

## Research Update on School Mental Health: Redefining the Boundaries

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February 23, 2006

## Outline

- Policy context of school EBPs/EBIs
- Models of implementation: NYC School Support Example
- Research update: Review of outcome studies
- Alternative approaches to examining implementation of EBPs/EBIs in schools

## Reform in Regular and Special Education: A Context for EBPs and EBIs

- Reauthorization of IDEA
- President's Commission on Excellence in Special Education
- Report of the Coalition for Evidence-Based Policy
- What Works Clearinghouse ([www.w-w-c.org](http://www.w-w-c.org))
- K-3 Intervention Projects funded by OSEP (see <http://www.wcer.wisc.edu/cce/>)
- Progress Monitoring Center at Vanderbilt U
- School Psychology Task Force <http://www.sp-ebi.org>
- Evidence-Based Mental Health website: <http://cebmh.warne.ox.ac.uk>
- Center for Evidence-Based Medicine website: <http://www.library.utoronto.ca/medicine/ebm>

## Major Reports on Children's Mental Health, EBPs, & Schools

- Mental Health: A Report of the Surgeon General (1999)
- Report of the Surgeon General's Conference on Children's Mental Health: A National Action Agenda (2000)
- Youth Violence: A Report of the Surgeon General (2001)
- National Strategy for Suicide Prevention (2001)
- Supplement to the Mental Health Report: Culture, Race, Ethnicity (2001)
- Blueprint for Change: Research on Child and Adolescent Mental Health (NIMH, 2001)
- NASDSE & NASMHPD Monograph (2002)
- President's Commission on Excellence in Special Education (2002)
- President's Commission on Disadvantaged Youth (2003)
- President's New Freedom Commission Report on Mental Health (2003)
- Safe, Supportive and Successful Schools: Step by Step (Osher, Dwyer, & Jackson, 2004)
- School Mental Health Alliance Report (2005)
- Center for Mental Health in Schools Initiatives website: <http://smhp.psych.ucla.edu>
- University of Maryland's Center for School Mental Health Assistance; website: <http://csmha.umaryland.edu>
- Annenberg Foundation/Oxford U Summit on Evidence-Based Interventions (2004)

## EBPs: Definitions in MH

- From Chambless, Shulman, et al 1998; Lonigan, Elbert, Johnson, 1998; update in press
- Well established and probably efficacious: difference is in whether different investigators have tested the model
- At least two controlled group design studies or a large series of single-case design studies
- Minimum of two investigators for well established
- Use of a treatment manual
- Uniform therapist training and adherence
- True clinical samples of youth
- Tests of clinical significance of outcomes
- Functioning outcomes plus symptoms
- Long-term outcomes beyond termination

## Alternative approaches to evaluating evidence

- Kazdin 2004 criteria
- Not evaluated
- Evaluated but unclear, no or possibly negative effects at this time
- Promising (some evidence)
- Well-established (parallel to well-established in conventional schemes)
- Better/Best Treatments (treatments shown to be more effective than other evidence-based treatments)

### Additional Considerations for Schools

(Kratochwill, 2005)

- What is the professional consensus on the intervention?
- What do my own knowledge and experience tell me?
- What is the safest decision?
- What is the cost?
- How harmful would the "wrong" decision be?
- What are my student's/consultee's/parent's preferences?

### Task Force on Evidence-Based Interventions in School Psych

(Kratochwill + Hoagwood, Co-Chairs)

- Outgrowth of APA's Division 12 (Clinical Psych), Committee for Empirically Supported Practice Division of Clinical Child Psychology (Division 53) and the Interdisciplinary Committee on Evidence-Based Youth Mental Health Care
- Focus and Scope of the Task Force: <http://www.sp-ebi.org>
- Developed Procedural and Coding Manual
- Conducting implementation study of EBIs in schools  
See the *School Psychology Quarterly* Mini-Series on the Task Force and Futures Conference article.

### Applying EBPs in School MH Clinics in NYC: Lessons Learned

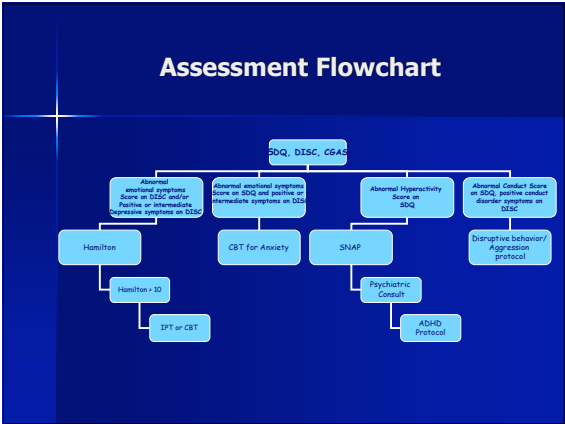
Peter S. Jensen, M.D.  
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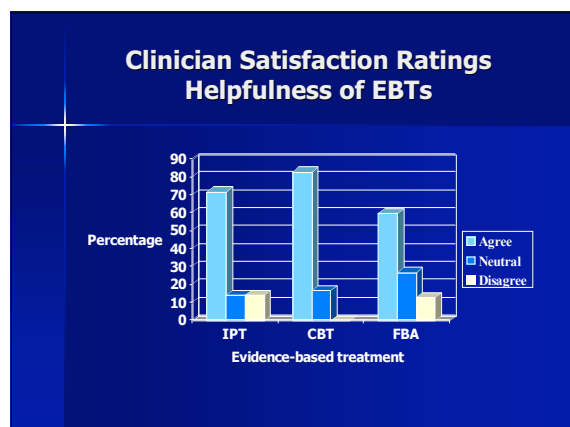
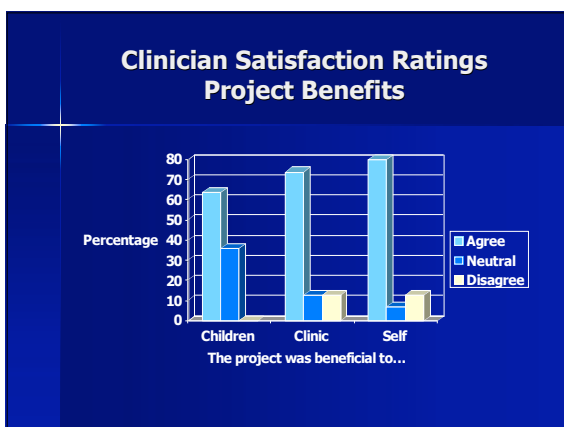
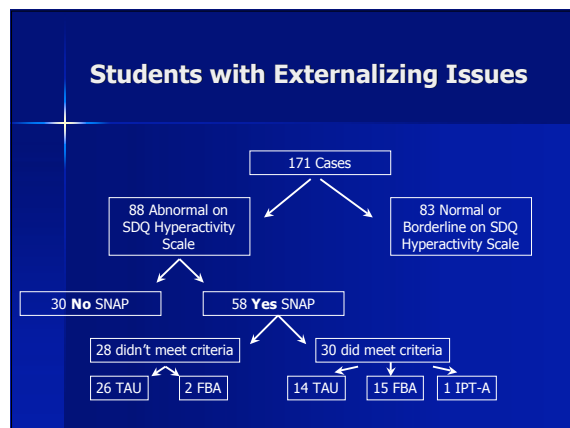
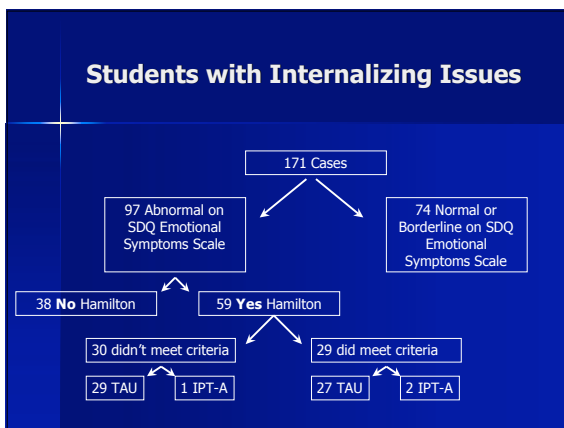
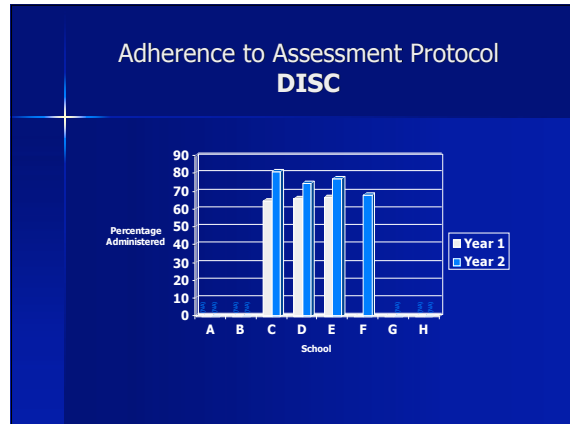
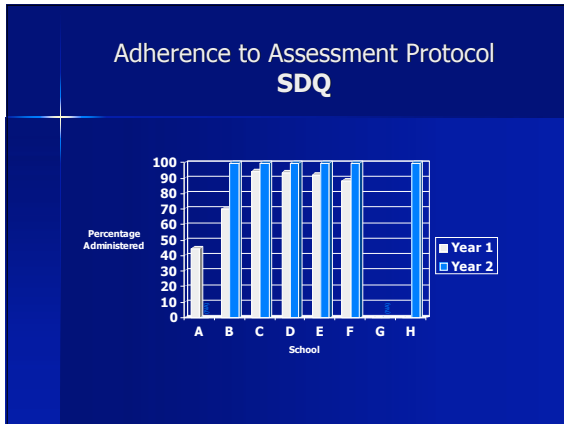
### Evidence-Based Assessments and Treatments

- Seven school health clinics in NYC with mental health staff identified through state-issued RFP
- All school-based clinicians provided training in a battery of assessment measures
- Each offered training in their 1<sup>st</sup> or 2<sup>nd</sup> choice EBT
- Training included 1-2 days of didactics plus weekly on-site consultation around specific cases
- Clinicians encouraged to use treatment with all appropriate cases, not just cases for which they received consultation

### Evidence-Based Assessment Measures

- Strengths and Difficulties Questionnaire (SDQ)
- Diagnostic Interview Schedule for Children (DISC)
  - Depression module
  - Anxiety module
  - Substance Abuse module
- Children's Global Assessment Scale (C-GAS)
- Hamilton Rating Scale for Depression
- SNAP





**Average Number of Sessions by Type of Session for Open and Closed Cases (n=138)**

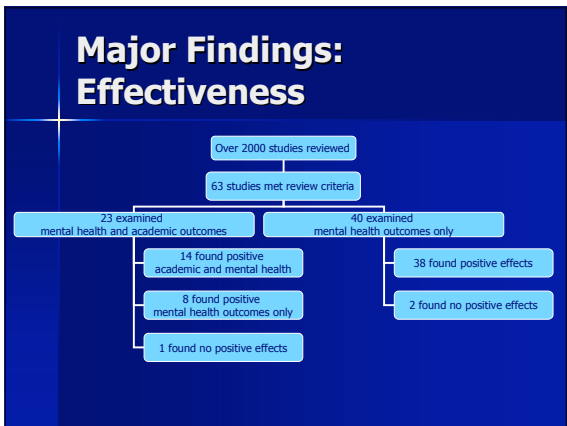
| Type of Session | Average # of Sessions for Open Cases (n=65) | Average # of Sessions for Closed Cases (n=73) | Average # of Sessions for All Cases (n=138) |
|-----------------|---|---|---|
| Individual      | 25.23                                       | 17.59   | 21.19                                       |
| Parent          | 6.11  | 1.90  | 3.88  |
| Family          | 1.55  | 1.08  | 1.30  |
| Crisis          | .48   | .42   | .45   |
| Group           | .37   | .41   | .39   |
| Teacher Consult | 2.63  | .79   | 1.66  |
| Psychiatric     | 1.42  | 1.62  | 1.51  |
| Missed          | 5.95  | 6.44  | 6.21  |

- Implementing EBPs in Schools  
Lessons Learned**
- Clinicians will default to that with which they are most familiar
  - Supervisory support on using EBPs was lacking—may be critical for sustained implementation
  - Model was externally driven, not internally integrated within the school clinics
  - EBP implementation needs to be fitted to the needs of schools, not vice versa

- One problem of fit: Types of outcomes assessed  
Review of School MH Program Outcomes (Hoagwood, Olin, Kerker, Kratochwill, under review)**
- Knowledge base on MH programs and those targeting educational achievement is disconnected
  - Majority of studies on school MH interventions fail to include school-related outcomes
  - This review examines
    - the effectiveness of school-based interventions that target both educational *and* mental health outcomes,
    - constructs of measures used, and
    - implications of the overlap for school MH services

- Criteria for Inclusion**
- Program criteria for inclusion:
    - Prospective, longitudinal design
    - Random assignment or quasi-experimental comparison
    - Published between 1990 and 2004
    - Evaluation within public school setting

- Definitions of Outcomes**
- Mental health was defined broadly to include behavioral issues, emotional problems, impaired functioning, or psychiatric diagnoses
  - Educational outcomes consisted of students' academic progress (e.g., grades, special ed placement) and behavioral functioning within the school (e.g., attendance, suspensions)



## Results

- Over 2000 articles reviewed
- Only 63 studies met criteria for inclusion in this review
- 23 of these 63 studies (36.5%) tested the effects of a program on both academic and mental health outcomes
- The remaining 40 studies (63.5%) examined only mental health outcomes

## Major Findings: Effectiveness

- Of the 23 studies, fourteen (60.9%) found a statistically significant impact on both academic and mental health outcomes
- Eight studies (34.8%) found the program to improve mental health but not academic outcomes, while one study (4.3%) found no positive effects
- Notably, 38 of the 40 studies (95%) that examined mental health outcomes only were found to be significantly effective.

## Major Findings: Mental Health Constructs

- A variety of self, peer, teacher, or parent-reported measures were used
- These measures assessed social competence, aggression, antisocial and other problem behaviors
- Standardized Instruments included:
  - Child Behavior Checklist, Teacher Observation of Classroom Adaptation, Teacher-Child Rating Scale, Behavior Assessment System for Children, Behavioral and Emotional Rating Scale

## Major Findings: Educational Measures

- Educational outcomes most frequently assessed included grades, reading and math scores, school attendance, and special education placement
- Standardized measures included:
  - Effective School Battery, Classroom Environment Assessment, Woodcock Johnson-Revised Tests of Achievement, Comprehensive Test of Basic Skills, Diagnostic Reading Scales, California Achievement Tests, Washington Assessment of Learning Outcomes

## Major Findings: Target Population

- Seventeen of the 23 studies (73.9%) focused on kindergarten and elementary students, a majority of which had a preventive focus
- Of the six studies targeted at middle and high school populations, three focused on conduct problems and three on stress-related issues

## Major Findings: Interventions

- 11 of the 14 dually effective programs were highly intensive, targeting children at risk for antisocial behavior
  - Multiple levels of target (individual and environment)
  - Across multiple context (both home and classroom/school)
  - Over extended periods of time (1 to 2 years or more)
- The 8 programs that had positive mental health outcomes only were less intensive
  - Limited school or family involvement (usually researcher implemented)
  - Less than a year

### Implications: the gaps

- Paucity of empirically-validated school-based MH interventions (63/2000 or < 1%)
- Majority of these studies (2/3<sup>rd</sup>) failed to include educational outcomes or school context variables, even when interventions were designed to effect classroom or school-wide processes.

### Implications: Challenge of Measuring Educational Outcomes

- May be difficult for programs to demonstrate academic impact because distal outcomes such as grades and school drop out are less likely to have an immediate change
- More proximal variables that mediate educational outcomes (e.g., academic engagement, disciplinary actions associated with conduct problems, classroom and school climate) may be more sensitive to change but few practical measures of these constructs

### Implications: What Seems to Work?

- Effective studies highlight the importance of family involvement for improving both the academic and mental health outcomes for children with mental health needs
- Effective programs tend to be highly intensive, and program effects tend to be larger when measures of outcome overlap with content of intervention.
- Need to understand the processes by which mental health interventions affect academic and other educational outcomes; critical in efforts to streamline or adapt effective interventions for larger scale dissemination

### APA School Psych Task Force Study: Implementation of EBIs in Schools:

(Hoagwood, Kratochwill, Forman, Atkins, Rosenberg, Olin, Saka)

- **GOALS**
- **A. Identify EBIs currently being used in schools; identify their core characteristics**
  - Review federal and foundation sources to identify evidence-based programs targeted at children & youth
  - Review and compare their criteria
  - Identify school-based programs that have received the greatest number of endorsements
- **B. Interview program developers to examine facilitators or barriers of:**
  - Adoption of programs
  - Initial implementation
  - Sustainability

**Agencies or Organizations with EBP lists**

| Organization  | Main mission  | Programs and ratings                           |
|---|---|--|
| American Youth Policy Forum   | Reducing juvenile crime   | 25 effective programs                          |
| Blueprints for Violence Prevention  | Violence, delinquency, aggression and substance abuse   | 11 model programs and 18 promising programs    |
| Center for Mental Health Services, U.S. Department of Health and Human Services | Reduction of risks or effects of psychopathology in school aged children, from ages 5 to 18.            | 32 Effective and 2 Promising programs          |
| Center for Substance Abuse Prevention (CSAP)                                    | Substance use prevention  | 66 Model, 37 Effective, and 55 Promising prog. |
| Department of Education, Safe and Drug-free Schools                             | Making schools safe, disciplined, and drug-free: reducing substance use, violence, and conduct problems | 9 exemplary and 33 Promising programs          |
| Surgeon General's Report (2001)   | Violence prevention and intervention  | 7 Model, 20 Promising programs                 |
| Center for Disease Control  | HIV Prevention  | 24 effective programs                          |

**Agencies/Organizations with EBP lists Cont'd**

| Organization                            | Main mission  | Programs and ratings                                  |
|---|---|---|
| Communities That Care                   | Substance abuse, delinquency, teen pregnancy, dropout, and violence. Positive development of youth and children | 92 effective programs                                 |
| Mihalic and Aultman-Bettridge (2004)    | Reviewing school-based, evidence-based programs   | 6 exemplary, 17 Promising, 33 Favorable               |
| National Institute of Drug Abuse (NIDA) | Substance Use prevention and reduction  | 10 effective programs                                 |
| Strengthening America's Families        | Family therapy, family skills training, in-home family support, and parenting programs                          | 14 exemplary I, II 16 model, and 5 Promising programs |
| Title V (OJJDP)                         | Delinquency prevention  | 56 exemplary, 44 effective, and 69 promising programs |
| Promising Practices Network             | Broad prevention  | 20 Proven and 44 promising programs                   |
| Hamilton-Fish Institute                 | School violence prevention  | 12 Effective and 11 Noteworthy program                |
| CASEL                                   | Promote social and emotional learning   | 21 Select, 80 Safe and sound programs                 |

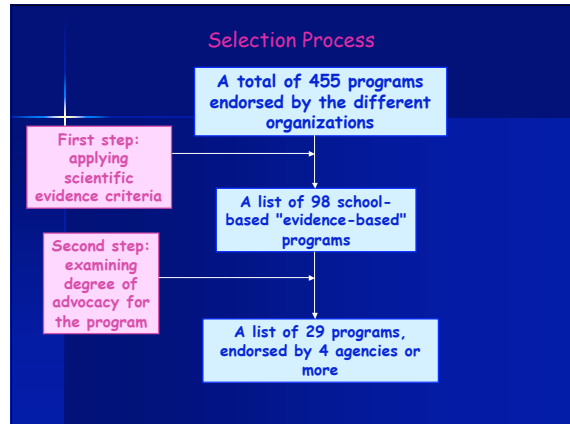
### Criteria for Selection

**First Step: Evidence Criteria for selecting programs**  
 • 3 criteria for "evidence-based"

- Programs had to be school-based or have school-based components
- Programs had to be tested in studies utilizing either a randomized control or a quasi-experimental research design (quasi-experimental = matched control or comparison group without random assignment; usually with equivalence of groups or statistical adjustment)
- The program's outcome data had to show clear evidence of the program's effectiveness (e.g., significant effect on targeted variables)

**Second Step: Degree of Endorsement**

- The number of endorsements by various organizations for each program served as an indicator to the degree to which the program was advocated for
- The 4 agency endorsements emerged as a natural cut-point



### General Characteristics of the Programs

Out of the 29 programs

- 11 Comprehensive prevention
- 9 Violence and behavior problems prevention and intervention
- 8 Substance use
- 5 Social skills and emotional adjustment
- 2 Academic
- 1 Specific mental health disorders (PTSD)

### Implementation Interview Protocol for Developers

- An Intervention Interview Protocol has been constructed and revised for the present project

The interview consists of 4 sections:

- General questions about the program (e.g., main purpose and background information)
- Questions about adoption and initial implementation: Assessing factors that act as facilitators or barriers to the process of adopting a program in the school, or to the process of the initial implementation
- Questions related to implementation technology or requirement such as space, human resources, funding, training etc.
- Questions about sustainability of the program, both with the support of the developer and independently from them

## Concluding Thoughts

- Current MH models of implementing EBPs in schools are inadequate
  - Lack of attention to academically relevant outcomes, to school processes that may affect implementation, to school contingencies
- Reverse engineering is needed

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