Findings of the Probation Management Alternatives Project

LEAA GRANT NOS. 75-DF-06-0003
76-F-1-1-M-S

Prepared By

ROSALIE D. DAVIS, Ph.D., C.P.

Research Analyst

June, 1976

JOHN C. PATTERSON

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I wish to laud many of the Juvenile Probation Officers for their unfailing dedication, despite minimal support and recognition. I could not have sustained the effort alone; I am deeply indebted.

The rest of the credit goes to Bert, Were it not for his intelligence and sense of humor, we'd still be wandering around in a computerized wasteland.

Rosalie Davis, Ph.D., C.P.
Research Analyst

F O R E W O R D

What follows is a presentation of facts and trends discovered during the tenure of the Probation Management Alternatives Project. While this was to have been rigouous research comparing three approaches to juvenile probation, what we have, instead, is an example of the effects of reality and other extraneous, human variables on the outcomes of even the most meticulously drafted design. The reader should not despair, however; whenever possible the data were kept uncontaminated toward the dual purpose of successfully implementing the research design and following our own curiosity. We believe the results to be interesting and of interest to those working in Juvenile Justice.

Implementation

On March 31, 1975, we set out to compare team, traditional and volunteer probation management schemes to determine whether any significant difference in cost, recidivism rates, the length of time required to attain correctional goals and the frequency and kinds of probation officer-probationer contacts existed between the three approaches. In accord with the research design, the null hypothesis was:

> There is no significant difference between traditional, team or volunteer probationary methods on recidivism, length of time required to achieve correctional goals, frequency and kinds of contacts between probation officer and probationer and cost per probationer served.

The operational definitions were:

1. Traditional probation: Supervision of a number of probationers by a single field probation officer as is currently the accepted procedure.

2. Team probation: Supervision of a group of juvenile probationers by a team composed of three probation officers. A group counseling specialist was assigned half-time to each team to conduct parent and/or family group counseling sessions.

3. Volunteer probation: Supervision of one probationer by a volunteer probation officer who is not necessarily trained, but whose sole motivation is a willingness to be of service.

4. Recidivism: Any new charge, more or less serious than the probationary offense, which causes the probationer to be referred to the Juvenile Probation Office.

5. Correctional goals: Statements of behavioral objectives agreed upon conjointly by probationer and probation officer (or those specified by the sentencing judge) to be accomplished upon or prior to release from probation. These goals may include psychotherapy, school attendance, community service, employment, restitution or the like.

6. Contact: Any time increment during which the probation officer is directly involved with the probationer or acting in his behalf. Contacts will be classified as direct, peripheral or telephone and can be made at the probationer's home, school, place of employment or in one of the support agencies (e.g. Mental Health Center), the probation office and/or any other setting acceptable to all parties; they can involve one or more of the following: the probationer, his family, school personnel, employer, another probation officer and/or probationer (s), agency staff members, non-delinquent peer group members and other probationers with their families.

7. Cost: A simple accounting of money spent under the team, traditional or volunteer approach as related to number of individuals served (contacts) and overall aim (correctional goals and recidivism rates).

8. Probation:

   A. Official - probation involving court action either by

      1.) adjudication - judge ordered through a court appearance

      2.) or, consent decree - the child volunteers to accept court ordered probation without a direct court appearance

   B. Unofficial - child is placed on probation at the recommendation of intake officer

9. Degree of Supervision - is determined at the discretion of the field officer and involves

   A. Maximum Supervision - probation officer will contact the probationer once a week and meet with the probationer's family bi-monthly. Additional contacts to be provided as needed.

   B. Medium Supervision - bi-monthly contact with probationer; monthly contact with family. Additional contacts to be provided as needed.

   C. Minimum Supervision - monthly contact with probationer. Additional contacts to be provided as needed.

10. Seriousness of Offense: The research design adjudged seriousness of offense using the New Mexico Criminal Code (NM Statutes 40A-1-1 through 40A-1-15) in that were the offender an adult he would be guilty of committing a felony, misdemeanor, or petty

misdemeanor (40A-1-5) and if a felony it would further be classified as a capital felony, first, second, third or fourth degree felony (40A-1-7).

The population consisted of any juvenile offender living in Bernalillo County who was on probation when the research began and those juveniles placed on probation for the subsequent thirteen (13) month period from April 1, 1975, through April 30, 1976.

At first the existing Probation Department was delighted at the prospect of having six new officers on board, as this meant a significant reduction in caseloads. Under the provisions of the design, the traditional officers were to retain any probationer whom they had supervised six months or more; it was decided that those on probation less than six months would not be affected as greatly by the disruption in services. So as to insure that these officers were not merely ridding themselves of the difficult cases, probationers transferred to the team were to have been carefully scrutinized by the head field officer and the Chief Probation Officer. Of course, the teams' views were subjective, but some slippage was apparent, as the teams received individuals requiring less than six months supervision whose records of past offenses were noteworthy.

Nevertheless, cases being assigned, data collection began and team, traditional and volunteer officers were instructed in the use of the following instruments.

1. Weekly Contact Reports: Weekly contact reports were required of each probation officer to insure accuracy of data. The checklist format aided the uniformity of response, ease of documentation and were directly amenable to key punching. Reports from team and

traditional officers were submitted each Monday morning; volunteers filled theirs out during the monthly meetings with the Director of Volunteers. Information included:

A. Probationer's name and/or case number

B. Who contacts whom

C. The kind of contact made

D. A description of the contact

E. The place of contact

F. A record of technical violations

G. and, length of time per contact.

2. Probation Action Plan: This is a list of correctional goals agreed upon by probationer and probation officer or ordered by the court at the onset of probation which were turned in once probation was terminated. Since it was our wish to avoid vagueness, the probation officers were asked to state correctional goals (and those actions which lead to completion of goals) in measurable, observable behavioral terms. For instance, let us assume that full time employment had been a correctional goal. The economic situation was such that completion of this goal probably presented some difficulty, but the probationer could have initiated procedures which enhanced his opportunities. Sub-goals could have included registration with the Employment Securities Commission, reading the want ads daily and applying for three or four jobs per week, seeking the assistance of one of the employment agencies in the city, or the like. Irrespective of the number of goals, they should have all been specified as that cited above; the probation officers were required to keep a running account of progress toward and/or achievement of each goal.

3. Probationer's Evaluation: The research team believed that the probationer's subjective feelings toward probation were important in a comparison of team, volunteer and traditional approaches. As a pre- and post-measure of the probationer's attitude, the probation officers asked their charges to fill out the evaluation form. The first measure was to be completed when the probationary agreement was taken; the post measure was required as part of the dismissal procedure. In both instances, the probationer received assurance that no one, save the research analyst, would see their responses. The evaluation was completed in privacy (the anti-room or empty office) and left with one of the receptionists.

4. WRAT: The reading section of the Wide Range Achievement Test was administered to 20% of the existing population and to everyone placed on probation after April 1, 1975. Since there seems to be a negative correlation between reading ability and juvenile delinquency, we wished to discover how far, if at all, the juvenile offenders were behind the average school population.

5. The Mooney Problem Checklist: Typically, most adults are wont to define problem areas for the juvenile offender; we thought it might be interesting to allow the probationers to enumerate their own problems and compare these results with those problems named by a population of juveniles not on probation. Again, 20% of the existing population and everyone placed on probation after April, 1975, was given the checklist. The control group consisted of randomly selected, non-delinquent adolescents in Bernalillo County.

Our getting-started enthusiasm palled somewhat when it became apparent that we possessed neither office space or furniture. The grant provided a typewriter and desks for the director, research analyst and secretary, only. Since we lacked funds for rent and there was no room at the court house, where the traditional officers are housed, we were forced to set up shop in one room of a defunct elementary school in Albuquerque's Central Cities area. Ironically, we were evicted from our rent free haven about three months later, at which time we moved into one room of a defunct high school also in the Core Area. Officer furniture throughout the life of the program was a rag-tag collection of Public School discards.

Computerized demographic data for all the juveniles presently on probation, which the research analyst believed existed, was not so. True, the data were available, but not on tape or keypunched cards; they existed in the file room and in the minds of the probation officers. This presented a singular dilemma. But, since we needed a data base if any analysis was to be

accomplished, the research analysis spent the first two months of the project gathering and coding data on the existing population. Quite correctly, the team members, traditional and volunteer officers, feeling bombarded by extra work, met this effort with considerable resistance, thus making the task even more tedious. Adding the need to establish the data base and its concommitant resistance to inadequate office space, two telephone lines for ten persons and no air conditioning, it is understandable that our enthusiasm waned and tempers ran high during the summer of 1975.

But the fall brought cooler weather and a lessening of tension. A rapid turnover in and addition of personnel to the traditional officers unit meant less resistance to the paper work resultant of we-never-did-it-this-way-before mentality. Also, the more experienced traditional and team officers developed an expertise in the use of the instruments and, in general, we all enjoyed a harmonious fall and winter. But, as can be expected when experimental constraints are forced upon an existing, operating system, reality quickly stepped in to alter the randomization scheme and thereby inalterably confounding the data.

The design called for the research analyst to evaluate each officer's caseload with regard to the age, sex, socio-economic status, type of probation (official or unofficial) of each probationer to determine to what extent these factors were present in each caseload. Knowing that random assignment is impossible when caseloads already exist, we expected considerable skewness, which we hoped to balance out as quickly

as possible, thereafter assigning newcomers via stratified randomization procedures. In other words, controls were to have been implemented to insure that the co-variates (age, sex, socio-economic status, kind of probation and geographic location) were evenly distributed among caseloads. Coded data was submitted to the Division of Automated Data Processing (DADP) during the last week in May, 1975; while awaiting the results of what variables were present in each caseload, the chief field officer assigned cases on a rotating system, which simply matched probation officers to probationers on a "who's next" basis. Unfortunately, the stochastic allocation scheme stipulated in the design never saw fruition. DADP's first run was not available until January, 1976, and in the meanwhile a new chief field officer reorganized the field unit such that traditional officers were assigned to school districts, thereby significantly loading variables by geographic location. Teams had always been assigned probationers within geographic boundaries, but pains had been taken to insure an equal representation of demographic viables in each area. Therefore, even after the reallocation of traditional manpower, the teams continued to receive probationers more or less randomly.

The data regarding frequency and kind of contact were also confounded. Even though computerized reports were not available, hand tallies of monthly contacts were made; insufficient and excessive meetings were discussed with team members and, to a lesser extent, with the traditional officers. While this kind of accountability is necessary in making probation viable, it does tend to contaminate the outcomes of research; statistical

inferences regarding contacts as a result of the method of probation management will not be included in this report. Further affecting the results is the questionable accuracy of the data base, itself. DADP witnessed overwhelming internal stress last summer. The personnel, although cooperative, were unable to function in the administrative upheaval. Rather than to use an existing canned package, available in the DADP library, they created a program in our behalf. We spent the year working out the kinks, but despite our efforts many tragic flaws are still evident. Specifically, we are still uncertain that all the case histories are on the master-list; if some cases do not exist, one need not be a computer scientist to realize the snowball effect - all subsequent transactions, contacts, goals, releases, would have been ignored. Therefore, as stated in the foreword, some of what is documented represents only trends in the data. Hopefully, our errors tended to cancel one another and the picture is a true one. Right now, we are not confident in making such a statement.

Results

Frequency Distributions

For many of us the term Juvenile Delinquent has societal and emotional overtones. Although the word is rarely found in current popular or scientific literature, the theme remains the same; children in trouble, youthful offenders, problem children--call them what you will--all bring to mind a stereotyped, stylized teenager. He (mind you, not she) is an habitual offender and a school dropout from a broken home shared by many siblings, wherein the income is substandard, the location undesirable. Usually there is a racial or an ethnic bias, as well. The Juvenile Delinquent population in Bernalillo County is as follows. Where comparisons are made, the population information was taken from the 1970 Census data.

Population: Our records show that at some point in time from April 1, 1975, to April 30, 1976, 1255 youths were on probation in Bernalillo County. This accounts for approximately 2% of all youngsters aged 10-19 residing in the county. Accounting from the Daily Referral sheets shows that about 3300 persons or 5% of the youths in the county were referred to the Probation Department.

Income: The range from $840 to $60,000 per year is of considerable magnitude; the figures below demonstrate a noticeable descrepancy.

Income for Probationer's Family	Percent of Families
$ 840- 5,000	38.0
5,100-10,000	37.1
10,100-15,000	14.4
15,100-20,000	5.1
21,000-60,000	5.4

Comparing these figures to those for the population at large, there is no doubt that most of the probationers in Bernalillo County come from lower socio-economic families.

Average Family Income

Bernalillo County	Juvenile Probation
Mean = 10,370	Mean = 8442.53
Median = 9,031	Median = 6449.45

Test for Difference in Medians

$z = 10.37$
$p < .0001$

Sex:

Male	1039	82.8%
Female	216	17.2%

Race:

	Percent on Probation	Percent age 10-19 in County
Anglo	43.10	53.27
Spanish	54.10	44.23
Other	2.80	2.50

$X^2 = 52.41$
$p < .0001$

Age:

	Number	Percent
9	2	0.2
10	12	1.0
11	8	0.6
12	28	2.2
13	54	4.3
14	140	11.2
15	244	19.4
16	309	24.6
17	300	23.9
18	157	12.5
19	1	0.1

Mean = 15.75
Median = 15.96

Number of Previous Offenses: Our figures conclude 40.6% are first offenders; 36.8% are on probation for the second or third time.

Offense Number	Number of Probationers	Percent
1	510	40.6
2	294	23.4
3	168	13.4
4	109	8.7
5	69	5.5
6	33	2.6
7	23	1.8
8	16	1.3
9	12	1.0
10	5	0.4
11	5	0.4
12	2	0.2
13	1	0.1
14	2	0.2
15	2	0.2
16	1	0.1
17	1	0.1
23	2	0.2

Geographic Location:

Quadrant	Percent of Probationers	Percent of County Population
NE	34.40	48.09
SE	16.20	15.60
NW	25.80	20.74
SW	23.60	15.56

Since population figures for the 10-19 age group were not available by quadrant, there is no significance test computed. The disparities for the north and south valley may not be significant when we consider the population is predominantly Spanish, the adolescent group which tends to be disproportionately represented in the general population.

	Ethnic Representation in Bernalillo County for All Ages	Ethnic Representation Ages 10-19
Anglo	57%	53.27%
Spanish	34%	44.23%
Other	9%	2.50%

School Information:

Percentages of Probationers by High School District

Not in School	19	West Mesa	8
Albuquerque	18	Manzano	5
Cibola	2	School on Wheels	3
Del Norte	6	Community School	1
El Dorado	4	New Futures	0
Highland	9	Freedom	1
Rio Grande	10	Out-of-Town	2
Sandia	4	Parochial	2
Valley	6	T-VI	2
		UNM	0

High School Enrollment Compared to Probationer Density

High School	Percent of all High School Students	Percent of Probationers in Attendance
Albuquerque	8.83	14.29
Cibola	6.86	3.78
Del Norte	8.96	5.58
El Dorado	12.24	6.57
Highland	9.80	9.69
Rio Grande	10.91	14.29
Sandia	11.74	7.39
Valley	7.91	9.03
West Mesa	9.77	11.49
Manzano	10.54	7.06
School on Wheels	1.04	6.24
Community	.62	.82
Freedom	.77	3.78

Excluding School on Wheels, Community and Freedom High $X^2=78.73$, df=9, $p<.001$. That a school effect exists is undeniable; the probationers are disproportionately represented at Albuquerque High School.

The Albuquerque Public Schools Student Withdrawls 1976-75, recently completed by the Organization Analysis and Research component, projected a 5.0% yearly dropout rate for secondary schools; attrition among probationers is alarmingly higher at 12.93% per year.

Age	Percent in School	Retention Rate	Dropout Rate
14	94.3		
15	93.9		
16	81.2	86.46	13.53
17	70.7	87.07	12.93
18	62.4	88.26	11.74

Marital Status of Natural Parents:

Status	Number	Percent
Married	619	49.3
Separated	61	4.9
Divorced	451	35.9
Never Married	14	1.1
Widowed	110	8.8

Family Size:

Siblings	Number	Percent
0	94	7.5
1	175	13.9
2	215	17.1
3	247	19.7
4	190	15.1
5	123	9.8
6	87	6.9
7	40	3.2
8	41	3.3
9	12	1.0
10	13	1.0
11	7	0.6
12	8	0.6
14	2	0.2
15	1	0.1

Mean = 3.43
Median = 3.08

Summation of Frequency Distributions: The stereotype still exists, but the image is not nearly so crystallized as in the past. The data reveal...

1. that even though most of the probationers live in lower socio-economic surroundings, an impressive number (45.9%) have a yearly family income above $7100.00,
2. almost 20% are girls,
3. a reversal in ethnic representation of Spanish and Anglo youths as found in the general population of Bernalillo County; nonetheless, over 40% of the probationers are Anglo,

4. and, the typical probationers is a soon-to-be 16 year old male on probation for the first or second time, living in the northeast quadrant with his natural parents and three siblings.

Cross Tabulations

Of the 45 juvenile offenses, nine account for over three-fourths of the dispositions documented in this research project; let us examine these as they relate to quadrant, school, family income and sex of offender.

Offense	Percent of Probationers
Auto Theft	6.5
Auto Burglary	4.0
Burglary	25.1
Shoplifting	6.1
Larceny	8.1
Stolen Property	4.5
Possession of Marijuana	3.5
Disorderly Conduct	4.4
CHINS	13.9

Offense by Quadrant:*

Offense	NE	SE	NW	SW
Auto Theft	35	14	15	18
Auto Burglary	22	7	13	8
Burglary	92	49	93	81
Shoplifting	28	7	17	24
Larceny	37	15	21	29
Stolen Property	18	9	18	12
Possession of Marijuana	13	10	12	9
Disorderly Conduct	16	12	15	12
CHINS	66	26	43	40

Income by Offense:

Offense	$840-4200	$4300-7000	$7100-10,800	$10,810+
Auto Theft	21	18	27	13
Auto Burglary	12	12	11	13
Burglary	79	86	66	68
Shoplifting	25	18	17	14
Larceny	26	21	17	32
Stolen Property	11	13	16	11
Possession of Marijuana	10	8	7	17
Disorderly Conduct	18	14	10	7
CHINS	48	42	27	35

*Unless stated otherwise, numbers represent actual cases in each category.

Offense by High School District:

Offense	Not in School	Albuquerque	Cibola	Del Norte	El Dorado	Highland
Auto Theft	18	9	2	6	4	9
Auto Burglary	6	9	1	7	2	4
Burglary	45	54	5	20	14	15
Shoplifting	12	9	0	6	2	8
Larceny	16	27	6	5	3	8
Stolen Property	11	16	1	2	2	6
Possession of Marijuana	8	5	3	2	2	5
Disorderly Conduct	17	9	2	1	2	5
CHINS	28	29	3	12	4	15

	Rio Grande	Sandia	Valley	West Mesa	Manzano	School on Wheels
Auto Burglary	12	3	3	5	1	3
Auto Theft	3	4	4	4	2	0
Burglary	39	14	16	33	14	15
Shoplifting	9	2	3	10	4	1
Larceny	16	4	2	5	3	1
Stolen Property	6	5	3	5	0	0
Possession of Marijuana	3	3	4	2	2	1
Disorderly Conduct	4	1	4	5	3	1
CHINS	16	4	15	19	9	9

	New Futures	Community	Freedom	Out of Town	Parochial	T-VI	U
Auto Burglary	0	0	2	1	1	3	0
Auto Theft	0	0	2	0	2	0	0
Burglary	0	3	7	8	9	3	1
Shoplifting	1	0	2	1	5	1	0
Larceny	0	2	2	1	0	1	0
Stolen Property	0	0	0	0	0	0	0
Possession of Marijuana	0	0	1	1	1	1	0
Disorderly Conduct	0	0	0	0	0	1	0
CHINS	0	0	1	5	4	2	0

Offense by Sex:

Offense	Female	Male
Auto Theft	6	76
Auto Burglary	1	49
Burglary	15	300
Shoplifting	30	46
Larceny	4	98
Stolen Property	3	54
Possession of Marijuana	1	43
Disorderly Conduct	7	48
CHINS	98	77

Summation of Cross Tabulations Were age by geographic quadrant figures available from the 1970 census data, we could compute more meaningful offense by quadrant comparisons. Let it suffice to say that there is a fairly equitable city-wide distribution of juvenile offenders; the southwest quadrant may tend to be over-represented, but again we call your attention to the predominance of Spanish surnamed youths in the area. We conclude...

1. that income and possession of marijuana tend to be positively related, while income is inversely related to disorderly conduct and shoplifting,
2. again that Albuquerque High School is over-represented in the probationer population when considering these nine offenses,
3. 28.9% of the males and 45.4% of the females are under supervision for burglary and CHINS, respectively,
4. and, that one-fourth of all the juvenile offenders are on probation for residential or commercial burglary.

The Research Design

As the reader will recall, the purpose of this project was to compare the effacacy of team, traditional and volunteer probation management in the face of recidivism, length of time to achieve correctional goals, frequency and kinds of contact and cost. Included also were investigations of the results of the Mooney Problem Checklist, the Wide Range Achievement Test (WRAT) reading subtest and the pre- and post-probation evaluation. Only team and traditional comparisons are shown, as the volunteers' contact sheets, action plans, et. al, remained conspicuously absent throughout. We do know, however, that the volunteers supervised forty-nine (49) probationers during September, 1975. We regret this lack in the findings, but no amount of force or cajolary brought results; we contend the volunteers are a valuable factor in juvenile probation, but without documentation the knowledge must remain strictly spectulative.

Recidivism: Every juvenile referred to the department has his or her name entered in the daily log book kept by the Intake Unit. Since our operational definition included any new charge, more or less serious than the probationary offense, which causes the probationer to be referred to the Juvenile Probation Office, we felt the daily log was the logical beginning in our recidivism tallies. Only juveniles actively on probation during this study are represented in the outcomes; volunteers are included. The reader is cautioned to remember these are strictly referrals and do not account for final dispositions. Referrals by way of

revocation (violation of probation) are not included, as it was felt a revocation represented action on a previous, not a new, charge.

	Recidivism		
Type of Probation Management	Team	Traditional	Volunteer
Number of Persons on Probation by Method	437	769	49
Number of Referrals	358	541	25
Average Number of Referrals	.8192	.7035	.5102
Number of Persons Referred	183	312	13
Percentage of Recidivism	41.88	40.57	26.53
Estimated Annual* Recidivism Rate	66.72	62.44	45.53

*The percentage of recidivism is not a representative number estimating annual recidivism rates. For example, if a person was on probation for only one month of the study, it would be invalid to count that person as having gone one year or six months (as the others on official or unofficial probation) without recidivating. To arrive at an adjusted annual recidivism rate, a technique for reliability testing was employed which uses 1) the total "time on test" (time on probation without another referral) and 2) the number of failures (recidivists). This method yields an estimated mean time to recidivism and an estimate of the annual rededivism rate. Please recall this number does not reflect final dispositions. Please see: Cohen, A. C., Progressively Censored Samples in Life Testing, Technometrics, 1963, 5, 327-339.

Persons Referred But Not on Active Probation

Number	1066
Number of Referrals	1523
Average Number of Referrals	1.4287

There is no significant difference in Team and Tradition rates. While they both have approximately the same percentage of recidivists, the Teams' average annual recidivism rate tends to be higher owing to repeat offenders. Most distressing is the recidivism rate for those not on probation. Projections are that over 50% of the juvenile offenders (referrals to the department) are counseled and released twice or more.

Length of Time to Complete Correctional Goals:

Method	Goals Set	Goals Completed	Percent
Team	451	106	23.50
Traditional	416	185	44.47

$z = 6.53$
$p < .0001$

In all fairness to the Team members, it should be stated that they were required to report correctional goals throughout the study; the Traditional officers reported theirs ex post facto. Retrospection is generally expansive.

Frequency and Kinds of Contacts: Even though these data tend to be unreliable, frequency of contact is listed.

Average Monthly Contacts Per Officer*

	Traditional	Team
Direct	53.23	42.26
Peripheral	20.81	24.96
Telephone	17.74	17.81

*Reflects a fluctuation in numbers of Traditional Officers.

Average Monthly Contact per Probationer*

	Traditional	Team
Direct	1.60	1.22
Peripheral	.60	.72
Telephone	.52	.52

Cost: Early in the summer of 1975, the research analyst, per-chance, met the gentleman who drafted the project's grant application and, since the cost requirement had baffled us, this seemed the opportunity to settle this issue with finality. His response was less than satisfactory, however, as he was also mystified as to exactly how the cost should be calculated. He invited us to use our collective imagination. The following figures reflect the 1975-76 projected budget for the Traditional Field Officers Unit.

Probation Management Alternatives	Traditional
Grant Funding -Research Analyst Salary $94,837 Divide by number of officers (7) $13,548.14 per officer per year Divide by average caseload (34.57) $391.90 per probationer per year	Projected Budget -Director of Volunteers Salary -Part time salaries -2/3 office supplies -3/4 postage -equipment and machinery -intake unit $207,959.28 Divide by average number of officers (10) $20,795.93 per officer per year Divide by average caseload (33.87) $613.99 per probationer per year

*Reflects a fluctuation in numbers of Traditional Officers.

Save the cost and correctional goals factor, we must accept the null hypothesis; there is no significant difference between traditional and team probation management in recidivism rates and contacts. Team management does, however, provide services to slightly more probationers at a significantly lower cost.

Mooney Problem Checklist: Results from the checklist are available for 575 probationers and 57 non-delinquent high school and junior high school students in Bernalillo County. Scores were completed as specified in the manual and the three major areas of concern, irrespective of the magnitude of concern, were recorded in the master file. There were 330 items, 30 in each of the following areas:

HPD	Health and Physical Development
FLE	Finances, Living Conditions and Employment
SRA	Social and Recreational Activities
SPR	Social-Psychological Relations
PPR	Personal-Psychological Relations
CSM	Courtship, Sex and Marriage
HF	Home and Family
MR	Morals and Religion
ASW	Adjustment to School Work
FVE	The Future: Vocational and Educational
CTP	Curriculum and Teaching Procedure

Probationer Population

	First	Second	Third Choice
HPD	38	40	48
FLE	64	67	50
SRA	18	27	34
CSM	15	7	27
SPR	41	81	73
PPR	50	77	67
MR	23	27	37
HF	62	66	49
FVE	73	79	78
ASW	207	96	74
CTP	18	28	38

Even the most cursory glance reveals ASW as the overwhelming area of concern--so overwhelming, in fact, that it is the first and second most frequently declared problem. Let us compare these results to the non-delinquent population by totaling the number of times a specific problem ranked first, second or third.

	Probationers	Non-delinquent	z
HPD	126 (20.69%)	11 (19.64%)	.19
FLE	181 (29.72%)	18 (32.14%)	-.38
SRA	79 (12.97%)	9 (16.07%)	-.66
CSM	49 (8.05%)	10 (17.86%)	-2.47*
SPR	195 (32.02%)	20 (35.71%)	-.57
PPR	194 (31.86%)	22 (39.29%)	-1.14
MR	87 (14.29%)	11 (19.64%)	-1.08
HF	177 (29.06%)	13 (23.21%)	.93
FVE	230 (37.77%)	9 (16.07%)	3.24**
ASW	377 (61.90%)	27 (48.21%)	2.01*
CTP	84 (13.79%)	18 (32.14%)	-3.65**

*$p < .05$
**$p < .01$

Discovering delinquent and non-delinquent youths expressed similar kinds of problems made us curious as to whether the degree of concern was at all similar in both groups; because the differences were significant, the CSM, ASW and FVE categories were reviewed and the underlined statements were tallied. The comparison follows:

	Probationers	Non-delinquent
CSM	Mean = 2.20	3.07
	S.D. = 3.76	3.90
	t = 1.22	
ASW	Mean = 6.20	5.28
	S.D. = 6.12	4.19
	t = 1.97*	
FVE	Mean = 3.71	3.12
	S.D. = 3.76	3.33
	t = 0.65	

*$p < .05$

CSM and FVE do not differ significantly, but in addition to being the overwhelming first concern of the probationers, ASW is also of a greater magnitude of concern. Why? Could it be that even though the control group expresses difficulty in school, their coping skills are better developed such that they can tolerate the situation and remain free to enjoy (?) the social-psychological preoccupations typical of adolescents? The juvenile probationers may dislike school with such intensity that it permeates and/or over-rides their social and psychological concerns; knowing they cannot cope with school, the probationers may realize and express a parallel concern over the future. Success in school, so we are taught, often predicates success in a chosen profession. Do they feel doomed to failure? Do they now and will they continue to fulfill the prophecy?

Reading Ability: Much to our dismay, the Albuquerque Public Schools do very little institutional research and are, therefore, unable to give specific information with regard to system-wide reading abilities. A "ball park" figure, computed from the 1973-74 academic year sweep testing effort in which 6000 sophomores participated, allows that the average fifteen or sixteen year old is reading about nine (9) months below the grade level; i.e., the national norm. We administered the reading section of the WRAT to 597 probationers and present the following results:

Grade Level	Cases	Percentage
1	3	1
2	36	6
3	30	5
4	52	9
5	60	10
6	67	11
7	67	11
8	62	10
9	50	8
10	44	7
11	28	5
12	28	5
13	32	5
14	12	2
15	7	1
16	8	1
17	4	1
18	1	0
19	6	1

Mean = 7.69
Median = 7.25

Seventy-nine (79) percent of the population reads at or below the tenth grade level; fifty-one (51) percent read at the fourth, fifth, sixth, seventh and eighth grade levels inclusively. The average probationer is a tenth grader reading at somewhat better than a second semester seventh grader. Our ball park figure estimates the juvenile offender population in Bernalillo County to be two to three academic years behind their non-delinquent counterparts in reading ability.

Pre- and Post Evaluations: The initial evaluation was filled out as soon as possible. For those on official probation, it was normally done directly after court; unofficials and consent decrees completed theirs at the first meeting with the probation officer. Since the probation officers remembered the post-evaluations only after the release was completed, we received far less of these than anticipated; pre-evaluations were

numerous. We did complete seventy-six sets and, even though the sample size may be too small to be reliable, the results are presented, as they are curious.

There were five questions per evaluation with a five point, least favorable to most favorable option, scale. The pre- and post-evaluations were worded identically with the exception of verb tense, the post-evaluation being in the past tense.

Question	Pre-Mean	Post-Mean	t value
I feel probation will be good for me.	3.5472	3.6226	-0.56
My probation officer will be my friend.	4.3962	4.0566	2.58*
My correctional goals are realistic.	3.5660	3.3208	1.42
Probation will help me stay out of trouble.	4.0000	4.1887	-1.53
Probation will help me solve some of my personal problems.	3.0943	3.0755	0.10

*$p < .01$

Of singular significance is the post-evaluation response to question 2; probationers did not view their probation officers as friends after being released. A closer look at the outcomes raises some interesting questions: after the fact, probation is good; correctional goals become unrealistic; they stayed out of trouble thanks to probation; no personal problems were solved. Why? Hypothetically, the probationers may feel relief and be happy at staying out of trouble, so, by inference,

probation is good. On the other hand, correctional goals may have become unrealistic in tandum with the pressure, as applied by the officer, to complete them. Personal problems may have gone unsolved because the cause of the problem may have been the probationer himself, not the outside world. (This was witnessed in our parent-teen group counseling sessions.) The officer may have tended to introduce or reinforce that fact. No wonder the officer is not a friend. The negative outcome may be a credit to the officer; no, they were not friends, but they may have done their work well. Pursuance of these hypothetical questions might yield interesting results.

Sidetracks to Uncover Peculiarities in Data (STUPID)

If we haven't already lost you, this is the part of research most enjoyable to the researcher, those serendipitous sidetracks which raise questions and, often, eyebrows. Some of what follows is silly and presented strictly for comic relief. The rest bears significance and adds knowledge to the relative paucity of facts known about juvenile offenders in Bernalillo County.

Astrological Sign by Percentage of Probationers and General Population:

	Number	Percent of Probationers	Percent of General Population
Aries	88	.07012	.08348
Taurus	112	.08924	.08485
Gemini	102	.08127	.08582
Cancer	115	.09163	.08612
Leo	106	.08446	.08564
Virgo	109	.08685	.08454
Libra	97	.07729	.08313
Scorpio	100	.07968	.08179
Saggitarius	111	.08845	.08088
Capricorn	109	.08685	.08061
Aquarius	106	.08446	.08105
Pisces	100	.07968	.08209

$X^2 = 6.16$

* Taken from: A to Z Horoscope Maker and Delineator by Llewellyn George, Llewellyn Publications, St. Paul, Minn., 1970, p.716.

Birthday:

Day of Month	Percent of Probationers
1	4
2	3
3	4
4	4
5	2
6	3
7	3
8	3
9	3
10	3
11	4
12	4
13	3
14	3
15	5
16	3
17	4
18	2
19	3
20	3
21	4
22	3
23	3
24	4
25	3
26	3
27	3
28	3
29	3
30	2
31	1

Race by Grouped Income:

	840-4200	4300-7000	7100-10800	10810- and Up	Total Cases
Anglo	16.5%	21.5%	24.1%	38.0%	503
Negro	41.7%	25.0%	12.5%	20.8%	24
Indian	66.7%	22.2%	11.1%	0.0%	9
Spanish	35.6%	30.3%	21.1%	13.1%	641

Race by Marital Status of Natural Parents:

	Married	Separated	Divorced	Never Married	Widowed	Total
Anglo	48.6%	4.4%	38.8%	0.2%	7.9%	541
Negro	36.0%	0.0%	52.0%	8.0%	4.0%	25
Indian	30.0%	0.0%	50.0%	0.0%	20.0%	10
Spanish	50.7%	5.4%	32.8%	1.6%	9.4%	679

Age by Disposition of First Offense:

Age	Official	Unofficial	Counsel and Release
6	0	0	1
7	0	0	2
8	4	2	1
9	7	5	9
10	8	10	17
11	10	11	19
12	27	19	54
13	63	26	69
14	109	35	97
15	134	41	77
16	118	29	47
17	69	20	14
18	7	0	0

The older the person at the time of first referral, the greater the likelihood of being placed on official or unofficial probation. Fourteen seems to be the age of responsibility in the eyes of the Second Judicial District:

Age 13 or younger	52.74% placed on Official or Unofficial
Age 14 or older	70.51% placed on Official or Unofficial

Summation of STUPID: Race and income tend to be inversely proportional among the families of Spanish and Anglo probationers; marital status of natural parents is constant cross-culturally. Astrological sign and day of birth, notwithstanding, the likelihood of being placed on probation for a first offense is greater after the fourteenth birthday.

Summary and Conclusions

The report makes no attempt to develop all the implications; the findings are fairly evident, but subject to such differing and controversial explanations that this writer will simply avoid the proverbial heat by remaining well outside the kitchen. Said simply, any ramifications, be they change, discussion or replication, are left to the experts.

There are some suggestions, however. At this juncture team management appears neither to help nor harm in any significant way, but it is less expensive in terms of service delivery. Of course, the surroundings were austere compared to those of the traditional officers, but even that did not alter the teams' effacacy. If saving money, regardless of the physical plant, means hiring additional officers with a reduction in caseloads, then, perhaps, team management is a viable alternative. The reader will recall the average caseload contained 35 or so probationers per officer and every person was seen approximately 1.25 to 1.50 times per month; while this is hardly up to the court requirement for maximum supervision, we might safely assume this is better than when the ratio was one officer per 65 to 80 probationers.

While investigating the cost of service delivery, the Probation Department might also explore the self-stated problems of the juveniles under supervision. Is school <u>the</u> problem or is it, in fact, the embodiment of all conflict stemming from acceptance, conformity and the generalized middle class

social system. And, what of reading ability? Educators and adjudicators, alike, should explore whether a deficit reading score is a function of delinquency of visa versa.

There's a wealth of data from this study that not only needs further manipulation, but could also act as the catalyst for other, less general, research efforts. In the past, we have done a great deal to the probationer; this study, the present data and any future endeavors may very well begin a concerted effort to do something for the probationer, particularly at an earlier age. We should know conclusively whether youngsters placed on official probation for the first offense, age and seriousness of offense notwithstanding, come back more or less often than those who are repeatedly counseled and released.

Finally, the data base warrants continuation; it could become an invaluable tool in prediction as well as in simple accounting. The following plan is merely a suggestion. Other such systems may also be applicable.

The PDP-11/10 and the RT-11 software offers an on line system with one hard copy device and one video scope usuable for printed copies and general information retrieval respectively. All demographic information can be entered at Intake and the file can be updated after every transaction - referral, disposition, release, etc. A data clerk could easily complete these tasks in minimal time (about eight hours per week) and the probation officers would be able to query the files at their convenience. An on line system assures confidentiality and eliminates time constraints as well as the inconvenience

of searching the file room. This type of system can be purchased for approximately $30,000 and maintained for $100 a month. Of immediate use is the daily record keeping capabilities; wider aspects include the assimilation of quarterly and monthly reports and an accurate description of monthly trends.

Appendix I - Project Director's Notes

The purpose of this appendix is to evaluate, on a rather intuitive basis, the administration implications of the Probation Management Alternatives Project. If anything is apparent from the data gathered and analyzed by the PMA Project, it is that the results are inconclusive as to which method of probation supervision is more effective.

I would hypothesize that the method of supervision is not so much a function of recidivism as are the uncontrollable factors that have exerted daily influence on the probationers for a substantial period of time. These factors include home, school and peer group.

As a suggestion for further research, it might be advantageous to separate the recidivist population from the data base and to do statistical analysis to determine if any factors significantly relate to the tendency to recidivate.

The need for an ongoing data collection and analysis program is definite.

As Dr. Davis points out in the research report, the lack of an established electronic data base was one of the biggest drawbacks of the project.

Any meaningful, ongoing assessment of the work of the department will depend upon the availability of an easily manipulated data base.

In order to provide a complete picture, it will be necessary to include both a juvenile offender based tracking system (JOBTS) and a management information system.

For the Court, the point of entry of the data would be at the intake level.

The maintenance of such a system would not be expensive and, in my opinion, would not necessitate the purchase of expensive hardware or hiring of personnel. Even though the development of the existing system was painstaking and slow, the trauma was typical of that reported by others in converting to computer systems. Now, most of the "bugs" have been worked out and the immediate needs of the department can be met and the operation should be considerably smoother. The Division of Automated Data Processing (DADP) has recently expanded its capacity to provide services, thereby enabling much more responsiveness.

The management information reports now programmed and in operation include:

1. Monthly Contact Report by Officer - giving the number of contacts by type and average time per contact listed by officer.

2. Monthly Contact by Case - each case actively assigned for field supervision is listed and the type and time of contact is listed.

3. Insufficient Contact Report - cases listed by officer and file number that were not seen in accordance with the degree of supervision specified.

4. Excess Contact Report - cases listed by officer and file number that were seen in excess of twice the minimum number of contacts specified.

5. Monthly Goal Completion Reports - correctional goals, completions data and number of days to completion for each probationer released from supervision.

These reports are necessary to provide a degree of accountability for the supervision of the probationers and

the most efficient use of time.

One factor that might be viewed with concern is that the average amount of time spent in case related contacts (as reported on the contact reports submitted by the officers) was less than 40% of the available work time.

This might indicate a need for training designed to increase the efficiency of time use. It also might indicate a need to study the non-case related time use (court responsibilities, public relations contacts, transportation of juveniles to and from the Detention Home, etc.) to determine if the field officer might not be relieved of some of these duties.

Presently, the Second Judicial District's Probation Department does not maintain data that can track the individual through the system. Their annual report, however, demonstrates considerable expertise in tracking paper.

While the research evaluation was inconclusive as to the effectiveness of traditional vs. team supervision, there might be some consideration given to the following:

1. Work environment
    a. physical
    b. emotional
2. Work performance
    a. accountability
    b. functional specialization
3. Training.

It should be noted that the Hawthorne effect has had some significance in the execution of the project; however, the writer feels that operationally the effect is distributed

equally on both the control group (traditional probation officers) and the experimental group (probation teams) and therefore equalized to some extent.

When the project was started, the working conditions of the traditional probation officers were changed significantly. The biggest change was a dramatic decrease in the size of the caseload. Prior to PMA, the average caseload for a single officer was between 70 and 80 probationers. As the caseloads for the PMA teams were built from the cases carried by the traditional officers, caseloads decreased to an average of 35 probationers per officer.

Accompanying this change was a shift in the record keeping procedures. For the first time, the probation officers were required to keep a record to be turned in weekly of the contacts they made. This was viewed by many of the traditional officers as a sign of mistrust and they resented this research requirement.

The PMA teams, however, were all neophytes to the job. None of the seven officers involved had been probation officers before. The record keeping requirements were included as a part of their initial training and were accepted. These record keeping chores were also accepted by the new traditional field officers as personnel changes were made. The writer feels that the record keeping which was imposed is part of the normal expectations of daily operation of any enterprise and are really minimal.

The authors of the original grant, in their omnipotent widsom, made no provision in the budget for office space rental

or any office furniture other than for the Project Director, Research Analyst, and Secretary. It became necessary for the project to secure space from the Albuquerque Public Schools (rent free) for offices, and the space provided was one classroom in the old Albuquerque High School. Office furniture was also scrounged from the school system and placed in a rather communal fashion in the space provided. Providentially, this situation has worked out to the benefit of the project. Territorial rights do not seem to be important to the PMA staff and it has made it possible for the entire project staff to interact. Indeed, the physical conditions forces interaction. This interaction includes the secretary and enables her to function effectively in situations when the probation officers are not in the office and some sort of action seems indicated to stave off crisis.

The emotional environment is also effected. Through the interaction of the team members, a collective support is given to individual efforts. Case planning uses the creative thoughts and experiences of several people and failure becomes less personal. Frequent team meetings provide almost daily feedback and different insights.

By contrast, being a traditional probation officer can be a lonely experience. Defeats become personal defeats. Situations such as the suicide of a probationer creates emotional drains for which outlets are not provided.

Work Performance

While the writer would like to assume that all people who are hired for jobs will do their utmost to accomplish what is

expected, it would be "Pollyanish" to believe that this is always true.

One situation this writer encountered early in the PMA Project which eventually led to the forced termination of a team member involved falsification of contact records and feedback reports to team members. The team members' contacts with the same probationers belied the reports and enabled the confrontation which led to the termination. This situation could have lasted indefinitely without the team interaction.

A situation which exists and has existed for a long time is the high attrition rate of probation officers within the department. Each time a probation officer leaves the caseload is shifted to a new officer, disrupting the continuity of service to the client. Through the team, continuity would be disrupted only if the entire team were to leave at the same time. A similar situation is created whenever a traditional probation officer goes on vacation, sick leave, etc. As long as one member of the team remains in town, the continuity of service to the client can be maintained.

Because of the specialization that each member of the team has, it is possible to better identify problem areas and develop the means to solve the problems. This also results in a satisfaction beyond that which can be experienced by the traditional officers who are confronted by such a multitude of problems that it is difficult to see the forest because of the trees.

An example of this may be seen by the work done by an educational specialist with the PMA Project. The relationship between educational progress and delinquency is becoming more and

more apparent. It seemed as if there was a need to identify the reasons for this and to improve the educational program accordingly. The team member identified the need and a community resource. This resulted in a comprehensive research project being initiated to determine the local relationship between learning disabilities and delinquent behavior as well as prescriptive educational programs designed to meet the needs of those subsequently identified as "learning disabled." (See Appendix II)

This program was made possible because of the specialization of tasks on the team and the ability of the other team members to cover when necessary.

Because of the relatively larger caseloads that the teams deal with, the ability to categorize problems and deal with these in groups has been facilitated.

For example, approximately 20% of the juveniles on probation are out of school and many of these need employment. The teams decided to deal with these clients in a group situation with the employment specialists and group worker teaching the skills necessary for obtaining a job. Unless a traditional officer's caseload was homogenously assigned, this type of group operation would be impossible and the resultant time savings would be lost.

Training

Because of the high turnover rate of probation personnel, the training of new probation officers must be an administrative concern. Budgetary considerations dictate replacement personnel cannot be hired until a vacancy exists. This means

that caseloads go unsupervised until new officers can be trained to assume them.

Training has generally been done by a combination of observation of another more experienced officer and specified tasks to be carried out.

The training process with the team is much the same with the exception that training is done with other members of the team doing the training and, since the caseload will be the same with which the new officer eventually works, assumption of full usefulness and effectiveness is facilitated.

Disadvantages

One could hardly write a credible exposition on the relative effectiveness of traditional versus team supervision without exploring some of the drawbacks of each. Lest the reader feel the writer has lost all objectivity, it is necessary to examine the drawbacks of team operations.

Effective team operation must allow time for exchange of information. At times, this communication must be a forced priority. There are always other things that team members can do such as telephoning, seeing clients, writing court reports, etc. It was decided early in the PMA Project that during the team meeting nothing short of a disaster would be allowed to interfere. This had to be reinforced from time to time.

Due to the inconclusive nature of the results, there is not sufficient justification to recommend that traditional, team or volunteer methods of probationer supervision be continued as they have been operating.

The cost factor would seem to indicate that more could

be done with the resources available to the Juvenile Probation Department, and the low percentage of time being spent by those officers responsible for field supervision working their caseload needs to be examined closely.

Generally, in a research effort the burden of proof is on the new or innovative. I am not sure that this is as it should be as it stifles the development of different solutions to the problems confronting us.

I would suggest that change should be an ongoing, dynamic process and that new and innovative ideas be constantly introduced, evaluated, adjusted and re-evaluated.

With that as a philosophical basis, the following suggestions are tendered:

1. Increase communication between the intake unit and the field officers - many times during the course of this project it was brought to my attention that the intake unit was involved in the supervision of a case after it was assigned to a field officer for ongoing supervision. The result was confusion and chaos. If a team method of supervision were to be adopted, it would be recommended that an intake officer be assigned as part of the team, thereby facilitating communication.

2. Increased use of group techniques - if it is not possible to increase the percentage of time being used by supervising officers for case contacts, then the use of group meetings would increase the effectiveness of the time spent. Even if the percentage of time spent on case contacts were increased, group meetings would still provide better efficiency.

3. Development of diversion capabilities within the department - the data would suggest the present methods of informal dispositions are not effective, especially with the younger offenders. A diversion unit which could offer remedial services rather than just lecture and release might be indicated.

4. Clarification of the lines of authority for the

Director of Volunteers - a major disappointment has been the inability to receive any information concerning the Volunteer Probation Officer Program to include in the data base. Strict lines of accountability need to be established for this program.

On a personal note, I would like to recognize the efforts of many people who contributed to the successful implementation of this project. There were a number of professional consultants who gave of their expertise: Dr. Kyle Pierce, Clinical Psychologist; Dr. Richard McDowell, Professor of Special Education, University of New Mexico; Dr. Billy Watson, Associate Professor of Special Education, University of New Mexico; and Dr. Hubert Davis, Associate Professor of Mathematics, University of New Mexico.

Also, Jim Garcia and Michael Kenney of the Bernalillo County Mental Health Center; Ms. Pat Donnallen, Family Counseling Service, and a multitude of people and agencies too numerous to mention.

I would also extend my personal thanks to the twelve judges of the Second Judicial District and especially to Judge Joseph F. Baca, Administrative Judge of the Children's Court, and to Ed Mahr, Court Administrator, without whose backing the project would have been impossible.

A very special note of thanks should go to the project staff members, the seven probation officers, the research analyst, and the secretary. These people assumed a pioneering attitude and came through rather well in the atmosphere of uncertainty about their future or the future of this program.

I hope that all is not done and said about this project. I would hope that it might serve as the springboard for

continually examining the validity of the method of operation of the probation system.

John C. Patterson, Director
Probation Management Alternatives
Project

Appendix II - INTERIM REPORT*

Diagnostic Evaluation of Delinquents

Scoring and data analysis has been completed on only a part of the subjects in the study. Since the number of subjects included in each mean and standard deviation differs the number of subjects will be indicated for each area. No data are included on the neurological examinations. Also, no data are included on the incidence of learning disability since this requires an individual by individual evaluation. The final analysis of all data should be completed by August 15, 1976.

The slowness of this process emphasizes the need for an individual at Manzanita Center whose sole responsibility for 20 hours per week would be to conduct diagnostic evaluations, score and analyze results, and report those results to the court, the probation officer, and the school or other placement agency. Such a position in the form of a graduate assistant is available at a fraction of the cost ($3807) than it would be available in any other setting.

Results

The mean age of the 28 subjects was 15 years 8 months (SD=16.010 months) with a range from 12-3 to 17-7. Of these 28 subjects, 24 were male and four were female. Mean grade placement for last grade successfully completed was 9.76 (SD=7.640). Last grade successfully completed ranged from

*Compiled by Dr. William Watson, Associate Professor, Special Education, University of New Mexico.

grade 7 to grade 12 for 25 subjects. One of the 25, who only completed seventh grade, was in a GED course at the Technical-Vocational Institute at the time of the testing.

An assessment of receptive vocabulary was done using the Peabody Picture Vocabulary Test. The scores are especially reflective of poor and different language backgrounds. Standard scores on this test tend to have a fairly high relationship to intellectual (primarily verbal components) quotients obtained from more comprehensive instruments. With n=22, the mean standard score was 85.500 (SD=14.712). This is approximately one standard deviation lower than the mean of the group on which the test was standardized. However, such a score is at the very lower end of the normal range. Scores ranged from a low of 62 to a high of 109.

Subtests of the Goldman-Fristoe-Woodcock Sound-Symbol Test battery were used to measure auditory functioning in several areas. (For this test, the mean scale score for the standardization group was 50.)

Subtest 3, Sound Analysis, scores for 19 subjects were analyzed. The task requires the subject to identify the first, middle and last sounds of nonsense words. Mean scaled score was 42.842 (SD=14.311). Scaled scores ranged from 1 to 60. Any scores below standard score of 43 are considered significantly low. Six subjects scored in this category.

Subtest 4, Sound Blending, requires the subject to synthesize the individual sounds of real words. This is an important task in reading. Mean scaled score was 43.368

(SD=10.028) (N=19). Scaled scores ranged from a low of 27 to a high of 60. Nine subjects scored below 43, which is considered an indication of deficit in this task.

Data on 17 subjects on Subtest 5, Sound-Symbol Association, require the subject to recognize an unknown symbol and a nonsense name given the symbol. This appears similar to the task of spelling. The result was a mean scale score of 48.882 (SD=8.767). This mean score is considered well within the normal range; however, four subjects did score significantly low.

Subtest 7, Spelling Sounds, requires the subject to listen to a nonsense word, repeat it and then spell the word. This requires an auditory input and a written output. Scoring was completed on 11 subjects. Mean scaled score was 39.363 (SD=7.690) compared to a standardized mean of 50. Of the 11 subjects, seven indicated deficits in this area.

On the Developmental Test of Visual Motor Integration the mean age score (SD=33.598) for 14 subjects. The task requires the subject to copy a geometric shape. The test was standardized on youngsters two through fifteen. For subjects older than fifteen, their performance must be interpreted cautiously. Four of the fourteen subjects on which scoring and analysis was completed scored below CA 6.11, which is considered to be a significant discrepancy.

The Piers-Harris Children's Self-Concept Scale was also administered. Subjects respond to statements about themselves with yes or no. The mean stanine score for 13 subjects was 3.692 (SD=1.315). This is below the average range. Four

scores fall within the below average range and one falls within the low range.

Scores on three subtests of the Wide Range Achievement Test: Reading, Spelling, and Arithmetic for 16 subjects were analyzed. Mean scores of two types: scale scores and grade equivalent scores, are presented. Scale scores consider the age of the subject. Grade equivalent scores are median scores. The raw score from which the median score is derived is the middle score (half were higher, half were lower) for that grade level in the standardization sample. In reading, the mean scale score is 88.187 (SD=13.712). The standardization mean scale score was 100. Scale scores ranged from 63 to 112. The four scores above 100 were 101, 101, 111, and 112.

Mean grade equivalent score in reading for 16 was 7.6 (SD=2.792). This compares with the mean grade placement of 9.76 for the group of 28. Two subjects were below the level of functional literacy (fourth grade) and one subject was at the fourth grade level. Thirteen of the 16 subjects were reading below the level of the last grade completed.

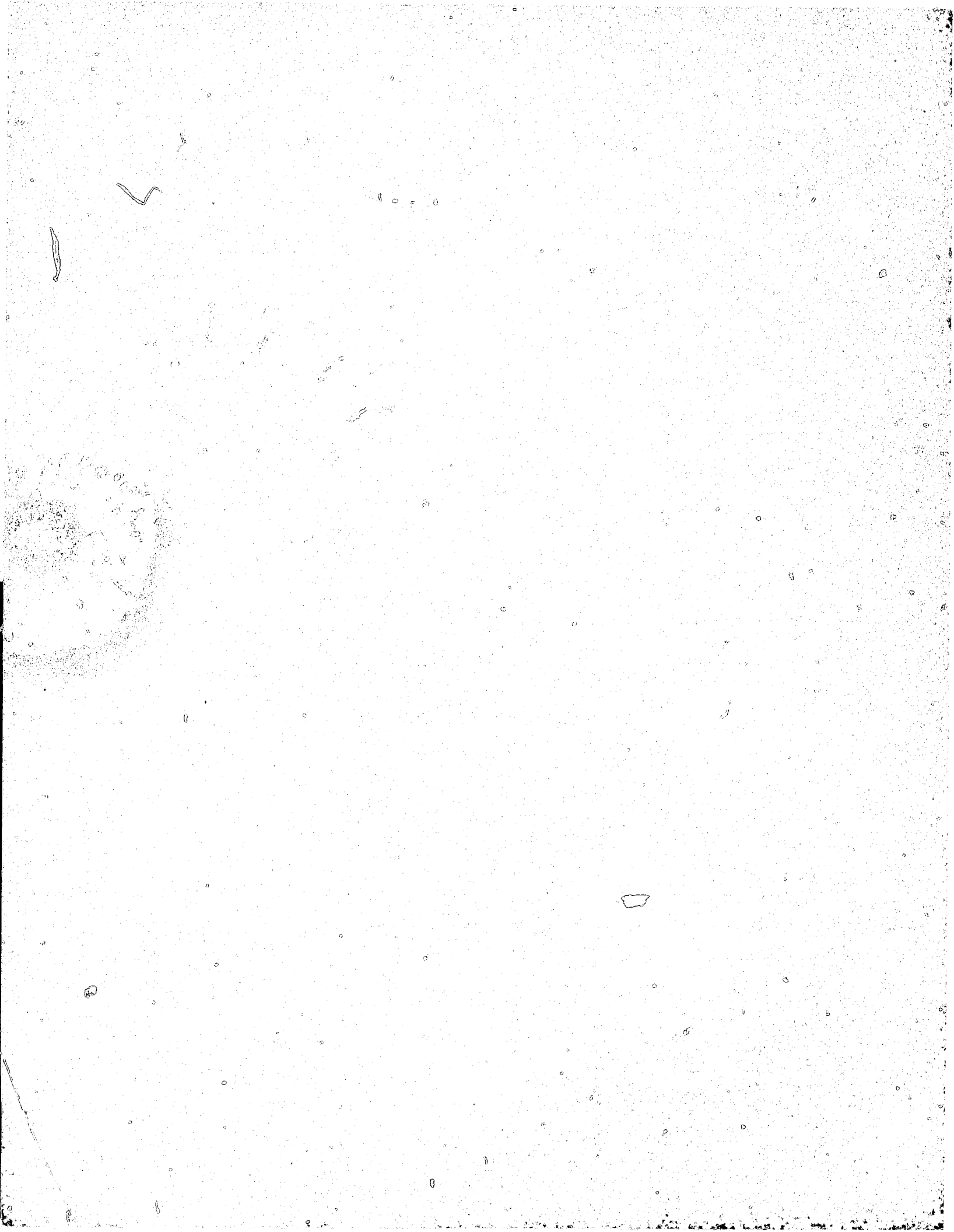
The mean scale score in spelling was 79.25 (SD=9.671). The range of scale scores was from 64 to 91. Not a single subject reached the standardization mean of 100 and only two had scale scores in the nineties. Grade equivalent mean score in spelling for the 16 subjects was 5.531 (SD=1.808). The range was from 2.6 to 7.8. None of the scores was equivalent to the last successfully completed school grade.

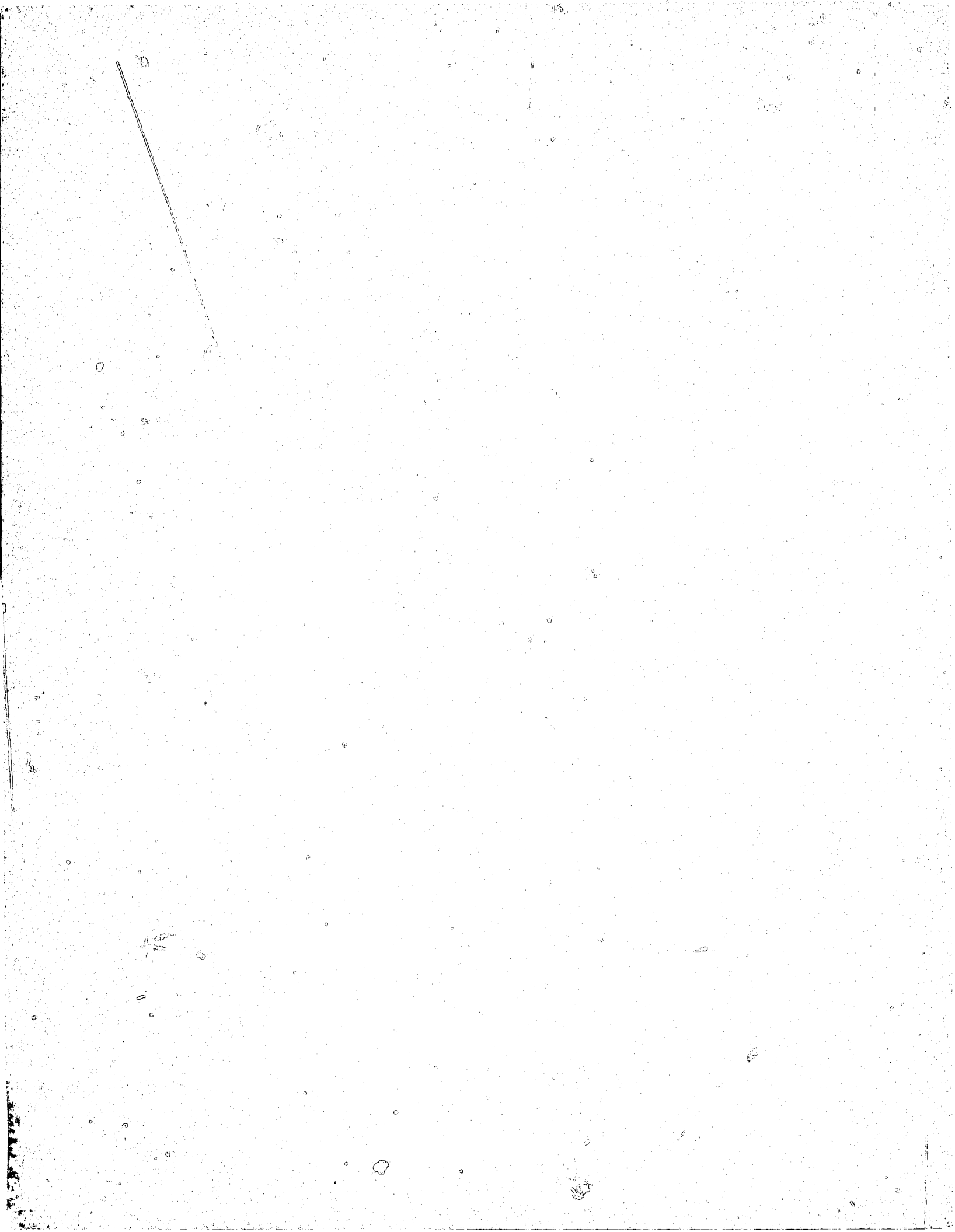
Scores in Arithmetic were the lowest of the three academic content areas measured. Mean scale score was 75.062

(SD=9.953). Scale scores ranged from a low of 62 to a high of 99. The next highest score was 84. Mean grade equivalent score was 4.775 (SD=1.835). Range of grade equivalent scores was from 2.3 to 9.5, with the next highest score being 6.3.

In summary, these interim results indicate that most of the subjects have a great difficulty mastering basic academic skills. The results of the auditory and visual tests indicate that some of these difficulties may be attributed to learning disabilities "within" the child and are possibly enhanced by poor environment. However, most of the school learning problems are probably not directly attributable to difficulties within the children themselves. Regardless, these tentative results point up the need for a thorough psychoeducational diagnosis and appropriate teaching program.

TABLES INDEX





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