

FIRST-YEAR FUNCTIONAL IMPACT of
a UNIQUE COLLABORATIVE PROGRAM
of SCHOOL-BASED
MENTAL HEALTH INTERVENTION

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PARENT QUESTIONS BEFORE ED ENROLLMENT

1. What are the rates of success for your program?
2. How long before he can return to regular school/classes?
3. Will he eventually return to regular school/classes?
4. Can you help him read better?

OUTCOME FINDINGS

1. Annual DOE reports:

ED drop out rate = 51% in 1999-2000 (LD = 2nd at 28%)

2. Greenbaum et al., 1996:

43% drop out for an 8-18 yo SED cohort over 6 years

3. Mattison & Felix, 1997:

8-year follow up of SED cohort

Elementary school = 47% success, 26% without success, 27% still in

Secondary school = 40% success, 59% without success, 1% still in

4. No evidence-based studies

Baseline Predictors of 8-yr Outcome (Unsuccessful)
(Mattison, Spitznagel, & Felix, 1998)

	<u>p=</u>	<u>OR</u>	<u>95% CI</u>	<u>Points</u>
Age	.003	1.24	1.08-1.43	1 per yr.
Any CD/ODD	.008	2.88	1.32-6.32	5
<u>No</u> Anx/Depr	.03	0.44 (2.27)	0.21-0.94	-4
PIQ>VIQ	.04	2.46	1.03-5.85	4

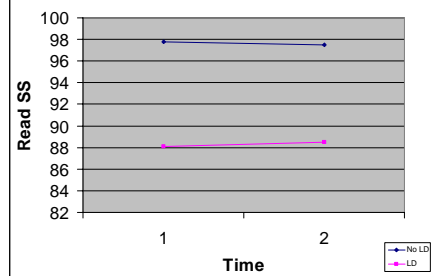
(Concordance = 73.3%)

Three-Year Follow Up of 81 ED Students
(Mattison, Hooper, & Glassberg, 2002)

	<u>Baseline</u>	<u>3-Year</u>	<u>r</u>
WISC-R:			
Verbal	98.6	96.4	.77
Perf.	101.8	101.2	.76
Full Scale	100.1	98.6	.81
WJPEB SS:			
Reading	91.9	92.0	.72
Math	90.4	89.7	.69
Written	93.9	90.4*	.67

*p<.05

Change in Reading SS



PROTOTYPE ED STUDENT

Demo: Male
Lower middle class

Educ: Low average IQ
LD comorbidity

Family: Single mother
Abuse experience
Parent with psychiatric disorder

DSM: ADHD
Comorbidity

Severity: Parent and teacher T scores > 70

Treatment: None (or inadequate)

"PSYCHIATRIC CONSULTATION" MODEL

- Unresponsive to previous ED services
- Program of intensive school-based mental health intervention
- Long Island BOCES middle school
(n= approx. 120 from 24 school districts)
- 4 hours/day consultation by child psychiatrist (Stony Brook)
- Day program for 24 students (State Hospital staff)
- Individual + group + family therapy
(5 BOCES therapists + 2 substance abuse counselors)

- Crisis intervention (principal + 2 asst. principals + therapists)
- 6-8:1:1 classrooms (n=15)
- Instruction for Regents testing
- Regular middle school day
- School-wide behavioral level system
- Other special ed services (pull out)

What is the first-year outcome of school function for new students in this program compared to their prior year?

PARTICIPANTS

N=24 (10 + 14)

Male 95.8%

Mean age 12.8 ± 1.3 years

Caucasian 87.5%

SES 40.5 ± 14.6 (skilled, clerical, sales)

Full IQ 100.4 ± 15.4

METHOD

One-year outcome (previous yr vs 1st yr in program)

Measures of school function:

Academic =
Major subject GPA (n=19)
Major subject fail (19)
Reading SS (18)

Attendance =
Days absent (20)
Days late (18)

Behavior =
DR (19)
OSS (21)

Measure of psychopathology:

DSM-IV Symptom Categories of
Child Symptom Inventory (CSI-4T)
(Gadow & Sprafkin) (23)

Data analysis:

Repeated-measures ANOVA

CHANGES IN FUNCTION

	<u>Pre</u>	<u>Post</u>	<u>p=</u>	<u>ES</u>
Academic:				
GPA	68.1 (± 9.9)	74.6 (7.0)	.02	.66
Fail	1.6 (1.8)	0.5 (1.0)	.02	.59
Read SS	98.5 (18.3)	97.4 (12.4)	ns	

CHANGES cont'd

Attendance*:				
Absent	17.6 (10.7)	18.3 (14.3)	ns	
Late:	5.7 (7.3)	2.4 (3.6)	.03	.45
Behavior:				
DR	11.8 (11.9)	4.9 (6.8)	.008	.58
OSS	1.7 (2.6)	0.9 (1.5)		(.07)

* Additional 3 = Home tutored

CHANGES IN CSI-4T T SCORES

<u>Sx Category</u>	<u>Pre</u>	<u>Post</u>	<u>p=</u>	<u>ES</u>
ADHD-I	66.6	63.5	ns	
ADHD-H	68.0	67.2	ns	
ADHD-C	68.8	66.3	ns	
CD	67.7	59.2	.02	.45
ODD	76.1	71.2	ns	
GAD	81.6	75.9	ns	
MDD	75.7	72.9	ns	
DYS	76.1	74.3	ns	
BIPOL	72.3	71.1	ns	

OTHER FINDINGS OF FUNCTION DURING FIRST YEAR

Intensive treatment:	
Psychiatric hospitalization	12.5%
Day program	8.3%
PINS	4.2%
(Medication	79.2%)
Critical symptoms:	
School aggression vs peers/staff	16.7%
Suicidal symptoms	4.2%
Drug/alcohol counseling	12.5%

ANNUAL COMPARISON OF FUNCTION IN PROGRAM

	03-04 New (n=24)	00-01* All (n=89)
Major GPA	74.6	79.9
Major failures	0.5	0.3
Absenteeism	18.3	14.9
Late	2.4	4.2
DR	4.9	4.9 **
OSS	0.9	1.1

* Teaching = curriculum-based vs Regents
** New > old students (p<.01)

CONCLUSIONS

1. These high-risk ED students showed noteworthy improvement in each functional domain (academic, attendance, & behavior), i.e., significant practical gains.
2. Importantly, significant improvement occurred in conduct symptoms, an especially negative outcome predictor.
3. Critical clinical indicators were not common during the course of the year in this vulnerable group.

LIMITATIONS

1. Unique ED group and program.
2. Relatively small n – therefore, no investigation of predictors.
3. No comparison group (i.e., an open trial).
4. Primarily school-based data, i.e., limited information from parents.
5. Difficulty in obtaining past school information.

IMPLICATIONS

1. The methodology in this study can serve as an early model for future evidence-based research on outcome for ED students.
2. The outcome results for these high-risk ED students can be compared with future studies of other ED programs.
3. What level of mental health services is necessary to compliment ED programming?

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