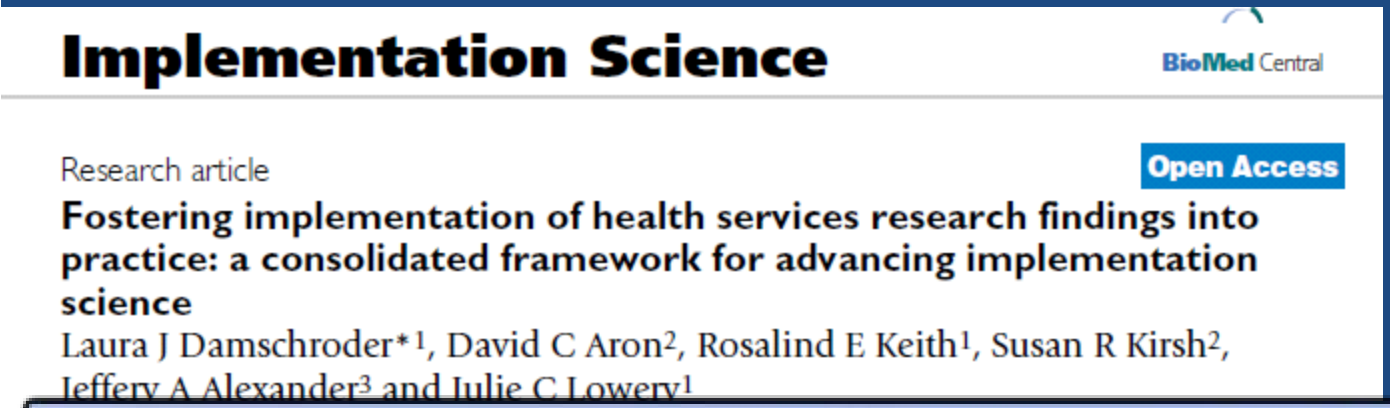
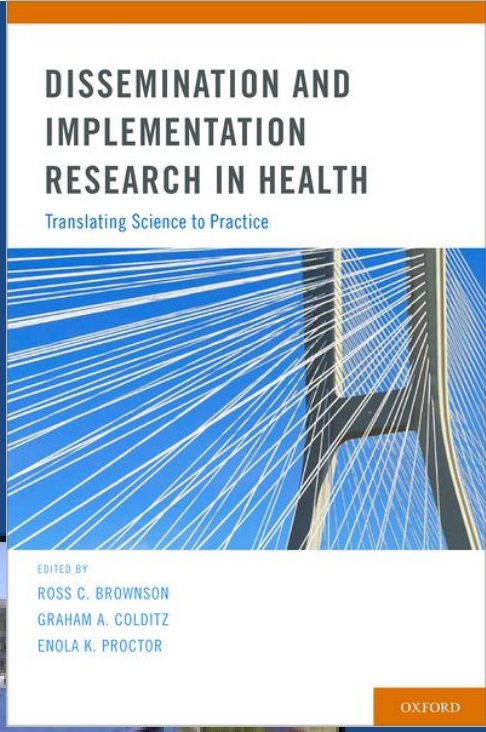
IMPLEMENTATION RESEARCH IN LOW-RESOURCE SETTINGS

Rinad Beidas, PhD, Laura Murray, PhD, Shannon Dorsey, PhD, Stephanie Skavenski, MSW, MPH, Margaret Kasoma, & John Mayeya

Where we are Domestically…

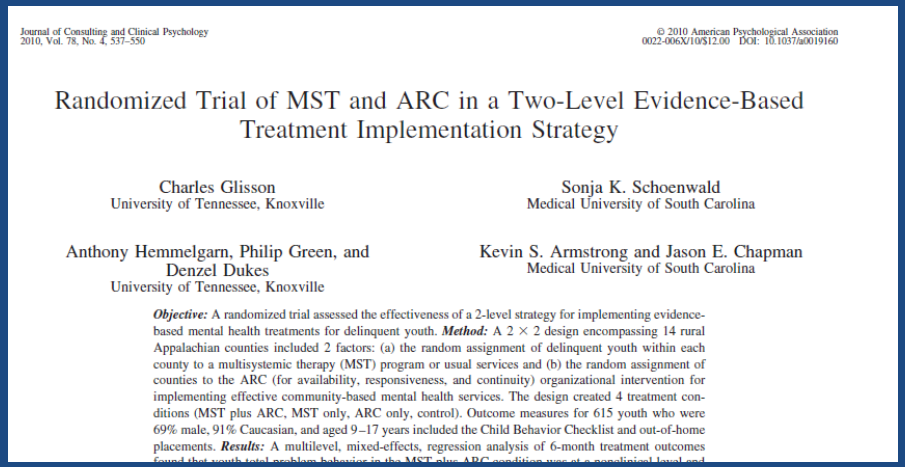




CENTER FOR SCIENTIFIC REVIEW
DISSEMINATION AND IMPLEMENTATION RESEARCH IN HEALTH STUDY SECTION
ROSTER

Where we are domestically

- 61 implementation science models and counting…. (Tabak et al., 2012)
- Sophisticated implementation science designs
  - Hybrid effectiveness-implementation designs (e.g., Curran et al., 2012)
  - Randomization of implementation strategies



Journal of Consulting and Clinical Psychology
2010, Vol. 78, No. 4, 537–550

0022-006X/10/$12.00 DOI: 10.1037/a0019160

Randomized Trial of MST and ARC in a Two-Level Evidence-Based Treatment Implementation Strategy

Charles Glisson
University of Tennessee, Knoxville

Sonja K. Schoenwald
Medical University of South Carolina

Anthony Hemmelgarn, Philip Green, and Denzel Dukes
University of Tennessee, Knoxville

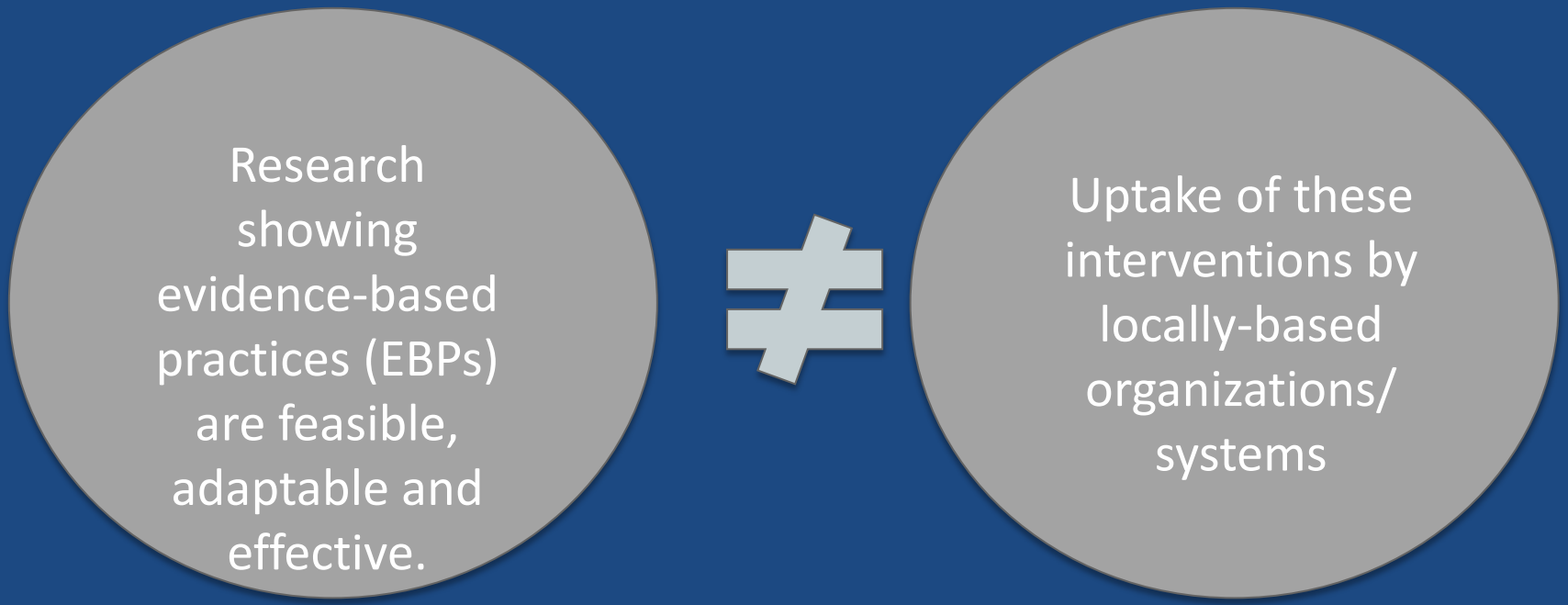
Kevin S. Armstrong and Jason E. Chapman
Medical University of South Carolina

Objective: A randomized trial assessed the effectiveness of a 2-level strategy for implementing evidence-based mental health treatments for delinquent youth. ***Method:*** A 2 × 2 design encompassing 14 rural Appalachian counties included 2 factors: (a) the random assignment of delinquent youth within each county to a multisystemic therapy (MST) program or usual services and (b) the random assignment of counties to the ARC (for availability, responsiveness, and continuity) organizational intervention for implementing effective community-based mental health services. The design created 4 treatment conditions (MST plus ARC, MST only, ARC only, control). Outcome measures for 615 youth who were 69% male, 91% Caucasian, and aged 9–17 years included the Child Behavior Checklist and out-of-home placements. ***Results:*** A multilevel, mixed-effects, regression analysis of 6-month treatment outcomes

- Measure repositories
  - Seattle Implementation Research Conference Measures Project
  - Grid-Enabled Measures developed by the National Cancer Institute
  - DIRC CMHSR Measures Collection

Implementation Research of MH in Low-Resource countries

- "Embryonic" to that of the West (Thornicroft et al., 2009)



Important to examine and learn from Implementation processes

Our challenge: Bringing implementation science to Low and Middle Income Countries (LMIC)

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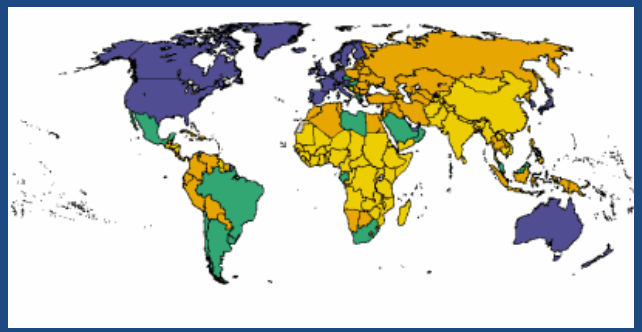

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Higher uptake of EBPs

Challenge #1: Measurement

- Can we use implementation measures designed in high income countries in LMIC?
  - Domestically used implementation outcome measures have NOT yet been tested for appropriateness/understanding/transferability to LMIC!
    - Need for mixed methods to ensure constructs translate (e.g., evidence-based practice)
  - Measures assume access to trainings, Internet, and knowledge of what evidence-based practices are
  - Organizational structure is different

Challenge #2: Providers

- Individual providers seem to present with DIFFERENT concerns than heard in the U.S.
  - U.S. – concern about EBPs being mechanical, loss of creativity
  - LMIC – “hungry” to learn how to do treatment, very open and wanting of supervision

Challenge #3: Organization

- Challenging to assess given lack of ONE organization
  - No agency to call home or measure organizational culture and climate
  - Leadership structure is different
  - Larger context/systems and sustainability (e.g., Ministry of Health)

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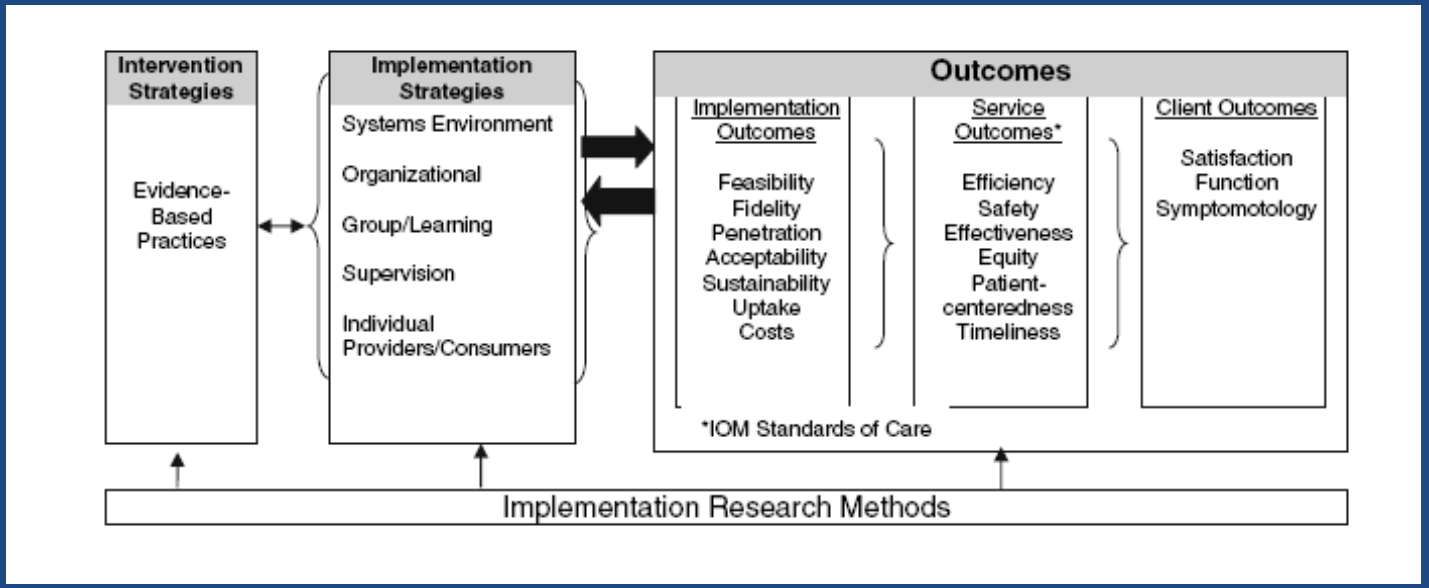
MIXED METHODS IMPLEMENTATION STUDY

NIMH K23 – Murray PI

Aims

- To retrospectively examine implementation outcomes in two TF-CBT studies in Zambia using mixed methods
  - Implementation outcomes
    - Acceptability; adoption; appropriateness; penetration; sustainability
  - Contextual predictors
    - Attitudes; organizational context



Sample

- Male and female adults that were trained and implemented TF-CBT as part of 2 studies in Zambia or involved in the implementation process (N = 60)
  - Counselors
    - Front-line staff
  - Ministry of Health administrators
    - Policy-makers
  - Project managers
    - NGO staff
  - Research/Tech Assistance staff
    - Hopkins team

Quantitative Measures

- Attitudes
  - Evidence-based practice attitudes scale (EBPAS-50; Aarons et al., 2012)
    - 50-item measuring attitudes towards evidence-based practices via 12 subscales: appeal, requirements, openness, divergence, limitations, fit, monitoring, balance, burden, job security, organizational support and feedback
- Organizational context
  - Organizational readiness for change (ORC; Lehman, Greener, & Simpson, 2002)
    - 129-item measure assessing motivation, resources, and organizational factors
  - Dimensions of organizational readiness-revised (DOOR-R; Hoagwood et al., 2004)
    - 21-item measure which assesses director perspectives on intra- and extra-organizational variables important to implementation

EBPAS-50 (©Gregory A. Aarons, Ph.D.)
Evidence-Based Practice Attitude Scale-50 Item

Reference:

Aarons, G.A., Cafri, G., Lugo, L., & Sawitzky, A. (2010). Expanding the Domains of Attitudes Towards Evidence-Based Practice: The Evidence Based Practice Attitude Scale-50 (EBPAS-50). *Administration and Policy in Mental Health.*

Contact: gaarons@ucsd.edu

The following questions ask about your feelings about using new types of therapy, interventions, or treatments. Manualized therapy refers to any intervention that has specific guidelines and/or components that are outlined in a manual and/or that are to be followed in a structured/predetermined way. Evidence-based practice refers to any intervention that is supported by empirical research.

For questions 1-8: Circle the number indicating the extent to which you agree with each item using the following scale:

0	1	2	3	4
Not at all	Slight extent	Moderate extent	Great extent	Very great extent

	0 Not at all	1 Slight extent	2 Moderate extent	3 Great extent	4 Very great extent
1. I like to use new types of therapy/interventions to help my clients.					
2. I am willing to try new types of therapy/interventions even if I have to follow a step-by-step process.					
3. I know better than academic researchers how to care for my clients.					
4. I am willing to use new and different types of therapy/interventions developed by researchers.					
5. Research based treatments/interventions are not clinically useful.					
7. I would not use a step-by-step therapy/interventions.					
8. I would try a new therapy/intervention even if it were very different from what I am used to doing.					

Modifications to the measures: EBPAS

- EBPAS-50
  - ‘Step by step therapy program that has been researched’ rather than referring to ‘EBP’ or ‘manual’
    - I would adopt ~~an evidence-based practice~~ a step-by-step therapy program that has been researched if I knew more about how my clients liked it.
  - Country rather than state
    - I would adopt a therapy/intervention if it was required by my ~~state~~ country
  - Counselor rather than therapist
    - I am satisfied with my skills as a ~~therapist~~ counselor/case manager.
  - Certificate rather than continuing education
    - I would learn a step-by-step therapy program that has been researched if ~~continuing education credits~~ a certificate was provided.

Organizational Readiness for Change (TCU ORC)
Treatment Staff Version (TCU ORC-S)
(For clinicians only)

Instructions: Please fill in the circle that shows your answer to each item in reference to the clinical setting within which you see the majority of your clients.
FOR TREATMENT STAFF

Disagree Strongly	Disagree	Uncertain	Agree	Agree Strongly	
(1)	(2)	(3)	(4)	(5)	(6) (N/A)

How would you define your "program" or "organization"?
Your program needs additional guidance in –

	1 Disagree Strongly	2 Disagree	3 Uncertain	4 Agree	5 Agree Strongly	6 N/A
1. Assessing client needs.						
2. Matching needs with services.						
3. Increasing program participation by clients.						
4. Measuring client performance.						
5. Developing more effective group sessions.						
6. Raising overall quality of counseling.						
7. Using client assessment to guide clinical and program decisions.						
8. Using client assessment to document program effectiveness.						

Modifications to the measures: ORC

- Removal of questions related to accreditation
- Change wording from “offices” to “work space”
  - Your ~~offices~~ work space and equipment are adequate
- Explicitly referring to TF-CBT training rather than general workshops or conferences
  - You learned new skills or techniques at a professional ~~conference~~ training in the past year

Dimensions of Organizational Readiness-Revised (DOOR-Rev)

(Adapted from MacArthur Foundation CHILD-Steps Project of the Youth Research Network)

Please **rate the importance** of the following factors in the implementation of TF-CBT [*insert name of most successful program*] in your area.

	Not Important 1			**Moderately Important 4**			**Extremely important 7**
D12. Description of the treatments / services that implied they were "evidence based" or "scientifically tested"	1	2	3	4	5	6	7
D13. Leadership support from a project director for the new treatment or service	1	2	3	4	5	6	7
D14. Support for the new treatment or service by particular individuals working with you (other than the project director) who are respected by others	1	2	3	4	5	6	7
D15. Support for it by the relevant public agency (i.e., ministry of health, education)	1	2	3	4	5	6	7
D16. Support for it by clients in your area.	1	2	3	4	5	6	7
D17. Support for it by consumer groups in your country	1	2	3	4	5	6	7
D18. Support for it by other counselors you know	1	2	3	4	5	6	7
D20. Support for it by agencies with which you and/or your organization has contracts	1	2	3	4	5	6	7
D22. Financial benefits from adoption of it (e.g. more grant funding, additional contracts with other organizations)	1	2	3	4	5	6	7
D23. Fit or match between the clinical needs of the populations served and the target population of the intervention	1	2	3	4	5	6	7
D24. Fit or match of it with the philosophy or mission of you and/or your organization	1	2	3	4	5	6	7

Modifications to measures: DOOR-R

- Removal of specific US public agencies (e.g., child welfare, Medicaid)
  - Support for it by the relevant public agency (i.e., ministry of health, ~~child welfare, health, juvenile justice~~, education)
- Removal of questions related to accreditation

Qualitative Measure

- Semi-structured 1-2 hour interview
  - Background
    - How did you happen to get involved in the TF-CBT project?
  - Process of implementation
    - Discuss your experience in how easy/difficult TF-CBT has been to implement?
  - Organizational context
    - How do people in your organization think and feel about the implementation of mental health or psychosocial treatment brought from outside the country?
  - Mechanisms of diffusion
    - Who would you consider “people with influence or leaders” important to the staff here, and what would you say have been their views of and attitudes toward TF-CBT?
  - Overall assessment and future prospects of program
    - What do you see as the prospects of TF-CBT – the ability of sustaining it at your organization?
  - Feedback on interview process

Procedure

- Verbal consent – no identifiers collected
- Qualitative interview
  - All stakeholders (counselors, administrators, staff, and research directors)
- Quantitative measures
  - EBPAS
    - All
  - DOOR
    - All
  - ORC-D
    - Administrators, Research directors
  - ORC-S
    - Counselors, Supervisors

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PRELIMINARY QUALITATIVE THEMES

Qualitative sample to date

- 13 respondents to qualitative
  - Study 1 only = 4
  - Study 2 only = 4
  - Both studies = 5

- Role on studies
  - Counselors = 7
  - Counselor/Supervisor = 3
  - Research team = 4

How did TF-CBT training compare to other types of training?

- Practical and participatory
- Common goal with other trainings to help children
- TF-CBT was structured and systematic

✧The major difference is TFCBT is more practical and participatory; It also had a lot to do with roleplays and practices.

✧The one thing I liked about TF-CBT was giving us the chance to practice among colleagues before actually going to practice in the field.

✧TFCBT involved role-play, also had supervision sessions, the training really molded us in that it put you in a more practical situations with the people you expect to be your clients.

Counselors Perspectives – Emerging Themes

- Feelings about bringing tx in from "outside": Most were skeptics – then turned positive.

I personally and other people thought it was a waste of time but it was later when we understood the process and appreciated it.

People had a positive feeling though at first they were skeptic as they awaited for the results.

Note: Preliminary data analysis only

Counselors Perspectives – Emerging Themes

- Belief that TF-CBT brings about positive changes – excited, appreciate it

  - 90% were very positive about it; because of participation and commitment that everyone put in from that I think you can conclude that they were all happy with the model. For example we had cases where we had to follow our client despite long distance and we had to travel from that I think there was total commitment.

  - Yes, we think it's a good venture that could help people who are traumatized recover and so it should be an ongoing program.

Note: Preliminary data analysis only

Counselors Perspectives: Emerging Themes

1. All stated they knew nothing about TF-CBT before they learned it in these projects.
2. Changes in impressions since these studies
   - Training prepared us well
     - "TFCBT was designed well. I think the people who designed it were very good simply because it was not difficult to put into practice. There was no gap between what we were trained in and what we actually practiced- it was a systematic flow of events"
   - TF-CBT works/helps
   - Added to our skills
   - TF-CBT has become easier to do over time/with practice
3. Characterization of their supervisors was overwhelmingly positive
4. Believed their clients felt: positive, appreciative, and that TF-CBT worked

Note: Preliminary data analysis only

Organizational Themes

- Most organizations did NOT have any prior experience implementing programs like TF-CBT
  - Almost all organizations had implemented “general psychosocial programs”
  - Prior experiences with “general counseling” helped implementation because knew how to establish rapport with children, talk about confidentiality… (general skills)
- TF-CBT has been “embraced” by organizations after the implementation
  - Organizations supported attending training
- Mixed across organizations if there was enough therapists to do TF-CBT (Study 1 had enough; Study 2 did not)

Organizational

- Leadership:
  - Local PI – Dr. Imasiku
  - Local organization that has continued with TF-CBT independently and holds a large number of trained counselors (SHARPZ)

- Problematic for individuals to discuss sustainability within an organization
  - Moved multiple times
  - Not “attached” to an organization implementing it

Policy Level

- Mental Health said not to be priority of government
  - Lack of man power to do this work
  - Focus only on physical health
- Lack of knowledge and acceptance by community

- Recommendation for sustainability
  - MoH bring TF-CBT into training programs/universities
  - More community outreach so folks know about TF-CBT

Implementation Challenges

- HIV infrastructures offered the services – but these held stigma. Often counselors had to find other places to meet.
- Limited resources/staffing
  - Therapist availability and turnover with task-shifting
- Lack of retention specialist or staff focused on following up/engagement.
- NGO had to out-source the counselor positions to other CBOs.
  - Poor for sustainability

Implementation Challenges

- Logistics (e.g., transport; lack of space to meet)
- Client participation/motivation was low – “counseling is not a priority in the community”
- Continuity (e.g. not enough trained, no follow-up program)
- Limited organization to network with on the area of TFCBT, need for partnership with government; Strategy: Dialog with government ministries
- Change of management/leadership
- Policy – buy-in, engagement, commitment, plan

Implementation Facilitators

- Organization giving us what we need (e.g., training, transport, supervision materials)
- Supervisors were supportive

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PRELIMINARY QUANTITATIVE ANALYSIS

Counselor Attitudes

- EBPAS-50 (Aarons et al., 2012)
  - N = 5 – VERY preliminary
- We have not yet collected enough ORCs or DOOR-R measures to complete data analysis due to unforeseen challenges

EBPAS-50 (Aarons et al., 2012)

N = 5	Mean	Standard Deviation
Requirements	2.60	.80
Appeal	3.10	.29
Openness	3.25	.29
Divergence	1.07	.43
Limitations	.34	.46
Fit	3.31	.46
Monitoring	.70	1.10
Competence	2.40	.72
Burden	.60	1.07
Job Security	2.27	1.23
Organizational Support	3.13	.38
Feedback	3.53	.38
Total	3.01	.22

Note: Preliminary data analysis only

Requirements

were happy with it. The *Requirements* factor assesses the extent to which the provider would adopt an EBP if it were required by an agency, supervisor, or state. The *Openness*

US Mean (Aarons, 2005)	Zambia Mean
2.47	2.60

Moderately likely to adopt if it were required by their country

Appeal

tors, the *Appeal* factor assesses the extent to which the provider would adopt an EBP if it were intuitively appealing, could be used correctly, or was being used by colleagues who were happy with it. The *Requirements* factor assesses the

US Mean (Aarons, 2005)	Zambia Mean
2.90	3.10

Greatly likely to adopt if it were appealing

Openness

required by an agency, supervisor, or state. The *Openness* factor assesses the extent to which the provider is generally open to trying new interventions and would be willing to try or use more structured or manualized interventions. The

US Mean (Aarons, 2005)	Zambia Mean
2.49	3.25

Greatly open to trying new interventions

Divergence

Divergence factor assesses the extent to which the provider perceives EBPs as not clinically useful and less important than clinical experience. Previous studies suggest adequate

US Mean (Aarons, 2005)	Zambia Mean
1.34	1.07

To a slight extent view EBPs as less important than clinical experience

Limitations

could best be labeled as 'Limitations' of EBPs and their inability to address client needs. Factor two addresses a

US Mean (Aarons et al., 2012)	Zambia Mean
1.28	.34

Endorsed almost no imitations associated with EBPs

1. EBP detracts from truly connecting with your clients
2. EBP makes it harder to develop a strong working alliance
3. EBP is too simplistic
4. EBP is not useful for clients with multiple problems
5. EBP is not useful for families with multiple problems
6. EBP is not individualized treatment
7. EBP is too narrowly focused

Fit

inability to address client needs. Factor two addresses a dimension related to the 'Fit' of the EBP with the values and needs of the client and clinician. Factor three

US Mean (Aarons et al., 2012)	Zambia Mean
2.90	3.31

Endorsed fit with client needs and clinical approach impacted adoption to a great extent

8. I would adopt an EBP if my clients wanted it
9. I would adopt an EBP if I knew more about how my clients liked it
10. I would adopt an EBP if I knew it was right for my clients
11. I would adopt an EBP if I had a say in which EBP was used
12. I would adopt an EBP if I had a say in how I would use the EBP
13. I would adopt an EBP if it fit with my clinical approach
14. I would adopt an EBP if it fit with my treatment philosophy

Monitoring

relates to negative perceptions of 'Monitoring' or oversight by supervisors. Factor four reflects content

US Mean (Aarons et al., 2012)	Zambia Mean
1.35	.70

Not at all to slight extent endorsing negative perceptions of monitoring

15. I prefer to work on my own without oversight
16. I do not want anyone looking over my shoulder while I provide services
17. My work does not need to be monitored
18. I do not need to be monitored

Competence

oversight by supervisors. Factor four reflects content that addresses perception of skills and downplays the role of science in therapy; therefore we refer to this

US Mean (Aarons et al., 2012)	Zambia Mean
1.59	2.40

Moderate beliefs about perceptions of skill

19. I am satisfied with my skills as a therapist/case manager
20. A positive outcome in therapy is an art more than a science
21. Therapy is both an art and a science
22. My competence as a therapist is more important than a particular approach

Burden

factor as 'Balance'. Factor five relates to the time and administrative 'Burden' associated with learning EBPs.

US Mean (Aarons et al., 2012)	Zambia Mean
1.02	.60

Slight extent of burden associated with EBPs

23. I don't have time to learn anything new
24. I can't meet my other obligations
25. I don't know how to fit EBP into my administrative work
26. EBP will cause too much paperwork

Job Security

Factor six conveys the perceived likelihood of increased 'Job Security' or professional marketability provided by learning an EBP. Factor seven has content that addres-

US Mean (Aarons et al., 2012)	Zambia Mean
1.78	2.27

Training in EBPs provides moderate job security

27. Learning an EBP will help me keep my job
28. Learning an EBP will help me get a new job
29. Learning an EBP will make it easier to find work

Organizational support

learning an EBP. Factor seven has content that addresses perceived 'Organizational Support' associated with learning an EBP. Finally, in contrast to the Monitoring

US Mean (Aarons et al., 2012)	Zambia Mean
3.07	3.13

Great willingness to adopt an EBP if organizational support provided

30. I would learn an EBP if continuing education credits were provided
31. I would learn an EBP if training were provided
32. I would learn an EBP if ongoing support was provided

Feedback

factor, factor eight addresses positive perceptions of receiving 'Feedback' related to providing mental health services.

Table 2 displays the eigenvalues, proportion of variance

US Mean (Aarons et al., 2012)	Zambia Mean
3.19	3.53

Great openness to feedback

33. I enjoy getting feedback on my job performance
34. Getting feedback helps me to be a better therapist/case manager
35. Getting supervision helps me to be a better therapist/case manager

Discussion

- We had more challenges getting this study off the ground than we anticipated
  - Helping the IRB understand what implementation science is
  - Modifying measures to make them more contextually appropriate
- Mixed methods support each other
- Very preliminary – stay tuned…

Future Directions

- Prospective hybrid implementation effectiveness study
- Cascading Training Models – Iraq and Thailand; Zambia
- Assessing appropriateness of measures in LMIC

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