Chapter Six

Issues in School-Based Mental Health Services Chapter Six — Issues in School-Based Mental Health Services

Assessing School-Based Mental Health Needs and Services: Implications for Maximizing Youth Outcomes

Introduction

Mental health issues in children have broad, and in some cases, long-term academic, social, and familial consequences (Park et al., 2001).

Programs that address mental health needs and diagnoses in the schools are increasingly cited as best practices for prevention and intervention. This paper describes results from a project commissioned by the Hamilton County Community Mental Health Board with funding from the Health Foundation of Greater Cincinnati with the aims of: (a) assessing Hamilton County Public School Districts' perspectives on the *mental health needs* of students (within their district); (b) assessing Hamilton County Public School District's perspectives on the *mental health services available* to students (within their district); and (c) providing recommendations for how identified gaps can be addressed to optimize mental health functioning in students and to maximize the potential for school-based mental health services.

The implications for schools, agencies, funders and mental health advocates from this project are numerous and provide information about how educational and mental health systems can collaborate to promote and optimize mental health outcomes for children and adolescents.

Method

Participants

The target population for the project was the administrative staff within the 22 school districts in Hamilton County, Ohio and their 198 respective schools. One-hundred percent of the 22 Districts and 80% of the 198 Hamilton County Schools completed the survey.

Procedures/Survey Methods

Districts and schools were mailed a packet that included a letter, hard-copy version of the survey with a self-addressed stamped envelope, and clear instructions on alternative methods for completing the survey. Respondents could complete the adapted version of the SAMHSA *Survey of Characteristics and Funding of School Mental Health Services* (US Department of Health and Human Services, 2005a) by hard copy/mail, hard copy/fax, phone/in-person interview, electronic/email, or electronic web. The mailing was followed up by an email version of the cover letter with a web link to the survey and electronic copy of the survey. If respondents requested a phone interview after initial contacts were made, an appointment was scheduled to complete the survey. Districts and schools that had not responded within three weeks after the introductory letter was mailed were offered the option to complete a shorted version of the survey that included the "essential questions" on student mental health needs and resources.

The District version of the survey consisted of 30 items, many of which were included in the SAMHSA survey (US Department of Health and Human Services, 2005b). Many of the questions were related to the funding of mental health services for staff and intervention and prevention programs. The School version of the survey included 23 items related to the delivery of mental health services, collaboration with community agencies, and the mental health needs of students in the school. Data from all survey types (i.e., fax, email, web-based survey) were entered into a database and responses were summarized using descriptive analysis. Where appropriate, surveys were analyzed for urban versus non-urban schools.

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Results

Students' mental health needs were rated higher as students progressed in grade/age, with 47% of district representatives rating the needs of 7th and 8th graders as high, and 65% of district representatives rating the needs of 9th to 12th graders as high. Social, interpersonal and family problems were the highest rated need for both males *and* females attending urban *and* non-urban schools with 75% to 85% of school representatives rating them as one of the top three problems. Interventions for social, interpersonal and family problems were also rated as the highest consumer of school's resources for all four categories of students (e.g. male/urban, female/urban, male/non-urban, female/non-urban; see Table 1).

	Non-Urban Females	Urban Females	Non-Urban Males	Urban Males
a. Adjustment issues	12.2%	30.5%	17.2%	30.8%
b. Social, interpersonal, or family problems	74.8%	85.0%	76.0%	74.9%
c. Anxiety, stress, school phobia	34.8%	27.4%	20.5%	21.2%
d. Depression, grief reactions	32.3%	22.5%	14.7%	11.5%
e. Aggressive/ disruptive behavior, bullying	38.4%	39.1%	54.2%	50.9%
 Behavior problems associated with neurological disorders (e.g. ADHD) 	28.1%	12.8%	45.7%	33.6%
g. Delinquency and gang-related problems	2.3%	3.7%	4.7%	3.8%
h. Suicidal or homicidal thoughts or behaviors	2.8%	1.9%	0.7%	0.0%
. Alcohol/drug problems	3.2%	7.3%	11.1%	4.2%
. Eating disorders	2.9%	0.0%	1.0%	0.0%
k. Concerns about gender or sexuality	1.3%	0.0%	1.6%	1.0%
l. Experience of physical or sexual abuse	1.4%	2.8%	1.6%	0.0%
m. Sexual aggression, including harassment	1.5%	2.8%	0.0%	1.9%
n. Major psychiatric or developmental disorders	8.7%	3.2%	11.4%	1.0%

Table 1 School Reports of Most Frequent Psychosocial/ Mental Health Problems

The most common barriers in the delivery of mental health services were identified as gaining parental consent/cooperation (73% for urban schools and 48% for non-urban schools), financial constraints of families (57% and 65% for urban and non-urban schools respectively), inadequate school mental health resources (54% and 49% for urban and non-urban schools respectively), and transportation difficulties (43% and 47% for urban and non-urban schools respectively).

The Districts reported that primary facilitators to the delivery and coordination of mental health services included the location of mental health services (72%), availability of providers (57%) and non-competing priorities for use of funds (57%). Mental health services with the highest percent of "unsatisfied" ratings from the Districts included the availability of mental health services including the number of mental health staff (69% unsatisfied); the level at which general education students are served (62%); the ranges of mental health services provided (77%); professional development training concerning mental health (92%); the number of community-based providers and services (77%); the number of parent/family services that were available (85%); and the level at which prevention services were provided (84%).

Additionally, the majority of schools rated services as insufficient to deal with the mental health needs of students. They indicated that many critical services were not provided school-wide, and that Districts collected very little data on the mental health needs of students and the services that they were receiving. The inadequacy of mental health services is supported by the finding that approximately eighty percent (80%) of Districts reported that mental health funding was "decreasing" or "remaining the same" compared to last year while approximately one-hundred percent (100%) of Districts reported that mental health needs were "increasing" or "remaining the same" compared to last year.

Conclusions

The report generated from survey results provides a number of recommendations and implications for improving mental health services in children and adolescents. Specifically, survey data suggested a need to advance the access to, and the availability, quality, and tracking of mental health services by:

- Effectively minimizing, and eventually eliminating barriers to mental health treatment, most notably barriers related to parent consent and involvement, which are critical to access, and positively impact child and adolescent mental health.
- Supporting and encouraging the use of evidence-based practices.
- Increasing the focus on parent, family and community factors given the high prevalence of children and adolescents experiencing social, interpersonal and family difficulties.
- Establishing new and strengthened collaborations among systems serving children and adolescents, most notably among mental health agencies and schools. Relationships that are dynamic in creating synergy and coordination are needed to promote collaboration and positive movement.
- Creating ways to assist mental health providers and schools in meeting the service and administrative demands and to better integrate services and systems.
- Ensuring alignment in mission and vision with respect to child and adolescent mental health across service providers and systems, particularly with respect to school-agency collaborations.
- Increasing information sharing, technology and administrative support to better track mental health needs and services across the District.
- Leverage funding and resources to foster and sustain collaborations and to ensure delivery and quality of services. Mental health advocates may also work with districts and schools to secure alternative funding from untapped local, state and federal resources for mental health staff, services, training, and professional support.
- Formalizing contracts and terms of engagement between collaborating partners.
- Monitoring progress in child/adolescent mental health and the development of school-based mental health initiatives over time.

Finally, the long-term sustainability and success of school-based mental health initiatives will require additional public awareness about mental health needs and services specific to Hamilton County. Awareness and advocacy will be critical to ensuring that districts and schools prioritize mental health, as well as to ensure that there are resources available to accomplish goals and priorities related to prevention and intervention.

References

- Park, M. J., Macdonald, T. M., Ozer, E. M., Burg, S. J., Millstein, S. G., Brindis, C. D., & Irwin, C. E., Jr. (2001). *Investing in clinical preventive health services for adolescents*. San Francisco, CA: University of California, San Francisco, Policy Information and Analysis Center for Middle Childhood and Adolescence, & National Adolescent Health Information Center.
- U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA). (2005a). *Survey of the characteristics and funding of school mental health services 2002-2003 District questionnaire*. Washington, DC: Author.
- U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration (SAMHSA). (2005b). *Survey of the characteristics and funding of school mental health services 2002-2003 School questionnaire*. Washington, DC: Author.

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Coordination and Collaboration of School-Based Services: The Hamilton County Children First Program

Introduction

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The Hamilton County Family and Children First Council (FCFC) **Olivia Davis** was created in July 1993 and provides a service coordination mechanism at the county level. The Hamilton County FCFC has placed emphasis on improving coordination between the social service systems, combining resources, eliminating duplication and facilitating collaboration. FCFC has five main initiatives: (a) The Hamilton County Child and Family Health Services Consortium, (b) The Child Fatality Review Team, (c) Help Me Grow, (d) The Parent Partners Program, and (e) The Children First Program. This paper will focus on the outcomes for one of these initiatives: The Children First Program. This program provides prevention, intervention and education programs in 11 schools through contracting with provider agencies and funds from other sources (e.g. grants, contracts, etc.).

The Children First Program targets schools with high rates of students with emotional and behavioral disability and students receiving free and reduced lunch. Programming ranges from long-term, intense, individually-oriented interventions such as mental health and substance abuse treatment, school nursing services, groups for grieving children to short-term group services such as after school art programs, recreational activities and health and family fun fairs, which enhance student and family connections with the school. Each school has a full-time Family and Children First Coordinator who oversees and coordinates all services implemented at the school.¹

Provider agencies in each school are selected on the basis of their ability to address one or more of the following Children First Program priorities:

Priority 1: To decrease rates of truancy, suspension, and expulsion Priority 2: To decrease rates of drop-out Priority 3: To decrease rates of abuse and neglect Priority 4: To increase school connectedness

In addition, provider agencies must (a) provide cost-effective quality services that are tailored to meet the individual needs of the school, (b) work effectively within the school, (c) work as a part of a team of providers at the school, (d) demonstrate an ability to achieve positive outcomes, (e) be creative and responsive in designing services, and (f) implement at least one program model or best practice in their work with children and families. Best practice is based on criteria from What Works in Prevention and Prevention that Works. This practice is described in the full report. Each provider agency is also required to submit a detailed proposal at the beginning of the school year that includes the program name, description, Children First Program priorities being addressed, proposed outcomes and measures, and the number of children projected to be served. Each provider agency tracks the number of child and parent program participants served each month via sign-in sheets. At the end of the year, provider agencies submit a report that includes proposed and actual outcomes and the number of students served.

Method

Each provider agency develops a plan to evaluate their program that is consistent with agency foci and goals and submits data relevant to the Children First Program priority areas. Two measures are administered across all 11 schools and programs: the Teacher-Child Rating Survey (TCRS) and the Teacher Feedback Survey. The TCRS consists of 32 items assessing strengths and limitations in a

¹ For a copy of the full report, please contact Patty Eber at Patty.Eber@hamilton-co.org

child's socio-emotional functioning. The Teacher Survey asks teachers to rate their level of satisfaction with the program, performance of the coordinator, coordination of services, program activities, impact of students, impact on school, impact on community and impact on teachers, using a 5-point Likert-type scale which ranges from 5 = Very Satisfied to 1 = Very Dissatisfied, or 5 = Strongly Agree to 1 = Strongly Disagree.

Results

The total number of student contacts (service utilization, duplicated) across all schools in school year 2005-2006 was 19,038 (average of 1,600 participant contacts per month).

Priority Area Outcome Highlights (Data from Individual Agencies)

Priority 1 was to decrease rates of truancy, suspension, and expulsion. Data submitted by the Family Service of Greater Cincinnati/Northern Kentucky agency (N = 325) indicated that monthly perfect attendance at its program ranged from a low of 13.5% to a high or 36.6%; Eight students (2.4%) had perfect attendance the entire year. Eighty-five percent of students showed an increase in knowledge of appropriate behavior when angered, and 89% of students were not absent or suspended while participating in group sessions.

Priority 2 was to decrease rates of drop out. Data from the Center for Families and Children agency's Ohio Youth Scales Agency Worker Forms (Ogles, Melendez, Davis, & Lunnen, 2000) indicated that 64% of children (N = 84) demonstrated statistically significant improvement in problem severity, 50% of children demonstrated statistically significant improvement in functioning, 50% of children demonstrated an increase in hopefulness, and 60% of children were extremely satisfied with services.

Priority 3 was to decrease rates of abuse and neglect. Data from the Center for Children and Families (N = 150) indicated that 61% of students decreased their anger, 67% of students decreased blaming others, 39% of students decreased the tendency to overreact to their peers' negative behaviors, 33% of students decreased their tendency to gang up on children they didn't like, 11% of students reduced their use of physical force to dominate other children, and 33% of students decreased their use of threats or bullying to get their way.

Priority 4 was to increase school connectedness. Data from the Family Service of Greater Cincinnati/ Northern Kentucky agency indicated that 40 men attended the Father's Day/Men in Children's Lives program, 10 parents attended the Live a Dream Event, and 18 grandparents attended Grandparent's Day. In addition, 16 parents volunteered more than 1 time, 18 volunteered more than 5 times and 23 parents attended a Resource Center Event.

Teacher-Child Rating Survey (TCRS) Outcome Highlights

TCRS pre- and post-tests were completed on over 300 students receiving Children First Program services across all 11 schools. The TCRS data are summarized to provide pre-post changes on the four empirically derived scales: Task Orientation, Behavior Control, Assertiveness, and Peer Sociability. Across all schools, pre-post changes were statistically significant (p < .01) across all four scales. Table 1 summarizes the TCRS change scores.

Teacher Survey Outcome Highlights

Data were collected on 242 teachers across all schools,

Table 1 Changes in TCRS Scores-All Schools

Scale	Time Period	Mean
Task Orientation	Initial	21.83
	Final	26.58
	Change	4.74*
Behavior Control	Initial	23.27
	Final	27.75
	Change	4.6*
Assertiveness	Initial	25.26
	Final	29.28
	Change	4.06*
Peer Sociability	Initial	25.52
	Final	29.97
	Change	4.56*

Note: N = 302; *p < .01

182 – Research and Training Center for Children's Mental Health – Tampa, FL – 2008

with a response rate of over 80%. Over 93% of teachers reported that they would recommend the Children First Program to other schools. In addition, 92% of teachers reported that they *strongly agreed* or *agreed* that the Children First Programs positively impacts students, and 92% of teachers reported that they *strongly agreed* or *agreed* that FCFC provided effective coordination and leadership. Qualitative feedback from teachers was positive, as indicated below:

"Family and Children First is our only source for coordinating resources for the many needs of our students. In this capacity this program plays an integral role at our school."

"The goal of all programs is to assist students [with achieving] academic success. Many students have difficulties in school both academically and behaviorally. Family and Children First assists many students in working through their difficulties. For example, 49 (of 150) students in the 2006 graduating class received services from Family and Children First. Many of these students would not have graduated without this assistance."

"I know of several specific cases that, if it were not for FCF [Family and Children First], several of our students would not have been successful, academically or within the community as a whole."

Discussion

Outcome data suggest that the Children First Program is making a positive and significant impact on participants and schools in Hamilton County. The data for 2005-2006 is consistent with positive results reported in previous years (included in the full report). Most notably, this year TCRS results show significant pre-post changes in the behavior of participants and Teacher Survey results indicate high levels of satisfaction with programming. Through its leadership in coordination, FCFC has also promoted positive student and parent/family engagement (as evidenced by program-specific foci and outcomes). Thus, the Children First Program serves as a model at the county level for developing shared priorities across agencies, regulating funding for school-based mental health services, and standardizing data collection. A complete discussion of the findings can be found in the full report.

References

Ogles, B. M., Melendez, G., Davis, D. C., & Lunnen, K. M. (2000). *The Ohio Youth Problem, Functioning, and Satisfaction Scales: Technical Manual.* Columbus, OH: Ohio Department of Mental Health.

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Evaluation of the Full Purpose Partnership Program

Introduction

In 2003, the partnership between a system of care called the Dawn Project and an urban public school district in the Midwest implemented a school-based pilot project in three elementary schools. The Full Purpose

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Partnership (FPP) was designed to integrate the philosophy of systems of care (Stroul & Friedman, 1986) with the techniques of Positive Behavioral Supports (PBS; Eber, Sugai, Smith, & Scott, 2002; Lewis, Powers, Kelk, & Newcomer, 2002; Sugai & Horner, 2002).

The FPP model is built on a foundation that includes (a) effective curricula and instruction; (b) inquiry driven, data-based decision making; (c) systems of care principles (i.e., authentic family involvement; strengths-based practice; cultural competence; interagency collaboration); and (d) schoolwide positive behavior supports. FPP implementation is conceptualized through a three-tiered system of school-wide supports and programming—modeled after the PBS model (e.g., Eber, et al., 2002; Scott & Barrett, 2004)—that includes prevention, early intervention, and comprehensive intervention, which are described in the following section. The overarching goal is to create better opportunities for teaching and learning through coordinated home-school-community connections and relationships, while the ultimate objective is to improve academic achievement for all students.

The Full-Purpose Partnership Program (FPP) is a school-wide transformational process that focuses on developing strength-based and student-centered classrooms and schools. The goal is to create better opportunities for teaching and learning through home-school-community connections, with the ultimate objectives including fewer behavior problems and improved academic achievement. FPP is in its fourth year operating in three elementary Indianapolis Public Schools, and also has newly been implemented in a fourth school this year.

In a previous study of FPP (Smith, Anderson & Abell, n.d.), a school climate survey was administered to 425 teachers, parents, and students in the three pilot FPP schools. School climate was found to be positive in all three schools. Students rated their teachers and principals favorably and parents reported that they were pleased with the quality of teaching and the effectiveness of the principals. Parents also reported, overwhelmingly, that they were treated respectfully by school personnel. Teachers also were enthusiastic about school climate, although slightly less than parents. The highest scored individual survey item was, "High academic standards are expected." In terms of office referrals, the evaluation team concluded that the preventive focus of FPP appears to be effective for the vast majority of students in each school who were never referred to the office during the course of the school year.

The current study builds on and extends the results of this study with a specific focus on how FPP implementation processes are perceived by key stakeholders and to determine if FPP is implemented with fidelity to the model.

Method

Researchers conducted an in-depth emergent case study of the FPP program at four elementary schools in Indianapolis Public Schools. Interviews were audiotaped and transcribed for analysis. This formative evaluation was characterized specifically as process evaluation (Patton, 2003) because of its focus on describing the basic processes of FPP implementation within schools and how these processes are perceived by participating school staff. The current orientation of FPP within its schools is described to inform key stakeholders (i.e. district and school level administration, school staff, and community partners) and not to evaluate the performance of the staff in implementing the FPP process. Transcriptions were then were coded using the constant comparative method (Glasser & Strauss, 1967),

allowing researchers to use the initial results of one method to extend or clarify the results from another method. Specifically, the researchers explored perceptions of the impact that the FPP was having at the three pilot schools and the initial results of implementation at the fourth school.

Subjects. Participants included approximately 35 members of various stakeholder groups involved in the inception and/or implementation of FPP within these select schools including district-level administrators, school principals, school staff, School/Family Care Coordinators (SFCCs), and community mental health administrators. Semi-structured interviews were conducted with each participant, with the exception of school teachers and support staff, who participated in focus groups.

Results

Data gathered revealed five overarching themes: (a) the role of FPP and the SFCC in the school, (b) impacts on FPP, (c) school climate and culture, (d), mental health and behavior, and (e) families and the community. On the first theme, the role of FPP and the SFCC in the school, these roles are uniquely defined in each school, but trends do exist. SFCCs perform many roles, most notable as resource connectors. Flexibility of the SFCC is essential to their success. SFCCs and FPP are both conceptualized as a support for teachers. With regard to the second theme, impacts on FPP, buy-in is seen as an essential part of the success of FPP in the school, for both teachers and students. Training is an important tool for ensuring this buy-in. Staff and student transition, as well as challenges in transportation, can provide barriers to FPP's effectiveness. On the third theme, school climate and culture, a set of core values and principles serves as the foundation for the culture and impact of FPP. FPP has been effective in fostering a positive environment, and a sense of community has developed on multiple levels and between multiple stakeholders in the schools. Responses within the fourth theme, mental health and behavior, reveal the introduction of Positive Behavior Supports, mental health services and wraparound that have accompanied FPP are seen as valuable resources. Through FPP, schools have implemented preventative and proactive approaches to address behavior, including looking to the function and reasons behind behavior. As a result, schools have seen improved mental health and behavioral outcomes, as well as increased student satisfaction. With regard to the fifth and final theme, families and the community, the home/school/community connection is seen as essential by those working in FPP schools. Strengthening these relationships is seen as beneficial for all parties. FPP schools have been effective at fostering these relationships, and enthusiasm and engagement in ensuring student success have increased from all three.

Conclusions

The FPP is grounded in the idea that *behavior and academics are inextricably intertwined*. Behavior teams, for example, have examined data demonstrating that office referral rates are higher during whole class instruction than during other instructional configurations. Such findings lead to hypotheses about the relationship between classroom instruction and classroom behavior that can in turn be explored, such as: "Are some students getting bored during lecture?", "Should we be doing a better job of utilizing learning styles?", "To what degree are students happy with the instructional approaches used in this classroom?" etc. The FPP schools take a broad school-wide, data-based approach to determine and understand how the school is functioning. They use a team process to explore connections between behavioral and academic challenges and then use problem-solving approaches to generate possible solutions. They can then test the effectiveness of these solutions, creating an ongoing, iterative process. This work is pushing these schools into new terrain. Questions about accountability loom large and drive some of these conversations. For example, educators are asking, "How do we capture and analyze useful data?" "What do we mean by evidence-based practices and under what conditions are such practices more and less effective in our school (or classroom)?"

A few major conclusions were drawn from this data and by the researchers of other studies and experiences with the Full-Purpose Partnership. First, program coordination by someone who is not directly connected or subject to school administration ensures SFCCs the freedom to work creatively and

promote culture change. SFCCs in a very real sense bring the FPP model to life through their outside perspective and unique skills and assets. Second, gaining staff buy-in and building capacity before model implementation is critical, and sustaining both takes concerted effort across time, particularly in reference to new student and staff induction. It is this front-end investment coupled with active promotion over time that builds the foundation for sustainable culture change. Third, combining Positive Behavior Interventions and Supports with system of care principles enhances the strengths of both approaches, promoting preventative, perspective taking, and proactive approaches. On a final note, cultural change processes in school take years to occur, are interactive, and require ongoing monitoring, modification, and renewal. There is no "endpoint" at which the model is operating perfectly.

For those looking to create school-based system of care models or looking to improve the implementation of existing models, the findings of this study include reoccurring themes related to assets and challenges in the practice of the FPP model. Specifically, the FPP model provides support and resources to all stakeholders in the school, from students to parents to teachers to administrators, ensuring a route to buy-in for all stakeholders. However, failure to ensure this buy-in due to poor or insufficient communication and training, as well as high levels of transition, accessibility issues, poorly defined roles, and the clashing effects of different systems working together can ultimately become barriers that prevent FPP from working efficiently and effectively.

References

- Eber, L., Sugai, G., Smith, C. R., & Scott, T. M. (2002). Wraparound and positive behavioral interventions and supports in the schools. *Journal of Emotional and Behavioral Disorders*, 10(3), 171-181.
- Glasser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory: Strategies for qualitative research.* Chicago: Aldine Publishing Co.
- Lewis, T. J., Powers, L. J., Kelk, M. J., & Newcomer, L. L. (2002). Reducing problem behaviors on the playground: An investigation of the application of school wide positive behavior supports. *Psychology in the Schools*, 39(2), 181-190.
- Patton, M. Q. (2003). Practical evaluation. Beverly Hills, CA: Sage Publications.
- Scott, T. M., & Barrett, S. B. (2004). Using staff and student time engaged in discipline procedures to evaluate the impact of school-wide PBS. *Journal of Positive Behavior Interventions, 6*(1), 21-27.
- Smith, J. S., Anderson, J. A., & Abell, A. K. (n.d.). Preliminary evaluation of the full purpose partnership school-wide model. Under review.
- Stroul, B. A., & Friedman, R. M. (1986). A system of care for children and youth with severe emotional disturbances. (Revised Edition). Washington, DC: Georgetown University Child Development Center, CASSP Technical Assistance Center.
- Sugai, G., & Horner, R. H. (2002). Introduction to a special series on positive behavior support in schools. Journal of Emotional and Behavioral Disorders, 10(3), 130-136.

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Longitudinal School Functioning among Students Served in a System of Care

Introduction

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Perhaps it is our inability to articulate a specific causal model for emotional and behavioral challenges and poor school functioning that has promoted the use of flexible responses such as systems of care (SOCs) in schools (e.g., Eber, Sugai, Smith, & Scot, 2002). Thus, we speculate that the wide-range and interplay of both school and non-school factors place SOCs in a promising position for improving school functioning (Adelman & Taylor, 2006). The hypotheses for this study were: (1) school functioning improvement will be associated with clinical functioning improvement over time, (2) students without special education labels would outperform students with labels in terms of school functioning after controlling for clinical change over time, and (3) demographic characteristics would not be associated with change over time in school functioning.

Method

Data for this study came from a longitudinal evaluation of the Dawn Project SOC in Indianapolis, Indiana (see Anderson, Wright, Kooreman, Mohr, & Russell, 2003). The majority of the young people in the sample (N = 365) were male (n = 259; 72%), and from a minority background (n = 198; 55%). The average age at the time of enrollment in the SOC was 12.55 years (SD = 2.64) and 76% of the sample (n = 272) had been identified for special education.

Dependent Variable

Data were drawn from a subset of interview questions from the Educational Questionnaire (EQ; ORC Macro, 2000) asking caregivers to rate students' educational functioning during the past six months. School functioning was created as a composite variable from EQ questions about school attendance, grades, and discipline. Responses were aggregated and the outcome variable was created with a scale from *poor* (i.e., a score of 1) to *excellent* (i.e., a score of 7) school functioning for each measurement point (i.e., every six months).

Independent Variables

Time. In these analyses, time represented the number of months since a student entered the Dawn Project. Average length of stay in the Dawn Project is approximately 14 months; therefore, these analyses capture changes during and after SOC participation.

Behavioral and Emotional Rating Scale (BERS; Epstein & Sharma, 1998). This scale assesses the emotional and behavioral strengths of young people. Higher scores indicate higher levels of strengths.

Child Behavior Checklist (CBCL; Achenbach, 1991). This caregiver rated instrument is used primarily to assess symptomatology among youth. Higher scores indicate higher levels of impairment.

Child and Adolescent Functional Assessment Scale (CAFAS; Hodges, 1994). This scale assesses the degree to which students' challenges interfere with their functioning. Higher scores indicate lower levels of functioning.

Special education and demographics. Special education status was a dichotomous variable indicating whether students were receiving special education services at the time they entered the Dawn Project. Demographics included age (at the time students entered the SOC), and sex and race, which were dichotomous, indicating whether students were male or female and Caucasian or from another racial group.

Analytic Strategies

Change in school functioning over time was derived using repeated measures *t*-tests. Hierarchical linear modeling was used to examine school functioning trajectories (Singer & Willet, 2003). Three separate models were created, each exploring the influence of a time varying clinical predictor on school functioning, along with special education status, age at enrollment, sex, and race. For the sake of brevity, only the final models, which exclude non-significant predictors, are presented.

Findings

Dependent Variable

At enrollment, average school functioning is 4.16, which increases to 4.78 at 12 months (t = 2.63, p < .01); Cohen's d = .37. From 12 months to 24 months, the average increase in scores is not significant (t = 1.11). Cohen's d = .22. Change from enrollment to 24 months is significant (t = 2.59, p < .05); Cohen's d = .59.

	BERS (SD)	CBCL (SD)	CAFAS (SD)	School Functioning (SD)
Enrollment ($n \approx 360$)	88.33 (18.20)	70.72 (11.18)	133.15 (49.59)	4.16 (1.74)
12 months ($n \approx 234$)	90.36 (17.52)	66.81 (11.44)	113.94 (50.20)	4.78 (1.60)
24 months ($n \approx 106$)	91.41 (16.94)	65.94 (11.80)	110.47 (49.42)	5.12(1.51)
Overall averages	90.21 (17.69)	68.03 (11.72)	119.53 (51.27)	4.63 (1.68)

Table 1 Average Clinical and School Functioning Scores Over Time

Unconditional Models

The grand mean of school functioning scores in the unconditional means model is 4.56 (p < .001), the overall average score for all participants at all times. The intraclass correlation indicates that 27% of the total outcome variation is located between individuals and 73% is within individuals. In the unconditional growth model, with the addition of time, initial status is 4.27, which is significantly different from zero (p < .001). The slope, .03 is significant (p > .001) and the covariance correlation coefficient, -.64, is significant (p < .05), indicating that the initial status is correlated with the rate of change. Both the variance of initial status and the variance of the slope also are significant, suggesting that different individuals have different starting points and different rates of change. Additionally, Pseudo R^2_e indicates that the proportion of variance accounted for by linear time is 14%.

Clinical Models

The average level of the dependent variable, school functioning, by special education status, time and clinical score variables for all youth is shown in Table 2.

BERS. When the model is trimmed to include only significant predictors, both the intercept and slope are significant (p < .001); as is special education status (p < .05) on the slope and the BERS (p < .001). The equation shows that school functioning or Y = 1.27 + .04(time) - .02(special education status)(time) +.03(BERS). Scores for school functioning range from 1, *poor*, to 7, *excellent*. Examining prototypical individuals shows that a student, who is average age (M = 12.55), has an average BERS enrollment score (M = 88.33) and is not in special education, will have a school functioning score at the time of enrollment of 3.92. A similar student who is in special education also has an initial score of 3.92. At 12 months, the student not in special education, with an average BERS score (M = 90.36) will have a predicted functioning score of 4.46, compared to 4.22 for the student in special education. At 24 months (BERS; M = 90.41), predicted scores will be 4.97 for the student not in special education and 4.49 for the student in special education.

		BERS Scores		
	88.33	90.36	91.41	
	(enrollment)	(12 months)	(24 months)	
In special education	3.92	4.22	4.49	
Not in special education	3.92	4.46	4.97	
		CBCL Scores		
	70.72	68.81	65.94	
	(enrollment)	(12 months)	(24 months)	
In special education	4.29	4.45	4.65	
Not in special education	3.79	4.37	4.99	
		CAFAS Scores		
	133.15	113.94	110.47	
	(enrollment)	(12 months)	(24 months)	
In special education	4.73	5.04	5.20	
Not in special education	4.25	4.92	5.44	

Table 2 Average Level of School Functioning, by Special Education Status, Time Point, and Clinical Score for Students who are 12.55 years of Age at Enrollment in Dawn

CBCL. With only significant predictors, the equation is Y = 8.21 + .50 (special education status) - .07(age) + .04(time) - .035(special education status)(time) -.05(CBCL). Examining several examples from this model suggest that a student who is average age (M = 12.55), has an average enrollment CBCL score (M = 70.72), and is not in special education, will have a school functioning score at the time of enrollment of 3.79; while the same student, except with a special education label, will start .5 points higher. By 12 months, the student not in special education, with an average CBCL score (M = 66.81) will have a predicted functioning score of 4.37 compared to 4.45 for the student in special education. By 24 months (CBCL: M = 65.94), predicted scores will be 4.99 for the student not in special education and 4.65 for the student in special education.

CAFAS. Including only significant predictors, the equation is Y = 6.58 + .48(special education status) - .08(age) + .04(time) - .03(special education status)(time) -.01(CAFAS). Using the trimmed model, an examination of prototypical participants demonstrates that a student, who is average age (M = 12.55), has an average enrollment CAFAS score (M = 133.15), and is not in special education, will have a school functioning score at the time of enrollment of 4.25; while the same student, except with a special education label, will start roughly .48 points higher at 4.73. At 12 months, the student not in special education, with an average CAFAS score (M = 113.94) will have a predicted school functioning score of 4.92 compared to 5.04 for the student in special education. By 24 months (CAFAS: M = 110.47), predicted scores will be 5.44 for the student not in special education and 5.20 for the student in special education.

Conclusions

The primary hypothesis for this study, that significant positive school progress over time would occur and would be associated with similar positive trends in clinical functioning, was substantiated. School functioning increased between enrollment and 24 months, with the largest effect size in the first 12 months, which was when students were involved with the Dawn Project. After controlling for time, each clinical measure explained an additional 7% to 9% of the improvements in school functioning, suggesting that improved school functioning has a relationship with improved clinical functioning. The second hypothesis, that demographics would not be associated with change over time, also was

confirmed. This finding differs from previous research reporting demographic disparities for children and youth with emotional and behavioral challenges (e.g., Cullinan, Osborne, & Epstein, 2004), as well as in the broader mental health literature (US Department of Health and Human Services, 2001). Specifically, this suggests that students tend to enter the Dawn Project with substantial challenges in impairment and functioning and low levels of strengths, and then profit equally well from their SOC involvement, without regard to demographics.

Third, after controlling for clinical functioning, students with special education labels appeared to have better school functioning when they entered the Dawn Project than students without labels. However, this effect did not hold and by 24 months, students not in special education were outperforming their peers in special education. It is not clear what these findings mean. Perhaps prior to entering a SOC special education services do serve to support overall school functioning for students. This makes sense given the purpose of special education to assist students with disabilities who are at risk for school failure. In sum, these results provide valuable and unique insight into the relationship between educational and clinical functioning that occurs across time in a SOC.

References

- Achenbach, T. M. (1991). Manual for the Child Behavior Checklist/4-18 and 1991 Profile. Burlington, VT: University of Vermont Department of Psychiatry.
- Adelman, H. S. & Taylor, L. (2006). *The implementation guide to student learning supports in the classroom and schoolwide: New directions for addressing barriers to learning.* Thousand Oaks, CA: Corwin Press.
- Anderson, J. A., Wright, E. R., Kooreman, H. E., Mohr, W. K., & Russell, L. A. (2003). The Dawn project: A model for responding to the needs of children with emotional and behavioral challenges and their families. *Community Mental Health Journal*, 39, 63-74.
- Cullinan, D., Osborne, S., & Epstein, M. H. (2004). Characteristics of emotional disturbance among female students. *Remedial and Special Education*, 25(5), 276-290.
- Eber, L., Sugai, G., Smith, C. R., & Scot, T. M. (2002). Wraparound and positive behavioral interventions and supports in schools. *Journal of Emotional and Behavioral Disorders*, 10, 171-180.
- Epstein, M. H. & Sharma, J. (1998). Behavioral and Emotional Rating Scale: A strength-based approach to assessment. Austin, TX: PRO-ED.
- Hodges, K. (1994). *The Child and Adolescent Functional Assessment Scale*. Ypsilanti, MI: Eastern Michigan University, Department of Psychology.
- ORC Macro (2000). Data Manual for Phase III of the National CMHS Evaluation. Atlanta, GA.
- Singer, J. D. & Willett, J. B. (2003). Applied longitudinal data analysis: Modeling change and event occurrence. Oxford University Press: New York.
- U.S. Department of Health and Human Services. (2001). *Mental health: Culture, race, and ethnicity A supplement to Mental health: A Report of the Surgeon General.* Public Health Service, Office of the Surgeon General.

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An Evaluative Study of the Impact of School-Based Mental Health Services on Student Behavior, Psychosocial Functioning, and other Risk Factors

Introduction

Clay Gemmill R. Paul Thomlinson

Recent years have seen an explosion of violence in American schools, resulting in the injury or death of many. Although the responses to this public health crisis have been numerous and varied, some have focused on what might be termed "safety from without." These approaches focus on external safety measures such as installation of metal detectors and surveillance cameras, or the addition of security guards and law enforcement officers to school campuses. While these responses are reasonable reactions to perceived threats, they are likely to miss the mark because they do not address the need for "safety from within," or prevention efforts targeting the social, emotional, and behavioral problems that are very often precursors to school attacks. The need for preventive intervention is great—at least 10% of youth will experience a serious emotional disturbance severe enough to impair functioning, yet only about one in five of these youth will receive any kind of treatment, yielding a situation where "unmet need for services remains as high now as it was 20 years ago" (U.S. Public Health Service, 2000, p. 11). Each youth left untreated has the potential for decline in functioning, possibly increasing the likelihood of isolation, suicide, substance abuse, and violent acting out.

The U.S. Secret Service (Vossekuil, Fein, Reddy, Borum, & Modzeleski, 2002), in concert with the U.S. Department of Education, conducted perhaps the most extensive study of school shootings and other school-based attacks to date, examining school shootings as far back as 1974. The study included 41 student attackers and interviews with 10 school shooters. In summary,

"The study found that school shootings are rarely impulsive acts. Rather, they are typically thought out and planned out in advance. In addition, prior to most shootings other kids knew the shooting was to occur—but did not alert an adult. The study findings also revealed that there is no "profile" of a school shooter; instead, the students who carried out the attacks differed from one another in numerous ways. *However, almost every attacker had engaged in behavior before the shooting that seriously concerned at least one adult — and for many had concerned three or more different adults* (italics added for emphasis; (Vossekuil, et al., 2002, p. 20)."

The implications of this study are that many school attacks may be preventable events and that prevention efforts must involve students, parents, and school personnel at multiple levels—including the establishment of systems for recognizing and responding to troublesome behaviors that may be precursors to school violence.

An example of a preventive approach is found in the response of the Springfield, Missouri community. A partnership between 17 public schools and the area community mental health center directly addressed the concept of "safety from within" through the provision of preventative, responsive mental health services in district middle and high schools. This collaborative project to provide school-based services was designed to circumvent some often-identified barriers to getting students into mental health services, such as difficult access, complicated referral mechanisms, long wait times for appointments, lack of adequate transportation, and financial barriers. In the Springfield system, teachers, who are often the first to identify students with significant behavioral or emotional problems, have an immediately accessible resource available to them. Specifically, for the past three years, 17 masters-level School-Based Clinicians (SBCs) and six School-Based Case Managers (SBCMs) have provided mental health and behavioral consultation to teachers, administrators and school counselors. In addition, they provide individual therapy, family therapy, group therapy, crisis intervention, psychological assessments, home visits, case management and after-school services to several thousand students in the Springfield public school system.

This evaluative study seeks to answer the following research question: What are the behavioral, academic, and psychosocial outcomes for students who are at-risk of behavioral and emotional problems and who have been provided services through SBCs and SBCMs?

Method

Participants. The program provides services in nine middle schools, five high schools, and three alternative school programs in the Springfield school district. At-risk students are identified by school personnel and referred to SBCs and SBCMs for services. Since the program began in spring of 2004, over 7,738 students have received services under the program. Students receiving services in the program can be characterized as follows: (a) 57% high school students and 43% middle school students; (b) 49% male; (c) 84% Caucasian, 10% African-American, 3% Hispanic, 1% Asian, and 1% American Indian; and (d) 49% received free or reduced lunch.

Instruments. Changes in student mental health (student behaviors, problem severity, functioning, life satisfaction, and satisfaction with services) were assessed through the 44-item Ohio Youth Problems, Functioning, and Satisfaction Scales (Ohio Scales; Ogles, Melendez, Davis & Lunnen, 1999). The Ohio Scales were administered only to those students who received individual or family therapy. In addition, the following data were collected for each student receiving services: attendance (unexcused and excused absences), discipline referrals (fighting, conduct, etc.), disciplinary action (in-school suspensions or ISS, and out-of-school suspensions or OSS), and academic data (GPA on a 4-point scale). In order to assess extensiveness of services delivered, level of service was stratified by number of sessions resulting in *low* (1-3), *medium* (4-7), *high* (8-12), and *intense* (>12) categories.

Design and analysis. A non-control pretest-posttest design was employed in which students were broken into cohorts based on the quarter in which they began services. The nature of the services provided and the population to whom they were provided precluded the use of a control group. That is, it would violate school policies and treatment protocols to assign a student in need to a control condition. Initial program data were analyzed with a series of paired-samples *t*-tests.

Results

Results indicate that students receiving services through the program showed significant reductions (i.e., from the quarter prior to initiation of services through the quarter following initiation of services) in conduct-related referrals, t(722) = 5.661, p < .001; a decrease in drug and alcohol related offenses, t(117) = 3.168, p = .002; probation and conferences, t(375) = 4.42, p < .001; total offenses, t(1377) = 3.49, p < .001, and excused absences, t(2614) = -8.013, p < .001. There was a significant *increase* in bus and administrative referrals, t(503) = -3.19, p = .001; and ISS, t(868) = -2.31, p = .021. The results for all discipline referrals and disciplinary actions are listed in Table 1.

In addition to improvements in the domains described above, results from the Ohio Scales indicated significant psychological, social, and interpersonal improvements among students receiving individual therapy. Students receiving individual therapy showed both clinical and statistically significant improvements in problem severity, t(125) = 7.71, p < .001, hopefulness, t(125) = 5.378, p < .001, and functioning, t(125) = -6.376, p < .001. These findings suggest significant decreases in arguing, fighting and yelling, self-harm, impulsivity, and depression, as well as improved functioning in the areas of getting along with family, friends and others, controlling emotions and staying out of trouble, concentrating, paying attention, finishing tasks, and accepting responsibility for actions.

Indicator	Ν	Pre- mean	Post- mean	SD	t-test value	p-value	Change percentage
Attendance	439	1.00	.96	1.50-1.16	0.41	.684	-4.00%
Bus/ Admin	504	.81	1.06	1.01-1.15	-3.19	.001	30.86%
Detention	272	1.18	.96	1.83-1.28	1.57	.119	-18.64%
Disorderly Conduct	723	3.10	1.93	4.54-2.87	5.66	.000	-37.74%
Drugs/Alcohol	118	.89	.46	0.93-0.74	3.17	.002	-48.31%
Fighting	501	.96	1.00	1.19-1.26	-0.43	.667	4.00%
Excused absence	2615	5.03	6.35	6.12-7.52	-8.01	.000	26.24%
Unexcused absence	1752	3.76	3.93	5.41-5.47	-0.07	.948	1.40%
GPA	1609	2.14	2.16	1.10-1.10	-1.08	.281	0.93%
ISS	869	1.09	1.25	1.34-1.37	-2.31	.021	14.67%
OSS	536	1.06	1.01	1.29-1.24	0.57	.572	n/c
Probation	376	.98	.62	1.17-0.72	4.42	.000	-36.73%
Total	1378	2.91	2.39	4.95-3.40	3.49	.000	-17.86%

Table 1 Disciplinary Referrals and Actions, and Academic Performance

Conclusions

It is possible that unknown and/or uncontrolled factors influenced the results of this study. The mental health team works in 17 different schools, each with its own climate, procedures, staff, and student population, and the type and number of hours each participant spent in school-based services varied substantially. Further, the lack of a control group leaves open questions of historical factors and regression to the mean as partial explanations for the positive results. Still, even in the context of such limitations, this study shows that those students receiving school-based services experienced dramatic changes in risk factors, with significant reductions in total discipline referrals (18%), violations regarding drugs, alcohol, and tobacco (48%), and the number of referrals for disorderly conduct, defiance, and disrespect (17%). These results, in tandem with substantial improvements in psychosocial functioning (less impulsivity, better relationships, more control of emotions, etc.) provide important evidence that school-based services contribute to achieving the goal of "safety from within" for the Springfield school system.

References

- Ogles, B., Melendez, G., Davis, D., & Lunnen, K. (1999). *The Ohio Youth Problems, Functioning, and Satisfaction Scales (Short Form) User's Manual.* Ohio University and Southern Consortium for Children.
- U.S. Public Health Service. (2000). *Report of the Surgeon General's Conference on Children's Mental Health: A national action agenda.* Washington, DC: Department of Health and Human Services.
- Vossekuil, B., Fein, R., Reddy, M., Borum, R., & Modzeleski, W. (2002). The final report and findings of the Safe School Initiative: Implications for the prevention of school attacks in the United States. U.S. Department of Education, Office of Elementary and Secondary Education, Safe and Drug-Free Schools Program and U.S. Secret Service, National Threat Assessment Center, Washington, D.C.

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Relationships Between School/Residential Transitions and Mental Health Functioning for Youth with Serious Emotional Disturbance

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Introduction

A growing body of research has shown that students who have experienced school and/or residential mobility are at increased risk La'Trice Montgomery Monica J. Mitchell Sharon Foster Mary DePaola Lori E. Crosby Matthew Ross

for underachievement in academic settings (e.g., Audette, Algozzine & Warden, 1993; Rumberger & Larson, 1998; Temple & Reynolds, 1999). In addition, higher rates of violent behavior were found in residentially-mobile adolescents compared to non-mobile adolescents (Haynie & South, 2005). Interventions aimed at decreasing mobility have typically included wraparound services such as case management and treatment referrals. There is limited research available specifically assessing the relationship between mobility and mental health functioning in youth with serious emotional disturbances. This paper will examine the relationship between school and residential transitions and mental health functioning for participants in Project Wraparound (Project WRAP), an individualized, community-based mental health program for youth with serious emotional and behavioral disturbances in Cincinnati, Ohio.

Method

Project WRAP and INNOVATIONS in Program Evaluation and Community Research staff established three goals in 2004 for Project WRAP: decreasing the potential for residential transitions, decreasing the potential for school transitions and improving mental health functioning. Data related to these outcomes were tracked on a Quarterly Clinical Update Form which included service notes, including residential and school placement status and Global Assessment of Functioning scores (GAF; American Psychiatric Association, 1994, higher scores indicate positive change). The Update Form was completed at the initial contact and at 3, 6, 9 and 12 months following the initial assessment by staff based on face-to-face interactions with youth and their families. The Update Forms were submitted quarterly to INNOVATIONS and then entered and analyzed using SPSS version 14.0. "Transitions" were defined as a change in residential or school placement from one time point to another and mental health functioning was assessed by comparing the GAF scores every three months and creating change scores for each child across time points. This method ensured that trends were not skewed by changes in participants over time.

During the 2005-2006 school year, there were 107 participants in Project WRAP. The majority of participants were male, African-American and over 90% qualified for free or reduced lunch (150% below poverty level), which is consistent with the demographics of the schools from which students were referred. The majority of participants involved in the program were between the ages of 10-17 (68.4%). Date of birth was available for 57 or 53.3% of participants. Staff were trained to reliably assess the GAF and transition ratings to increase the integrity and accuracy of the data.

Results

School transitions. Nineteen (17.8%) of the 107 students who received Project WRAP services experienced one or more transitions during the 2005-2006 academic year. According to the data analysis, the greatest negative change occurred among students who experienced three school transitions at the three month assessment (-4) and the greatest positive change occurred at the 12 month assessment among those students who experienced no school transitions (11.25; see Table 1).

Overall, a greater number of school transitions were associated with lower GAF scores. Although trends were not statistically significant, GAF scores provide clinically meaningful data in terms of students' social, behavioral, and /or emotional competence.

Table 1 Changes in Global Assessment Functioning (GAF)

Time Point	Number of School Transitions	Change in GAF Scores
	0	-0.82
3 Months	1	0.00
	2	2.80
	3	-4.00
6 Months	0	2.00
	1	2.00
	2	5.80
	3	0.00
	0	3.90
Months	1	3.90
wonuns	2	4.40
	3	0.00
	0	11.25
2 M . I	1	7.20
2 Months	2	7.00
	3	0.00

Residential transitions. Only five (4.7%) of the 107 students experienced a residential transition during the 2005 school year. Decreases in GAF scores among students who experienced one or more residential transitions at the three month assessment, while the greatest positive changes in GAF scores occurred among those students who experienced no residential transitions, resulting in the inverse relationship in GAF and residential transitions that was observed with GAF and school transitions (see Table 2). The long-term trends and effects of residential transitions should be explored in future research.

Table 2
Changes in Global Assessment Functioning (GAF)
by Time Point and Number of Residential Transitions

Time Point	Number of School Transitions	Change in GAF Scores
3 Months	0	0.27
()()	1+ 0	-6.00 2.60
6 Months	1+	4.00
9 Months	0	9.20
y months	1+	6.00

Mental health functioning. GAF scores increased after the first three months of treatment. Post-hoc analyses revealed that, consistent with the literature, youth aged 14-17 in Project WRAP displayed the lowest GAF scores suggesting that adolescents in this program may be have the greatest mental health risk, independent of transition status.

Conclusions

Overall, the data show that GAF scores were stable from 0 to 3 months of treatment but then increased significantly at 6, 9 and 12-month assessments. The fact that there were very few students who experienced transition while receiving support from Project WRAP is an additional strength of the program, although it is difficult to know what the rate of transition would have been in the absence of Project WRAP services. Finally, participants in Project WRAP, in general, showed positive trends in GAF ratings, although the average GAF across all time points is lower than what would be expected in a normal population (with a normal GAF being defined as equal to 70). Although data were highly accurate and submitted in a timely manner, Project WRAP will be piloting a secure, de-identified web-based electronic data entry form in the fall of 2006 to better understand outcomes in real time and to monitor the progress and needs of children and adolescents receiving Project WRAP services. In addition, this system will provide the potential to better understand the impact of positive and negative transitions on mental health functioning and other outcomes.

Future assessments should investigate other potential factors (e.g. social-economic status, parent involvement) that may influence the overall low GAF scores of participants in Project WRAP. This may help the program accomplish the goal of improving the mental health functioning of children and adolescents more effectively, increasing GAF scores from clinical to normal ranges. Longitudinal research that includes larger sample sizes and richer data sets are needed. Results of long term follow-up studies of the current sample will help to better discern the issues related to school and residential transitions that impact overall mental health functioning.

References

- American Psychiatric Association, (1994). *Diagnostic and statistical manual of mental disorders, 4th Edition* (DSM-IV). Washington, DC: Author.
- Audette, R., Algozzine, R. & Warden, M. (1993). Mobility and school achievement. *Psychological Reports*, 72(2), 701-702.
- Haynie, D. L. & South, S. J. (2005). Residential mobility and adolescent violence, Social Forces, 84(1), 363-376.
- Rumberger, R. W & Larson, K. A. (1998). Student mobility and the increased risk of high school dropout, *American Journal of Education, 107*(1), 1-35.
- Temple, J. A. & Reynolds, A. J. (1999). School mobility and achievement: Longitudinal findings from an urban cohort, *Journal of School Psychology*, 37(4), 355-377.

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Cross-Setting Consistent and Setting-Specific Strength Behaviors in Preschoolers: Influence on Reported Concerns

Introduction

Scott Rosas Lynn Chaiken Jane Case

Preschool children with behavior problems are at increased risk for continued behavioral disturbances and serious psychopathology throughout childhood (Campbell, 1997). Moreover, it is generally accepted that problem behaviors that occur across settings, such as home and school, are seen as more of a concern than behavioral problems that occur in a single setting. When identified in multiple settings, problem behaviors are less likely to be affected by rater and setting characteristics and more likely to be an internalized part of the child's behavioral repertoire. Thus, the risk of more serious problems is greater when problem behaviors are found to exhibit consistent pattern across settings. It is plausible then, that positive behaviors identified in multiple settings would also be less influenced by rater and setting characteristics and constitutes a regular pattern of behavior. In this sense, strength behaviors that exhibit cross-setting consistency may help to minimize the risk of serious problems among preschool aged children.

Parent and teacher behavior ratings are typically used in the identification of child behaviors at home and school. Determining when parents and teachers agree is important, because research has found that greater parent-teacher agreement was associated with higher rates of positive behaviors and lower the rates of problematic behaviors (Victor, Halverson, & Wampler, 1988). Unfortunately, most cross-informant correspondence research has focused on examining the magnitude of parent-teacher agreement of children's problem behaviors. However, recent research found parents and teachers of preschoolers co-identified the presence of strength behaviors at higher rates than problem behaviors (Rosas, Chaiken, & Case, 2006), although how co-identification relates to teacher- and parent-reported behavior problems is unclear.

In this study, we hypothesized that preschool children with above average behavior concerns from teacher and parent reports would also have fewer reported strength behaviors than those preschoolers with average and below average behavior concerns. Previous research has shown a strong inverse relationship between teacher- and parent-reported strengths and problem behaviors (Naglieri & LeBuffe, 2005). We further hypothesized that strength behaviors identified in two settings (i.e. those behaviors determined as cross-setting consistent) would have greater influence on the level of teacher- and parent-reported behaviors identified in only one setting (i.e. those behaviors determined as setting specific).

Method

Data were collected on 1,595 preschool children (793 male) using the Devereux Early Childhood Assessment (DECA; Lebuffe & Naglieri, 1999) from both preschool teachers and parents from Head Start and state-funded preschool programs in Delaware. The DECA includes 10 problem behaviors organized in a behavioral concerns subscale and 27 strength behaviors organized into three subscales: initiative, self-control, and attachment. The DECA was normed on 2,000 2-5 year olds and demonstrated strong discriminant, predictive, and construct validity (LeBuffe & Shapiro, 2004). Internal reliability estimates between .76 and .88 across the four subscales have been reported (Naglieri & LeBuffe, 2005). Teachers and parents rated the child's behavior within the past thirty days, and scored each item as 0, *never*, 1 *rarely*, 2, *occasionally*, 3, *frequently*, or 4, *very frequently*.

The cross-setting consistency and setting specificity of strength behaviors was identified by first dichotomizing teacher and parent responses. If a child was rated by a parent and teacher as frequently (3) or very frequently (4) displaying the strength behavior, the behavior was determined to be cross-setting consistent on the basis of being present in two settings (i.e. home and preschool). If only one informant reported the strength behavior as present (3 or 4), it was determined to be setting specific. Parent-teacher

co-identification and setting specific rates were established for all 27 strength behaviors and totals were calculated for each of the three subscales. Next, we divided the entire sample into three behavior concern groups based on the parent and teacher norms published with the DECA. Using T-scores to stratify the sample, the three groups were Above Average behavior concerns (T-score \geq 60), Average behavior concerns (T-score between 60 and 40), and Below Average behavior concerns (T-score \leq 40). Finally, we conducted two separate MANOVAs using the three groups based on teacher-reported behavior concerns and three levels of parent-reported behavior concerns as fixed factors. Dependent variables included in each of the MANOVAs were the total number of co-identified attachment, co-identified initiative, co-identified self-control, setting specific attachment, setting specific initiative, and setting specific self-control behaviors.

Findings

Using Wilk's criterion, we found a significant effect of strength behaviors upon the levels of teacherreported - [F(12, 3048) = 59.33, p < .001, $\eta_p^2 = .19$] and parent- reported - [F(12, 3110) = 16.54, p < .001, $\eta_p^2 = .06$] behavior concerns. For the teacher-reported behavior concerns group, univariate tests of between-subjects effects revealed statistically significant differences for all of the dependent variables. Post hoc analyses revealed significant differences between each level for all dependent variables except setting specific initiative and attachment behaviors. For the parent-reported behavior concerns group, univariate tests of between-subjects effects revealed statistically significant differences for each of the dependent variables except for setting specific self-control behaviors. Post hoc analyses revealed significant differences between each level for only the co-identified initiative and self-control behaviors. The results of these follow-up analyses are presented in Tables 1 and 2.

		Level	of Behavior Co	oncerns			
Variable		Above Average (AA) n = 253	Average (A) n = 969	Below Average (Ba n = 310	4) F	Tukey	ηp^2
Co-identified Initiative	М	2.57	3.64	5.51	78.85**	AA < A < BA	.09
behaviors	SD	2.59	2.88	3.15			
Co-identified Self-	M	.98	2.89	4.51	187.20**	AA < A < BA	.20
control behaviors	SD	1.65	2.26	2.18			
Co-identified	М	3.41	4.51	5.48	56.41**	AA < A < BA	.07
Attachment behaviors	SD	2.35	2.34	2.15			
Setting specific	М	1.43	1.34	2.23	25.80**	AA, A < BA	.03
Initiative behaviors	SD	2.11	1.75	2.27			
Setting specific Self-	М	.81	1.76	2.47	57.69**	AA < A < BA	.07
control behaviors	SD	1.55	1.84	1.99			
Setting specific	M	.95	.89	1.21	6.35*	AA, A < BA	.01
Attachment behaviors	SD	1.58	1.27	1.45			

Table 1 Univariate and Follow-Up Analyses Results of Teacher-Reported Behavior Concerns

p < .05; p < .001

Note: Post hoc results significant at p < .05.

		Level	of Behavior Co	oncerns			
Variable		Above Average (AA) n = 772	Average (A) n = 710	Below Average (BA) n = 81	F	Tukey	ηp^2
Co-identified Initiative	М	3.24	4.24	5.40	32.02**	AA < A < BA	.04
behaviors	SD	2.76	3.10	3.71			
Co-identified Self-	M	2.24	3.41	4.47	68.59**	AA < A < BA	.08
control behaviors	SD	2.18	2.36	2.78			
Co-identified	M	4.08	4.91	5.19	26.51**	AA < A, BA	.03
Attachment behaviors	SD	2.35	2.32	2.68			
Setting specific	M	3.26	3.26	2.40	3.68*	BA < AA, A	.01
Initiative behaviors	SD	2.76	2.87	2.69			
Setting specific Self-	M	1.55	1.61	1.48	.30	-	-
control behaviors	SD	1.83	1.83	1.84			
Setting specific	М	2.10	1.87	1.23	7.73**	BA, A < AA	.01
Attachment behaviors	SD	2.06	2.00	1.71			

Table 2
Univariate and Follow-Up Analyses Results of Parent-Reported Behavior Concerns

p* < .05; *p* < .001

Note: Post hoc results significant at p < .05.

Conclusions

As expected, we found that preschool children with higher levels of teacher- and parent-reported behavior concerns had fewer strength behaviors. Regardless of whether the strength behaviors were found to exist in one setting or present at both home and preschool classroom, an inverse relationship between behavior concerns and strengths was found. However, close inspection of the *F*-values and effect sizes revealed that strength behaviors that were determined to be cross-setting consistent accounted for a greater degree of variance between levels of teacher- and parent-reported behavior concerns than strength behaviors present in a single setting. Although the strength of the relationship was weaker for parentidentified behavior concerns, this finding suggests that increases in strength behaviors found in only one setting. This finding suggests that a focus on promoting and developing strengths that extend beyond one setting and become a part of the child's behavioral repertoire may be important to reducing the severity of behavioral problems.

Walker et al. (1996) posited that a reduction in severe delinquent behaviors requires teachers and parents working closely together, including the sharing of assessment information from their respective settings, jointly developing behavioral strategies, and reinforcing behaviors across settings. Key to the development of a common understanding is determining which behaviors parents and teachers agree on, as it is less likely that behavior is influenced by the setting when raters co-identify specific behaviors. Unfortunately, the lack of cross-informant research has contributed to the absence of guidelines for integrating data gathered from different informants. These findings have implications for how assessment information from parents and teachers may be used to address mutually identified problem behaviors. Clearly, identifying and fostering those strength behaviors that exhibit cross-setting consistency may be key to reducing the level of behavioral concerns in young children. Moreover, strategies that promote the development and reinforcement of strength behaviors across settings may have a potentially greater benefit in the reduction of problem behaviors than those that simply focus on building strengths within the preschool setting.

References

- Campbell, S. B. (1997). Behavior problems in preschool children: Developmental and family issues. *Advances in Clinical Child Psychology*, 19, 1-26.
- LeBuffe, P. A., & Naglieri, J. A. (1999). Devereux Early Childhood Assessment user's guide. Lewisville, NC: Kaplan Press.
- LeBuffe, P. A., & Shapiro, V. B. (2004). Lending "strength" to the assessment of preschool social-emotional health. *The California School Psychologist*, *9*, 51-62.
- Nagileri, J. A., & Lebuffe, P. A. (2005). Measuring resilience in children: From theory to practice. In S. Goldstein & R. B. Brooks (Eds.), *Handbook of resilience in children* (pp. 107-121. New York: Kluwer.
- Rosas, S., Chaiken, L., & Case, J. (2006, June). Parent and teacher agreement on Devereux Early Childhood Assessment items in a sample of children in Head Start. *Poster presented at the 8th Annual Head Start Research Conference, Washington, DC.*
- Victor, J. B., Halverson, C. F., & Wampler, K. S. (1988). Family-school context: Parent and teacher agreement on child temperament. *Journal of Consulting and Clinical Psychology*, 56(4), 573-577.
- Walker, H. M., Horner, R. H., Sugai, G., Bullis, M., Sprague, J., R., Bricker, D., & Kaufman, M. J. (1996). Integrated approaches and preventing antisocial behavior patterns among school age children and youth. *Journal of Emotional and Behavioral Disorders*, 4(4), 194-209.

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Symposium Mental Health Consultation in Early Education Settings: Building the Research Base

Symposium Introduction

Judith Meyers

Mental Health Consultation to early education settings is an increasingly widespread strategy to foster the social and emotional development of children and to provide early intervention and treatment for young children with challenging behaviors or other mental health concerns. This symposium focuses on recent efforts to identify and build an evidence-base to support the effectiveness of this intervention. The results of a review and synthesis of research addressing the child Chair Judith C. Meyers

Discussant Roxane Kaufmann

Authors

Judith Meyers Eileen M. Brennan et al. Walter S. Gilliam C. Cybele Raver Roxane Kaufmann

and family outcomes of mental health consultation will be followed by presentations summarizing two randomized control studies of specific interventions: the Early Childhood Consultation Partnership in 43 preschool classrooms in Connecticut, and the Chicago School Readiness Project in 35 Head Start classrooms. The implications for policy, practice, and future research needs are discussed.

The Evidence Base for Mental Health Consultation in Early Childhood Settings: Research Synthesis Addressing Child and Family Outcomes

Eileen M. Brennan, Mary Dallas Allen, Deborah F. Perry, & Jennifer R. Bradley

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Introduction

Child care providers and early childhood educators have the opportunity to foster social and emotional development of the increasing numbers of young children who receive education and care in group settings (Capizzano & Adams, 2003). Unfortunately, many young children exhibit either challenging or troubling behavior to such an extent that they are asked to leave pre-kindergarten programs (Gilliam & Shahar, 2006). Early childhood mental health consultation (ECMHC) has been recognized as a promising approach to assist staff to promote social and emotional development of young children and transform difficult and troubling behavior (Brennan, Bradley, Allen, Perry, & Tsega, 2006).

As conceptualized by Cohen and Kaufmann (2000), early childhood mental health consultation "aims to build the capacity (improve the ability) of staff, families, programs, and systems to prevent, identify, treat, and reduce the impact of mental health problems among children from birth to age 6 and their families" (p. 4). When professionals with mental health expertise collaborate with staff and families of young children, relationships between staff, family, and the young children in their care can be improved, and group processes and individual problem behaviors can be managed more effectively (Johnston & Brinamen, 2006).

Because ECMHC is an increasingly widespread strategy employed in early childhood settings across the U.S. (Brennan et al., 2006), and policymakers and practitioners have emphasized the importance of using evidence-based strategies to serve young children, we undertook a systematic examination of the effectiveness of this approach.

This research review and synthesis addresses the child and family outcomes of ECMHC in early childhood settings. Specifically, the purpose of this paper is to answer two questions: (a) How effective

is early childhood mental health consultation in promoting social and emotional development of young children and in reducing difficult or troubling child behavior? and, (b) What are the effects of early childhood mental health consultation on families receiving services?

Method

We employed recognized search and synthesis procedures (Cooper & Lindsay, 1998) to find studies that met our inclusion criteria. In phase 1 of our search, we used keywords to search electronic databases of scholarly articles, on-line early childhood databases, and national organizational, governmental, and university websites for articles, conference proceedings, bulletins, and reports on ECMHC. During phase 2 our research review team contacted experts in the field of ECMHC in order to uncover unpublished internal and external evaluations, program reports, and mental health consultation program outcomes. We specifically sought unpublished works to increase the inclusiveness of our review (Cook et al., 1992).

In order to be included in our investigation, studies had to meet five criteria: (1) they had to be empirical research using either quantitative or mixed methods of research; (2) they were required to address ECMHC in particular, not health consultation, or general early intervention services; (3) they had to study programs serving children birth to eight years old; (4) they had to address child and/or family outcomes; and (5) the investigation must have been conducted between 1985 and 2006. Due to the wide variety of measures used and the low numbers of studies having statistical results allowing for comparison of effect sizes, we were unable to conduct a meta-analysis of the studies we obtained.

Our review and synthesis was conducted using a content analysis approach. We constructed standard coding categories for the data elements in each of the studies, and compiled an extensive matrix of these data elements with each study which met our inclusion criteria in a separate row and one coding category in each column. The coding categories included distinguishing characteristics, consultation features, consultant qualifications, funding sources, methodological factors, measures used, child outcomes, and family outcomes. Studies were sorted into subtypes based upon their research design and rigor of methodology. Finally, we synthesized findings into major themes and subthemes based on the research questions.

Results

Forty-one studies were initially identified through the literature search. Fourteen investigations did not meet the inclusion criteria: five studies focused on older children, eight studies did not exclusively examine mental health consultation, and one study only addressed staff and program outcomes.

In order to evaluate the rigor of the 27 included studies, we classified them into three sets by methodology. The most rigorous group consisted of 10 studies involving both an intervention and comparison (usually no treatment) group; the second set of 13 studies were quasi-experimental or pre-experimental evaluation studies which did not use comparison groups; the final set of four studies was descriptive or correlational in design.

Sample sizes in the investigations ranged from 4 to 714 children and 4 to 845 family members. Most of the programs were located in urban areas, and served culturally diverse children and families; many families were reported to have low incomes. Consultants provided a range of services, which varied considerably between programs but did fall into the categories of either program-focused (i.e., consulting on program structure, scheduling, staffing, classroom management, or administration) or child/family-focused (i.e., observation, assessment, direct interventions, family assistance, referrals).

Thirty-seven standardized measurement instruments were used to collect quantitative child (n = 25) and family-related (n = 12) data on child behavior problems, early childhood social and emotional development, child cognitive development, staff relations with parents, family empowerment, family support, family stress levels, parenting skills, and family satisfaction with services. Supplemental quantitative data were provided by instruments designed for particular studies and by observations. Additionally, staff and family members provided qualitative data regarding outcomes through interviews.

How effective is early childhood mental health consultation in promoting social and emotional development of young children and in reducing difficult or troubling child behavior?

Four major sets of child outcomes were identified in response to the first review question. First, children in centers receiving consultation were found to have greater gains on socialization, emotional competence, and communication skills than comparison children. Second, multiple studies also supported improved social skills and peer relationships for children in centers receiving ECMHC, compared with those not receiving services. Children with internalizing problems (withdrawn, nonsocial) showed particular improvement in social skills in one study. Third, decreased behavior problems in children were found in twelve studies, and there was some evidence of a significant decline in numbers of children having symptoms in the clinical range. Finally, multiple evaluations revealed a decrease in numbers of children being expelled from programs where ECMHC was present.

What are the effects of early childhood mental health consultation on families receiving services?

Although there were fewer investigations that studied the effect of consultation on families, there was evidence regarding four family outcomes. Staff and family reports confirmed that ECMHC produced improved communication between family members and the staff serving their children. Parenting skills were also reported to improve in several studies that noted skill gains in dealing with children's problem behaviors, improved discipline skills, and an increase in positive parent-child interaction. Both quantitative and qualitative data gave evidence that families gained access to mental health services through the consultation process. Two studies that measured parenting stress detected no significant differences from pre- to post-intervention.

Discussion

The studies examined in this review have begun to establish the effectiveness of ECMHC as an intervention that accelerates social and emotional development of children exhibiting difficult or troubling behavior. Levels of problem behavior have been shown to decrease, and fewer expulsions are reported in programs with consultation supports. Although family stress has not been shown to be affected by consultation, children and families have greater access to mental health services and parenting skills improve.

As encouraging as this evidence is, policymakers need to support more rigorous tests of well-defined models of ECMHC in order to improve the evidence base. Researchers in the early childhood field should produce a series of studies using a consistent set of valid and reliable instruments to measure child, family, staff, and program outcomes in order to move knowledge ahead (Perry, Woodbridge, & Rosman, 2007).

References

- Brennan, E. M., Bradley, J. R., Allen, M. D., Perry, D. F., & Tsega, A. (2006, February). Staff and program outcomes of mental health consultation in early childhood settings: A research synthesis. Paper presented at *The 19th Annual Research Conference: A System of Care for Children's Mental Health: Expanding the Research Base*, Tampa, FL.
- Capizzano, J., & Adams, G. (2003). Children in low income families are less likely to be in center-based care. Snapshots of America's Families (Paper No. 16). Washington, DC: Urban Institute
- Cohen, E., & Kaufmann, R. (2000, May). Early childhood mental health consultation. Washington, DC: Center for Mental Health Services of the Substance Abuse and Mental Health Services Administration and the Georgetown University Child Development Center.
- Cook, T. D., Cooper, H., Cordray, D. S., Hartmann, H., Hedges, L. V., Light, R. J. et al. (1992). *Meta-analysis for explanation: A casebook.* New York: Russell Sage.

- Cooper, H. M., & Lindsay, J. J. (1998). Research synthesis and meta-analysis. In L. Bickman & D. J. Rog, (Eds.), Handbook of applied social research methods (pp. 315-337). Thousand Oaks, CA: Sage.
- Gilliam, W., & Shahar, G. (2006). Pre-kindergarten expulsion and suspension: Rates and predictors in one state. *Infants and Young Children, 19*(3), 228-245.
- Johnston, K., & Brinamen, C. (2006). *Mental health consultation in child care: Transforming relationships with directors, staff, and families.* Washington, DC: Zero to Three Press.
- Perry, D. F., Woodbridge, M. W., & Rosman, E. A. (2007). Evaluating outcomes in systems delivering early childhood mental health services. In D. F. Perry, R. K. Kaufmann, & J. Knitzer (Eds.), Social & emotional health in early childhood: Building bridges between services & systems (pp. 121-146). Baltimore: Brookes.

Findings from a Random Controlled Trial of a Statewide Early Childhood Mental Health Consultation System

Walter S. Gilliam

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Introduction

Severe behavior problems during the preschool years are a meaningful predictor of continued behavior problems, poor peer standing, and academic difficulties during kindergarten (Howes, Calkins, Anastopoulos, Keane, & Shelton, 2003; Keane & Calkins, 2004). High quality early education and intervention programs may prevent severe behavior problems in young children from low-income communities and families (Yoshikawa, 1995; Zigler, Taussig, & Black, 1992). Yet some preschoolers may begin their early education programs with severe behavioral problems already present, potentially limiting their ability to participate fully and benefit from the early educational experience (Boyd et al., 2005).

Recent findings from a national study of prekindergarten teachers suggests that teachers who report having an ongoing relationship with a classroom-based mental health consultant are about half as likely to report expelling a preschooler, relative to teachers who report no such support (Gilliam, 2005). Unfortunately, there are few rigorously studied scaleable models for facilitating improved socialemotional climates and decreasing severe behavior problems within early education and child care programs (Brennan, Bradley, Allen, Perry, & Tsega, 2005).

The Early Childhood Consultation Partnership (ECCP) is a mental health consultation program available to staff at child care centers serving young children throughout the state of Connecticut. The consultation focuses on the overall social-emotional atmosphere within the classroom, also addressing both behavioral concerns for individual children and classroom-wide behavioral management challenges. Services are provided by one of the 10 masters-level consultants supported by ECCP and can be requested by parents or childcare center directors, teachers, or other staff. ECCP consultants received clinical supervision in a variety of formats.

The ECCP service is eight weeks long (plus a week 12 final consultation visit), with four to six hours of classroom-based consultation per week. The consultation has a two-part focus: (a) specific classroom-based consultation regarding teacher-child interactions, classroom behavior management techniques, and overall program quality; and (b) child-specific consultation including hands-on strategies and community service referrals for individual children with social-emotional difficulties. Additionally, the classroom consultant provides teacher training on various behavioral or social-emotional topics. The intervention is manualized and menu-driven based on the individualized needs of teachers and classrooms.

The purpose of this study was to examine the effectiveness of ECCP at (a) improving classroom environments and teacher-child interactions, (b) increasing teacher beliefs and practices regarding developmentally appropriate and child-centered pedagogy, (c) reducing teacher mental health concerns

(job stress and depression) and increasing teacher sense of job satisfaction, and (d) reducing teacherrated behavior problems in target children (i.e., the two children in each classroom whose challenging behaviors concern the teacher most).

Method

The effectiveness of ECCP was evaluated in a random-controlled study, employing both pretest and posttest assessment and classroom-based raters who were blind to treatment condition. Data were collected during for cohorts (January 2005-June 2005 and September 2005-March 2006) and combined for analyses. Only classroom-based programs serving children mostly in the three- to four-year-old range that had never before received ECCP services and consented to evaluation were randomized. Across the two cohorts, 48 classrooms were assigned to treatment and 50 were assigned to waitlist control. Study attrition yielded group sizes of 43 treatment and 42 control. Treatment classrooms received a mean of 43.1 service hours (SD = 10.0).

Teachers were 96% female; 79% White, 11% Latina, 6% African-American, and 5% other; 61% held a BA or higher. Classrooms were mostly in community-based child care centers (82%), with the rest in Head Start centers (13%) or public schools (5%). Target children studied were mostly boys (73%).

Measures of classroom quality were the Early Childhood Environments Rating Scale-Revised (ECERS-R; Harms, Clifford, & Cryer, 1998) and the Arnett Caregiver Interaction Scale (CIS; Arnett, 1989). Measures of teacher beliefs and practices included the Parental Modernity Scale (Schaefer & Edgarton, 1985) and the Teacher Beliefs and Practices Scale (Marcon, 1999). Teacher job stress and satisfaction were measured with the Child Care Worker Job Stress Inventory (Curbow, Spratt, Ungaretti, McDonnell, & Breckler, 2000), and teacher depression was measured with the Center for Epidemiological Studies Depression Scale (Radloff, 1977). Measures of child behavior problems for the two identified children in each class were the Conners Behavior Rating Scale and the Social Skills Rating System (Gresham & Elliot, 1990).

Results

The ECCP program demonstrated statistically significant decreases in teacher-rated acting-out behavior problems in the classroom, relative to the control group. The effects were consistent across the two measures employed, and were of a meaningful magnitude. Effect sizes were greatest in the area of oppositional behaviors and hyperactivity. Significant positive effects were found across all four of the externalizing behavior problem subscales used (see Table 1), but none of the four internalizing behavior problem subscales and none of the three social skills subscales.

No other significant effects were found. No significant differences were found on the observational measures of global classroom quality or teacher-child interaction, or any of the subscales of these measures. No significant differences were found on the four scales measuring teachers' (a) beliefs about the importance of obedience, (b) beliefs about the importance of child independence, (c) beliefs about developmentally appropriate classroom practices, or (d) self-reported developmentally appropriate classrooms. No significant differences were noted on either of the three subscales of teacher job stress (job control, job demands, or job satisfaction) or on the measure of self-reported depression.

	ECCP	(n = 75)	Control (n = 69)		_		Cohen's
	М	SD	М	SD	F	p	d
CBRS							
Oppositional							
Pretest	72.37	16.46	70.77	15.35			
Posttest	63.33	15.67	68.17	14.86	10.6808	.0014	0.41
Hyperactivity							
Pretest	68.79	13.33	66.03	12.47			
Posttest	63.04	14.28	65.52	12.18	10.6173	.0014	0.40
Restless-Impulsive							
Pretest	66.62	13.93	65.79	12.90			
Posttest	61.93	13.99	64.16	11.61	4.0500	.0461	0.23
SSRS							
Externalizing Prob							
Pretest	7.32	3.33	7.44	2.90			
Posttest	5.67	3.50	6.65	2.95	4.3291	.0393	0.27

Table 1 ANCOVA Results for Child Behavior Problems

Conclusion

The ECCP program appears to have been successful at significantly and meaningfully decreasing teacher-rated externalizing (e.g., oppositionality, hyperactivity, impulsivity) behavior problems. There is no evidence of successfulness at reducing internalizing (e.g., anxiousness, shyness, perfectionism, emotional lability) behavior problems, but the ECCP service was not targeted to these children. Whether these child behavior differences would be observable to a trained, objective, and condition-blind outside rater was not measured in this evaluation.

As a consultation service, ECCP is an indirect model of service. However, no evidence was found to support any of the hypothesized pathways of effect (through improving classroom environments, changing teacher beliefs, or reducing teacher job stress and depression). Therefore, exactly how ECCP is effective at reducing teacher-rated behavior problems remains unknown. Regardless, the effects of ECCP in the area of decreasing child behavior problems are meaningful and consistent across measures and suggest overall program effectiveness. A more complete description on the ECCP intervention, evaluation methods, and findings can be found in a brief report (Gilliam, 2007), available at www.chdi. org/files/5162007_145018_183022_pdf

References

- Arnett, J. (1989). Caregivers in day care centers: Does training matter? *Journal of Applied Developmental Psychology*, 10, 541-552.
- Boyd, J., Barnett, W. S., Bodrova, E., Leong, D. J., Gomby, D., Robin, K. B., et al. (2005). Promoting children's social and emotional development through preschool - Policy Report. Retrieved May 27, 2006, from http://nieer.org/resources/policyreports/report7.pdf
- Brennan, E. M., Bradley, J. R., Allen, M. D., Perry, D. F., & Tsega, A. (2005, March). The evidence base for mental health consultation in early childhood settings: Research synthesis and review. Paper presented at *The 18th Annual Research Conference: A System of Care for Children's Mental Health--Establishing the Evidence Base*, Tampa, FL.

Curbow, B., Spratt, K., Ungaretti, A., McDonnell, K., & Breckler, S. (2000). Development of the Child Care Worker Job Stress Inventory. *Early Childhood Research Quarterly*, *15*, 515-536.

- Gilliam, W. S. (2005). *Prekindergarteners left behind: Expulsion rates in state prekindergarten programs*. Retrieved May 27, 2006, from http://www.fcd-us.org/PDFs/NationalPreKExpulsionPaper03.02_new.pdf
- Gilliam, W.S. (2007). Reducing behavioral problems in early care and education programs: An evaluation of Connecticut's Early Childhood Consultation Partnership. IMPACT, CHDI, Farmington, CT.
- Gresham, F. M., & Elliot, S. N. (1990). *Social Skills Rating System Manual*. Circle Pines, MN: American Guidance Service.
- Harms, T., Clifford, R. M., & Cryer, D. (1998). *Early Childhood Environment Rating Scale* (Rev. ed.). New York: Teachers College Press.
- Howes, R. B., Calkins, S. D., Anastopoulos, A. D., Keane, S. P., & Shelton, T. L. (2003). Regulatory contributors to children's kindergarten achievement. *Early Education and Development*, 14, 101-119.
- Keane, S. P., & Calkins, S. D. (2004). Predicting kindergarten peer social status from toddler and preschool behavior. *Journal of Abnormal Child Psychology*, 32, 409-423.
- Marcon, R. A. (1999). Differential impact of preschool models on development and early learning of innercity children: A three-cohort study. *Developmental Psychology*, *35*, 358-375.
- Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1,* 385-401.
- Schaefer, E., & Edgarton, M. (1985). Parental and child correlates of parental modernity. In I. E. Sigel (Ed.), Parental belief systems: The psychological consequences for children (pp. 287-318). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Yoshikawa, H. (1995). Long-term effects of early childhood programs on social outcomes and delinquency. *The Future of Children, 5*(3), 51-75.
- Zigler, E., Taussig, C., & Black, K. (1992). Early childhood intervention: A promising preventive for juvenile delinquency. *American Psychologist*, 47, 997-1006.

Mental Health Consultation in Preschool Classroom Processes: Preliminary Findings from a Randomized Trial in Head Start Settings

C. Cybele Raver, Stephanie Jones, Christine Li-Grining, Latriese Sardin-Adjei & Darlene Jones-Lewis

Introduction

Recently researchers and policy makers have expressed the concern that preschoolers' behavior problems may significantly compromise their chances for success in school (Gilliam, 2005; Raver, 2002). Specifically, children who are persistently sad, withdrawn or disruptive have been found to receive less instruction, are less engaged and less positive about their role as learners, and to have fewer opportunities for learning from peers (Arnold, Brown, Meagher, Baker, Dobbs, et al., 2006; Raver, Garner & Smith-Donald, 2006). Exposed to a wide range of psychosocial stressors, children in poor neighborhoods are at greater risk for developing emotional and behavioral difficulties (Dodge, Pettit & Bates, 1994). Preschools in low-income communities are therefore likely to be called upon to serve a greater number of young children with behavioral problems, and are likely to face the pressing need for effective intervention (Rimm-Kaufman, Pianta & Cox, 2000).

To address this need, the principal aim of the Chicago School Readiness Project is to improve low-income preschool-aged children's school readiness by increasing their emotional and behavioral adjustment through a comprehensive, multi-component classroom-based intervention. As part of the CSRP model, teachers were invited to participate in 30 hours of training on ways to successfully manage children's disruptive behavior in their classrooms (Webster-Stratton, Reid & Hammond, 2001). One challenge is that it might be particularly difficult to implement new classroom management strategies when teachers feel frustrated, emotionally negative, or detached. This framework led us to include a weekly Mental Health Consultant (MHC) in a model of classroom- and child-centered consultation, with the first 20 weeks of consultation highlighting the MHC's role as "coach" in supporting teachers while they try new techniques learned in teacher training. Mental health consultants spent a significant portion of the school year (in winter) helping teachers to reduce stress and limit burnout.

Master's level social workers were hired and trained to serve as site-based MHCs, following a manualized approach (Madison-Boyd, Raver, Aufmuth, Jones, Barden, et al., 2006). MHCs were responsible for weekly on-site consultation in coaching teachers to take the risk of trying new strategies of responding to children's challenging behavior. In addition, MHCs maintained stress reduction roles in winter of the school year.

Method

Using a clustered randomized controlled trial (RCT) design, the Chicago School Readiness Project randomly assigned a treatment versus control condition to 18 Head Start sites, which included 35 Head Start-funded classrooms led by 94 teachers. Randomization resulted in 18 classrooms assigned to treatment vs. 17 classrooms assigned to the control condition (one site lost one of two classrooms, after randomization but before the intervention was implemented).

The CSRP intervention was implemented for two cohorts of children and teachers, with a total of 543 children and 87 teachers participating in CSRP. CSRP classrooms included 67% children identified as African American, 26% identified as Hispanic, with 20 classrooms with racial compositions (i.e., > 80% African American and five classrooms > 80% Hispanic). Written teacher consent to complete teacher surveys (e.g. teachers' demographic characteristics, values and beliefs about teaching practices, etc.) was also obtained from 65 of the 94 teachers (representing 69%). Of those teachers willing to provide survey data, teachers were 40-years-old on average (SD = 11), and nearly all teachers were female (97%). Most teachers belonged to an ethnic minority group, where 70% of teachers were African American, 20% were Latina, and 10% were European American. A majority of teachers held an Associates degree or higher. Examination of rates of participation suggests that 75% of teachers participated in at least one training and 63% of teachers participating in more than half of the trainings. MHCs with a master's in social work were hired and matched to sites, providing an average of 82 hours (SD = 12) of service to classrooms from September through March. On average, classrooms received 132 hours (SD = 28) of both teacher training and mental health consultation during this time period.

The CLASS (La Paro et al., 2004) was used to test whether our intervention had a significant impact on classroom quality, with four scales representing important indicators of classrooms' emotional climate: positive climate, negative climate, teacher sensitivity, and behavior management (positive climate, $\alpha = 0.82$; negative climate, $\alpha = 0.70$; teacher sensitivity, $\alpha = 0.77$; behavior management, $\alpha = 0.66$; see LoCasale-Crouch et al., 2007).

Results

Results of hierarchical linear modeling analyses suggest that treatment-control group differences were significant for classrooms' positive climate, controlling for classrooms' level of positive climate at baseline, and the set of classroom covariates, t = 4.98, p < .001. Examination of the unstandardized coefficient for treatment impact from September to March suggests that treatment lead to almost 1 point increase in positive climate and teacher sensitivity. The effect size for CSRP impact on teacher sensitivity was d = .49. Regarding teachers' management of children's disruptive behavior, analyses suggest that differences between treatment and control group classrooms met trend levels of statistical significance with covariates included in the model, t = 1.88, p < .10. Similar to other Classroom Assessment Scoring System (CLASS; La Paro, Pianta, & Stuhlman, 2004) outcomes, treatment led to over .5 *SD* increase in teachers' classroom management, d = .57.

Our analyses of the short-term impact of CSRP intervention suggest that concrete steps can be taken to improve the ways that teachers manage children's behavior and how they structure the emotional climate in their classrooms. Specifically, our analyses suggest that intervention classrooms experienced a substantial improvement over control classrooms in their emotional climate, with teachers demonstrating greater enthusiasm with their students, more responsiveness to their students' needs, and lower use of harsh or emotionally negative practices in March. The control group's receipt of a teacher's aide helps us to rule out the likelihood that differences in classroom quality might have simply been because MHCs were able to lend "an extra pair of hands" during the day. As such, the CSRP components of workforce development through training and coaching are promising avenues for improving teachers' classroom management.

Conclusion

A fair question would be whether we would have obtained significant impact on classrooms, relying on teacher training only, without including mental health consultants. Our bet is that MHCs' role in supporting teachers was central to the intervention's success. In our view, this may have been because MHCs took an important collaborative stance rather than an expert one. In addition, we learned much about the daily challenges of low-income preschool staff as they provide Head Start-funded comprehensive services to low-income families. This study provides the opportunity to develop a more balanced perspective by analyzing changes in classroom quality among 18 Head Start sites in 7 of Chicago's poorest neighborhoods over the course of the school year. Such analyses help to identify the strengths of these early educational settings, the areas that need improvement, and the steps that can be taken to achieve higher quality in "real world," low-income preschool contexts.

References

- Arnold, D. H., Brown, S. A., Meagher, S., Baker, C. N, Dobbs, J., & Doctoroff, G. L. (2006) Preschool-based programs for externalizing problems. *Education & Treatment of Children, 29*, 311-339.
- Dodge, K. A., Pettit, G. S., & Bates, J. E. (1994). Socialization mediators of the relation between socioeconomic status and child conduct problems. *Child Development, 65*, 649-665.
- Gilliam, W. S. (2005). *Prekindergartneers left behind: Expulsion rates in state prekindergarten programs*. FCD Policy Brief Series, 3. New York, NY: Foundation for Child Development.
- La Paro, K., Pianta, R., & Stuhlman, M. (2004). Classroom Assessment Scoring System (CLASS): Findings from the pre-k year. *The Elementary School Journal*, 104, 409-426.
- LoCasale-Crouch, J., Konold, T., Pianta, R., Howes, C., Burchinal, M., Bryant, D., et al. (2007). Observed classroom quality profiles in state-funded pre-kindergarten programs and associations with teacher, program, and classroom characteristics. *Early Childhood Research Quarterly*, 22, 3–17.
- Madison-Boyd, S., Raver, C., Aufmuth, E., Jones-Lewis, D. Barden, K., & Williams, M. (2006). The Chicago School Readiness Mental Health Consultation manual. Chicago, IL: University of Chicago.
- Raver, C. C. (2002). Emotions matter: Making the case for the role of young children's emotional development for early school readiness. *Social Policy Report*, 16, 3–6.
- Raver, C. C., Garner, P. & Smith-Donald, R. (2006). The roles of emotion regulation and emotion knowledge for children's academic readiness: Are the links causal? In B. Pianta & K. Snow (Eds). *Kindergarten transition and early school success*. Brookes Publishing.
- Rimm-Kaufman, S., Pianta, R., & Cox, M. (2000). Teachers' judgments of problems in the transition to kindergarten. *Early Childhood Research Quarterly*, 15, 147-166.
- Webster-Stratton, C., Reid, M. J., & Hammond, M. (2001). Preventing conduct problems, promoting social competence: A parent and teacher training partnership in Head Start. *Journal of Clinical Child Psychology*, 30, 238–302.

Symposium Discussion

Roxane Kaufmann

Mental health consultation is an important component of the early care and education system that serves children from birth through age five and supports their families. The presentations clearly illustrate the positive changes that mental health consultation effects in children, personnel, programs and families. Staff that have access to mental health consultation increase their capacity to manage children with challenging behaviors and promote social and emotional development. Increasingly, states and communities across the country are investing in mental health consultation through legislation, increased funding, and training, each of which result in new partnerships between community mental health agencies and early care and education programs. There are still many questions that need to be answered through research and evaluation, so the field knows what aspects of consultation are most effective, what skills and backgrounds are necessary for consultants to have, and what, if any, are the long-term effects of early childhood mental health consultation on the development of the children served.

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