

# School Mental Health *Data Matters*



## ***School Mental Health Outcomes – Be Brief, Be Academic***

As discussed in the first issue of *Data Matters*, monitoring change in the emotional/behavioral health and academic progress of children and adolescents throughout the course of treatment is a critical component of accountability and quality improvement in school mental health (SMH). Further, documenting treatment progress is essential in order to modify treatment plans to best fit students' mental health needs (Wells, Burlingame, Lambert, Hoag, & Hope, 2006). The first issue of *Data Matters* presented the challenges associated with selecting meaningful outcome measures, including difficulties associated with lack of time and resources. In this issue of *Data Matters*, we consider two characteristics of measures that may enhance their usefulness and appeal in the school setting: brevity and focus on academic outcomes.

Given the time constraints of SMH clinicians and informants (i.e., parents, teachers), brief, less time consuming measures may be more appealing than lengthy comprehensive measures. That being said, it is important to ensure that brevity does not compromise quality. In this issue, we review recent literature documenting the value of using measures that are briefer than traditional measures of children's mental health outcomes. We also highlight a few brief outcome measures that are psychometrically sound and feasible within the context of providing mental health services in schools. Next, we address the importance of measuring academic outcomes when considering the impact of school mental health services. Specifically, Drs. Kern and Walker of the University of Washington co-authored our *Community Spotlight* section, discussing the relationship between the use of school-based health centers and academic outcomes.

In an effort to advance both research and practice in the area of SMH quality, the CSMH produces quarterly *Data Matters* newsletters. Content includes:

- Brief discussion and summaries of topics related to SMH outcomes, data collection and interpretation
- A "Community Spotlight" section, authored by leaders from "real world" communities and programs engaged in SMH program evaluation
- Resources to promote quality SMH assessment and improvement
- Citations and abstracts of recent literature on SMH evaluation and outcomes assessment

## ***Is Briefer Better?***

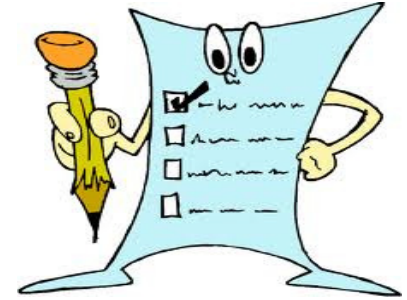
When considering which assessment instruments to use in practice, SMH clinicians are confronted with tremendous variability across measures in content (e.g., symptomatology, functioning), number of items, sensitivity to detecting changes in emotional/behavioral health and academic progress, and informant type (e.g., self, parent, teacher). Although there are many measures from which to choose, a large number of these measures are developed for diagnostic and screening purposes, and are not designed to detect change in children's emotional/behavioral health<sup>2</sup> nor to measure treatment outcomes<sup>3</sup>. In addition, some

measures are very narrow and only assess specific symptoms or disorders, limiting the information collected about the child's overall functioning, and making program-wide evaluations difficult. In contrast, some measures are comprehensive and assess emotional/behavioral functioning across many domains. Comprehensive measures are often quite lengthy and not feasible for frequent outcomes monitoring within school settings. For example, one of the most commonly used comprehensive measures to assess psychosocial functioning among youth is the Child Behavior Checklist<sup>4</sup>. This measure has

strong psychometric properties<sup>5</sup> and has the option of cross-validation of information by teacher, parent, and youth report forms<sup>4</sup>. Although it is fairly easy for the clinician to administer, it is very time-consuming for the informant to complete the CBCL which contains over 100 items. In addition, interpretation of the CBCL profiles may be challenging for SMH clinicians who have limited time and/or for those who lack training and experience with this measure. More importantly, the CBCL has limited sensitivity to change<sup>6</sup>, which is critical to tracking treatment progress.

As an alternative to the CBCL and other similarly lengthy instruments, the **Youth Outcome Questionnaire-30.1**<sup>7</sup> assesses overall psychosocial functioning and monitors treatment progress among youth between 4-17 years of age. In addition, it includes critical items to alert clinicians to potential high-risk behaviors (e.g., suicide, substance abuse). The Y-OQ-30.1 is brief (30-items), and has a parent and child version. This measure has adequate internal consistency, test-retest, and inter-rater reliability, and discriminates between symptoms that fall in the normal and dysfunctional range<sup>7</sup> In addition, the Y-OQ-30.1 has a reliable change index, which makes it easier for clinicians to determine if clinically significant change has occurred in child clients over the course of treatment. The Y-OQ-30.1 is able to appropriately detect

progress that occurs either weekly or biweekly, which is important for SMH in particular due to the frequency of sessions (i.e., sometimes multiple sessions per week) and/or short-term clients.

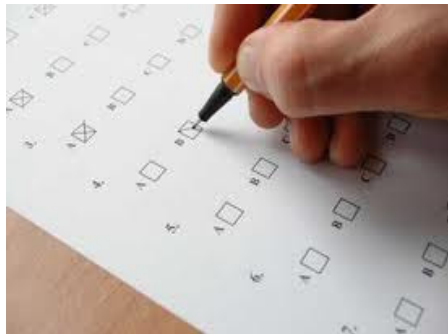


*It is important to identify brief measures that:*

- are able to detect change in emotional/behavioral functioning
- are clinically relevant but “broad or general”
- can be administered frequently
- are feasible for clinicians to administer and score in schools
- are easy for informants to complete
- are psychometrically sound

appear feasible for implementation by mental health clinicians in schools.

Overall, there is a movement in the children’s mental health field for clinicians to utilize evidence-based practices, including evidence-based assessment methods to document the course and outcome of treatment. Brief measures require less administration and scoring time, are informative, and equally as helpful (or more helpful), compared to comprehensive measures. Additionally, they provide an adequate and efficient mechanism to track and adjust children’s mental health treatment plans. All of these factors contribute to the argument that frequent, regular assessments using validated and reliable brief measures may be the most feasible and effective method for SMH clinicians to collect data on treatment progress and outcomes.



SMH clinicians may desire an even briefer measure, and one that may be administered via phone to reach caregivers who are unable to complete a survey at school (or whose paperwork never makes it back to school). Two such measures are briefly discussed in the boxes below that meet these criteria, and

Brief Problem Checklist	Youth Top Problems (TP)
<p>The <b>Brief Problem Checklist (BPC)</b><sup>8</sup> is a 12-item measure that was adapted from items on the Youth Self-Report<sup>9</sup> and the Child Behavior Checklist<sup>4</sup>. The BPC is a brief interview administered to children and caregivers to track child clinical outcomes in treatment over time<sup>8</sup> The scale consists of a Total Problems scale and two clinical scales (Internalizing and Externalizing) that correspond to the targets of treatment for many youth. The BPC has adequate reliability (i.e., internal consistency, test-retest) and validity. In longitudinal analyses, the BPC significantly predicted change on other measures of symptoms and dysfunction in an ethnically diverse clinical sample of boys and girls aged 7-13 years. The findings suggested that the BPC required minimal effort (p. 535) from the clinician due to the fact that most families were reached via phone after the 1<sup>st</sup> or 2<sup>nd</sup> call. In addition, the time for families to complete the BPC was very short with most interviews lasting less than one minute.</p>	<p>The <b>Youth Top Problems (TP)</b><sup>10</sup> measure was developed to complement standardized measures and to assess client identified problems throughout treatment. The TP assesses youth problem behaviors by separately asking youth and caregivers to list their most concerning problems, then having each rate the severity of each problem on a scale ranging from 0 (<i>not at all</i>) to 10 (<i>very, very much</i>). Next, youth and caregivers are provided with a list of all the problems and must identify which problem “is the biggest problem right now?,” “which of these is giving you [or youth’s name] the most trouble right now?,” and “which one is the most important to work on?” The top three problems identified by the youth and caregiver are utilized to inform treatment. Weisz and colleagues evaluated the TP in a sample of outpatient-referred boys and girls aged 7-13 years.</p>



# Community Spotlight

By Suzanne Kerns, Ph.D. and Sarah Cusworth Walker, Ph.D.

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Division of Public Behavioral Health and Justice Policy

Despite the burgeoning research relating use of school-based health centers (SBHCs) to a variety of key health and wellbeing indicators, there is a paucity of studies examining the relationship between use of SBHCs and academic outcomes. Linking use of SBHCs to academic outcomes has become increasingly important given the tough economic climate facing schools and public health centers and the pressure to only invest in programs that contribute towards mutually desirable outcomes, such as enhanced academic achievement.

The University of Washington partnered with the City of Seattle and Public Health Seattle and King County to help answer the question, “Do SBHCs improve academic outcomes?” Previous research in this area is limited by studies with small sample sizes, a focus on youth in specific high-risk categories (e.g., pregnant adolescents), or students attending specialized schools (i.e., alternative schools). We wanted to look at the impact across the entire school district and over a student’s high school career. We created a de-identified database, linking Seattle Public Schools’ academic, demographic, and disciplinary information with the Public Health school-based health center usage information.

We conducted two studies of academic outcomes using different research methodology, outlined in Table 1. The first study examined the relationship between SBHC use and school attendance, school achievement (as measured by grade point average) and discipline. The second study examined the relationship between SBHC use and graduation rates across the population of students and also for students with demographic characteristics putting them ‘at-risk’ for dropout.

The two studies found that student use of SBHCs was positively related to academic outcomes, including grade-point average, attendance, and graduation<sup>11</sup>. There was no impact of SBHC use on disciplinary actions. We found that students using SBHCs a low to moderate amount had a 33% reduction in school dropout and exploratory analyses revealed that students at highest risk for dropout (i.e., free/reduced lunch, GPA <2.5, attendance <90%, African American or Hispanic ethnicity) were even more likely to experience benefits of SBHC use.

**Table 1. Research methodology**

	Time Frame	Sample	Measures	Analysis
<b>Study 1</b>	5 semesters Fall 2005– Fall 2007	Higher-risk 9th grade students <ul style="list-style-type: none"> <li>• 444 students who used SBHCs in 9th grade Fall</li> <li>• 1,861 never-users</li> </ul>	<ul style="list-style-type: none"> <li>• Any SBHC use in Fall 2005</li> <li>• Demographics</li> <li>• GPA</li> <li>• Attendance</li> <li>• Discipline</li> </ul>	Students included in the SBHC user group were statistically matched to students in the non-user group <sup>12</sup> . Groups were then compared on GPA, attendance and disciplinary events.
<b>Study 2</b>	8 semesters Fall 2005– Spring 2009	All students enrolled in SPS as 9th graders in the Fall, 2005 <ul style="list-style-type: none"> <li>• 1,754 SBHC users</li> <li>• 1,580 never-users</li> </ul>	<ul style="list-style-type: none"> <li>• Demographics</li> <li>• GPA</li> <li>• Attendance</li> <li>• Discipline</li> <li>• Avg. semester SBHC use: Never (0 visits) Low-use (.125-.5) Mod. –use (.51-2.5) High-use (&gt;2.5) Dropout<sup>a</sup></li> </ul>	Students in the SBHC user group were statistically matched to non-users. Groups were then compared to ‘time to dropout’ using Cox regression analyses. Our model enabled us to examine the unique contribution that SBHC use made on the likelihood of dropout across the semesters.

## Recent Literature



- Dr. Bruce Chorpita and colleagues developed the Brief Problem Checklist, an easily administered, clinically relevant, and psychometrically sound measure for children and caregivers. These findings were published in the *Journal of Consulting and Clinical Psychology* in 2010. Results revealed that the Brief Problems Checklist has a psychometric strength and for the initial 6 months of treatment, predicted change on related measures of child symptoms.

\*Chorpita, B. F., Reise, S. P., Weisz, J. R., Grubbs, K., Becker, K. D., & Krull, J. (2010). Evaluation of the Brief Problem Checklist: Child and caregiver Interviews to measure clinical progress. *Journal of Consulting and Clinical Psychology, 78*, 526-536.

- In 2011, Dr. John Weisz and colleagues published their findings on the development and testing of an efficient strategy for identifying (before treatment) and repeatedly assessing (during treatment) the problems identified as most important by caregivers and youths in psychotherapy in the *Journal of Consulting and Clinical Psychology*. Results indicated that the 3 problems of greatest concern to youth and their caregivers matched significantly with other clinical measures of youth

symptomatology, while also adding specificity that other measures do not provide. In addition, the authors discuss the psychometric properties of the measure, as well as implications for the use of the Top Problems Checklist in clinical settings.

\*Weisz, J.R., Chorpita, B. F., Frye, A., Ng, M.Y., Lau, N., Bearman, S.K., Ugueto, A.M., Langer, D.A., & Hoagwood, K.E. (2011). Youth top problems: Using idiographic, consumer-guided assessment to identify treatment needs and to track change during psychotherapy. *Journal of Consulting and Clinical Psychology, 79*(3), 369-380.



- In a 2010 edition of *School Psychology Review*, Drs. Volpe and Gadow examined two methods of selecting items from existing rating scales to create shorter instruments for assessing teacher-reported response to intervention. Findings suggest that abbreviated and original versions of IOWA conners Teacher Rating Scale and the teacher-completed Peer Conflict Scale were equivocal with respect to internal consistency, temporal stability, concurrent validity and treatment sensitivity, supporting the use of abbreviated scales for progress monitoring of mental and behavioral outcomes in schools.

\*Volpe, R. J., & Gadow, K. D. (2010). Creating abbreviated rating scales to monitor classroom inattention-overactivity, aggression, and conflict: Reliability, validity, and treatment sensitivity. *School Psychology Review, 39*, 350-363.

**We welcome input regarding additional content that would be useful as we pursue the objective of enhancing the use of data to improve SMH quality. In addition, if you are interested in contributing to *Data Matters* content (e.g., as a “real world” setting or topical discussion), please contact Dr. Nicole Evangelista Brandt at [nbrandt@psych.umaryland.edu](mailto:nbrandt@psych.umaryland.edu).**



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## Footnote for Community Spotlight

<sup>a</sup>Defined by Seattle Public Schools as: expelled, attaining maximum age without graduation, completing GED, leaving school without returning or confirming transfer to another school. Students who died, transferred to another educational situation, or were still enrolled Spring 2009 were excluded from analyses at the semester of the event.

***The mission of the Center for School Mental Health (CSMH) is to strengthen policies and programs in school mental health to improve learning and promote success for America's youth.***

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