A Framework by which to Understand and Apply Evidence-Based Treatments (EBTs): Focus on Culturally Diverse Populations

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Luis A. Vargas
Division of Child and Adolescent Psychiatry
Department of Psychiatry
University of New Mexico School of Medicine

What this Presentation Will Cover

- Examining how Evidence-Based Treatments (EBTs) are defined
- Examining factors related to that application of EBTs to culturally diverse populations
- Exploring the underlying issues of politics, economics, and policy in the dissemination of EBTs
- Exploring other ways of understanding EBTs
- Examining the role of Evidence-Based Practice in the delivery of EBTs

American Psychological Association Task Force Criteria for **Evidence-Based Treatments**

Criteria 1: Well-Established Treatments

- There must be at least two good group-design experiments, conducted in at least two independent research settings and by independent investigatory teams, demonstrating efficacy by showing the treatment to be
  - superior to pill or psychological placebo or to another treatment

    OR
  - equivalent to, or not significantly different from, an already established treatment in experiments with statistical power being sufficient to detect moderate differences

    AND
  - treatment manuals or logical equivalent were used for the treatment
  - treatment was conducted with a population, treated for specified problems, for whom inclusion criteria have been delineated in a reliable, valid manner
  - reliable and valid outcome assessment measures were used, at minimum tapping the problems targeted for change
  - appropriate data analyses

American Psychological Association Task Force Criteria for **Evidence-Based Treatments**

Criteria 2: Probably Efficacious Treatments

- There must be at least two experiments showing the treatment is superior (statistically significantly so) to a wait-list or no treatment control group

OR

- One or more experiments meeting the Well-Established Treatment Criteria with the one exception of having been conducted in at least two independent research settings and by independent investigatory teams

Criterion 3: Possibly Efficacious Treatments

- There must be at least one study showing the treatment to be efficacious in the absence of conflicting evidence

Criteria adapted from Division 12 Task Force on Psychological Interventions (Chambless et al., 1998, Chambless et al., 1996) and from Chambless and Hollon (1998)

Are EBTs Ready for Prime Time?

(Dissemination to All Populations in the U.S. & Internationally)

- Sample problems
- Questions about adapting EBTs for culturally diverse populations
- Methodological issues
- Ethnocentrism of American psychology
- Intertwining of science, politics, power, and privilege
- Selection and matching of common elements
- Alternative frameworks for evaluating EBTs

Should We Be Addressing Culture Rather than Ethnicity?

- Ethnic groupings more typical in studies examining "generic" Evidence-Based Treatment (EBT) for ethnic groups
- Representative numbers of ethnic minorities in efficacy studies not a solution (Miranda et al., 2003)
- Studies of cultural adaptation of EBTs usually focus on "culture" rather than "ethnicity"

To Adapt "Generic" EBTs or Not to Adapt?

On One Hand:

- Differences between ethnic groups can be due to many other variables with which ethnicity has been confounded (Kazdin et al.,1995)
- "Generic" EBT superiority over Usual Care (UR) not reduced by inclusion of minority youth (Weisz et al., 2006)

To Adapt "Generic" EBTs or Not to Adapt?

Huey & Polo, 2008

- No well-established treatments were identified
- Probably efficacious or possibly efficacious treatments were found for ethnic minority youth with anxiety-related problems, attention-deficit/hyperactivity disorder, depression, conduct problems, substance use problems, trauma-related syndromes, and other clinical problems
- Meta-analysis showed overall treatment effects of medium magnitude (d = .44).
- Effects were larger when EBTs were compared to no treatment (d =.58) or psychological placebos (d = .51) versus treatment as usual (d =.22)
- Youth ethnicity (African American, Latino, mixed=other minority), problem type, clinical severity, diagnostic status, and culture-responsive treatment status did not moderate treatment outcome
- Most studies had low statistical power and poor representation of less acculturated youth
- Few tests of cultural adaptation effects have been conducted in the literature and culturally validated outcome measures are mostly lacking

To Adapt "Generic" EBTs or Not to Adapt?

Huey & Polo, 2008

- No compelling evidence as yet that these adaptations actually promote better clinical outcomes for ethnic minority youth
- At least two broad approaches to applying EBTs to ethnic minorities seem justified:
  - Maintain EBTs in their original form and apply only those culture responsive elements that are already incorporated into the EBT protocols (as in study by Silverman, 1999 on CBT for anxious Latinos & European American youth)
  - Allow providers to tailor treatments for ethnic minority youth, but only to the extent justified by client needs

To Adapt "Generic" EBTs or Not to Adapt?

Huey & Polo, 2008

- EBTs for ethnic minorities are not limited to interventions derived from a single conceptual paradigm
- E.g., using CBT or IPT may be preferable to untested alternative therapies when treating depressed Latino adolescents
- Among EBTs, cognitive–behavioral approaches show the strongest record of success with ethnic minority youth
- Family systems treatments, such as BSFT, MDFT, and MST, are supported for youth with conduct problems and drug-related disorders

To Adapt "Generic" EBTs or Not to Adapt?

On the Other Hand:

- Cultural competency hindered by emphasis on EBTs
- 3 consequences of emphasis of EBT (Sue, 2003)
  - Allows critics to attack cultural competency and claim no convincing evidence for its effectiveness.
  - Negates other forms of evidence pertaining to cultural competency
  - The dominance of efficacy studies limiting because forms or knowledge based on discovery rather than hypothesis-testing are often ignored as important sources of information.

To Adapt "Generic" EBTs or Not to Adapt?

- EBT and CST split--a function of different methods and researchers (Nagayama Hall, 2001)
- Cultural competency: a process, orientation or approach not easily defined (Sue, 1998)
- EBTs neglect 3 essential elements of psychotherapy (Norcross, 2003)
  - the person of the therapist
  - the therapy relationship
  - the patient's non-diagnostic characteristics
- "Adaptation of treatments" loosely used (Hwang, 2006)

To Adapt "Generic" EBTs or Not to Adapt?

- Some "generic" EBTs already allow for adaptation

  E.g. MST therapists evaluate the "fit" of initial and ongoing problem behaviors within the youth's larger social context throughout assessment and treatment (Henggeler et al., 1998). This "fit" assessment informs the selection of evidence-based treatment strategies, which are then used to alter individual, family, and contextual factors that contribute significantly to problem behavior.

- Need to include better and multiple measures of culture
- Need to develop guidelines for what "culturally adapted" means in research
- Need to consider developing treatments within a cultural group

To Adapt "Generic" EBTs or Not to Adapt?

Meta-analysis of 76 studies (Griner & Smith, 2006)

- Random effects weighted average effect size was d =.45, indicating a moderately strong benefit of culturally adapted interventions
- Interventions targeted to a specific cultural group were four times more effective than interventions provided to groups consisting of clients from a variety of cultural backgrounds
- Interventions conducted in clients' native language (if other than English) were twice as effective as interventions conducted in English

To Adapt "Generic" EBTs or Not to Adapt?

- Can there be a balance between treatment fidelity and adaptation?
- Examples of culturally adapted EBTs
  - GANA version of PCIT (McCabe et al., 2005
  - Racial Socialization in Parent Training with African American Families (Coard et al., 2004)
  - Chinese Taoist cognitive therapy for Chinese clients with anxiety disorder (Zhang et al., 2002)

Is the Current Approach to the Study of Efficacy "The Gold Standard" for Establishing EBTs?

- The efficacy study is the wrong method (Seligman, 1995); it omits too many crucial elements of what is done in the field
- Percent variance attributable to therapeutic , or specific, factors: **Treatment Method, 8%**; Individual Therapist, 7%; Therapy Relationship, 10%; Patient Contribution, 25%; Interaction, 5%; Unexplained Variance, 45% (Norcross, 2007)
- EBTs focus on average response of patients (Nagayama Hall, 2001)
- EBT in psychology is based on efficacy studies, not effectiveness studies (Cook, 2007)

Is the Current Approach to the Study of Efficacy "The Gold Standard" for Establishing EBTs?

- Nonspecific factors are usually not incorporated into theories (esp., in CBT) and are more often referred to as good clinical practice (e.g., be respectful and warm) in treatment manuals (Bjornsson, 2011)
- Many controls are often not credible; control conditions should be matched as closely as possible with the therapy that is being tested on nonspecific factors like empathy, therapeutic alliance, etc. (Bjornsson, 2011)
- Therapist are likely adapting EBTs on their own, although these adaptations are not being measured

Is the Current Approach to the Study of Efficacy "The Gold Standard" for Establishing EBTs?

- Random Clinical Trials (RCTs) de-emphasize processual aspects of therapy (Elliott,1998)
- Most RCTs represent one version of the intervention and one version of outcome in one setting at one time with one population—problems with representation and extrapolation (Cook, 2007)
- RCTs are still too dependent on traditional statistical significance and often do not include statistics designed to reflect the practical value of results

RCTs Are Improving

- Study of 193 RCTs showed that 84% discussed clinical significance, 46% considered statistical power, 31% interpreted effect size, and 2% interpreted confidence intervals (Faulkner, et al., 2008)
- "What If" Analyses to determine what sample size would be needed to achieve statistical significance, given a particular effect size (Pederson, 2003)

Alternative Approaches Show Promise

- Greater specificity, less generalizability: A lesson from Rational Drug Design where druglets will address, with better effectiveness, the unmet medical needs of smaller and smaller segments of the population
- Alternative approaches like propensity score matching in observational studies may include patients that are more representative of the "real world" than an RCT could provide (Love, 2003)

Should we be taking it a little slower, a little more cautiously?

- Efficacy study results are often overgeneralized (Cook, 2007)
- Is Empiricism the Only Answer?
  - Empiricism itself is culturally based
  - EBT becoming an ideological and economic monopoly (Slife et al. 2005); need for methodological pluralism
  - Concerns about the dogmatism of an exclusive ideology (Bernal & Scharrón-del-Río, 2003); need for discovery-oriented research

Should we be taking it a little slower, a little more cautiously?

- Creating an imperialist fallacy (Ford & Urban, 1998), insisting others adopt a belief or model
- Expanding what we consider evidence, or viewing the world from approaches that derive from other epistemologies (e.g., can application of complexity theory or fuzzy logic provide ways of understanding?)
- Practice-based evidence (Friedman, 2005)
- Community-defined evidence/Community-based participatory research

Do We Really Know What We Think We Know?

Operational Definitions and Arbitrary Metrics

- Because of the empiricist value placed on objectivity, "…the variables most studied and conceptualized in research are the variables most easily observed and operationalized" (Slife, Wiggins, and Graham, 2005)
- Empiricism attempts make non-observables observable through operationalization, a value-laden process that limits an empiricist from studying the meaning of a construct (e.g., culture) (Slife, Wiggins, and Graham, 2005)

Do We Really Know What We Think We Know?

- Operationalization leads to the erroneous idea that studying the observed operationalization of a construct assumes knowledge about the *relationship* between the nonobserved construct (e.g., *culture*) and the operationalization of that construct (Slife, Wiggins, and Graham, 2005)

- What is an arbitrary metric? (Blanton & Jaccard, 2006)

Do We Really Know What We Think We Know?

- Research designed to establish empirical underpinnings of psychotherapy relies on arbitrary metrics (Kazdin, 2006)
- Need for real-world referents
- Implications of operational definitions and arbitrary metrics to culturally responsive therapy

Do Politics, Power, and Privilege Play a Role in the Scientific Study of Treatment Outcome ?

The current Western thinking of the science of psychology in its prototypical form, despite being local and indigenous, assumes a global relevance and is treated as a universal mode of generating knowledge. Its dominant voice subscribes to a decontextualized vision with an extraordinary emphasis of individualism, mechanism, and objectivity. This peculiarly Western mode of thinking is fabricated, projected, and institutionalized through representation technologies and scientific rituals and transported on a large scale to the non-Western societies under political-economic domination. Misra, 1996, as quoted in Marsella, 1998, p. 1285

Do Politics, Power, and Privilege Play a Role in the Scientific Study of Treatment Outcome ?

- "Generic" EBTs are actually culturally based, usually on the dominant society
- RCTs and meta-analytic studies are not immune from unintentional biases
- Every treatment has an underlying, culturally based epistemology
- Exportation of EBTs another form of cultural imperialism (Bernal & Scharrón-del-Río, 2003)

Preserving Diversity in Our Research: Extricating Research from the Enticements of Transnational Capitalism

Transnational Capitalism and EBTs

- Core Value: "The Western way is the good way; national culture is inferior" (from Holly Sklar, editor of *Trilateralism: The Trilateral Commission and Elite Planning for World Management*)
- Goal: "One world of homogeneous consumption…[I am] looking forward to the day when Arabs and Americans, Latinos, and Scandinavians, will be munching Ritz crackers as enthusiastically as they already drink Coke or brush their teeth with Colgate." (from the President of Nabisco Corporation as cited by Jerry Mander, author of *In the Absence of the Sacred*)

Distillation and Matching Model
(Chorpita, Daleiden, & Weisz, 2005)
An Alternative Strategy to the Application of EBTs

"Designed to provide a detailed description of strategies characterizing evidence-based treatments and to circumvent some of the problems associated with using manuals as the level of analysis (e.g., *empirical redundancy*, or the inability to aggregate similar findings across the literature) as well as those associated with rationally defined treatment approaches (e.g., investigator-driven inferences about the boundaries of a treatment approach, a problem type, or some other context variable). The methodology uses frequency patterns in practice techniques to guide the empirical construction of a distillation tree that organizes the selected literature according to any number of a priori selected variables of interest (e.g., disorder type, age, ethnicity, etc.)."

"The model is broadly designed to

- empirically accumulate a map of the treatment practices with favorable treatment outcome data
- promote understanding of the underlying data relations between treatment practices and client or context variables
- facilitate hypothesis generation regarding potential prescriptive heuristics to apply to novel situations."

Distillation and Matching Model (DMM)
(Chorpita & Daleiden, 2009)
An Alternative Strategy to the Application of EBTs

- Use of practice elements, such as assertiveness training, insight building, modeling, praise, problem solving, skill building, time out, etc.
- Indicates what practice elements were used in the efficacious ("winning") studies for what problem with which group (e.g., by age, gender, or ethnicity)
- Provides a working map of the literature

Distillation and Matching Model (DMM)
(Chorpita & Daleiden 2009)
Example of Guidance Provided

- Given the finding "that training parents to praise was more common in studies of anxiety treatments with Asian children (40% vs. 7% for all anxiety), one should consider whether to include praise when working with Asian families, to the extent that five studies in the analysis might be more germane than the larger anxiety literature
- "DMM provides a better definition of the hierarchical sets of the literature from which the clinician should generalize than other reviews might."

Distillation and Matching Model
(Chorpita & Daleiden 2009)
Some Cautions

- In the case of Asian children in previous slide, "cannot conclude that praise is more efficacious with Asian children than not including praise. That inference is possible only from a comparative trial within that population."
- "As with all descriptive reviews, and the literature more generally, much more can be said about what worked than about why something worked."
- "Analysis also cannot speak to the relation of variables outside the model (e.g., treatment setting) to practice element profiles, nor even whether practice elements themselves are the most important part of successful protocols (as opposed to assignment of homework, therapeutic alliance, etc.)."

A Newly Proposed Framework for Classifying Psychotherapies

David & Montgomery, 2011

Therapeutic Package	Theory		
	Well Supported	Equivocal Evidence	Strong Contradictory Evidence
Well Supported	**Category I** Evidence-Based Psychotherapies	**Category II** Intervention-Driven Psychotherapies	**Category V** Good Intervention & Bad Theory-Driven Psychotherapy
Equivocal Evidence	**Category III** Theory-Driven Psychotherapies	**Category IV** Investigational Psychotherapies	**Category VII** Bad Theory-Driven Psychotherapies
Strong Contradictory Evidence	**Category VI** Good Theory & Intervention-Driven Psychotherapies	**Category VIII** Bad Intervention-Driven Psychotherapies	**Category IX** Bad Theory & Bad Intervention-Driven Psychotherapies

A Newly Proposed Framework for Classifying Psychotherapies

Suggestions proposed by Lohr, 2011

Therapeutic Package	Theory		
	Well Supported	**Equivocal Evidence**	**Strong Contradictory Evidence**
Well Supported	**Category I** Hypnosis, Exposure and Response Prevention, Applied Behavior Analysis	**Category II** Dialectical Behavior Therapy	**Category V** Systematic Desensitization, Eye Movement Desensitization & Reprocessing
Equivocal Evidence	**Category III**	**Category IV** Acceptance & Commitment Therapy	**Category VII** Neurolinguistic Programming, Thought Field Therapy
Strong Contradictory Evidence	**Category VI**	**Category VIII**	**Category IX** Critical Incident Stress Debriefing, Attachment Therapy, Recovered Memory Technique

Evidence-Based Practice

- "is the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences" (APA, 2005)
- its purpose is "to promote effective psychological practice and enhance public health by applying empirically supported principles of psychological assessment, case formulation, therapeutic relationship, and intervention" (IOM, 2001)
- a much broader concept that includes the context of the service delivery system and the communities it serves, the composition and structures of the organizations within which the services are delivered, processual and cultural aspects pertaining to the delivery of services, including EBTs

Evidence-Based Practice

- Emphasizes psychometrically sound assessments and evidence-based interventions that are culturally responsive to the communities in which they are implemented
- Matching of treatments to needs identified during assessment is considered alongside clinical expertise and contextual and demographic characteristics
- A scientifically minded, culturally responsive approach, characterized by continual monitoring of interventions provided, the child's and family's response, and events and conditions that impact treatment, can contextualize EBP

Thank You