

Common Elements and Modularized Approaches to the Treatment of Youth Psychopathology

Aaron Lyon, Ph.D.
Assistant Professor
University of Washington
Psychiatry and Behavioral Sciences
Co-Director, School Mental Health Assessment,
Research, and Training (SMART) Center
@Aaron_Lyon



February 27 2015

Acknowledgments

Collaborators:

- Elizabeth McCauley
- Eric Bruns
- Kristy Ludwig
- Ann Vander Stoep
- Doug Cheney
- Janine Jones
- TJ Cosgrove
- Jessica Knaster Wasse
- Lucy Berliner
- Shannon Dorsey
- Seattle Public Schools

Funding:

- *National Institute of Mental Health*
- *Institute of Education Sciences*
- *American Psychological Foundation*
- *Public Health of Seattle & King County*



Overview

1. Intro to Common Elements / Modular Psychotherapy
 - Distillation and Matching Model
 - Applications
2. Pilot Study of MAP in Schools
3. Current & Future Directions for Common Elements Psychotherapy in Schools



Evidence-Based Practice

- Evidence-Based Practice
 - “The integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences” (APA, 2006)
 - Integration of contextual knowledge (e.g., experiential/tacit knowledge, collective wisdom) with empirical knowledge



What is Evidence?

- Sources of Evidence: The Four “Evidence Bases” (Daleiden & Chorpita, 2005)
 1. *General services research evidence*: info systematically mined from the existing empirical literature
 2. *Case history evidence*: drawn from individualized, case-specific data derived from clinical interactions with clients.
 3. *Local aggregate evidence*: uses case history evidence aggregated into larger meaningful units
 4. *Causal mechanism evidence*: a general and comprehensive understanding of etiological and treatment processes (e.g., tacit knowledge, collective wisdom)



Services Research Evidence

Parent-Child Interaction Therapy • Incredible Years • Interpersonal Therapy • Triple P Positive Parenting Program • Trauma-focused Cognitive Behavioral Therapy • Helping the Non-Cooperating Child • Multidimensional Treatment Foster Care • Coping Power • Cognitive Behavioral Therapy for Trauma in Schools • Community Re-entry Program • Primary and Secondary Enhancement Control Training • Brief Strategic Family Therapy • Functional Family Therapy

435 Trials
>750 Protocols

44 Years Research



Failures of Psychotherapy Research

- Clinical science has failed to reach the goal of reducing the prevalence and burden of mental illness in society (Baker et al., 2008)
- Impossible for individual psychotherapy to meet society's needs (Kazdin & Blase, 2011; Kazdin & Rabbitt, 2013). Requires investment in...
 - Technology-based methods of service delivery
 - Public health approaches/Population-level interventions
 - Use of nontraditional service providers
- Psychotherapy research has over-emphasized knowledge **PRODUCTION** to the exclusion of knowledge **MANAGEMENT** (Chorpita et al., 2011)



Failures of Psychotherapy Research

- Studies of “usual care” have found...
 - Community therapists use elements of EBP, but at a lower level of frequency and intensity than is believed to be effective (Garland et al., 2010)
 - Community therapists demonstrate particularly low use of many essential elements of care (e.g., exposure, homework review, role play)
 - Practitioners are often inconsistent reporters of their practice
 - Over-report using EBP/practice elements
 - May become better reporters with consultant support (Ward et al., 2012)
 - 90% of therapists rate themselves at the 75th percentile or higher, none rate themselves below average (Walfish et al.)



Evidence-Based Practice

Concerns with the “traditional” evidence base and structured Tx protocols...

- Fixed content
- Fixed intensity
- Fixed length
- Single Tx target
- Research evidence only at the level of the full manual
- *Deviations = low fidelity = ineffective?*



Common Elements ≠ Not Common Factors

- *Common elements*
 - Generic components/procedures of treatment (e.g., exposure, psychoeducation) cut across distinct treatment protocols
- *Common factors*
 - Personal and interpersonal components (e.g., alliance, therapist effects) common to all interventions are responsible for treatment outcomes

Barth et al. (2012)



Multiple “Common Elements” Approaches/Applications

- Common elements of **YOUTH PSYCHOTHERAPY** (Chorpita et al., 2005)
- “Kernels” of **ADULT AND YOUTH INTERVENTIONS** (Embry & Biglan, 2008)
- Common elements of **THERAPY ENGAGEMENT** (Becker et al., 2015; Lindsey et al., 2014)
- Common elements of **PREVENTION PROGRAMS FOR ADOLESCENTS** (Boustani et al., in press)
- Common elements of **PARENTING IN CHILD WELFARE** (Barth & Liggett-Creel, 2014)



Questions so far?

- Summary
 - Definitions of “evidence”
 - Need for new ways of thinking about evidence and its incorporation into practice
 - Definitions of common elements and modular design
 - Common elements vs. Common factors



"By stripping some of our best treatments down to the essence, **we can allow them to be fleshed out again at the point of service by practitioners with local expertise** who are embedded in the local context. Let therapists **add their own jokes, games, or metaphors**, and **let researchers outline the core change strategies** that should be preserved..."

(Chorpita et al., 2011, p. 495)



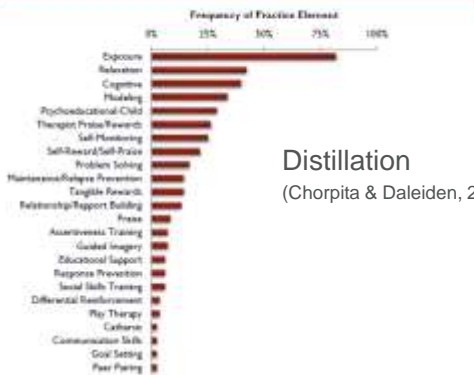
Identifying Common Elements: The Distillation and Matching Model (DMM)

(Chorpita, Daleiden, & Weisz, 2005b)

- ESTs can be *distilled* into practice elements/modules and *matched* to client characteristics
 - Compatible with, but independent from, the modular approach
- 1. Distillation (interventions as composites of strategies)
 - Technique identification
 - Evidence accumulation
- 2. Matching (summarizing relevant considerations for intervention selection)
 - Gauge association between content and study characteristics (e.g., client age, gender, ethnicity)
 - Determine which characteristics matter **most**



Figure 2. Practice Element Profile for Anxious or Resistant Behavior Problems (83 Study Groups)



Distillation
(Chorpita & Daleiden, 2007)

Modular Psychotherapy: Applications & Findings

- Shifting the primary goal of implementation from “using evidence-based practices” to “getting positive outcomes” (Chorpita et al., 2008)
 - Relies on continuous progress monitoring to collect case history evidence to inform clinical decisions
- Modular therapies more acceptable to providers (Borntrager et al., 2009)
- More flexible than traditional manuals with regard to the timing of Tx delivery (McHugh et al., 2009)



Applications & Findings

- Growing within adult mental health, esp. within anxiety treatment...
 - Coordinated Anxiety Learning and Management (CALM; Roy-Byrne et al., 2010)
 - Unified/Transdiagnostic Protocol for anxiety and related disorders (Barlow et al., 2010)
 - Common Elements Treatment Approach (CETA) for adults in low- & mid-income countries (Murray et al., 2014)
- *Spectrum* of modular applications:
Intervention co-design ↔ Quality improvement

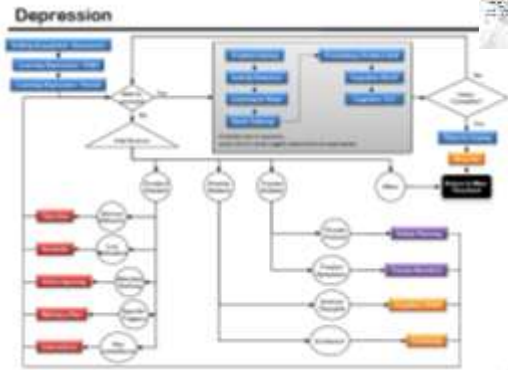


MATCH-ADTC (Chorpita & Weisz, 2005)

Main Flowchart



MATCH-ADTC (Chorpita & Weisz, 2005)



Applications & Findings

MATCH-ADTC

- Recent RCT demonstrated MATCH (ADC – w/o trauma component) to be superior to usual care and standard manual treatment (Weisz et al., 2012).
- Many differences persisted at 2 year follow-up (Chorpita et al., 2014)
- MATCH therapists used more non-manual techniques



Managing and Adapting Practice (MAP) (Chorpita et al., 2009)

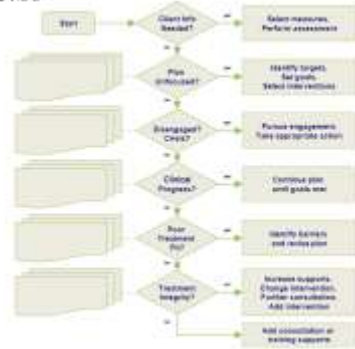
- Simplified, accessible approach to guide clinical decision-making
 - Emphasizes a *collaborative* decision process
- Less intervention structure (more QI than co-design)
- Accompanied by a structured professional development approach



PracticeWise.com

Managing and Adapting Practice (MAP) (Chorpita et al., 2009)

The MAP



Applications & Findings

- Three primary elements of the MAP system:

PracticeWise Website

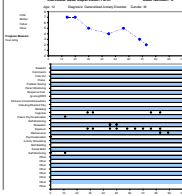
- Up-to-date research information database
- Matches youth problems and characteristics to practice elements

Practice Elements

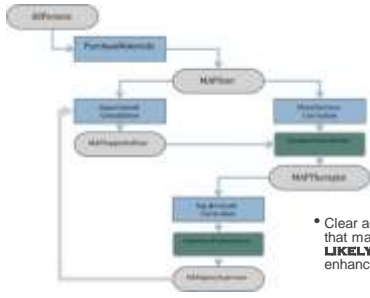


Clinical Dashboard

- Track implementation and client progress



Not Just Materials: MAP Professional Development Program



MAP Framework (Southam-Gerow et al., 2014)

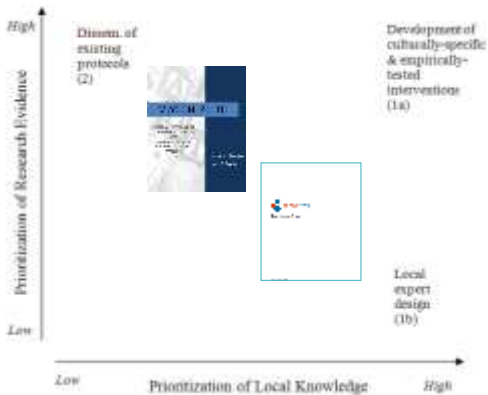
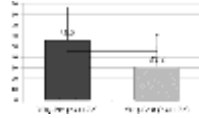
The MAP Framework

Is Outcome Centered	Clinical progress and therapeutic practices are MEASURED AND SYSTEMATICALLY MONITORED at the client case level.
Is Information Oriented	Emphasizes the COMMON ROLES THAT INFORMATION SERVES in decision-making, rather than requiring a specific set of instruments.
Supports a Common Language	By identifying common elements of interventions with scientific evidence of effectiveness across the behavioral health service domain, the MAP system provides an INTEGRATED LEXICON TO WHICH THE TERMINOLOGY OF SPECIFIC PROGRAMS AND DISCIPLINES IS READILY TRANSLATED .
Integrates Multiple Evidence Bases	The MAP system highlights FOUR SOURCES OF EVIDENCE that are referenced and prioritized during healthcare decision-making.
Coordinates Observed and Expected Values	By identifying common elements across evidence bases and obtaining indicators of client progress, clinical practice, and research findings, the MAP system INTEGRATES BOTH THE OBSERVED OUTCOMES OF CLIENTS AND PRACTITIONERS WITH THE EXPECTED OUTCOMES from the research and service systems.
Is Self-Correcting	The MAP tools, such as the PWEBS database and Practitioner Guides, are routinely updated based upon ONGOING REVIEW OF THE SCIENTIFIC LITERATURE . Similarly, the MAP system's use of INDIVIDUAL CLIENT MONITORING AND VISUALIZATION through the Clinical Dashboards provides a strong mechanism for self-correction of clinical care during health service provision.
Promotes Public Visibility	The MAP system provides a central visualization tool with the Clinical Dashboard, but also promotes transparency and public scrutiny of (a) the UNDERLYING EVIDENCE used to inform decisions and (b) the UNDERLYING LOGIC used to reach a final decision and course of action.
Process Management	The MAP system adopts a CONTINUOUS QUALITY IMPROVEMENT STRATEGY for managing the process of change. Common steps of this strategy include goal setting, assembling supports and applying procedures, testing results, and review and adaptation.



MAP System – Large-Scale Roll-Out in LA County (Southam-Gerow et al., 2014)

- Compared two training models within the MAP *professional development program* for scale-up:
 - National training model
 - Train the trainer
- Both successful in helping providers reach competence
- **Pre-post** youth outcomes effect sizes were strong (ranging from .59 to .80) and generally consistent with the literature on many evidence-based treatments

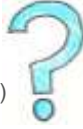


Lyon, Lau, McCauley, Vander Stoep & Chorpita (2014)

Questions so far?

- Summary

- Distillation and Matching Model (DMM)
- Principles of modularity
- MATCH and MAP applications of DMM



Assessment and Routine Outcome Monitoring: The “Glue” that Holds the Modular Approach Together



Data-Driven Decision-Making is Contextually Appropriate in SMH

- Assessment and progress monitoring align with increasingly-popular **Response to Intervention (RtI)** / **Multi-Tiered Systems of Supports (MTSS)** models of data-driven decision making



Graphic from the National Center on Response to Intervention



What is Evidence-Based Assessment?

- **Evidence-Based Assessment (EBA):** Assessment **methods** and **processes** that are based on empirical evidence in terms of both their reliability and validity as well as their clinical usefulness for prescribed populations and purposes (Mash & Hunsley, 2005)
 - **Standardized assessment (SA):** The use of measurement tools with empirical support for their reliability, validity, etc., (Jensen-Doss & Hawley, 2005)
 - **Idiographic assessment (IA):** Measurement of variables that have been individually selected or tailored to maximize their relevance for a particular individual (Haynes et al., 2009)



Value of EBA

Initial Assessment

- Rating scales can increase the ease and accuracy of clinical diagnosis (e.g., Jenkins et al., 2011; Youngstrom et al., 2005)
- Psychological assessment carries positive, clinically meaningful effects (Posten & Hanson, 2010)

Outcomes / Progress Monitoring

- Clinicians are often not able to detect client deterioration (Hannan et al., 2005)
- Providing assessment results to clinicians can result in improved outcomes (Bickman et al., 2011; Lambert et al., 2003)

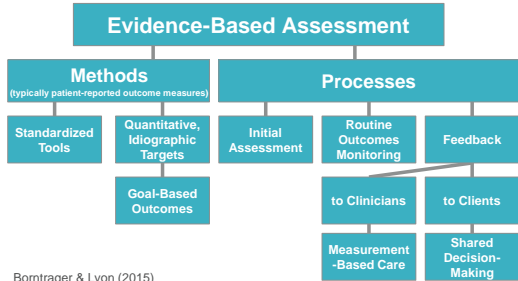


Idiographic Monitoring

- Value of idiographic targets (Weisz et al., 2011) . . .
 - Add specificity to ID'd problems
 - Give clients a voice
 - Enhance rapport / alliance
 - Provide foci for ongoing assessment
- **Combination** of SA and idiographic may be optimal (Weisz et al., 2011)



EBA "Landscape"



Borntrager & Lyon (2015)

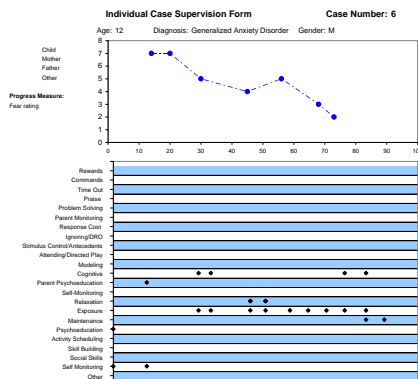


Potential Assessment / Monitoring Targets

Mental Health <ul style="list-style-type: none"> • Depression symptoms • Disruptive behavior • Self-injurious behavior 	Social Functioning <ul style="list-style-type: none"> • Interpersonal conflicts • Positive social experiences • Disciplinary events
School Engagement <ul style="list-style-type: none"> • Attendance • Homework completion • Class participation • School connectedness 	Physical Health <ul style="list-style-type: none"> • Sleep • Diet & Exercise
Academic Outcomes <ul style="list-style-type: none"> • Grades • Credits earned • Standardized test scores 	Services <ul style="list-style-type: none"> • Satisfaction with treatment • Engagement in intervention • Therapeutic alliance



EBA in the Modular Approach



CBT+: A Novel Application of a Common Elements Approach in Washington State



Core Team: Berliner, Dorsey, Jungbluth, Sedlar, & Merchant
University of Washington & Harborview Medical Center



CBT+ Overview (Dorsey et al., in press)

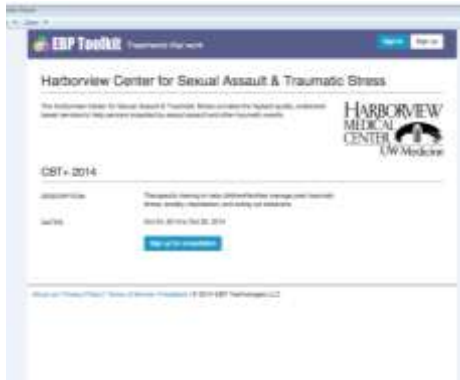
- Common-elements based, modularized intervention
- Grew out of existing statewide Trauma-Focused CBT (TF-CBT) initiative
- Includes **TRAINING AND CONSULTATION MODEL** for individual provider certification / “rostering”
 - Consultation call attendance
 - Documentation of 2+ cases in web-based system (i.e., Toolkit)
- **ORGANIZATIONAL SUPPORTS**
 - Supervisor training
 - Supervisor consultation calls
 - Organizational support guides



CBT+ Core Intervention Components

Assessment	Introduction/Buy In	Thoughts	Feelings	Behaviors
Anxiety	As needed: MI & Engagement Work Psychoeducation <ul style="list-style-type: none"> About anxiety The CBT Triangle How Tx works (see form) 	<ul style="list-style-type: none"> Cog. Coping Socratic dialogue <ul style="list-style-type: none"> Accuracy Helpfulness BF Role Play 	Emotion Reg. <ul style="list-style-type: none"> Relaxation Secret Calming Distraction Mindfulness 	Exposure <ul style="list-style-type: none"> Imaginal In Vivo Response prevention (OCD)
Depression	Psychoeducation <ul style="list-style-type: none"> About depression The CBT Triangle How Tx works (change by & timing) 	<ul style="list-style-type: none"> Cog. Coping Socratic dialogue <ul style="list-style-type: none"> Accuracy Helpfulness BF Role Play 	Emotion Reg. <ul style="list-style-type: none"> Relaxation Secret Calming Distraction 	<ul style="list-style-type: none"> Pleasant activity scheduling Goal setting/steps with rewards Problem solving
PTSD	Psychoeducation <ul style="list-style-type: none"> About trauma About PTSD/PTS The CBT Triangle How Tx works 	<ul style="list-style-type: none"> Cog. Coping Socratic dialogue <ul style="list-style-type: none"> Accuracy Helpfulness BF Role Play Reasonab. Plc. 	Emotion Reg. <ul style="list-style-type: none"> Relaxation Secret Calming Distraction Mindfulness/Trieness 	Exposure <ul style="list-style-type: none"> Imaginal (IN) In Vivo TS State Safety Planning
Behavior Problems	Psychoeducation <ul style="list-style-type: none"> FBA Principles Normal development Positive Parenting How Tx works 	<ul style="list-style-type: none"> Cog. Coping (parent/child) Socratic dialogue <ul style="list-style-type: none"> Accuracy Helpfulness 	Emotion Reg. (parent/child) <ul style="list-style-type: none"> Relaxation Secret Calming Distraction Cognitive Coomb. 	FBA <ul style="list-style-type: none"> Parenting Skills Positive time Praise Selective attention Injunctions Rewards Plan Consequences

CBT+ Toolkit



CBT+ Toolkit



CBT+ Findings

(Dorsey et al., in press; Lyon et al. 2015)

- Evaluation of 2009-2011 CBT+ training cohorts
- $n = 180$ clinicians with self-report data at multiple time points

Pre-post sample paired t tests for change in self-reported understanding and skill

	Pre-training		Post-consultation		t	d^2	p value	ϕ^2
	Mean	SD	Mean	SD				
SkR - depression	3.23	0.70	3.76	0.65	-8.16	.173	<.001	0.64
SkR - anxiety	3.01	0.77	3.59	0.70	-10.02	.177	<.001	0.76
SkR - behavior problems	3.37	0.83	3.73	0.80	-5.72	.178	<.001	0.43
SkR - PTSD/trauma	2.90	0.94	3.37	0.76	-11.10	.176	<.001	0.84
SkR - assessment	2.40	1.13	3.63	0.86	-15.00	.178	<.001	3.16
Organizational checklist	2.98	0.71	3.16	0.66	-3.27	.143	<.001	0.28
Therapist checklist	2.66	0.71	3.21	0.60	-10.24	.143	<.001	0.86

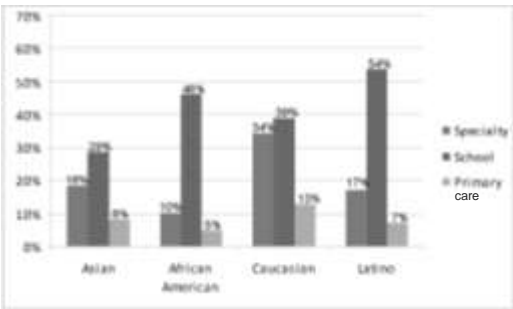


School Mental Health (SMH)

- Most youth who require mental health services do not receive them (Kataoka et al., 2002)
- SBMH accounts for >70% of all MH services (Burns et al., 1995; Farmer et al., 2003)
 - About 20% of all students receive SBMH services annually (Foster et al. 2005)
- Schools improve service access for underserved youth (Kataoka et al., 2007)



Service Access: Youth with Depression Sx



Lyon et al. (2013)



School Mental Health

- Little is known about usual care school mental health services (Langley et al. 2010)
 - Services are unlikely to be evidence-based (Evans & Weist, 2004; Rones & Hoagwood, 2000)
- Meta-analysis of SMH programs for low-income, urban youth revealed low levels of effectiveness, some iatrogenic effects (Farahmand et al., 2011)
- Simultaneously...
 - EBP developers have paid insufficient attention to the school context and how it might influence effective service delivery (Ringeisen et al., 2003)



Common Elements Psychotherapy in Schools

- Application in school-based primary care (Stephen et al., 2010)
 - Resulted in provider behavior change
- Implementation with school-based providers yielded (Weist et al., 2009)
 - Higher use of EBP, but no impact on practitioner attitudes or youth outcomes
- Additional large-scale work ongoing (Weist et al., 2014)



Local Setting: School-Based Health Centers (SBHCs)

- Operate in nearly 2,000 schools in the US (NASBH, 2008)
- Typically provide primary care and mental health services (Brown & Bolen, 2003)
- Confidential: Parents sign a blanket consent form for services at beginning of year.
- Well-substantiated as a mechanism to increase service accessibility to underserved and under/uninsured (Gance-Cleveland & Yousey, 2005; Kaplan et al., 1999; Wade et al., 2008)



Modularized, Common Elements Psychotherapy Pilot (Lyon et al., 2011)

Project Goals:

1. Provide training/support in relevant practice modules in the context of an existing consultation structure
2. Train school-based health center (SBHC) providers to implement outcome and practice monitoring with youth experiencing depression and/or anxiety



EBP Implementation

Consolidated Framework for Implementation Research
(Damschroder et al., 2009). Five domains:

1. Intervention characteristics
2. Outer setting – broader context in which an organization exists (e.g., patient needs, barriers to meeting needs, org policies/incentives)
3. Inner setting – immediate organizational context in which implementation occurs (e.g., structural characteristics, implementation climate, readiness for implementation)
4. Characteristics of individual practitioners
5. Implementation process



Outer Setting

Two primary organizations...

- Org #1: Staffs all middle school SBHCs
 - Emphasis on provision of safety-net services, less explicit focus on EBP
 - Org. provides few child MH services in community
 - Supervisor not a SBHC clinician
- Org #2: Staffs majority of high school SBHCs
 - Existing research arm, "EBP culture," and focus on cost-containment
 - Supervisor was a SBHC clinician
 - Staff also receive psychiatric consultation



Inner Setting

"It's not like other practice settings where you see them every week at five o'clock"

- Multiple barriers to EBP implementation in schools
 - e.g., competing responsibilities, lack of parent engagement, logistical barriers (Langley et al., 2010)
- SBHC practice characterized by uncertain Tx length
 - Sessions are frequently interrupted by student or school crises
 - Avg. number of MH therapy sessions = 4,6
- The school setting necessitates a flexible practice, but many available EBPs not so flexible

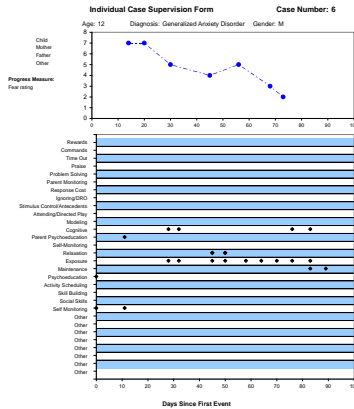


Intervention

- Informed by DMM and tools available from PracticeWise website (Chorpita et al., 2009)
 - Caveat:** We received workshop training, but not intensive training from sys. originators
- Modules trained corresponded to the most common presenting problems in SBHCs (depression and anxiety):

Activity Selection	Cognitive Restructuring for Depression	Cognitive Restructuring for Anxiety
Exposure	Maintenance/Termination	Problem Solving
Psychoeducation for Anxiety	Psychoeducation for Depression	Relaxation
Self-Monitoring	Skill Building	Social Skills

- Tracked module implementation and outcome monitoring using Excel "dashboard"



Practitioner Characteristics

- $n = 7$ providers participating in ongoing consultation
- Avg. years in current position = 4.9 ($SD = 4.3$)
- 94% female, 82% Caucasian
- Primary theoretical orientation (TO): Integrative/Eclectic (65%)

	Participants ($n = 7$)	Non-Participants ($n = 10$)
Age	41.4	39.3
Years in Practice	9.0	12.5
TO: % Bx' I or CBx' I	29%	20%
EBP Attitudes Scale (Aarons, 2005)	3.1	3.0
Knowledge of EB Services Ques. (Stumpf et al., 2009)	101.4	99.6



Implementation Process

Training & consultation: Sept – May

- Not mandated
- 4 half days in Sept and Oct – introduced monitoring system (Excel dashboard) and initial set of modules
 - Training activities: didactic presentations, distribution of written materials, modeling, role-plays, ongoing consultation
- Biweekly consultation meetings
 - Case review based on dashboard data trajectory
 - Introduction of additional modules
- Practitioners given freedom to implement the modules as they saw fit following introduction



Implementation Process

Identification & assessment

- Providers selected youth based on the following criteria:
 1. **Primary presenting problem (PPP) = depression or anxiety**
 2. **Student is committed to participate in three or more sessions**
- Asked to administer standardized measures corresponding to PPP at *each session*
- Email reminders and data QA from research assistants
 - Some providers struggled to use the Excel technology



Results: Implementation

Training participation

- 11 of 17 providers began participating in training
- 7 participated fully in the training and used the tools with youth
 - All from high school SBHCs
 - Most from Org #2, none from Org #1.
- **16 in-person consultation meetings** between Sept and May
 - Participants attended an average of 79% of consultations



Results: Implementation

Practice changes: Identification & assessment

66 students selected for tracking

- Avg. age: 16.1; 63% Female
- Ethnicity: 39% Cauc, 26% Asian/PI, 17% AA, 8% Latino/a, 9% Multiethnic

Primary presenting problem (PPP):

- Depression – 75%
- Anxiety – 14%
- Mixed Dep. & Anx. – 11%

Administration of standardized assessment (SA) measures:

- In **94%** of sessions, students received at least one SA measure
- Most common measure: *Short Mood & Feelings Questionnaire (SMFQ; Angold et al., 1995)*
- Other measures included: *CDI, brief YSR, GAD-7*



Results: Implementation

Practice changes: Treatment Sessions

- 487 Total sessions
 - Mean # sessions per student = **7.4** (range: 1-24, median: 6, mode: 3)
- Average number of elements reported used per session = **2.8**
- Elements most commonly reported used (% of sessions):
 - Cognitive restructuring (depression) **47.4%**
 - Self-monitoring **46.0%**
 - Problem solving **37.6%**
 - Psychoeducation (depression) **33.3%**
- Average number of unique elements used per student = **5.3**



Results: Implementation

Barriers to participation (Lyon et al., 2013)

- Time available – *number 1 concern*
 - Difficult for lone practitioner to make time for training and consultation
 - No release from clinical responsibilities
- Skepticism about new “flavor of the month”
- Applicability of EBP (in general) to the culturally-diverse, multi-problem youth seen in SBHCs



Results: Service Recipients

Youth symptoms

- SMFQ for depression (administered to $n = 50$ students)
 - Avg. baseline SMFQ: 13.1 ($SD = 4.3$)
 - Change in SMFQ for students receiving >1 session ($n = 45$):

SMFQ first	SMFQ last	SMFQ Change
13.53	9.44	-4.09



Results: Service Recipients

Youth symptoms

- SMFQ change not associated with the elements that are most common in depression treatment
 - i.e., cognitive restructuring, activity selection, psychoeducation, self-monitoring (PracticeWise, 2009)
- SMFQ change was associated with...
 - Problem Solving ($r = .34, p < .05$)
 - Relaxation ($r = .34, p < .05$)
 - Skill Building ($r = .45, p < .01$)
- Number of unique elements received unrelated to SMFQ change



Results: Provider Views on Intervention-Setting Fit

- Practitioners generally described a good fit between the modular approach and school-based service delivery across multiple levels (Lyon et al., 2014)

TABLE 2

Percentage of Clinicians Monitoring Appropriateness Themes at Different Contextual Levels in Relation to the Modular Approach

Code	Description	%
Client Factor	Fit with values/values of target population	33%
Client Practical	Fit with practical factors related to target population (e.g., effectiveness, developmental appropriateness)	75%
Client Other	Unanticipated comments at the client level	18%
Provider Value	Fit with values/values of provider	33%
Provider Practical	Fit with practical factors of the provider (e.g., clinical practices/approach, knowledge gaps)	66%
Provider Other	Unanticipated comments at the provider level	25%
School Value	Fit with values/values of school/school clinic	61%
School Practical	Fit with practical factors in a particular school (e.g., school schedule)	61%
School Other	Unanticipated comments at the school level	0%
Organization Value	Fit with values/values of internal organization/agency	0%
Organization Practical	Fit with practical factors of the organization/larger system	0%
Organization Other	Unanticipated comments at the organization level	0%



Discussion

Summary

- School context presents a number of important **PRACTICE LIMITATIONS** and **BARRIERS TO PARTICIPATION** in training/consultation
- **ORGANIZATIONAL FACTORS** may have substantially influenced participation
 - Despite similarities in individual-level variables, no practitioners from Org #1 completed the consultation
- **Motivated clinicians able to administer SA measures, track results, and report on their use of modules**



Discussion

Summary

- **SIMPLE, CONCRETE PRACTICE ELEMENTS** were most associated with outcome for depression treatment
 - Problem solving previously found to be associated with depression outcome (Kennard et al., 2009)
 - Easier to implement? More familiar?
- Consultation to SBHCs can result in provider behavior change and may be a useful method of increasing delivery of EBP to underserved youth.
 - *"...the practical skills we got and the way we were actually held to using them really makes me feel like I get lots of concrete gains for my clients these days! Especially with those pesky depressed stuck ones!"*



Discussion

Implications

- Importance of provider motivation to participate in training/consultation
 - More competent practitioners tend to seek out trainings and experience greater benefit (Puetz, 1980; Siqueland et al., 2000)
 - "Time" cited as the most common barrier (Lyon et al., 2013)
- Develop short-term SBHC interventions using a small number of effective modules
 - Modal # of sessions = 3!
- Consider SA implementation as a starting point for EBP implementation



Questions so far?

• Summary

- Justification for school-based service delivery
- Quality improvement goals in school mental health
- Applications of common elements approaches in schools



Brief Intervention for School Clinicians (BRISC)

A Modularized, Evidence-Informed Mental Health Treatment for Use by School Clinicians Working with High School Students

*Funded by the Institute of Education Sciences
(R305A120128 — McCauley & Bruns, Co-PIs;
Lyon, Co-I)*



BRISC: Overarching Goal

Develop and pilot test an evidenced-informed and feasible mental health intervention designed to address the unique characteristics and needs of the school context



BRISC: Evolving Goal



Enhanced integration of mental health service/care models with education based approaches supporting student academic and social/emotional development



Context for BRISC

<i>School-Based Usual Care</i>	<i>BRISC</i>
Intervention is often crisis-driven (Langley et al., 2010)	Structured / systematic identification of treatment targets
Focused on providing nondirective emotional support (Lyon et al., 2011)	Focused on skill building / problem solving
Interventions do not systematically use research evidence (Evans & Weist, 2004; Rones & Hoagwood, 2000)	All intervention elements are evidence-based
Standardized assessments are used infrequently (Weist, 1998; Lyon et al., in press)	Utilizes standardized assessment tools for progress monitoring



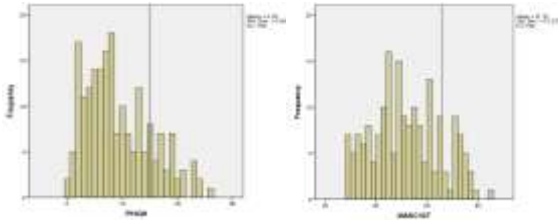
Context for BRISC

- Currently developing a brief intervention model (3-4 sessions) to maximize *intervention-setting fit*
- During 2009 pilot (Lyon et al., 2011), modal number of sessions was **3**
 - Large caseloads, sole practitioner
 - Frequent disruptions
 - Engagement difficulties
- Some clinicians struggled to determine which modules to select/prioritize
- Many students (60%+) with subclinical presentations



Context for BRISC

- Even low levels of symptoms can be accompanied by functional impairment
- PHQ-9 (depression) and MASC-10 (anxiety) scores across >180 youth receiving school-based services in September 2011 (Lyon et al., in press):

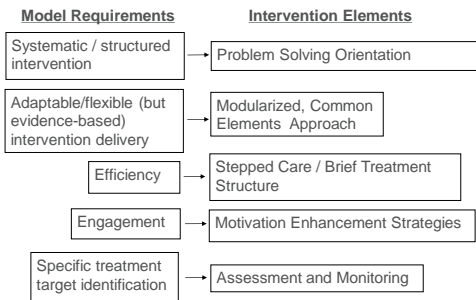


BRISC

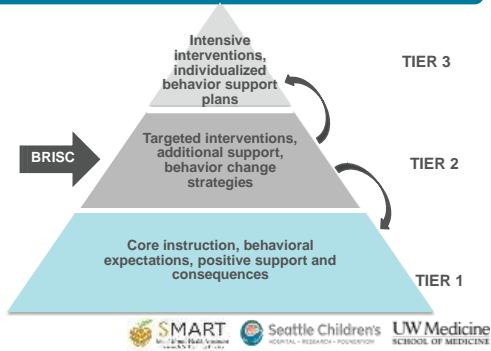
- *a priori* intervention model requirements necessary for a “good fit” with the school context:
 - Systematic intervention approach
 - Adaptable/flexible intervention delivery
 - Efficiency (short-term for those who don't need more)
 - Engagement enhancement
 - Specific identification and tracking intervention targets



Original BRISC Components



BRISC Integration with Educational Approaches

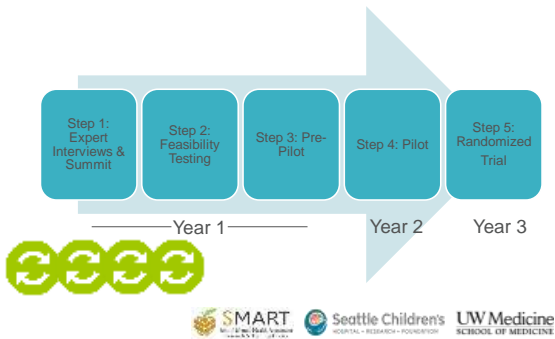


BRISC Intervention and Rationale

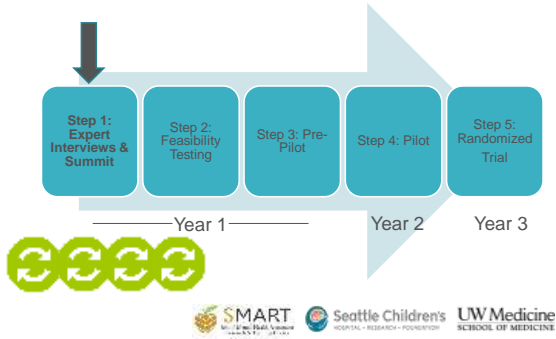
- Use **COMMON ELEMENTS** of evidence-based MH treatments for children and youth
- Be responsive to **TYPICAL PRESENTING PROBLEMS** of high school students seeking/needing help
- Tailored to **WORKFLOW, CASELOADS, AND CLIENT ENGAGEMENT & FOLLOW-UP** of SBMH clinicians
- **INTEGRATED** with school structures & connected to school social and behavioral supports



BRISC Protocol Development & Refinement 3 Year, IES Funded Goal 2



BRISC Protocol Development & Refinement
3 Year, IES Funded Goal 2



BRISC Study 1 (Year 1) (Lyon et al., 2014)

- Two qualitative research studies: (1) **KEY INFORMANT INTERVIEWS** with SMH experts and (2) **NOMINAL GROUP DECISION-MAKING PROCESS** with Summit attendees
- 3 crosscutting themes:
 1. Alignment with the school context (e.g., Rtl framework; dev of readiness assessment)
 2. Flexible/responsive service delivery
 3. Effective data utilization (esp integration of school/educational data)



Revised BRISC Protocol



Revised BRISC protocol following Study 1 to reflect stakeholder input:

- BRISC as a targeted intervention within existing tiered system
- Incorporate academic interventions/focus on monitoring academic success
 - Make use of existing school data systems
- Student voice in development/target
- ID academic and socio-emotional outcomes to focus on, (e.g. Top Problems Checklist)
- Establish "readiness" criteria for schools as a way to measure school's ability to integrate the program



Revised BRISC Core Factors

1. Agenda Setting
 - Collaborative
 - Focus/structure session
 - Manage the time
2. Problem Solving Framework
 - Clinician helps student identify specific problems
 - Empowers student to address/change
 - Brainstorming solution – anything goes
 - Important to prepare for/address internal and external barriers
 - No failure – any attempt provides useful information in implementing other solutions



Revised BRISC Core Factors

3. Progress Monitoring and Feedback
 - Weekly stress rating - generally and then related to identified problem (0=low to 10=high)
 - Useful in identifying targets to address /monitoring progress (i.e., it's like a ruler to measure change)
4. Practice Exercises
 - Tracking targets—moves from therapy to real life application
 - Helps identify barriers to change
 - Doing something that is slightly out of their comfort zone and different from what they would ordinarily do (not something too hard or drastic)



BRISC Protocol

Session 1: Engagement & Problem Identification

Session 2: Stress Psychoed & Problem Solving

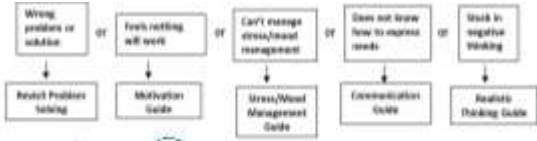
Session 3: Skill/Module Implementation

Practical difficulties; Getting along with other people; Just don't feel like it, Handling hard feelings; Dealing with a hard situation I can't change

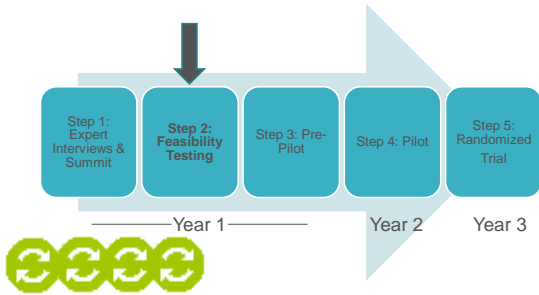
Session 4: Review Skill Implementation & Plan for Next Steps



BRISC Session 3 Module Selection Framework



BRISC Protocol Development & Refinement 3 Year, IES Funded Goal 2



BRISC Study 2 (Year 1): Goal

Evaluate 3 implementation outcomes (Proctor et al., 2011)...

- *Feasibility* – Extent to which a Tx can be successfully used or carried out within a given setting
- *Acceptability* – Perception that a Tx is agreeable, palatable, or satisfactory
- *Appropriateness* – Perceived fit of the Tx for a given practice setting, provider, consumer, or problem.



BRISC Study 2 (Year 1): Method

- Mixed-methods study (quantitative and qualitative)
- Participants:
 - $n = 11$ high school students
 - 91% female
 - 56% self-referred
- BRISC delivered by study therapists
- Therapists completed fidelity rating checklists after each of the four BRISC sessions
- Post-test (symptoms, functioning, etc) and semi-structured "exit interviews" at 8-weeks following the first BRISC session



BRISC Study 2 (Year 1): Results

Feasibility

- Average of **27 days** to deliver 4 sessions
- Individual sessions lasted **21-60 mins**
- Median delivery of components (adherence checklist) ranged from **73 to 91%** across sessions



BRISC Study 2 (Year 1): Results

- Interventionists demonstrated high levels of adherence to the BRISC protocol including:
 - identifying and monitoring problems
 - introducing and conducting stress/mood rating
 - planning problem monitoring
 - introducing problem-solving,
 - assessing barriers,
 - assigning practice exercises.

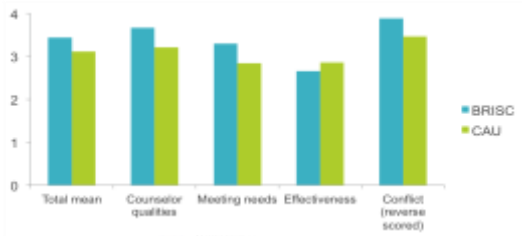


BRISC Study 2 (Year 1): Results

Acceptability

Multidimensional Adolescent Satisfaction Scale (MASS)

- Satisfaction with counseling scores sig higher than published scores for adolescent counseling as usual (Garland et al., 2000)



BRISC Study 2 (Year 1): Results

Acceptability

- Motivation to attend treatment ratings ranged from 8.3 for the second session to 8.9 for the fourth session (out of 10)
- Participants reported that their motivation to attend sessions **INCREASED INCREMENTALLY** for each successive session
- Mean ratings of helpfulness of homework/practice was 7.5 out of a possible positive rating of 10



BRISC Study 2 (Year 1): Results

Appropriateness

- 7 of 11 participants (63.6%) had 1+ clinically significant elevation in a problem area
 - Internalizing problems most common
- BRISC Tx focused on 1 problem area for 9 participants and on 2 areas for 2 students.
 - Problem areas included academic difficulties (5 participants), depression (3 participants), peer problems (3 participants), anxiety (1 participant), truancy (1 participant), and sexual trauma (1 participant).



“Post-BRISC Pathways” Identified

1. *Come back if you need it*

16 yr. AA anger/relationship issues, teaching-stress cycle, PS re other ways to respond, communication strategies—listening and “I” statements

2. *Supportive monitoring*

15 yr old, referred by parent/school counselor re academic performance, PS focused on managing academic demands (cell phone use, etc), ongoing check ins with school counselor to reinforce progress



Post-BRISC Pathways Identified

3. *Continue BRISC or other TAU*

15 yo Hispanic female, depression/dysthymia and academic difficulties. Attempted some initial school interventions and identified significant barriers related to mood. Addressed handling hard feelings (including a referral for psychiatry), then client was able to more effectively engage in problem solving around academic issues.



Post-BRISC Pathways Identified

4. *More intensive services* – (referral to other services (i.e. special education, psychiatry, trauma treatment, family therapy, DBT, eating disorder treatment, etc.)

19 yo African female, referred by nurse practitioner for trauma and some initial SI, worked on problem solving and handling hard feelings - reducing harmful/problematic coping behaviors (i.e. eating chalk and excessively taking pain meds) and problematic school/peer concerns, and connecting to more intensive outside services making a “warm hand-off” with an outside agency