Progression of Approaches to Interpreting and Translating Evidence on the Effectiveness of Social/Behavioral Interventions

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High Points of My Involvement with Evidence-Based Programs/Practices

- Began meta-analysis research in the mid-80s on interventions for at-risk youth, especially juvenile offenders; still at it
- Member of the Advisory Board for the Blueprints for Violence Prevention program registry
- Co-chair of the Campbell Collaboration Steering Committee and member of the Crime and Justice Group
- Leader of the consulting team advising on the CrimeSolutions evidence standards for meta-analyses of practices
- Developer of the SPEPTM evidence-based assessment of the expected effectiveness of programs for juvenile offenders
- Experience with more than a dozen juvenile justice systems using evidencebased programs and implementing SPEP

(1) Dominant EBP Paradigm: Curated Registries of Manualized Programs

For example:

- CrimeSolutions.gov programs component
- OJJDP Model Programs Guide
- Blueprints for Violence Prevention; now Blueprints for Healthy Youth Development
- Many others in different program areas, e.g.,
 - What Works Clearinghouse (DOE Institute for Education Sciences)
 - Evidence-Based Practices Resource Center (SAMHSA)
 - Social Programs that Work (Arnold Ventures' Evidence-Based Policy)
 - California Evidence-Based Clearinghouse for Child Welfare (California Department of Social Services)

Problems with the Model Programs Approach to Evidence Translation

- Proliferation of named programs and manuals, often variations on the same general intervention modality
- Few qualifying studies of each program; mode is one, relatively rare to have as many as 3
- Limited replication, esp. for routine application, and often inconsistent effects when replicated (e.g., DOE and HHS tiered evidence initiatives)
- Not distinctly more effective than generic versions of the same intervention modality; generic versions used much more often in practice
- Obstacles to uptake: provider resistance, cost, fidelity-adaptation issues, doubts about applicability to local clients and needs
- Little actual uptake; e.g., of >1000 programs in 10 JJ systems, only 7.3% were listed in the CrimeSolutions, Model Programs, or Blueprints registries

(2) Meta-analysis of Multiple Studies of Interventions Using Similar Modalities

- Basis for CrimeSolutions practice component
- Not replication, but can assess robustness of effects and range of plausible outcomes for a given type of intervention
- Makes the considerable heterogeneity of similar interventions and their effects visible and available for analysis
- Applies to generic as well as manualized programs; can also address practices for which there are no standardized protocols (e.g., diversion, intensive supervision, counseling)
- Inclusion of multiple studies with review of their collective results adds credibility to the conclusions

Problems with the Meta-analysis Approach to Evidence Translation

- Too few qualifying studies of some important types of interventions to support meaningful meta-analysis
- Loss of relevant studies for lack of accessible reports or insufficient information to support meta-analysis
- May be limited replication— too few high quality metaanalyses for some types of interventions
- Results typically lack sufficiently specific guidance to support implementation of the effective interventions identified, thus limited uptake
- Can be read to imply that any intervention of a type included in a meta-analysis with a positive mean effect is effective

(3) Identifying the Characteristics of Interventions Predictive of their Effectiveness

- Families of similar interventions have common features that can be summarized in a form that can guide practice without requiring emulation of any one specific program.
- Active exploration is underway of different approaches to conceptualizing, finding, and characterizing such features:
 - Core components (Blase & Fixsen, 2013)
 - Modules (Weisz & Chorpita, 2012)
 - Kernels (Embrey & Biglan, 2008)
 - Practice elements (Chorpita & Daleiden, 2009)
 - Behavior change techniques (Michie et al., 2013)
 - Quality indicators (Smith et al., 2012)
 - Effective program components (Wilson et al., 2020)
 - Change mechanisms (Ng et al., 2020)

A Proof-of-Concept Example of Evidence-Based Guidelines Based on the Characteristics of Effective Interventions

- Meta-analysis of ≈500 experimental/quasi-experimental studies of the effect of diverse interventions on the recidivism of juvenile offenders
- Extensive coding of study and intervention characteristics
- Multiple regression to identify predictors of recidivism effect sizes
- The most influential predictors related to the type of intervention, quality of implementation, amount of service provided, and risk level of youth
- These results were adapted to produce a simple scheme for rating the match between a local JJ program and the profile of the most effective programs of that type (SPEPTM)
- This scheme has been implemented in more than a dozen JJ systems;
 has been applicable to approximately 80% of the programs in use
- Three validation studies have shown that higher scores on this rating are associated with larger reductions in recidivism than otherwise expected

Problems Empirically Identifying Intervention Characteristics Associated with Effectiveness

- Studies of intervention effects typically do not report sufficient detail about the characteristics of the intervention, especially for the intervention as actually implemented
- Meta-analysis and research synthesis often focus on mean effects, not effect heterogeneity or factors associated with effect heterogeneity
- Insufficient number of studies of some intervention types to support meaningful analysis of effect heterogeneity

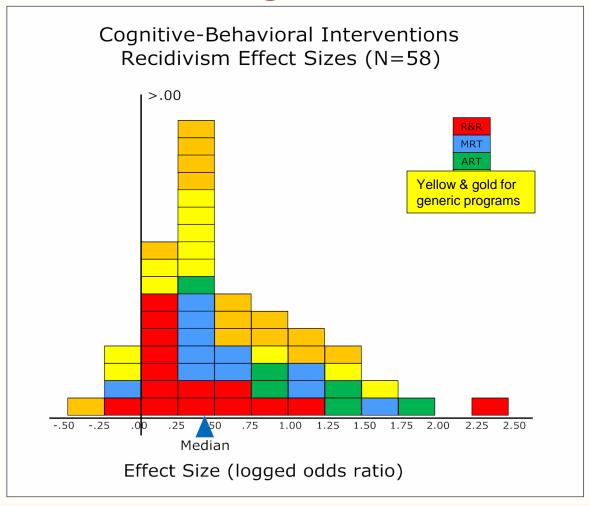


Thanks!

Questions & comments welcomed

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Heterogeneity of Effects in Name Brand and Generic CBT Programs for Offenders



Predictors of Recidivism Effects for Cognitive-Behavioral Therapy with Juvenile and Adult Offenders

In addition to quality of implementation and risk level of offenders:

- Number of sessions per week (2x or more).
- Program components that include
 - Anger control
 - Interpersonal problem solving
 - Not victim-offender mediation