School Mental Health (2015) 7:273–286
DOI 10.1007/s12310-015-9153-0

ORIGINAL PAPER

The Brief Intervention for School Clinicians (BRISC): A Mixed-Methods Evaluation of Feasibility, Acceptability, and Contextual Appropriateness

Aaron R. Lyon[1] · Eric J. Bruns[1] · Kristy Ludwig[1] · Ann Vander Stoep[1] · Michael D. Pullmann[1] · Shannon Dorsey[1] · John Eaton[1] · Ethan Hendrix[1] · Elizabeth McCauley[1]

Published online: 30 July 2015

Abstract To maximize impact across the broad spectrum of mental health needs exhibited by youth in school settings, interventions must be designed to be effective and efficient and demonstrate good fit with the educational context. The current paper reports on the second phase of an iterative development process for a short-term "Tier 2" intervention for use by school-based mental health providers—the Brief Intervention for School Clinicians (BRISC)—using mixed qualitative and quantitative analyses to evaluate feasibility, acceptability, and appropriateness while emphasizing student experiences. This phase was intended to yield information to drive further protocol refinement and testing across subsequent phases. We describe the rationale for, development of, and formative testing of the BRISC intervention. Results suggest that BRISC may be feasible to deliver, acceptable to students, and appropriate to the school context. In particular, the BRISC process appears to be effective in enhancing student engagement in the intervention and identifying and addressing individualized student needs. These findings and directions for further enhancing BRISC's potential for positive impact highlight how treatment development may benefit from initial, small-scale evaluations focused on both client and implementation outcomes.

Keywords Mental health · Tier 2 · Brief intervention · Implementation

✉ Aaron R. Lyon
lyona@uw.edu

[1] Department of Psychiatry and Behavioral Sciences, University of Washington, 6200 NE 74th St., Suite 100, Seattle, WA 98115, USA

Introduction

Schools offer significant advantages when conducting observation, screening, and assessment of children and adolescents' emotions and behavior (McCormick, Thompson, Vander Stoep, & McCauley, 2009; Owens & Murphy, 2004), as well as the provision of accessible and timely mental health services (Kataoka, Stein, Nadeem, & Wong, 2007; Lyon, Ludwig, Vander Stoep, Gudmundsen, & McCauley, 2013). As a method of organizing and summarizing the range of available interventions that may benefit all students with academic challenges, schools are increasingly adopting tiered frameworks that present strategies at multiple levels, including universal (Tier 1, the entire school population), selective (Tier 2, students demonstrating emerging problems or heightened risk), and indicated levels (Tier 3, focused on students with needs that require intervention) (Fazel, Hoagwood, Stephan, & Ford, 2014).

Results of meta-analyses show that *universal mental health promotion* programs can confer significant positive effects on both socio-emotional and academic outcomes of students (Payton et al., 2008). Whole-school- and classroom-based programs that promote better classroom behavior also have increasing empirical support (Bradshaw, Koth, Bevans, Ialongo, & Leaf, 2008; Embry, 2002; Horner et al., 2009; Shure, 1992). Evidence is also growing for the effectiveness of *selective prevention* programs focused on aggressive behavior, substance abuse, anxiety, and depression (Fazel, Hoagwood, Stephan, & Ford 2014).

School mental health (SMH) services are typically conceived as residing within Tiers 2 and 3, which comprise indicated school-based programs and interventions for students with identified need. Although there are some empirically supported, school-specific interventions for

certain diagnoses (e.g., post-traumatic stress disorder; Stein et al., 2003), few models for delivering SMH services to students with diverse needs have been rigorously examined. Moreover, SMH scholars have consistently concluded that services for emotional and behavioral needs offered in the education sector are not sufficiently based on empirical evidence (Evans & Weist, 2004; Owens et al., 2014; Rones & Hoagwood, 2000). Even when high-quality evidence-based practices (EBP) are introduced into schools, they are most often characterized by "incomplete implementation, restricted sustainability, and narrow spread" (Fazel, Hoagwood, Stephan, & Ford 2014, p. 382).

These implementation challenges are not unique to the school setting—implementation of EBP in other child-serving settings (e.g., community mental health) has also been limited (Becker, Smith, & Jensen-Doss, 2013; Horwitz et al., 2014). However, there may be unique challenges in school settings that further complicate the effective use of EBPs (Forman et al., 2013; Owens et al., 2014). Barriers to EBP use in SMH include difficulties integrating mental health services with the core academic mission of education systems, obtaining support or buy in from various school personnel, training adequacy, competing priorities or lack of time for training and implementation activities, and inadequate resources (Forman & Barakat, 2011; Forman, Olin, Hoagwood, Crowe, & Saka, 2009; Lyon et al., 2013c). At the policy level, initiatives such as No Child Left Behind, Common Core, and "high-stakes" testing have increased schools' emphasis on educational outcomes and led to a corresponding decrease in emphasis on the socio-emotional outcomes targeted by most mental health EBPs. Further, given that few of the interventions used in SMH have been designed explicitly for the educational context (Wong, 2008), there are many unanswered questions surrounding the fit between mental health EBPs and the school setting and the degree to which SMH services actually promote academic outcomes.

The current paper describes the rationale for, development of, and formative testing of a SMH intervention approach (the Brief Intervention for School Clinicians [BRISC]; Lyon et al., 2014a) aimed at addressing barriers to effective SMH service delivery. It is a school-based, stepped-care model designed to effectively assess and triage students while identifying an immediate and specific problem that students can actively address. It provides a flexible structure with up to four sessions to assess, engage, identify, and begin to address student challenges that are distressing and impacting academic performance/behavior and overall functioning. The goals of the paper are twofold: (a) to report results from an initial evaluation focused on both the potential for positive effects and implementation factors that are critical in crossing the "clinic to school chasm," such as feasibility, acceptability, and contextual appropriateness; (b) to provide an example of how treatment development may benefit from initial, small-scale evaluations focused on both client and implementation outcomes.

Toward Better Student Outcomes: Brief Intervention for School Clinicians (BRISC)

In light of the above impediments to the effective use of evidence in SMH, increasing work is being conducted to both (a) design effective interventions with good fit to the school context and (b) facilitate high-quality implementation of effective and promising practices (Forman et al., 2013; Owens et al., 2014). Regarding fit to context, SMH service delivery is characterized by large caseloads, significant clinician time constraints, and frequent student crises (Lyon et al., 2014b; Lyon et al., 2013c). Furthermore, students who seek mental health interventions represent a broad spectrum of severity and problem type. Although a small number of high-need youth may receive a disproportionate number of SMH sessions, research also suggests that most students present with subclinical problems and use fewer than four sessions per year (Lyon, Charlesworth-Attie, Vander Stoep, & McCauley, 2011; Lyon et al., in press; Walker, Kerns, Lyon, Bruns, & Cosgrove, 2010). Therefore, to maximize impact across this broad spectrum of needs, SMH interventions must be designed to be both effective and time efficient. SMH services must also be able to efficiently identify those students with more intensive needs—or those who do not respond to the intervention—and either modify the approach to service delivery or connect them with alternative, potentially more intensive, services.

Driven by the previously described barriers to EBP implementation in schools and with explicit attention to contextual appropriateness, our research team is iteratively developing and testing a systematic, evidence-based intervention focused on assessment, problem-solving, and skill-building that can be implemented as a "Tier 2" approach within a larger framework of multi-tiered systems of supports (MTSS; National Center on Response to Intervention, 2010). The developing BRISC protocol (Lyon et al., 2014a), is informed by recent developments in common elements approaches to psychotherapy with youth (Chorpita, Daleiden, & Weisz, 2005; Weisz et al., 2012), therefore includes identification of "top" problems, use of a problem-solving framework, and inclusion of routine progress monitoring using standardized and idiographic approaches (Borntrager & Lyon, 2015), and is intended to be applicable to the majority of student presenting problems commonly encountered in educational settings.

With funding from the Institute of Education Sciences, we are engaged in an iterative development and testing process in public secondary schools. The overarching

project includes four primary phases: (1) expert and stakeholder input, (2) feasibility and acceptability testing in schools, (3) pilot testing with existing school-based practitioners, and (4) a small-scale randomized study. The current paper describes the second phase of this process (feasibility testing). For a full discussion of the theoretical and empirical foundations for the developing BRISC model and results of expert and stakeholder input, please see Lyon et al. (2014a).

Studies conducted during Phase 1 of BRISC protocol development included an initial evaluation of BRISC's appropriateness to the school context, based on the perspectives of administrators, service providers, and national experts. As described by Lyon et al. (2014a), a number of crosscutting themes emerged to guide BRISC development: (a) be responsive to patterns of student help-seeking in schools (e.g., inconsistent attendance in therapy, use of four or fewer sessions); (b) develop methods or pathways for referrals based on student response to the intervention (including additional educational, social, or mental health services); (c) adopt a flexible and responsive stepped-care structure (e.g., a straightforward intervention approach that includes modules focusing on typical problem areas identified by students, facilitate client-centered decisions about the specific intervention focus); and (d) use educational (e.g., attendance) and other forms of data to drive decision-making, including data on treatment targets that resonate with students (e.g., "stress"). Such input informed initial development of the BRISC intervention model and protocol.

Implementation Outcomes: Feasibility, Acceptability, and Appropriateness

In addition to supporting the development of an effective and contextually appropriate school-based intervention, a goal of Phase 2 was to evaluate key implementation processes and outcomes. Among the implementation outcomes articulated by Proctor et al. (2011), feasibility, acceptability, and appropriateness all represent early-stage variables with implications for the long-term success of an implementation effort in schools. *Feasibility*, or the "extent to which a new treatment, or an innovation, can be successfully used or carried out within a given agency or setting" (p. 69), reflects the intersection between the requirements for implementing a particular innovation and the constraints present in the destination context. *Acceptability* is defined as "the perception among implementation stakeholders that a given treatment, service, practice, or innovation is agreeable, palatable, or satisfactory" (p. 67), which is best assessed through a stakeholder's direct experience with a particular intervention or innovation. Finally, *appropriateness* can be defined as "the perceived fit, relevance, or compatibility of the innovation or evidence-based practice for a given practice setting, provider, or consumer; and/or perceived fit of the innovation to address a particular issue or problem" (p. 69).

Current Aims

To inform continued development and revision of the BRISC protocol, the primary aim of the current paper is to use mixed qualitative and quantitative analyses to evaluate its feasibility, acceptability, and appropriateness in an authentic education setting, emphasizing student experiences. Data were collected in the second phase of the BRISC development project, during which university-based therapists from the research team delivered the intervention to high school students during the school day. We assessed the following research questions: (Research Question [RQ] 1) How well were clinicians able to deliver BRISC components (*feasibility*)? (RQ2) To what extent is the BRISC protocol acceptable to students (*acceptability*)? and (RQ3) To what extent did the BRISC protocol fit the presenting problems and preferences of referred students and promote improvement in students' priority problem areas (*appropriateness*)?

Method

Participants

Participants were 11 high school students who received the BRISC intervention in a single school during the 2012/2013 academic year (out of 15 approached—see below). Ten participants were female (91 %). Six were Caucasian and not of Hispanic descent (55 %), two were African American, two were Hispanic/Latino, and one was African. Students represented a mix of grade levels (one in ninth grade, two in tenth grade, three in 11th grade, and five in 12th grade). Four students (46 %) had failed one or more classes during the prior semester. Information on referral source was available for nine participants. Of those, five of the nine (56 %) were self-referred, two were referred by the nurse practitioner in the school-based health center, one by a teacher, and one by a school counselor. Enrollment was based on ongoing or "rolling" referrals throughout the spring semester of 2013.

Procedures

Research staff contacted students referred to BRISC to review details of the project, answer all questions, and invite them and a parent to participate in the intervention and evaluation. Of 15 approached, 12 agreed to participate;

one of these participants attended no BRISC sessions and is excluded from this report. The parents of the three students who had turned 18 were not approached to participate. Parents of two other participants under age 18 declined to participate, but allowed their student to participate. Research staff conducted baseline assessments in which they gathered demographic information and administered measures of mental health and adaptive functioning status. Data were also gathered on the number of sessions completed, the length of the sessions, and the number of days from the first to last session. Therapists completed fidelity rating checklists after each of the four BRISC sessions documenting whether or not they implemented the intervention elements that were intended for each session. Eight weeks after the first BRISC intervention session, after the completion of BRISC participation, study team members met with students in person to conduct qualitative exit interviews and collect post-intervention measures (see Measures). To support open and honest reporting about the services received, all students were interviewed by research team members other than their BRISC therapist. All study procedures were approved by the institutional review board at the University of Washington.

BRISC Intervention

Although it is ultimately intended for use by existing school-based professionals, in the current study the BRISC intervention was delivered by one masters-level social worker and two doctoral-level psychologists, all research team members, to allow for an adequate "test of concept" prior to training embedded staff. Study therapists were involved in the development of the BRISC protocol and had substantial knowledge of its content and procedures. Therapists participated in biweekly group supervision/consultation to review cases and troubleshoot difficulties encountered when delivering the protocol.

To allow students to attend the BRISC sessions, the existing standard procedure for school-based health center appointments was used. That is, administrative staff sent passes to participating students' classrooms, excusing them to attend their session. The BRISC protocol outlined four sessions (each lasting between 30 and 60 min), based on treatment elements shared across effective interventions for internalizing and externalizing problems in adolescents (see Table 1). Session one included administration of and feedback on brief standardized assessment measures (Patient Health Questionnaire [PHQ-9] and Generalized Anxiety Disorder scale [GAD-7]—see Measures), psychoeducation about the BRISC intervention, a brief functional assessment (targeting school, family, peers), problem identification, stress rating, and introduction to informal symptom or behavioral monitoring. Session two included monitoring review; psychoeducation on anxiety, depression, and stress; and introduction to problem-solving, focusing on the identified top problem.

Session three was individualized based on identified problem and barriers to solution implementation. Therapists could choose from four individual modules that included: "Dealing with a hard situation I can't change" (cognitive restructuring), "I just don't feel like it" (motivation enhancement), "Getting along with other people" (communication skills), and "Handling hard feelings" (stress and mood management). Session four involved collaborative review of progress and identification of next steps: (a) Return for SMH services if the student determines it is indicated (i.e., "come back if you need it"). In these cases, the presenting concern/problem is resolved and both therapist and student agreed no more care was indicated. However, the student is reminded that they can come back to see the counselor again in the future. (b) Supportive monitoring—regular brief check-ins with the therapist or, ideally, another school-based helper (i.e., teacher, coach, school counselor). In these cases, the presenting problem was resolved, but the therapist and student agreed that checking in with a supportive person in the school would help them stay on track and continue to progress. (c) Continued BRISC or other treatment from the SMH provider (e.g., therapist continues to meet regularly with the student). (d) Referral to more intensive services (often external to the school). In addition, BRISC involved the use of engagement strategies, informed by the growing literature on motivational enhancement (Miller & Rollnick, 2012), to facilitate student involvement in the intervention process and reinforce help-seeking behavior.

Measures: Intervention Delivery and Acceptability

BRISC session data Therapists documented number of sessions scheduled, attendance (vs. no show/cancelation), and session length.

Therapist adherence checklist A preliminary adherence checklist for the developing BRISC intervention was completed by study therapists following each BRISC session in which they identified which core BRISC elements they had delivered (e.g., administered standardized assessments, identified top problems, assigned practice exercises). Each of the BRISC sessions had a different number of recommended intervention elements, ranging from 10 (Session 3) to 14 (Session 1). Therapists also used adherence checklist to record the student's presenting problem(s).

Multidimensional Adolescent Satisfaction Scale (MASS; Garland, Saltzman, & Aarons, 2000), a 21-item measure of client satisfaction with the services they receive from their mental health provider, was administered at the eight-week (post-BRISC) exit interview to assess student acceptability. The MASS has four factors—counselor qualities, meeting

Table 1 Content of the BRISC protocol

Session #	Session content
Session 1	Administration and feedback of standardized assessment (SA)
	Introduction to BRISC
	Brief functional assessment (targeting school, family, peers)
	Problem identification
	Complete "stress" rating
	Introduction to informal monitoring
Session 2	Review monitoring
	Psychoeducation stress/mood
	Identification of top problem
	Introduction to problem-solving
	Select solution and set up behavioral experiment for practice exercise
Session 3	Review practice exercise
	Select and implement module
	"Dealing with hard situations I can't change" (cognitive restructuring)
	"I just don't feel like it" (motivation enhancement)
	"Getting along with other people" (communication skills)
	"Handling hard feelings" (stress and mood management)
	Assign practice exercise based on selected module
Session 4	Review practice exercise
	Administration and feedback of SA
	Review progress
	Identify what is still needed
	Discuss next steps

needs, effectiveness, counselor conflict—and has previously demonstrated strong psychometric properties (Garland et al., 2000).

Exit Interview

Eight weeks after their first BRISC session, participating students completed a semi-structured qualitative exit interview in addition to answering standardized questionnaires. Open-ended questions addressed reasons for seeking services, perceived BRISC utility, and feedback on specific aspects of BRISC (e.g., assessment tools, homework/practice exercises). During the interview, students were also asked to rate their agreement with several statements about whether they received and/or benefitted from different components of the intervention (e.g., practice/homework activities) using a Likert-style scale ranging from 1 to 10. Students also retrospectively rated their level of motivation to engage in BRISC initially and then to attend the second session, third session, and final fourth sessions.

Measures: Student Symptoms and Outcomes

Behavior Assessment System for Children-2 (BASC-2; Reynolds & Kamphaus, 2004). The BASC-2 is a well-established measure designed to assess behaviors and emotions among children and adolescents, including anger control, bullying, emotional self-control, negative emotionality, and resiliency. Internal consistencies of the BASC-2 subscales range from $\alpha = .76$ to $\alpha = .95$ for adolescents. Test–retest reliability is .81 (Reynolds & Kamphaus, 2004). The BASC-2 was administered only at baseline and used to describe participants as part of our effort to assess appropriateness of BRISC to the needs of students.

Revised Ways of Coping Checklist (RWCC; Vitaliano, Russo, Carr, Maiuro, & Becker, 1985). The RWCC is a self-report revision of the Ways of Coping Checklist developed by Folkman & Lazarus (1988) that assesses different methods of coping with stress. The RWCC includes eight subscales, four of which represent negative ways of coping (confrontive coping, distancing, self-controlling, escape avoidance) and four representing positive ways of coping (seeking social support, accepting responsibility, planful problem-solving, and positive reappraisal). The Revised Ways of Coping Checklist (RWCC) is scored on a relative scale such that each approach to coping is considered as a proportion of an overall "100 %" coping in which the respondent engages. The RWCC has been used successfully with adolescents in high school with good internal consistency across subscales ($\alpha = .69$–$.96$) (Wagner, Myers, &

Mcininch, 1999). Change over time is measured as the change in proportion of total coping for each different approach to coping. The RWCC was administered at baseline and eight-week follow-up.

Columbia Impairment Scale (CIS; Bird, Andrews, & Schwab-Stone, 1996). The 13-item CIS was administered to adolescents to measure overall level of adaptive functioning. The scale was used in the NIMH Methods for the Epidemiology of Child and Adolescent Mental Disorders (MECA) study and showed a reliability of $\alpha = .83$ for student report and good validity (Bird, Shaffer, Fisher, & Gould, 1993). It is also correlated with other indicators of psychological dysfunction and with the clinician-rated Children's Global Assessment Scale (Bird, Canino, Rubio-Stipec, & Ribera 1987). The CIS was administered at baseline and eight-week follow-up.

Patient Health Questionnaire (PHQ-9). The PHQ-9 is a widely used brief scale that queries about the presence of nine criteria for major depressive disorder and has high sensitivity (88 %) and specificity (88 %) (Kroenke, Spitzer, & Williams, 2001; Löwe, Kroenke, Herzog, & Gräfe, 2004). Research supports its use with adolescents, including good sensitivity (90 %) and specificity (79 %) in this population (Richardson et al., 2010). The PHQ-9 was administered by BRISC therapists to students in BRISC Session 1 and again in BRISC Session 4.

Generalized Anxiety Disorder Scale (GAD-7; Spitzer, Kroenke, Williams, & Löwe, 2006). The GAD-7 is a brief scale that queries about symptoms for generalized anxiety disorder. Normative data for the GAD-7 included a large sample of adolescents aged 14–25 years ($n = 634$) and concluded that the measure demonstrated age invariance. Internal consistency was found to be $\alpha = .89$ (Löwe et al., 2008). Similar to the PHQ-9, the GAD-7 was administered by BRISC therapists to students in BRISC Session 1 and again in BRISC Session 4.

Analytic Approach

Quantitative Analyses

Descriptive statistics were calculated for adherence as recorded by therapists, student common presenting problems (as recorded by therapists on the adherence checklist), and intervention delivery. For quantitative measures that were administered repeatedly (e.g., student symptoms, functioning, coping), simple *t* test or ANOVA comparisons were made between pre–post scores. Effect sizes were calculated as within-subject Cohen's *d* (Cohen, 1988) using pooled standard deviations and Morris & DeShon's (2002) equation 8 for repeated measures. To provide a general benchmark for comparison, client satisfaction scores from the MASS were compared to scores from a different sample of adolescents who had received outpatient community-based mental health services as reported in a psychometric study of the MASS (Garland et al., 2000), with effect sizes calculated as between-subjects Cohen's *d* (Cohen, 1988). Effect size threshold interpretations follow Cohen's (1988) recommendations with small effects between .20 and .50, medium effects between .50 and .80, large effects between .80 and 1.30, and very large effects above 1.30, while acknowledging the inherent risks involved in applying these simple categorizations without additional context (c.f. Glass, McGaw, & Smith, 1981).

Qualitative Analyses

Qualitative interviews were audio recorded, transcribed, and then coded using conventional and directed content analysis (Hsieh & Shannon, 2005) and qualitative coding software (Atlas.ti; Friese, 2012), which allows research team members to highlight text segments and assign codes. A team of four coders reviewed student responses to each question from the same subset of transcripts, identified potential codes, and then met to produce an initial codebook. The resulting codebook was trialed independently by coders across additional transcripts and then revised. This process continued over several iterations until a stable set of codes was reached. Coding used a consensus process in which each transcript was re-coded independently by all four raters who then met to arrive at consensus judgments through open dialog (DeSantis & Ugarriza, 2000; Hill et al., 2005). Portions of the second and third research questions were also evaluated using a mixed-methods approach for the purposes of data elaboration, explanation, and triangulation (Palinkas et al., 2011).

Results

In the following sections, we address each research question using a combination of quantitative and qualitative data. Tables 2 and 3 present key quantitative variables, and Table 4 presents the qualitative code hierarchy.

Research Question 1: How Well were Clinicians able to Deliver BRISC Components (feasibility)?

The extent to which study clinicians were able to deliver BRISC was evaluated via data on session length, total duration of BRISC service delivery, and the therapist adherence checklist (see Table 2). It took an average of 27 days to complete all four sessions (approximately 1 session/week), and despite a wide range (21–60 min), most sessions were approximately 50 min. Data from the adherence checklist indicated that clinicians generally

Table 2 BRISC feasibility and acceptability

	Median ($n = 11$)	Range
Feasibility		
Days between first and last session, for those completing four sessions	27	21–42
Session length (min)	50	21–60
Fidelity (percentage of items)		
Session 1 fidelity	85.7 % (12/14)	78.6–100 %
Session 2 fidelity	90.9 % (10/11)	54.5–100 %
Session 3 fidelity	80 % (8/10)	10–90 %
Session 4 fidelity	72.7 % (8/11)	54.5–90.9 %

	BRISC Mean	Range	Comparison mean[c]	p	Cohen's d
Acceptability					
Multidimensional adolescent satisfaction scale total mean (1–4)	3.44 (.25)	3.19–4.00	3.12 (.89)	.002	.561
Counselor qualities	3.67 (.22)	3.33–4.00	3.21 (.87)	<.001	.844
Meeting needs	3.30 (.52)	2.27–4.00	2.84 (.99)	.016	.609
Effectiveness	2.66 (.67)	1.75–4.00	2.86 (.97)	.346	−.280
Counselor conflict (reverse scored, higher is less conflict)	3.89 (.17)	3.50–4.00	3.47 (.76)	<.001	.903

Motivation (1–10)[b]	Mean	Range	Cohen's d for change from prior session
Session 1	6.27 (2.41)	1–10	N/A
Session 2	8.27 (1.19)	6–10	.928
Session 3[c]	8.60 (1.08)	7–10	.372
Session 4[d]	8.89 (1.17)	7–10	.331
Homework/practice activity helpfulness	7.50 (1.65)	6–10	

[a] Comparison data for single-sample t-tests obtained from Garland, Saltzman, & Aarons, 2000

[b] Repeated-measures ANOVA $F_{(1.3)} = 5.86$, $p = .03$, corrected for lack of sphericity

[c] $n = 10$

[d] $n = 9$

reported being able to deliver most session components, with median delivery of components ranging from 73 to 91 % by session.

Research Question 2: To What Extent is the BRISC Protocol Acceptable to Students?

Quantitative Data

Acceptability was first evaluated by examining session attendance and mean MASS total and subscale scores. Of the 11 participants who received at least one session, nine (82 %) attended all four sessions, one dropped out after two sessions, and another reported clinical improvement and no further need for treatment, after only three sessions. Single-sample t-tests were used to compare BRISC MASS results to results from another sample of adolescents ($n = 180$) receiving "usual care" services in outpatient settings (Garland et al., 2000). Table 2 shows that BRISC participants were significantly more satisfied overall as assessed by the MASS total score, with a medium effect ($d = .561$). BRISC participants also reported higher satisfaction on three of four subscales with medium to strong effects, including higher ratings of counselor qualities ($d = .844$), higher ratings of counselor ability to meet their needs ($d = .609$), and lower ratings of counselor conflict ($d = .903$). There were no significant differences on the MASS effectiveness subscale.

A repeated-measures ANOVA found exit interview ratings of motivation to attend sessions significantly increased over all sessions ($F_{(1.3)} = 5.86$, $p = .03$, corrected for lack of sphericity). Within-subject tests indicated that the change in motivation was largely attributable to the first and second sessions; for the nine students who completed BRISC, mean ratings of self-reported motivation to attend BRISC sessions (out of a possible 10 points) were 6.3 for the initial session and then increased to 8.3 for the second session (post hoc within-subject $F_{(1,8)} = 6$, $p = .04$, $d = .928$), 8.7 for the third session ($F_{(1,8)} = 1.3$, $p = .28$, $d = .372$), and 8.9 for the fourth session ($F_{(1,8)} = 1$, $p = .347$, $d = .331$). The helpfulness of homework/practice was rated a mean of 7.5.

Table 3 BRISC appropriateness (symptoms and outcomes)

	Pre-intervention mean proportion (SD)	Post-intervention mean proportion (SD)	*F*	d*f*	*p*	Cohen's *d*
Revised ways of coping omnibus test			3.3	7,4	3.3	
Confrontive	.105 (.049)	.094 (.041)	0.98	1,10	.345	−.306
Distancing	.132 (.051)	.106 (.035)	2.63	1,10	.136	−.504
Self-controlling	.167 (.025)	.152 (.059)	0.93	1,10	.358	−.354
Seeking social support	.110 (.036)	.146 (.070)	4.01	1,10	.073	.697
Accepting responsibility	.162 (.049)	.137 (.066)	1.74	1,10	.217	−.408
Escape avoidance	.118 (.048)	.095 (.063)	1.79	1,10	.211	−.415
Planful problem-solving	.113 (.048)	.156 (.083)	6.10	1,10	.033	.895
Positive reappraisal	.092 (.033)	.114 (.052)	1.79	1,10	.210	.421
	Pre-intervention mean (SD)	Post-intervention mean (SD)	*t*	d*f*	*p*	
PHQ-9 ($N = 10$)	7.3 (7.4)	6.4 (6.59)	.73	9	.484	−.235
GAD-7 ($N = 10$)	4.5 (5.4)	5.1 (4.7)	−.47	9	.653	.149
CIS ($N = 11$)	17.4 (8.8)	12.6 (8.6)	1.49	10	.168	−.449

Table 4 Qualitative codes from BRISC student interviews

Code	Brief description	# Mentioning (of 11)	
Engage	High or low motivation to participate in BRISC	11	
Barriers	Barriers to BRISC participation	3	
Improve	Areas in which BRISC could be improved	9	
Problem/ outcome	Personal student problems for and outcomes of BRISC services	Mentioned as *problem*	Mentioned as *outcome*
Relationship	Interpersonal relationships	2	2
Mood/anxiety	Mood or anxiety issues	4	3
Sleep	Sleep/sleep hygiene	3	2
Academic	Educational issues/outcomes (academic and school)	4	2
Anger	Emphasis on anger problems	3	2
Service	Connection to other services, typically addressed through linkages/referrals/case management	0	3
Stress	References to experiencing "stress" that is not explicitly tied to another problem category	3	1
Eating	References to problems with eating/diet	2	0
Skill	Benefiting from BRISC by developing/learning new skills	0	4
Post-BRISC	Comments about/relevant to post-BRISC pathways	7	

Qualitative Data

Student qualitative interviews yielded codes that provided additional insight into the acceptability of BRISC (see Table 4). Specifically, codes captured student comments that reflected reasons for high or low *engagement* in BRISC, identified *barriers* to participation, and cataloged specific ways in which students suggested that the BRISC intervention could be *improved.* Of these codes, engagement comments were the most common and generally reflected high motivation to participate, consistent with quantitative data for BRISC sessions 2–4. Some students indicated that their engagement was driven by a basic desire to get help for their problems ("I was really depressed…just worried for my well-being, so I went to see someone for it"). Other comments focused on the motivational value of therapist characteristics (e.g., "she was really kind," "a good listener," "I felt like she really enjoyed her job and wanted to make a difference"). Consistent with lower motivation ratings for the first session than for subsequent sessions, some students reported beginning BRISC with hesitation ("I kind of had my reservations about completely…letting it all out

there to talk to somebody"). However, motivation increased as they attended additional sessions ("…it was a lot more productive than I thought it would be at the beginning and I sort of liked that…and I liked coming here").

Specific practical and social *barriers* to participation were only mentioned by three participants and included the drawback of missing class, social stigma, and family pressures (e.g., "I didn't want my dad to know," "My parent didn't want me to"). These barriers appeared to relate to mental health intervention in general, rather than the BRISC intervention, specifically.

Students also made a number of comments about ways to *improve* BRISC, based on their experience during the pilot, and presumably increase its acceptability. Although BRISC was designed to be a targeted initial assessment and engagement approach within a tiered service model, some comments reflected student interest in an intervention of greater breadth, depth, or length (e.g., "I just think one more session would have helped because we would've been able to see how what we did worked over the longer term," "with extra sessions, you get more closure"). In addition to more sessions, this included an expressed desire that therapists focus on more than one target issue, and "more options or alternatives for the activities." Nevertheless, other students commented that the duration of services was likely sufficient ("I think [more sessions] would have continued to be helpful, but it's not a necessity for me to keep seeing her"). Finally, the largest number of improve codes was concrete, emphasizing ways to make the handouts clearer or more engaging ("I would change them to make them very diagramy-type, not just words on a page"). However, they did not seem to interfere with adequate service provision (e.g., "the handouts, a lot of them were just general, but we would like, flip it over, and write out specifically what's going on").

Research Question 3: To What Extent did the BRISC Protocol fit the Presenting Problems and Preferences of Referred Students (Appropriateness)?

Presenting Problems

Participant BASC self-ratings at baseline indicated that seven of the 11 participants (63.6 %) had at least one clinically significant elevation in a problem area. Three of the seven had one elevation, two had two elevations, one had three, and one had nine clinically significant elevations in problems areas on the BASC. Internalizing problems, such as depression, anxiety, sense of inadequacy, and somatization, were the most problems endorsed at a clinically significant or at-risk level by BRISC participants. Therapist adherence forms provided additional information about the identified primary problem areas for intervention. Data from adherence forms indicated that BRISC treatment focused on one single problem area for nine participants and on two primary problem areas for two students. Problem areas included academic difficulties (five participants), depression (three participants), peer problems (three participants), anxiety (one participant), truancy (one participant), and sexual trauma (one participant). Qualitative *problem* codes were also used to catalog student descriptions of the reasons why they sought treatment and both confirmed and expanded on the clinician-identified problems. Similar to the above, students were most likely to describe *academic* difficulties (four participants), *mood/anxiety* problems (four participants), and interpersonal *relationship* issues (two participants). In addition, students referenced a general experience of "*stress*" (three participants), *sleep* difficulties (three participants), *anger* (three participants), *eating* problems (two participants), and *time management* (one participant).

Improvement in Coping, Symptoms, and Functioning

Given the small sample size, lack of a control or contrast group, and brevity of the intervention, only a very preliminary assessment of change over time is appropriate. We did, however, explore change over time on key outcome measures (see Table 3). RWCC scores from pre- and post-intervention were analyzed using a repeated-measures ANOVA. An omnibus F test for within-subject change was nonsignificant ($F_{(7,4)} = 3.3$, $p = .133$), but exploratory post hoc tests did provide positive support for a significant increase in the relative use of planful problem-solving, which had a large effect size ($d = .895$), and a borderline significant increase in seeking social support, which had a medium effect size ($d = .697$). Distancing also had a medium effect size decrease in relative use ($d = -.504$). Paired t-tests yielded no significant pre–post changes in the PHQ-9, GAD-7, or the CIS, although the CIS approached a medium effect size ($d = .449$) and the PHQ had a small effect size ($d = .235$) in the expected, positive direction.

Student descriptions of the gains they experienced over the course of BRISC services were also evaluated qualitatively. Outcome coding began with the identified set of *problem* codes described above, but was also expanded—based on student responses—to include two additional outcomes: connection to other *services* (i.e., via referrals, case management, etc.) and the development of new *skills* (e.g., "a new method of thinking," "I established this new technique for myself to shut up, chill, and listen"). With the exception of the *eating* problem code, all of the problem codes described above were also identified as outcome codes for at least one student (see Table 4). *Mood/anxiety* problems (four participants), *skills* (four participants), and

service linkages (three participants) were the most commonly mentioned outcomes. A within-subject comparison of the qualitative outcome codes with the problem codes indicated that, across problems, approximately half of the students who sought services for a particular problem indicated improvement in that specific problem. However, students rarely reported gains in areas that were not identified as problems at the outset of BRISC (problem codes), with the exception of *skills* and *services*.

Finally, to shed further light on the appropriateness of the BRISC protocol and inform the development of a number of pathways for service connection or monitoring following the conclusion of BRISC, we evaluated the additional service needs identified for participating students. Session records indicated that, of the nine students who completed four BRISC sessions, two were referred to an existing school-based mental health counselor for further support, two were referred to external community care providers for more intensive services, two were invited to continue checking in with school-based counselors on an "as needed" basis, and three were not referred for further services. Student descriptions of their plans for services *post-BRISC* were similarly varied, including some stating that they "didn't feel like there was more I wanted to work on" unless "another problem were to arise," and others indicating that there was "more in terms of my grades and school work [on which I would like to keep working] also, just trying to get my mood up").

Discussion

The current study represented the second phase of an ongoing iterative BRISC development process. Results provide preliminary evidence that BRISC was feasible in the school setting, given that clinicians reported delivering 73–91 % of session components and the vast majority of students were able to complete the prescribed four sessions. Students' ratings of satisfaction and motivation, along with positive comments from interviews, also indicated it was acceptable. Finally, through the use of BRISC assessment tools and structure, clinicians were able to accurately determine a student-relevant problem area for focus, address many of the presenting problems exhibited by youth, and determine a diverse set of seemingly appropriate pathways for follow-up care for students after these four sessions, providing additional evidence of BRISC's appropriateness to the school setting. Results also pointed to a number of opportunities to improve the developing BRISC protocol. Below, we discuss key findings as they relate to the continued development of BRISC and to SMH in general.

Improving Student Satisfaction and Engagement

Student participants seem to have been satisfied with the BRISC intervention, with engagement scores higher than those from a separate, large adolescent sample (Garland et al., 2000) and a moderate effect size for total satisfaction. However, without a local comparison group, it is unclear whether satisfaction was specifically related to the BRISC intervention. These quantitative findings are supplemented by our qualitative work, suggesting that students found BRISC sessions productive and helpful. Both quantitative and qualitative analyses indicate that motivation to participate in BRISC seemed to increase over the four sessions (with the largest effects occurring between Session 1 and Session 2), suggesting that BRISC activities were relevant to students across the short duration of treatment and that some of this relevance may have been quickly apparent to participants.

Nevertheless, student feedback and clinician observations suggest the first and second sessions of BRISC may still need to be refined to provide more opportunities for engagement, and for students to immediately see the potential utility of treatment. In BRISC development, we used motivational interviewing strategies (Miller & Rollnick, 2012) to build client motivation to engage in treatment, beginning in the first session (e.g., differentiating between confidence ["it won't work"] and importance ["I forgot"] cues and asking corresponding "ruler" [0–10 questions] to elicit change talk). Options for additional strategies to improve engagement and motivation may be found in recent structured reviews. For example, Lindsey et al. (2014) found five major families of engagement practice elements. Two of these strategies are inherent to BRISC as a school-based intervention (accessibility promotion and appointment reminders), and others are already built in, including routine homework assignment and the use of a brief but structured assessment approach. Based on this feasibility trial, we have revised our protocol to enhance the final type of engagement element identified by Lindsay et al. (2014), psychoeducation about the treatment, in which adolescents are given a clear game plan about working together for 3–4 sessions to address a problem they have identified, followed by a check into determine next steps.

In addition to continuing to refine existing BRISC engagement strategies, the current pilot illuminated the potential benefit of streamlining and simplifying BRISC. Given that study clinicians were able to deliver the intervention within the recommended time (four 30–60 min sessions) and that nine of 11 students attended all four sessions, BRISC seem feasible. However, data from the adherence checklist indicated that study clinicians were not always able to deliver all of the session components (fidelity ranged from 73 to 91 %). These data suggest BRISC may

still require further simplification, especially given that the clinicians in this pilot test were university-affiliated therapists who were well oriented to the BRISC purpose and approach and likely had more "bandwidth" to implement the intervention. Such a finding is typical of initial pilot tests and aligns with calls by dissemination and implementation researchers to simplify interventions to increase likelihood of delivery in public health settings (e.g., Rotheram-Borus, Swendeman, & Chorpita, 2012).

Meeting Student Needs

One of the main goals for BRISC development was to design a "stand-alone" intervention that—in keeping with the contextual constraints of the education sector (Lyon et al., 2014a)—could be delivered in four or fewer sessions, with options for post-BRISC triage/planning that places BRISC as an entry point into a tiered service model. To achieve meaningful change within such a brief timeframe, problem-solving was incorporated as a cornerstone of the BRISC intervention. BRISC clinicians are trained and coached to work with students to carefully articulate what they are hoping to change as a result of their participation. Fortunately, toward this end, results of the study found consistency between clinician and student reports of presenting problems, suggesting that clinicians were able to accurately identify student concerns, or, at the very least, the BRISC process frequently yielded a shared understanding of mutually identified problems between provider and service recipient. This is particularly important in light of research, indicating that a large portion in variance in therapy outcomes is accounted for by clearly defined goals that are shared by therapist and client, combined with progress monitoring toward those goals (Carlier et al., 2012; Lambert et al., 2003). Also important for feasibility and acceptability, data suggest that BRISC was often used to target common school-interfering conditions, with academic difficulties among the most commonly identified reasons for referral across information sources. Continued emphasis on academically relevant problems is likely to enhance the contextual appropriateness of the final BRISC protocol (Lyon, Borntrager, Nakamura, & Higa-McMillan, 2013).

In addition to identifying problems, four BRISC participants specifically mentioned learning new skills as a positive outcome. This is important considering the explicit emphasis of BRISC on skill development within the limited service delivery timeframe. Across problems, approximately half of the students who sought services for a particular problem indicated that the problem improved. Qualitative findings provided general support for skill development as an outcome for BRISC and findings from quantitative outcomes suggest that student participants had significant improvement on one specific measure of coping skills, planful problem-solving. Indeed, while other subscales from our coping measure demonstrated small to medium effect sizes, planful problem-solving demonstrated a large effect size ($d = .895$). Given the substantial focus of BRISC on problem-solving, this improvement is promising. Although no other outcomes showed significant change from pre- to post-BRISC, all quantitative measures (except the GAD-7, which increased on average by one point) showed trends toward improvement (with small effect sizes). Results from our Phase 3 and 4 BRISC studies will help to confirm these trends with larger samples and representative providers.

Next Steps: Enhancing BRISC's Potential for Positive Impact

In addition to our iterative efforts to improve existing BRISC components, the pilot test has also led the research team to appreciate BRISC's potential viability as an engagement strategy unto itself. Although BRISC was created to provide an option in the tiered service system that is often missing for many students—a brief, stand-alone intervention tailored to the school context—BRISC may serve more as an entry point into mental health services. Session records and qualitative data on students' expressed needs indicated that six of the nine students who completed four BRISC sessions may benefit from additional mental health service supports. Moreover, in exit interviews, three students listed service linkages as a positive outcome of BRISC.

Although this iteration of BRISC was not intended to be an engagement and triage strategy, we are increasingly considering that this may be one of its primary contributions. As we strive to bring structure, efficiency, and research-based practice to SMH, it may be that, for some students, BRISC's optimal role is to help identify their highest priority needs, understand the nature and potential utility of psychosocial intervention, intervene initially, and, when necessary, connect them to subsequent treatment options that may be more intensive. As described above, engagement, problem identification, and initial problem-solving seem to be potential strengths of BRISC, and there is very preliminary evidence that BRISC may promote positive coping skills and positive improvements in functioning. At the same time, there also seems to be shared agreement between therapists and students that planning for next steps and finding the most appropriate post-BRISC pathway is an equally important part of the BRISC intervention.

Future iterations of BRISC may highlight this component by introducing discussion of subsequent supports earlier and more explicitly, and when appropriate (e.g., in the case of elevated problem severity, but low likelihood of engagement in subsequent care), applying the motivational enhancement strategies currently embedded in the BRISC

intervention to support continued service engagement. The BRISC motivational enhancement component shares many similarities with existing approaches to improving client motivation to participate in family-focused mental health services (e.g., Participation Enhancement Intervention; Nock & Kazdin, 2005; Family Check Up; Dishion, Nelson, & Kavanagh, 2003) including its roots in similar foundational motivational enhancement therapies and its use of empathic, person-centered communication strategies. However, unlike many of the other approaches, BRISC is (a) designed to be a stand-alone intervention strategy for low-severity students, (b) intended to be an appealing "first encounter" with mental health services for students who may require more intensive services at a later point in time, and (c) designed specifically for use in the high school context.

Limitations

Limitations of the current study include that the findings were derived from a small sample of students who had received a preliminary version of the BRISC protocol in a single school. In addition, all findings were derived from student report (e.g., about coping strategies), which may be compared to the perceptions of others (e.g., parents, teachers) in subsequent trials. Although effect sizes were calculated and simple tests of significance were conducted for some quantitative variables, interpretation of these analyses must be undertaken with caution, as should any generalization of the findings beyond the current intervention development project. Furthermore, therapists were members of the BRISC development team and, as noted earlier, are not representative of typical SMH service providers. An additional limitation is lack of formal adherence coding. Development of BRISC fidelity tools was part of the pilot project described here. Therefore, although therapists completed a trial adherence tracking form, sessions were not recorded or independently rated for adherence to the protocol. BRISC studies are now underway with school-based clinicians, allowing for a primary focus on practitioner perspectives and needs. In this work, sessions are recorded and are being coded for adherence. Although we recognize that adherence to the BRISC protocol may be more varied when delivered by therapists who are not part of the study team, our goal is to develop an intervention protocol that can be easily used by a variety of school-based professionals and therefore includes a limited number of simple to track elements that can be readily delivered to a youth across a spectrum of problems and tailored to suit their individual needs. Finally, although the current project incorporated a range of qualitative and quantitative data sources to address acceptability, feasibility, and appropriateness, standardized tools to measure these constructs would have helped to better situate the BRISC protocol in the context of other psychosocial interventions. The lack of well-established implementation measures has been well documented (Martinez et al., 2014). Fortunately, emerging work has begun to categorize existing measures and identify priorities for improvements (Lewis et al., 2015).

Conclusion

The current paper represents the second phase (feasibility testing) in an iterative intervention development process. By design, this phase was intended to yield information to drive further protocol refinement and testing in subsequent phases in more generalizable contexts. Findings were generally favorable surrounding the acceptability, feasibility, and appropriateness of the protocol, but also identified multiple areas for potential improvement. For these reasons, the BRISC protocol and its accompanying materials (e.g., training curriculum, adherence tool) will continue to evolve. It is our hope that continued testing and refinement will ultimately lead to a service strategy that can successfully fill a critical need for schools, and contribute to the capacity of the SMH field to bolster the well-being of children and youth.

Acknowledgments This publication was made possible in part by funding from Grant Number R305A120128 awarded by the Institute of Education Sciences and Grant K08 MH095939 awarded by the National Institute of Mental Health (NIMH). Drs. Lyon and Dorsey are investigators with the Implementation Research Institute (IRI), at the George Warren Brown School of Social Work, Washington University in St. Louis, through an award from the National Institute of Mental Health (R25 MH080916) and the Department of Veterans Affairs, Health Services Research & Development Service, Quality Enhancement Research Initiative (QUERI). The authors would like to thank all the other members of the BRISC Development Team, including Lucy Berliner, Doug Cheney, Janine Jones, Kevin King, Kelly Thompson, and Nancy Namkung.

References

Becker, E. M., Smith, A. M., & Jensen-Doss, A. (2013). Who's using treatment manuals? A national survey of practicing therapists. *Behaviour Research and Therapy, 51*(10), 706–710.

Bird, H. R., Andrews, H., & Schwab-Stone, M. (1996). Columbia Impairment Scale (CIS): Global measures of impairment for epidemiologic and clinical use with children and adolescents. *International Journal of Methods in Psychiatric Research, 6*, 295–307.

Bird, H. R., Canino, G., Rubio-Stipec, M., & Ribera, J. C. (1987). Further measures of the psychometric properties of the Children's Global Assessment Scale. *Archives of General Psychiatry, 44*(9), 821–824.

Bird, H. R., Shaffer, D., Fisher, P., & Gould, M. S. (1993). The Columbia Impairment Scale (CIS): Pilot findings on a measure

of global impairment for children and adolescents. *International Journal of Methods in Psychiatric Research, 3*, 167–176.

Borntrager, C., & Lyon, A. R. (2015). Monitoring client progress and feedback in school-based mental health. *Cognitive and Behavioral Practice, 22*(1), 74–86.

Bradshaw, C. P., Koth, C. W., Bevans, K. B., Ialongo, N., & Leaf, P. J. (2008). The impact of school-wide positive behavioral interventions and supports (PBIS) on the organizational health of elementary schools. *School Psychology Quarterly, 23*(4), 462–473.

Carlier, I. V., Meuldijk, D., Van Vliet, I. M., Van Fenema, E., Van der Wee, N. J., & Zitman, F. G. (2012). Routine outcome monitoring and feedback on physical or mental health status: Evidence and theory. *Journal of Evaluation in Clinical Practice, 18*(1), 104–110.

Chorpita, B. F., Daleiden, E. L., & Weisz, J. R. (2005). Identifying and selecting the common elements of evidence based interventions: A distillation and matching model. *Mental Health Services Research, 7*(1), 5–20.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Earlbaum Associates.

DeSantis, L., & Ugarriza, D. N. (2000). The concept of theme as used in qualitative nursing research. *Western Journal of Nursing Research, 22*(3), 351–372.

Dishion, T. J., Nelson, S. E., & Kavanagh, K. (2003). The family check-up with high-risk young adolescents: Preventing early-onset substance use by parent monitoring. *Behavior Therapy, 34*(4), 553–571.

Embry, D. D. (2002). The good behavior game: A best practice candidate as a universal behavioral vaccine. *Clinical Child and Family Psychology Review, 5*(4), 273–297.

Evans, S. W., & Weist, M. D. (2004). Commentary: Implementing empirically supported treatments in the schools: What are we asking? *Clinical Child and Family Psychology Review, 7*(4), 263–267.

Fazel, M., Hoagwood, K., Stephan, S., & Ford, T. (2014). Mental health interventions in schools in high-income countries. *The Lancet Psychiatry, 1*(5), 377–387.

Folkman, S., & Lazarus, R. S. (1988). *Manual for the ways of coping scale*. Palo Alto, CA: Consulting Psychology Press.

Forman, S. G., & Barakat, N. M. (2011). Cognitive-behavioral therapy in the schools: Bringing research to practice through effective implementation. *Psychology in the Schools, 48*(3), 283–296.

Forman, S. G., Olin, S. S., Hoagwood, K. E., Crowe, M., & Saka, N. (2009). Evidence-based interventions in schools: Developers' views of implementation barriers and facilitators. *School Mental Health, 1*(1), 26–36. doi:10.1007/s12310-008-9002-5.

Forman, S. G., Shapiro, E. S., Codding, R. S., Gonzales, J. E., Reddy, L. A., Rosenfield, S. A., & Stoiber, K. C. (2013). Implementation science and school psychology. *School Psychology Quarterly, 28*(2), 77–100.

Friese, S. (2012). *ATLAS. ti 7 user manual*. Berlin: ATLAS. ti Scientific Software Development GmbH.

Garland, A. F., Saltzman, M. D., & Aarons, G. A. (2000). Adolescent satisfaction with mental health services: Development of a multidimensional scale. *Evaluation and Program Planning, 23*(2), 165–175.

Glass, G. V., McGaw, B., & Smith, M. L. (1981). *Meta-analysis in social research*. Beverly Hills: Sage.

Hill, C. E., Knox, S., Thompson, B. J., Williams, E. N., Hess, S. A., & Ladany, N. (2005). Consensual qualitative research: An update. *Journal of Counseling Psychology, 52*(2), 196–205.

Horner, R. H., Sugai, G., Smolkowski, K., Eber, L., Nakasato, J., Todd, A. W., & Esperanza, J. (2009). A randomized, wait-list controlled effectiveness trial assessing school-wide positive behavior support in elementary schools. *Journal of Positive Behavior Interventions, 11*, 259–390.

Horwitz, S. M., Hurlburt, M. S., Goldhaber-Fiebert, J. D., Palinkas, L. A., Rolls-Reutz, J., Zhang, J., & Landsverk, J. (2014). Exploration and adoption of evidence-based practice by US child welfare agencies. *Children and Youth Services Review, 39*, 147–152.

Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research, 15*(9), 1277–1288.

Kataoka, S., Stein, B. D., Nadeem, E., & Wong, M. (2007). Who gets care? Mental health service use following a school-based suicide prevention program. *Journal of the American Academy of Child and Adolescent Psychiatry, 46*(10), 1341–1348.

Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: Validity of brief depression severity measure. *Journal of General Internal Medicine, 16*(9), 606–613.

Lambert, M. J., Whipple, J. L., Hawkins, E. J., Vermeersch, D. A., Nielsen, S. L., & Smart, D. W. (2003). Is it time for clinicians to routinely track patient outcome? A meta-analysis. *Clinical Psychology: Science and Practice, 10*(3), 288–301.

Lewis, C. C., Stanick, C. F., Martinez, R. G., Weiner, B. J., Kim, M., Barwick, M., & Comtois, K. A. (2015). The society for implementation research collaboration instrument review project: A methodology to promote rigorous evaluation. *Implementation Science, 1*, 2.

Lindsey, M. A., Brandt, N. E., Becker, K. D., Lee, B. R., Barth, R. P., Daleiden, E. L., & Chorpita, B. F. (2014). Identifying the common elements of treatment engagement interventions in children's mental health services. *Clinical Child and Family Psychology Review, 17*(3), 283–298.

Löwe, B., Decker, O., Müller, S., Brähler, E., Schellberg, D., Herzog, W., & Herzberg, P. Y. (2008). Validation and standardization of the Generalized Anxiety Disorder Screener (GAD-7) in the general population. *Medical Care, 46*(3), 266–274.

Löwe, B., Kroenke, K., Herzog, W., & Gräfe, K. (2004). Measuring depression outcome with a brief self-report instrument: Sensitivity to change of the Patient Health Questionnaire (PHQ-9). *Journal of Affective Disorders, 81*(1), 61–66.

Lyon, A. R., Borntrager, C., Nakamura, B., & Higa-McMillan, C. (2013a). From distal to proximal: Routine educational data monitoring in school-based mental health. *Advances in School Mental Health Promotion, 6*(4), 263–279.

Lyon, A. R., Bruns, E. J., Weathers, E., Canavas, N., Ludwig, K., Vander Stoep, A., Cheney, D., & McCauley, E. (2014a). Taking evidence-based practices to school: Using expert opinion to develop a brief, evidence-informed school-based mental health intervention. *Advances in School Mental Health Promotion, 7*, 42–61.

Lyon, A. R., Charlesworth-Attie, S., Vander Stoep, A., & McCauley, E. (2011). Modular psychotherapy for youth with internalizing problems: Implementation with therapists in school based health centers. *School Psychology Review, 40*, 569–581.

Lyon, A. R., Ludwig, K., Romano, E., Koltracht, J., Vander Stoep, A., & McCauley, E. (2014b). Using modular psychotherapy in school mental health: Provider perspectives on intervention-setting fit. *Journal of Clinical Child & Adolescent Psychology, 43*(6), 890–901.

Lyon, A. R., Ludwig, K., Romano, E., Leonard, S., Vander Stoep, A., & McCauley, E. (2013b). "If it's worth my time, I will make the time": School-based providers' decision-making about participating in an evidence-based psychotherapy consultation program. *Administration and Policy in Mental Health and Mental Health Services Research, 40*(6), 467–481.

Lyon, A. R., Ludwig, K. A., Vander Stoep, A., Gudmundsen, G., & McCauley, E. (2013c). Patterns and predictors of mental

healthcare utilization in schools and other service sectors among adolescents at risk for depression. *School Mental Health, 5*(3), 155–165.

Lyon, A. R., Ludwig, K., Wasse, J. K., Bergstrom, A., Hendrix, E., & McCauley, E. (in press) Determinants and functions of standardized assessment use among school mental health clinicians: A mixed methods evaluation. *Administration and Policy in Mental Health and Mental Health Services Research*, 1–13.

Martinez, R. G., Lewis, C. C., & Weiner, B. J. (2014). Instrumentation issues in implementation science. *Implementation Science, 9*, 118.

McCormick, E., Thompson, K., Vander Stoep, A., & McCauley, E. (2009). *The case for school-based depression screening: Evidence from established programs* (pp. 91–99). Fall: Report on Emotional and Behavioral Disorders in Youth.

Miller, W. R., & Rollnick, S. (2012). *Motivational interviewing: Helping people change*. New York: Guilford press.

Morris, S. B., & DeShon, R. P. (2002). Combining effect size estimates in meta-analysis with repeated measures and independent-groups designs. *Psychological Methods, 7*, 105–125.

National Center on Response to Intervention. (2010). *Essential components of RTI: A closer look at response to intervention*. Washington, DC.

Nock, M. K., & Kazdin, A. E. (2005). Randomized controlled trial of a brief intervention for increasing participation in parent management training. *Journal of Consulting and Clinical Psychology, 73*(5), 872.

Owens, J. S., Lyon, A. R., Brandt, N. E., Warner, C. M., Nadeem, E., Spiel, C., & Wagner, M. (2014). Implementation science in school mental health: Key constructs in a developing research agenda. *School Mental Health, 6*(2), 99–111.

Owens, J. S., & Murphy, C. E. (2004). Effectiveness research in the context of school-based mental health. *Clinical Child and Family Psychology Review, 7*(4), 195–209.

Palinkas, L. A., Aarons, G. A., Horwitz, S., Chamberlain, P., Hurlburt, M., & Landsverk, J. (2011). Mixed methods design in implementation research. *Administration and Policy in Mental Health and Mental Health Services Research, 38*, 44–53.

Payton, J., Weissberg, R. P., Durlak, J. A., Dymnicki, A. B., Taylor, R. D., Schellinger, K. B., & Pachan, M. (2008). *The positive impact of social and emotional learning for kindergarten to eighth-grade students: Findings from three scientific reviews*. Chicago: Collaborative for Academic, Social, and Emotional Learning (NJ1).

Proctor, E., Silmere, H., Raghavan, R., Hovmand, P., Aarons, G., Bunger, A., & Hensley, M. (2011). Outcomes for implementation research: Conceptual distinctions, measurement challenges, and research agenda. *Administration and Policy in Mental Health and Mental Health Services Research, 38*(2), 65–76. doi:10.1007/s10488-010-0319-7.

Reynolds, C. R., & Kamphaus, R. W. (2004). *Behavior assessment scale for children* (2nd ed.). Circle Pines, MN: AGS Publishing.

Richardson, L. P., McCauley, E., Grossman, D. C., McCarty, C. A., Richards, J., Russo, J. E., & Katon, W. (2010). Evaluation of the Patient Health Questionnaire-9 Item for detecting major depression among adolescents. *Pediatrics, 126*(6), 1117–1123.

Rones, M., & Hoagwood, K. (2000). School-based mental health services: A research review. *Clinical Child and Family Psychology Review, 3*(4), 223–241. doi:10.1023/a:1026425104386.

Rotheram-Borus, M. J., Swendeman, D., & Chorpita, B. F. (2012). Disruptive innovations for designing and diffusing evidence-based interventions. *American Psychologist, 67*(6), 463.

Shure, M. B. (1992). *I can problem solve: An interpersonal cognitive problem-solving program for children*. Champaign, IL: Research Press.

Spitzer, R. L., Kroenke, K., Williams, J. B., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: the GAD-7. *Archives of Internal Medicine, 166*(10), 1092–1097.

Stein, B. D., Jaycox, L. H., Kataoka, S. H., Wong, M., Tu, W., Elliott, M. N., & Fink, A. (2003). A mental health intervention for schoolchildren exposed to violence: A randomized controlled trial. *JAMA, 290*(5), 603–611.

Vitaliano, P. P., Russo, J., Carr, J. E., Maiuro, R. D., & Becker, J. (1985). The ways of coping checklist: Revision and psychometric properties. *Multivariate Behavioral Research, 20*(1), 3–26.

Wagner, E. F., Myers, M. G., & McIninch, J. L. (1999). Stress-coping and temptation-coping as predictors of adolescent substance use. *Addictive Behaviors, 24*(6), 769–779.

Walker, S. C., Kerns, S. E., Lyon, A. R., Bruns, E. J., & Cosgrove, T. J. (2010). Impact of school-based health center use on academic outcomes. *Journal of Adolescent Health, 46*(3), 251–257.

Weisz, J. R., Chorpita, B. F., Palinkas, L. A., Schoenwald, S. K., Miranda, J., Bearman, S. K., & Research Network on Youth Mental Health. (2012). Testing standard and modular designs for psychotherapy treating depression, anxiety, and conduct problems in youth: A randomized effectiveness trial. *Archives of General Psychiatry, 69*(3), 274–282. doi:10.1001/archgenpsychiatry.2011.147.

Wong, M. (2008). Interventions to reduce psychological harm from traumatic events among children and adolescents: A commentary on the application of findings to the real world of schools. *American Journal of Preventive Medicine, 35*, 398–400.