-grade boys had a court record. A search through the court files for a randomly selected group of 10th-grade boys from this area revealed that 31.8% had court records for delinquent behavior. Buttrussing the initial sample with youths currently involved with the juvenile justice system increased the base rate to 32.9%, thus more closely approximating the population base rate for the study area and incidence statistics reported by other investigators (Wolfgang et al., 1972). Because of these selection procedures, claims to representativeness must be laid aside. However, it is thought that the present sample was constituted as such to yield meaningful results to the questions addressed in this study.

Socioeconomic characteristics for the 70 families were assessed with the Hollingshead (1965) Index of Socioeconomic Status (SES). There are five SES levels according to this index, ranging from professional education and employment (Level 5) to unskilled laborers (level 1). The present sample is distributed as follows: Level 1 = 15.7%; Level 2 = 31.4%; Level 3 = 19.6%; level 4 = 29.4%; Level 5 = 3.9%. Twenty-six percent of the families were classified as father-absent.

### *Procedure*

All of the 70 subjects participated in a 3-hour interview session at the Oregon Social Learning Center. Within this session, subjects and their parents were interviewed separately in a structured format in addition to completing a number of questionnaires and two laboratory tasks.

### *Independent Variables: Measures of Skill*

*Interpersonal Problem Solving.* Interpersonal problem-solving skills were assessed by the Adolescent Problem Inventory (API) role-play task (Freedman et al., 1978). The solutions given by the subjects to the 42 problem situations presented were audiotaped and coded independently by raters. Solutions were rated on a 9-point scale ranging from 0 (very incompetent) to 8 (very competent). A criterion referenced rating scheme for each item is provided in the rating manual to the API. The development of the API and the scoring manual are discussed in more detail by

Freedman et al. (1978). The summary score used for the API was the total of the individual ratings across the 42 items.<sup>3</sup> Interrater reliability was computed for approximately 15% of the subjects and was found to be satisfactory (average  $r = .85$ ,  $p < .001$ ). An abstract of the 42 problem situations is provided in Table I.

*Interpersonal and Academic Competence.* These two variables were assessed on the mother's rating in the Child Behavior Checklist, a standardized parent questionnaire designed to measure both social competence (a priori scales) and behavior problem dimensions. The Interpersonal Scale assesses the number of friends the child has and his peer and family relationships. The School Competence Scale measures the child's performance in standard academic subjects and the extent to which he receives special services. The  $t$  scores derived from these scales are based on norms for boys ranging in age from 12 to 16. The authors of the Child Behavior Checklist (Achenbach, 1978; Achenbach & Edelbrock, 1978) report high retest stability for the social competence ( $r = .97$ ) scales.

*Reading Achievement.* Subjects were tested on the reading section of the Wide Range Achievement Test (WRAT), a standardized achievement test (Jastak & Jastak, 1978). The resulting score reflects the number of words read correctly by the subject.

*Verbal Intelligence.* The Ammons Full-Range Picture Vocabulary Test was administered to all subjects. The Ammons is a standardized language-based recognition vocabulary test assessing verbal and vocabulary skills (Sattler, 1978). A series of 16 cards is presented, with four pictures on each card. The subject is asked to associate pictures on the cards with words presented by the interviewer. Congruent validity for the Ammons was assessed by Sattler (1978), who correlated Ammons scores with scores from the Wechsler Intelligence Scale for Children (WISC). The analyses revealed satisfactory concurrent validity ( $r$ 's from .60 to .70) with this criterion. Sattler further reports the test-retest reliability of the Ammons to be satisfactory.

*Homework Completion.* Parents also completed the Parent Rating Questionnaire developed at OSLC. To assess the extent to which the child completes his homework, one item was used from this questionnaire. The item reads: "This child completes his homework." Parents rated the accuracy of this statement on a 5-point scale. Retest stability for this item was analyzed by having 26 randomly selected parents complete the questionnaire twice. The average time interval between the first and second administration was 68 days (range 41 days to 129 days). This analysis

<sup>3</sup>Two items were dropped from the original 44 items on the API. These items did not significantly differentiate between institutionalized delinquents and nondelinquents as revealed by a discriminant function analysis reported by Freedman et al. (1978).

Table I. Abstract of API Problem Situations<sup>a</sup>

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1. A male, peer, stranger, deliberately bumps into you on the street.
  2. Same as #1, plus he blames you.
  3. A gym teacher picks on you, makes you do extra pushups.
  4. A friend suggests buying booze illegally.
  5. Your father tells you to stay home on Saturday night.
  6. You want to break up with your girlfriend without hurting her.
  7. The school principal threatens to suspend you for hassling a substitute teacher.
  8. You come home late at night and your father is waiting up for you and is angry.
  9. You are called names by some guy in the schoolyard.<sup>a</sup>
  10. Your mother tells you to put on decent clothes before leaving the house.
  11. A friend wants you to deliver some drugs; he offers drugs and money in return.
  12. You are stopped on the street by a policeman after curfew.
  13. Your father wants you to stop seeing one of your male friends.
  14. Another boy makes an insulting remark about your mother.
  15. A friend suggests that you two steal a handgun from a discount store.
  16. You back your car over the neighbor's trash can; he yells at you.
  17. Your friend is upset because you dated a girl he likes.
  18. You've been grounded. A friend urges you to sneak out of the house.
  19. Your father gives you an ultimatum about getting your hair cut.
  20. A policeman comes to your door and asks for you.
  21. A teacher accuses you of writing obscene words on the walls in the men's room.
  22. A friend suggests joyriding in a car with the keys left in it.
  23. You run out of gas, get to work late, and get fired.
  24. Your father gets upset when you ask to borrow the car.
  25. A friend asks you to steal something for him from where you work.
  26. While with a friend, your father angrily tells you to go clean your room.
  27. An older friend asks you to help hold up a gas station.
  28. You want to ask the manager of a McDonald's for a job.
  29. Your girlfriend offers you a joint at a party.
  30. You ask a girl for a date and she says that her father won't let her go out with you.
  31. A girl's father meets you at the door and says he won't let her go out with you.
  32. Peers at school hassle you about your criminal record.
  33. A job interviewer is biased by your criminal record.
  34. A teacher hassles you about your criminal record.<sup>a</sup>
  35. You wake up in a bad mood.
  36. You need more money, your parents can't give it to you, and you are too young for a regular part-time job.
  37. You are bored and want some fun.
  38. You are studying for a final exam. A friend wants you to go to a concert instead.
  39. Your mother forbids you to see a friend again.
  40. Your girl breaks up with you. You feel miserable.
  41. You don't feel like delivering your paper route today.
  42. You feel hopelessly lost in a geometry class.
  43. You have a car and want something exciting to do.
  44. Your mother hassles you about going to church.
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<sup>a</sup>Permission to reprint granted by APA and Freedman et. al. (1978).<sup>b</sup>Deleted from present study.

revealed the homework completion item to be sufficiently stable ( $r(24) = .78, p < .001$ ).

**Chores at Home.** To measure chore responsibilities, each subject was asked during the child interview to report the chores for which he was responsible. The interview asked, "What chores do your parents expect you

to do ?” The interviewer was given a list of 15 typical chores children may be responsible for at home. The child’s responses were categorized into one of these chore categories. Standard probes were provided to encourage all subjects to recall all their chores. If there was any question on how to categorize a chore, it was noted and later decided upon by the interviewer’s supervisor. The total number of household chores reported by each subject was used as an index of the child’s chore responsibilities. The retest stability of the Chore variable was computed on 21 subjects who were readministered the Child Interview on a second occasion (average interval = 68 days). The product-moment correlation between the original score and the retest score for the 21 subjects was  $r(19) = .57, p < .001$ .

### *Criterion Measures of Juvenile Delinquency*

*Official Records.* The principal criterion of delinquency adopted in this study was official delinquency, defined as any police contact documented by the juvenile court for all nontraffic offenses. Official records of police contact were collected for all subjects 9 months following the interview sessions. Information on the number of prior police contacts for the 70 boys was ascertained through a computer search of the juvenile court records. The date of offense, the number of arrest episodes, and the alleged offense were collected for all subjects with police contact. As reported above, it was found that 23 of the 70 boys had been arrested prior to or within 9 months following assessment. The median number of arrest episodes for the 23 subjects was 1.9, ranging from a minimum of 1 to a maximum of 14. The following constitutes the distribution of recorded offenses for the 85 arrest episodes documented for these youths: 8.6% drug-related offenses; 5.9% status offenses; 68.2% property related offenses (e.g., vandalism, trespass, theft); 3.5% assault; and 14.1% miscellaneous, including malicious mischief and endangering another’s life through carelessness.

*Self-Reported Delinquency.* The self-report interview procedure used in this study was developed by Ageton and Elliott (1978). In the Child Interview, the study child is asked to report on his own delinquent behavior and illegal drug consumption within the past delinquent behavior and illegal drug consumption within the past year.<sup>4</sup> Exact frequencies are recorded for the 48 behaviors, along with the categorical frequencies for behaviors

<sup>4</sup>During all phases of these research procedures, subjects were advised that all information they provided would be coded and filed numerically and not associated with their names and would be used for research purposes only. Youths were reminded of confidentiality again just prior administration of the self-reported delinquency section of the interview.



Table II. Behaviors and Item Format for the Self-Reported Delinquent Life-Style Score

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How many times in the last year have you:

1. purposely damaged or destroyed property belonging to your parents or other family members?
  2. purposely damaged or destroyed property belonging to a school?
  3. purposely damaged or destroyed other property that did not belong to you, not counting family or school property?
  4. lied about your age to gain entrance or to purchase something?  
For example, lying about your age to buy liquor or get into a movie?
  5. carried a hidden weapon other than a plain pocketknife?
  6. stolen or tried to steal things worth \$5 or less?
  7. had sexual intercourse with a person of the opposite sex?
  8. cheated on school tests?
  9. hitchhiked where it was illegal to do so?
  10. hit or threatened to hit other students?
  11. been loud, rowdy, or unruly in a public place – disorderly conduct?
  12. avoided paying for such things as movies, bus rides, and food?
  13. been drunk in a public place?
  14. skipped classes without an excuse?
  15. drunk beer, wine, or hard liquor? (three times)
  16. used marijuana?
- 

committed on more than 10 occasions. In addition, the Delinquent Lifestyle Scale, developed by Elliott (personal communication, 1980) was used as a measure of patterned delinquency. This scale consists of 14 behaviors characteristic of a delinquent life-style as described by theorists such as Cohen (1955) and Cloward and Ohlin (1960). A boy's score is set at 0 unless he reports frequent (once a month or more) involvement in at least 7 of the 14 behaviors. Items covered in the Delinquent Lifestyle Scale are included in Table II.

The retest stability of the Delinquent Lifestyle Scale was computed for 21 subjects who were readministered the scale (average interval = 68 days). The product-moment correlation between the original score and the retest score for the 21 subjects was  $r(19) = .78, p < .001$ .

## RESULTS

The first question addressed in the present study was the interrelation among the seven measures of skill. Table III presents the product-moment interrelations of the independent variables. The average correlation among all the variables was relatively low, average  $r = .21$ . The average correlation involving reading achievement, verbal intelligence, and the mother's rating of school competence suggested a subcluster of academic skills ( $r = .42$ ). The API measure of interpersonal problem solving correlated moderately

Table III. Intercorrelations Among Measures of Academic, Interpersonal and Work Skills

	1	2	3	4	5	6	7
1. Interpersonal Problem Solving (API)	1.00						
2. Interpersonal Competence (CBC)	.40 <sup>c</sup> (51) <sup>e</sup>	1.00					
3. Reading Achievement (WRAT)	.21 <sup>a</sup> (54)	.11 (66)	1.00				
4. Verbal Intelligence (Ammons)	.00 (54)	.03 (66)	.65 <sup>d</sup> (69)	1.00			
5. School Competence (CBC)	.31 <sup>c</sup> (52)	.27 <sup>c</sup> (66)	.39 <sup>d</sup> (67)	.23 <sup>b</sup> (67)	1.00		
6. Homework Skills (Mother report)	.40 <sup>c</sup> (52)	.27 <sup>b</sup> (65)	.27 <sup>c</sup> (67)	.08 (67)	.55 <sup>d</sup> (66)	1.00	
7. Chores (Child report)	.10 (54)	.08 (66)	-.04 (69)	.10 (69)	-.12 (67)	.11 (67)	1.00

<sup>a</sup> $p < .10$ .

<sup>b</sup> $p < .05$ .

<sup>c</sup> $p < .01$ .

<sup>d</sup> $p < .001$ .

<sup>e</sup>Ns in parentheses.

with the mother's rating of interpersonal competence,  $r = .40, p < .001$ , and with the mother's ratings of homework skills,  $r = .40, p < .001$ . The child's report of chores did not correlate significantly with any of the other six measures of skill, including homework skills.

To compare the profiles between the officially delinquent and nondelinquent groups, the seven measures of skill were standardized for the complete sample. The mean for each measure of skill was then computed for the officially delinquent ( $N = 23$ ) and nondelinquent ( $N = 47$ ) groups separately. The profiles of the two groups on the seven skills are presented in Figure 1. The officially delinquent group of boys scored lower than the nondelinquent group on almost all measures of skill. Individual  $t$  tests (one-tailed) computed to compare the difference between the means of the two groups revealed that nondelinquents scored significantly higher on six of the seven measures of skill. Differences between the two groups appeared to be most pronounced for the measures of homework skill and school competence. The difference between delinquents and nondelinquents on the mother's rating of interpersonal competence was found not to be statistically reliable.

The main hypothesis of this investigation was that delinquents would show a lower multivariate profile than nondelinquents on all seven measures of skill. To test this, a Hotelling-Lawley multivariate  $t$  test (Harris, 1975) was computed using the seven measures of skill as the dependent variables and delinquency status as the independent class variable.<sup>5</sup> This test revealed the multivariate difference between the profiles of delinquents and nondelinquents to be significant,  $F(7, 42) = 3.83, p < .01$ . The univariate  $t$ -test results replicate the existing literature, showing a relationship between specific skill deficits and official delinquency. The multivariate profile analysis thus supported the univariate analyses and provided additional evidence to the literature on skill deficits by demonstrating that officially delinquent adolescents, as a group, scored lower on these seven measures of skill.

The second hypothesis was that the measures of skill would be negatively correlated with self-reported Delinquent Lifestyle. The first consideration was the correlation between the Delinquent Lifestyle score and Official Delinquency. A point biserial correlation was computed between these two criteria of delinquency, revealing them to correlate moderately,  $r = .55, p = .001$ .<sup>6</sup>

<sup>5</sup>For this multivariate analysis, subjects were excluded who were missing data on any of the variables included in the analysis, thus reducing the sample from 70 to 50.

<sup>6</sup>This correlation is somewhat higher than the correlations reported between self-report and official delinquency by other investigators (Hindelang, Hirschi, & Weis, 1981). We speculate that the higher correlation found between the two criteria in the present study is due to our use of the Delinquent Lifestyle Scale, which is essentially a measure of patterned delinquency and is probably more related to official detection than other estimates of delinquency.

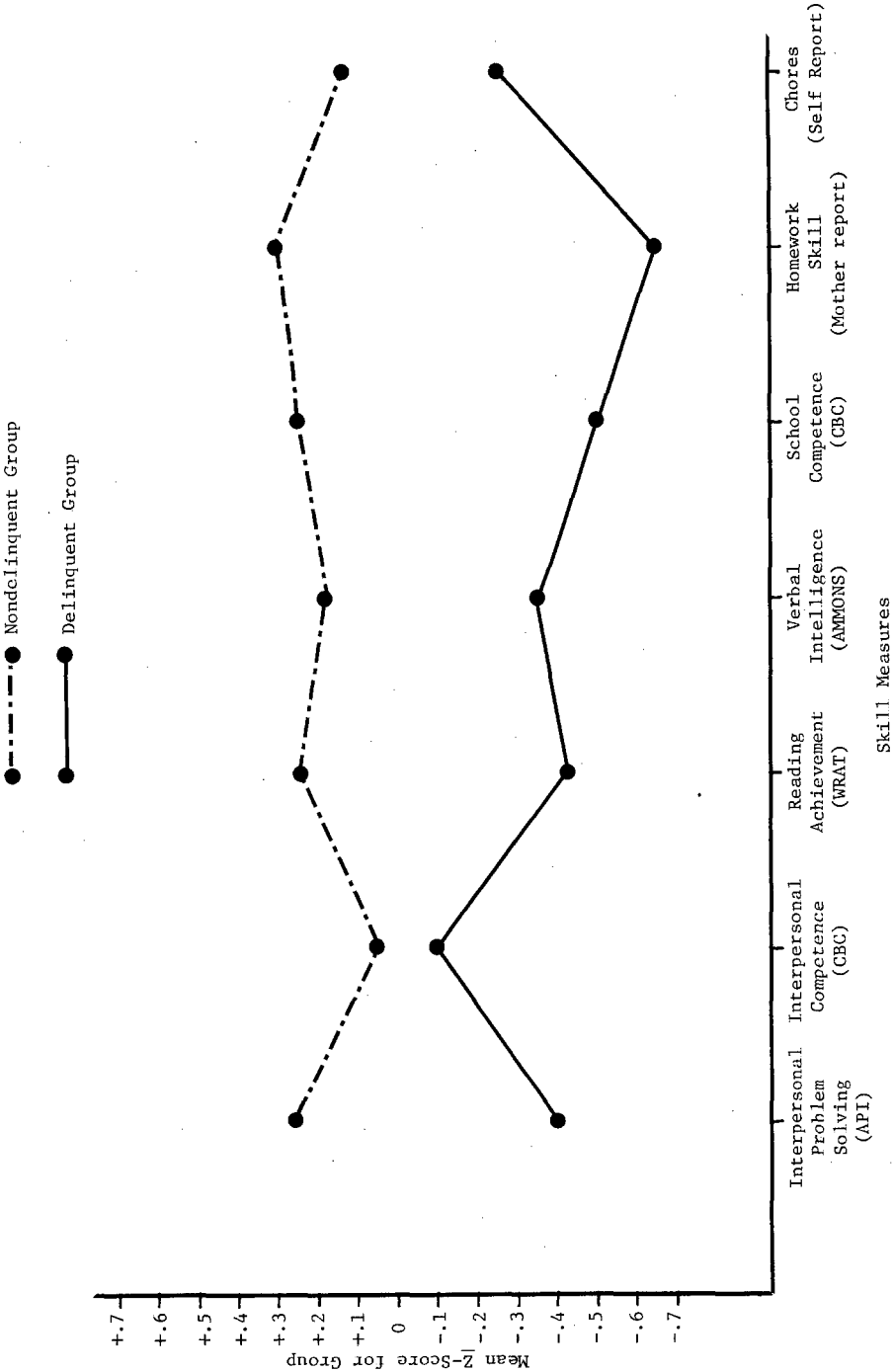


Fig. 1. Comparative profiles for delinquent and nondelinquent boys on seven measures of skill.

Table IV. Correlations Among Measures of Skills, Official Delinquency, and Self-Reported Delinquent Life-Style

	<i>N</i> <sup>a</sup>	Official delinquency <sup>b</sup>	Self-reported delinquent life-style
Interpersonal skills			
Interpersonal Problem-Solving Task	54	-.33 <sup>d</sup>	-.37 <sup>d</sup>
Interpersonal Scale (Mother rating-CBC)	66	-.08	-.15
Academic skills			
Reading Achievement (WRAT)	69	-.29 <sup>d</sup>	-.30 <sup>d</sup>
Verbal Intelligence (Ammons)	69	-.24 <sup>c</sup>	-.26 <sup>c</sup>
School Competence Scale (Mother rating-CBC)	67	-.33 <sup>d</sup>	-.37 <sup>d</sup>
Work skills			
Child report of chores	69	-.21 <sup>c</sup>	-.15
Mother rating homework skills	67	-.46 <sup>e</sup>	-.53 <sup>e</sup>

<sup>a</sup>The number of subjects included in each correlation varies due to missing data on the independent variables.

<sup>b</sup>Official Delinquency was dichotomized for these analyses: All subjects with a police record were assigned a score of 1; those with no record were assigned a score of 0.

<sup>c</sup> $p < .05$ .

<sup>d</sup> $p < .01$ .

<sup>e</sup> $p < .001$  (one-tailed *t* test).

The correlations between the measures of skill and the two criteria of delinquency are presented in Table IV. Five of the seven measures of skill were found to correlate significantly (one-tailed) with *both* official delinquency and self-reported Delinquent Lifestyle, average  $r = -.30$ . As can be seen, the magnitude of the correlations were similar for both criteria of delinquency. The mother's rating of homework skills correlated highest for both criteria,  $r = -.53$ ,  $p < .001$ , followed by the mother's rating of competence in school, the subject's performance on the API role-play task, and the short test of reading achievement. Variables related to performance in academic subjects were all correlated with official and self-reported delinquency. In general, the hypothesis that skill deficits are negatively related to self-reported Delinquent Lifestyle in adolescence was confirmed by these correlations.

## DISCUSSION

Although the base rate of official delinquency within the present sample closely approximates the population base rate for this area, the selection procedures described above preclude the consideration of this

sample as representative. However, in light of the consistent findings of other research showing a relationship between skill deficits and antisocial behavior, it is unlikely that the relationships found in this research were spurious. The difficulty with field research in this area is in obtaining a complete representation of "true delinquents" within the sample, especially when the research procedures require some kind of volunteer commitment from the subjects. For this reason, samples of convenience are often the rule rather than the exception.

To summarize, the two main hypotheses stimulating this research were confirmed: Adolescents with police contact records show a lower multivariate profile than do nondelinquent adolescents on the seven measures of interpersonal, academic, and work skills. Most of these skill deficits were found to correlate with both self-reported patterned delinquency as measured by the Delinquent Lifestyle Scale and official delinquency.

The child's report of chore responsibilities was not found to correlate with the other skill measures or the two criteria of delinquency. The latter finding was inconsistent with results reported by Slocum and Stone (1963), showing that antisocial youths reported completing fewer chores. One explanation for these inconsistent findings may have been the low reliability of the measure used in this study. Using periodic reports by parents (such as in the telephone interview) on their child's completion of chores might markedly increase the validity and reliability of this measure.

An association was observed, however, between schoolwork completion at home and both criteria of delinquency. This finding replicates and extends Hirschi's (1969) findings that youngsters classified as high self-reported delinquents tended to do much less schoolwork at home. One interpretation of this finding is that failure to complete homework and adolescent delinquency are both a direct function of a third important variable: the parent's lack of control and supervision of the child. The correlations among the skill measures revealed homework completion to be associated with academic skills and not completing chores at home. This finding suggests the need for systematic research on the causal relationship between parents' supervision and control of the child, homework completion, and academic success in adolescence.

Both the profile and correlational analyses indicated that academic skill deficits are strong covariates of adolescent delinquency. The intercorrelations among the seven measures of skill revealed that reading achievement, verbal intelligence, homework completion, and the mother's rating of school competence form a definitive subcluster of skills related to academic performance. This study did not address the question of whether the low academic performance of delinquent youths was primarily a result

of limited intelligence or underachievement, as evident from their limited engagement in homework. Longitudinal research using early measures of intellectual development would undoubtedly better address this long-standing issue.

An unanticipated result was the lack of relation found between the mother's global report interpersonal skill and the two criteria of delinquency. As some authors have pointed out, the choice of rater partly determines the outcome of global ratings of social skill (Bellack, 1979; Curran, 1979). In the context of this research on adolescents, the validity of such a global rating could certainly be improved by adding the teacher's and peers' reports on interpersonal behavior in the school setting to the mother's report.

Interpersonal problem solving, as measured by the API role-play test, was found to be associated with official and self-reported delinquency. This result complements the Freedman et al. (1978) research by suggesting that less chronic delinquent adolescents may also be characterized as deficit in their social problem-solving strategies, including those youths who report patterned delinquent offending but who have not been detected by the police. One reservation to this conclusion is that 7 of the 42 API items used in this research specifically involve resisting peer pressure to commit illegal offenses. In one respect it may be argued that competent problem solving involves the ability to assertively resist delinquent peer influences. In another respect it is acknowledged that adolescents with a more delinquent orientation may not perceive these role-play situations as problems and thus may readily agree to commit illegal acts at the suggestion of peers. To this extent, performance on these seven items may be seen as a function of values rather than purely lack of skill.

The general findings strongly suggest that multiple skill deficits often accompany a patterned engagement in antisocial behavior, and not exclusively official detection for misbehavior. Recent outcome research on clinical interventions with antisocial youths further indicates that skill deficits do not directly cause antisocial behavior. For example, programmatic work with delinquent children to improve reading skills produced significant increases in such skills but no consistent reduction in delinquent behavior (Cohen, 1973). Similarly, a carefully executed study by Spence and Marzillier (1981) has shown that it is possible to increase the chances of successful relations with peers and adults, but that the presence of these skills is not reliably associated with lower rates of either self-reported or court-reported delinquency. These studies and others indicate that improving the survival skills of an adolescent does not necessarily result in a concomitant reduction in antisocial behavior. It is of special importance, then, to better understand the role of skill deficits in

conjunction with known predictors, such as poor child-rearing practices, broken homes, criminal parents, and association with delinquent peers, in the processes leading to antisocial behavior in adolescence.

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