Going Off-Script: Modifications to Cognitive Processing Therapy (CPT) in a Community Mental Health Clinic

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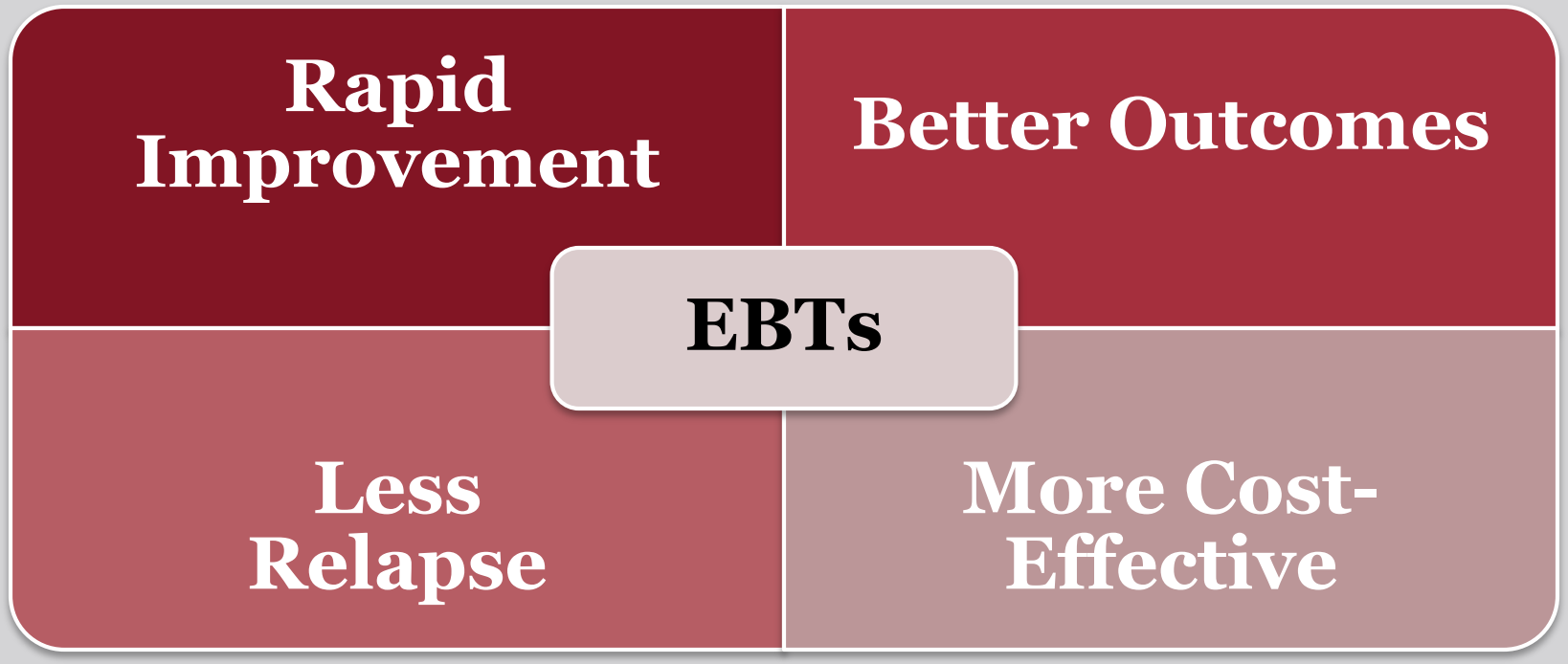
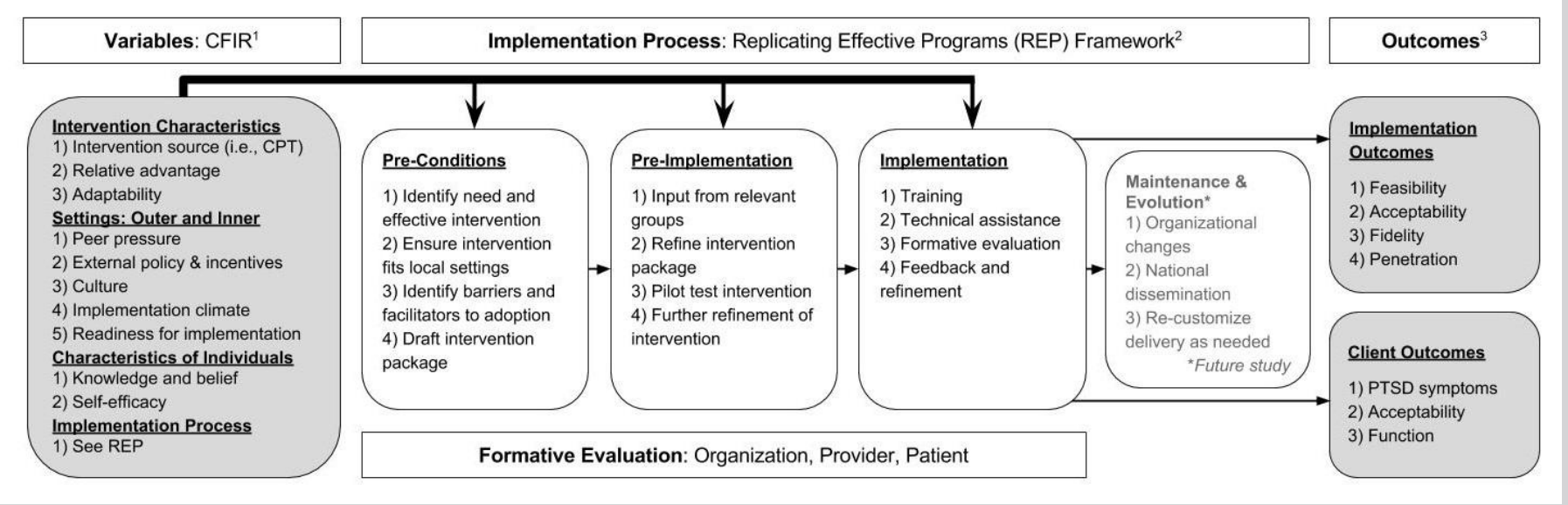
Agenda

- Background
  - Parent US study
  - Treatment fidelity
  - Modification coding
- Present study
  - Method
  - Applied coding framework
  - Modification checklist
- Results
  - Demographics
  - Modifications
  - Comparison sample
- Implications/future directions

Why Evidence-Based Treatments (EBTs)?



Implementation of Cognitive Processing Therapy (CPT) for PTSD in Diverse Communities



[1]Damschroder, L. J., Aron, D. C., Keith, R. E., Kirsh, S. R., Alexander, J. A., & Lowery, J. C. (2009). Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. *Implementation Science*, *4*(1), 50.

[2]Kilbourne, A. M., Neumann, M. S., Pincus, H. A., Bauer, M. S., & Stall, R. (2007). Implementing evidence-based interventions in health care: application of the replicating effective programs framework. *Implementation Science*, *2*(1), 42.

[3]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.

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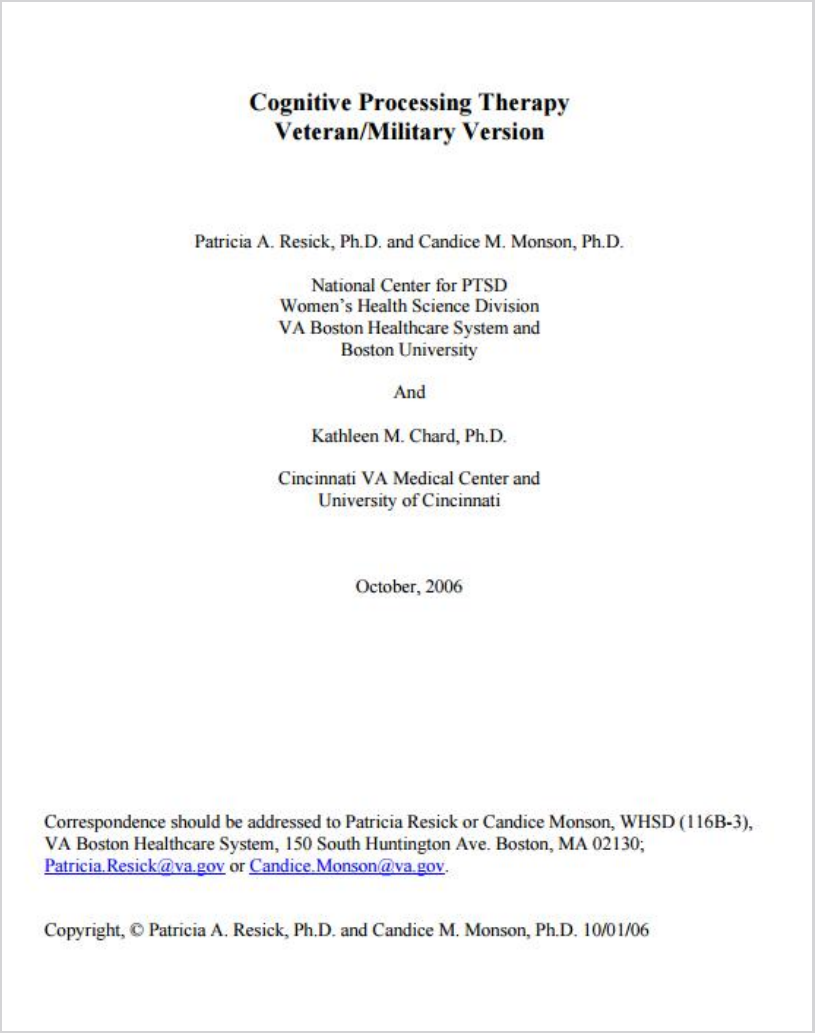
Challenges to Implementation of EBTs

- Fidelity to treatment manuals
  - Particularly salient in diverse, "complicated" community settings
- Role of treatment modifications to EBTs in implementation science



Cognitive Processing Therapy
Veteran/Military Version

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National Center for PTSD
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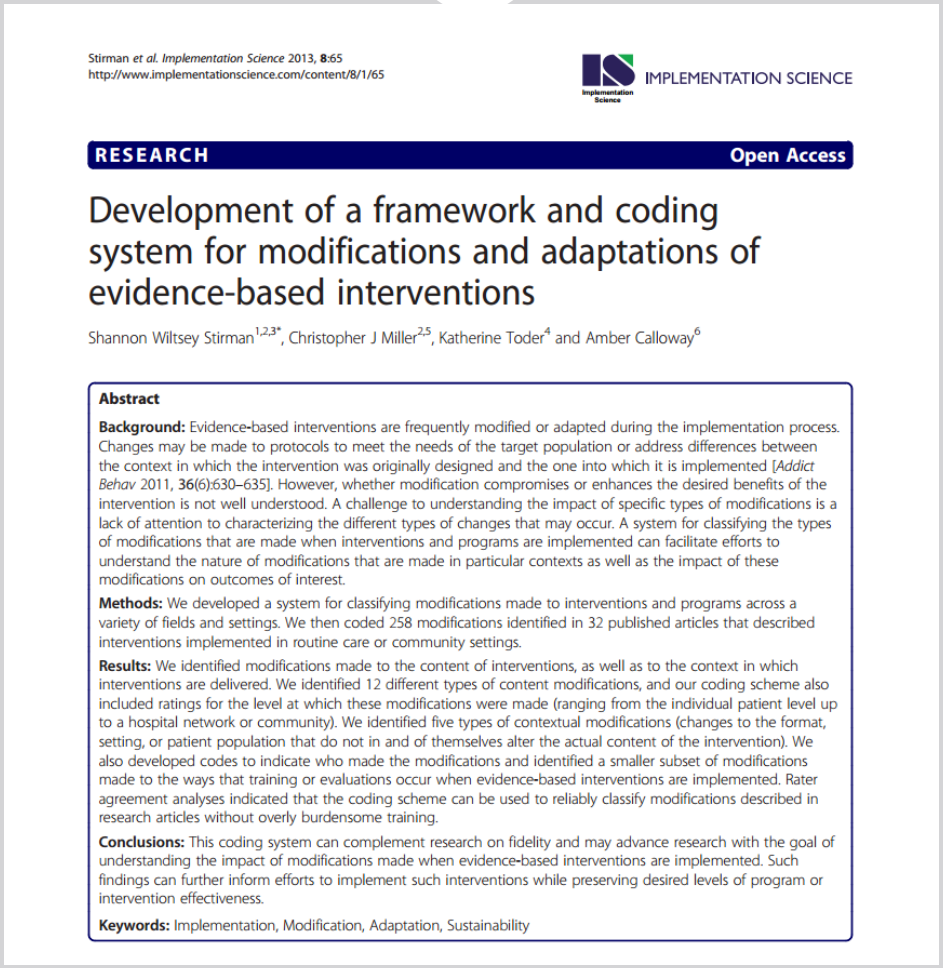
Resick, P.A., Monson, C.M., & Chard, K.M. (2008). Cognitive processing therapy: Veteran/military version. Washington, DC: Department of Veterans' Affairs.

Modifications in EBTs: A Coding Framework



Stirman *et al. Implementation Science* 2013, **8**:65
http://www.implementationscience.com/content/8/1/65

IMPLEMENTATION SCIENCE

RESEARCH Open Access

Development of a framework and coding system for modifications and adaptations of evidence-based interventions

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Abstract

Background: Evidence-based interventions are frequently modified or adapted during the implementation process. Changes may be made to protocols to meet the needs of the target population or address differences between the context in which the intervention was originally designed and the one into which it is implemented [*Addict Behav* 2011, **36**(6):630–635]. However, whether modification compromises or enhances the desired benefits of the intervention is not well understood. A challenge to understanding the impact of specific types of modifications is a lack of attention to characterizing the different types of changes that may occur. A system for classifying the types of modifications that are made when interventions and programs are implemented can facilitate efforts to understand the nature of modifications that are made in particular contexts as well as the impact of these modifications on outcomes of interest.

Methods: We developed a system for classifying modifications made to interventions and programs across a variety of fields and settings. We then coded 258 modifications identified in 32 published articles that described interventions implemented in routine care or community settings.

Results: We identified modifications made to the content of interventions, as well as to the context in which interventions are delivered. We identified 12 different types of content modifications, and our coding scheme also included ratings for the level at which these modifications were made (ranging from the individual patient level up to a hospital network or community). We identified five types of contextual modifications (changes to the format, setting, or patient population that do not in and of themselves alter the actual content of the intervention). We also developed codes to indicate who made the modifications and identified a smaller subset of modifications made to the ways that training or evaluations occur when evidence-based interventions are implemented. Rater agreement analyses indicated that the coding scheme can be used to reliably classify modifications described in research articles without overly burdensome training.

Conclusions: This coding system can complement research on fidelity and may advance research with the goal of understanding the impact of modifications made when evidence-based interventions are implemented. Such findings can further inform efforts to implement such interventions while preserving desired levels of program or intervention effectiveness.

Keywords: Implementation, Modification, Adaptation, Sustainability

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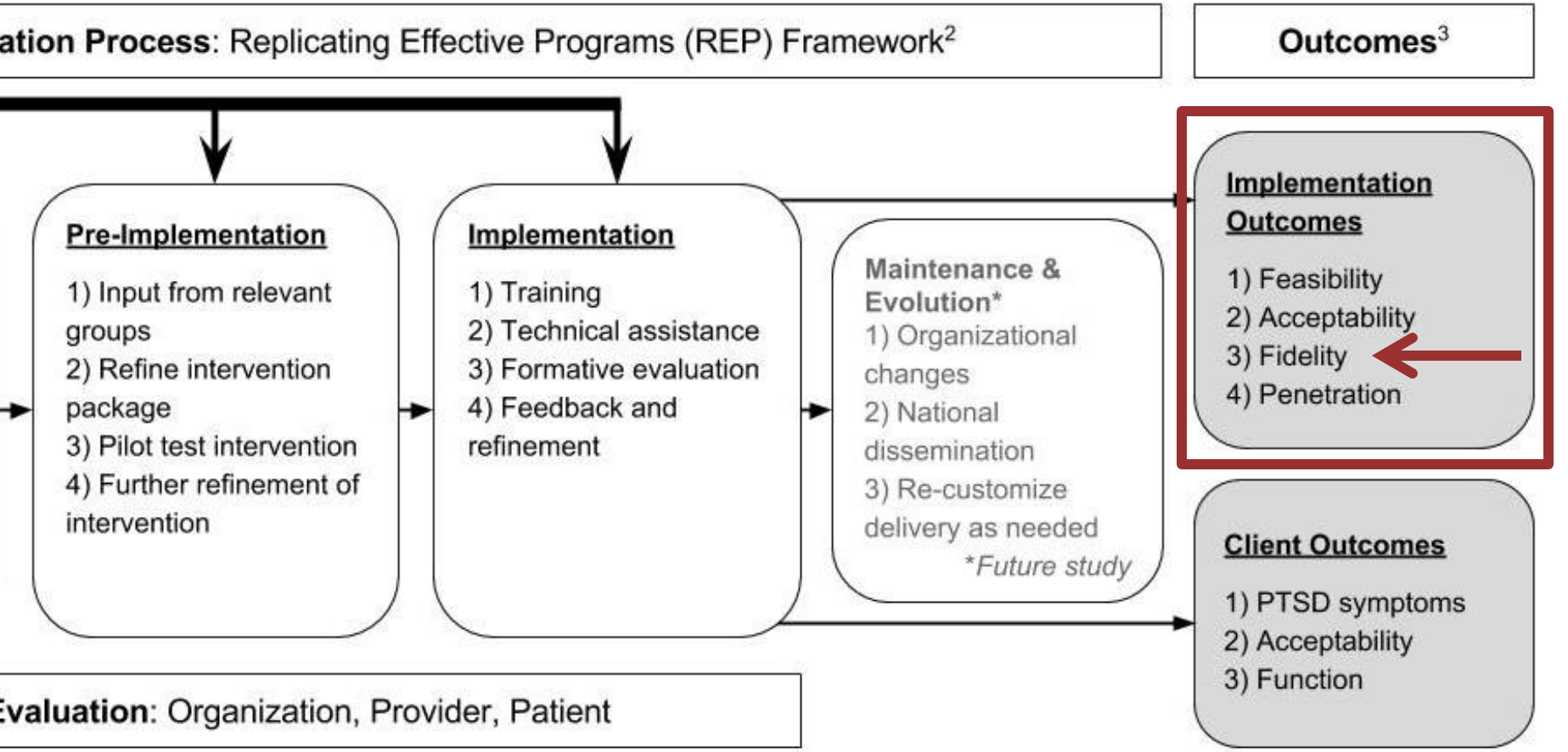
Application of Coding Framework to Our Model



Present Study: Aims

- To utilize the modification coding framework developed by Wiltsey-Stirman et al. (2013)
- To characterize provider modifications to an EBT (CPT) for PTSD
  - Delivered in a diverse community setting in both English and Spanish
  - Providers trained/treatment delivered in 2 waves:
    - Wave 1: CPT-C manual[1]
    - Wave 2: Adapted manual: CPT for Community Mental Health Centers[2]

[1]Resick, P.A., Monson, C.M., & Chard, K.M. (2008). Cognitive processing therapy: Veteran/military version. Washington, DC: Department of Veterans' Affairs.

[2]Marques, L. (2014) *Cognitive Processing Therapy for Community Health Settings.*

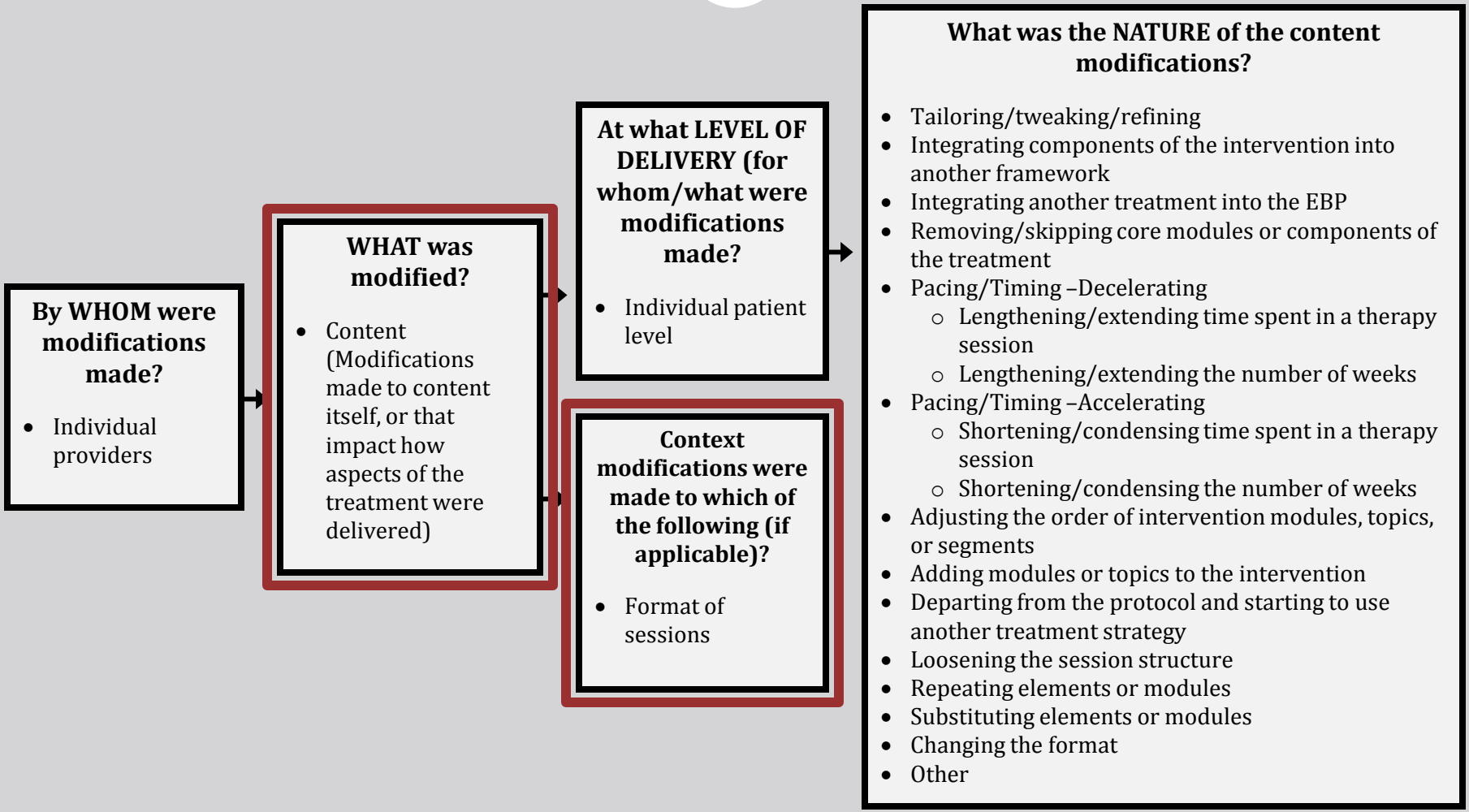
Sample

US Community Sample	Canadian Sample
○ 20 providers	○ 40 providers
○ 60 patients	○ 77 patients
○ 463 CPT sessions	○ 485 CPT sessions/141 rated in full
○ 2 training/delivery waves	○ 1 training/delivery wave

Coding Strategy

- Coding framework
  - Adapted our modification checklist from Wiltsey-Stirman et al. (2013)
  - Achieved 80% reliability between raters

Coding Framework for the Present Study



Our Adapted Modification Checklist

Modification and Adaptation Checklist

Circle: CPT-C **or** CPT-C-Community
Patient ID:
Provider ID:
Week Number:
Reviewer Name:

The examples used in these items can be modified slightly to more accurately reflect the intervention that is being used.

Type of Modification	Check Here
1. Tailoring/tweaking/refining (e.g., changing terminology or language, modifying worksheets in minor ways) Describe:	
3. Integrating another treatment into the EBP (e.g., integrating other techniques into the intervention) Describe:	

What is the NATURE of the Content modification?

1-Tailoring/tweaking/refining: use this code if the clinician describes a change to the EBP that leaves all of the major EBP principles and techniques intact (e.g. modifying language, creating somewhat different versions of handouts or homework assignments, cultural adaptations).

Note: This will be assigned to most CPT-C-Community session.

10. Loosening the session structure Describe:	
11. Repeating elements or modules (e.g., repeating a concept or activity covered in a previous session that was not intended for another session) Describe:	
12. Substituting elements or modules Describe:	
13. Changing the format (e.g., providing treatment in a group or telephone format; having family member attend a session or complete CPT assignments with patient). Describe:	
14. Other:	

Results: Provider Demographics

US Community Sample

Provider Demographics

Characteristic	Providers (n=20) *Mean (SD)*
Age	47.2 (13.6)
Years working in mental health	17.8 (12.0)
Characteristic	*%*
Sex	
Male	20
Female	80
Race	
White	81.3
Black or African American	6.3
Asian	6.3
Native Hawaiian or Other Pacific Islander	6.3
Ethnicity	
Hispanic/Latino	12.5
Not Hispanic/Latino	87.5
Profession	
Social Worker	70
Nurse	10
Psychiatrist	20

Canadian Sample

Therapist Demographics

Characteristic	Therapists (n=40) *Mean (SD)*
Age	42 (11)
Years of practice	11 (8)
Characteristic	*%*
Sex	
Male	32
Female	68
Ethnicity	
White	86
Hispanic	4
Degree	
PhD/PsyD/MD	49
Master's	33
Bachelor's/other	18
Treatment delivery location	
Private practice	36
Community mental health	21
Federal	11
Provincial	18
Other	15

Results: Patient Demographics

US Community Sample

Patient Demographics

Characteristic	Patients (n=60) *Mean (SD)*
Age	39.5 (13.9)
Characteristic	%
Sex	
Male	28.8
Female	71.2
Race	
White	32.8
Black or African American	5.2
Asian	1.7
Latino/Hispanic	51.7
Other	8.6
Ethnicity	
Hispanic/Latino	62.7
Not Hispanic/Latino	37.3
Highest Educational Level	
12 or more	77.2

Canadian Sample

Patient Demographics

Characteristic	Patients (n=77) *Mean (SD)*
Age	40 (14)
Characteristic	*%*
Sex	
Male	41
Female	57
Transgender	1
Race	
White	75
Black	3
South Asian	3
Hispanic/Latino	5
Other	9
Native language	
English	78
French	9
Military/Veteran	
Yes	40
Years of education	
12 or more	65

Results: Modification Frequency (US Community Sample)

- Average number of modifications per session

All sessions		English sessions		Spanish sessions		Canada
English	Spanish	Wave 1	Wave 2	Wave 1	Wave 2	Wave 1
1.64	2.55	1.92	1.28	2.80	2.33	1.09

Results: Modification Type

US Community Sample

	Total English Sessions (n=499*)
1	Loosening the session structure **(24.0%)**
2	Tailoring/tweaking/refining **(15.2%)**
3	Shortening/condensing time spent during therapy visit covering a CPT session **(13.2%)**
4	Removing/skipping core modules or components of the treatment **(9.4%)**

* = total number of modifications identified

Canadian Sample

	485 Total Sessions/141 Rated in Full (n=153/66**)
1	Skipping or Removing Elements **(26%)**
2	Modifying Session Length: Shortening Sessions **(23%)** Lengthening Sessions **(18%)**
3	Extending the protocol beyond 12 sessions **(11.0%)**
4	Repeating or breaking up session elements across more than one session **(7.3%)**

**modifications that span multiple sessions

Results: Modification Type (Community Sample)

	US Community English Only		US Community Spanish Only	
	Wave 1 (n=328*)	**Wave 2 (n=171*)**	**Wave 1 (n=207*)**	**Wave 2 (n=196*)**
1	Loosening the session structure **(21.6%)**	Loosening the session structure **(28.7%)**	Tailoring/ tweaking/ refining **(30.9%)**	Loosening the session structure **(23.0%)**
2	Tailoring/ tweaking/ refining **(15.2%)**	Tailoring/ tweaking/ refining **(15.2%)**	Repeating elements or modules **(14.5%)**	Pacing/Timing–Accelerating Shortening/ condensing time spent during therapy visit covering a CPT session **(19.4%)**
3	Pacing/Timing–Accelerating Shortening/ condensing time spent during therapy visit covering a CPT session **(12.8%)**	Pacing/Timing–Accelerating Shortening/ condensing time spent during therapy visit covering a CPT session **(14.0%)**	Loosening the session structure **(12.1%)**	Tailoring/ tweaking/ refining **(15.3%)**
4	Pacing/Timing-Decelerating--Lengthening/extending number of weeks **(11.9%)**	Removing/skipping core modules or components of the treatment **(9.9%)**	Removing/skipping core modules or components of the treatment **(11.6%)**	Pacing/Timing-Decelerating--Lengthening/extending number of weeks **(8.7%)**

Observed Comparison

- Providers seem to modify differently in a diverse community sample
  - Providers were demographically similar in both samples (white, female, non-Latino), suggesting that modification selection has to do with the relatively different patient samples
- Shortening session length was common in both samples
  - Reasons for this could include logistical barriers to treatment (transportation, child-care access, etc.) and instability in the lives of community patients
  - However, the Canadian sample also saw a similar rate of lengthening of sessions

Implications for Implementation

- Treatment modifications might increase provider satisfaction with an intervention (acceptability)
  - This could have positive implications for sustainability

Further Questions

- What motivates providers to modify?
  - Are they making cultural adaptations?
- How do providers select different modifications for different patients/groups?
- How do modifications impact long-term implementation and patient outcomes?

Thank You

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