

Integrating Evidence via Systematic Reviews



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Evidence for Violence Prevention Across the Lifespan and Around the World:
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Motivating circumstances for systematic reviews

- Multiple methodologically credible studies of the effects of an intervention of interest on one or more outcomes of interest.
- Recognition that no one study provides a confident basis for action (e.g., possible bias, idiosyncrasies, uncertain generalizability).
- Need for an objective summary of the findings of the full body of relevant evidence that assesses the nature and magnitude of effects and highlights implications for practice and policy.

How systematic reviews are systematic

Approaches evidence integration as a form of methodologically rigorous research:

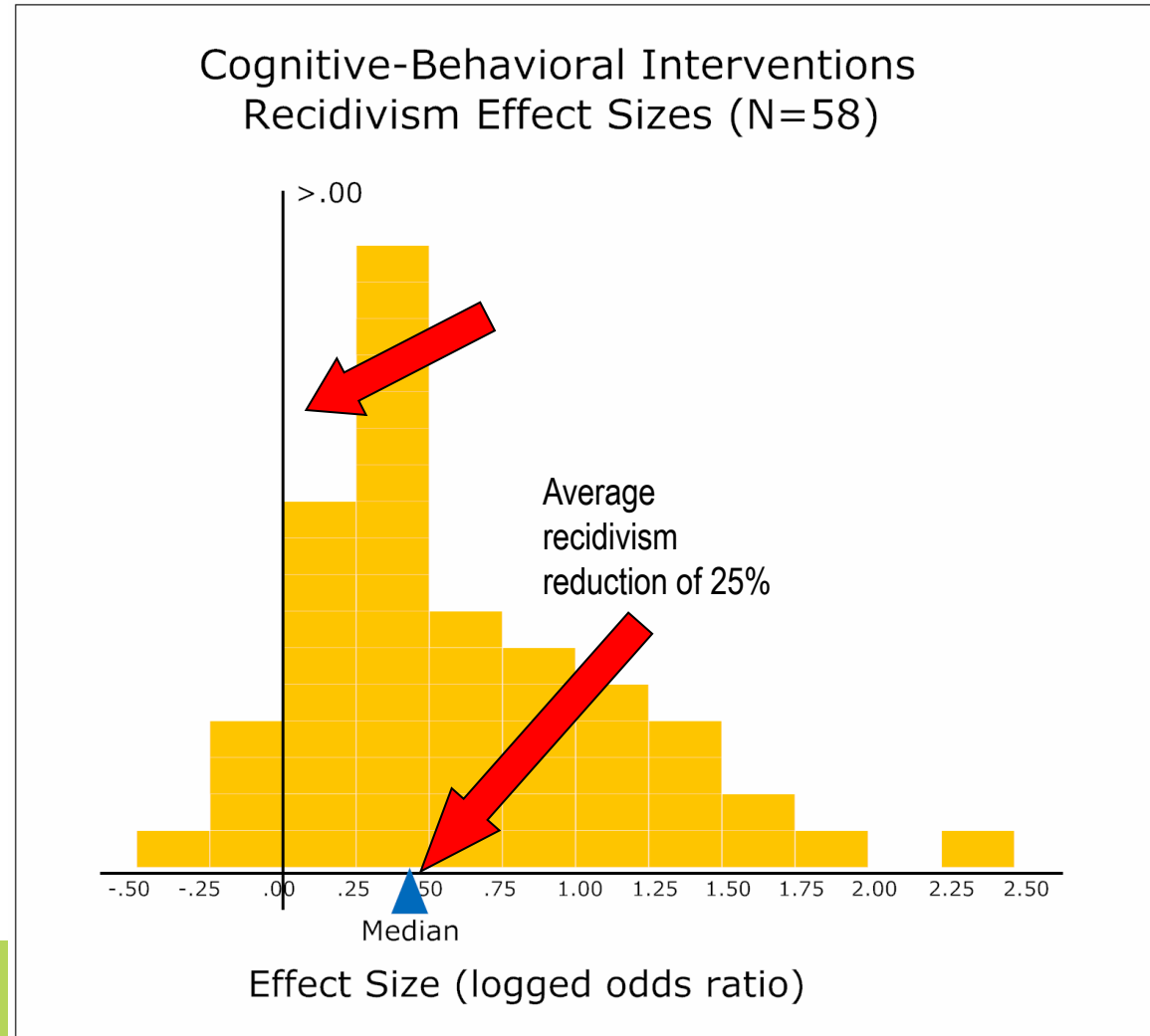
- Explicitly stated research questions
- Specified criteria for eligible studies
- Thorough, well documented literature search; reliable screening judgments
- Objective, reliable coding of the information reported in the eligible studies
- Statistical analysis of the resulting data when possible
- Reporting of results with transparency about data sources, procedures, limitations, etc.

Meta-analysis: A systematic review of quantitative research findings

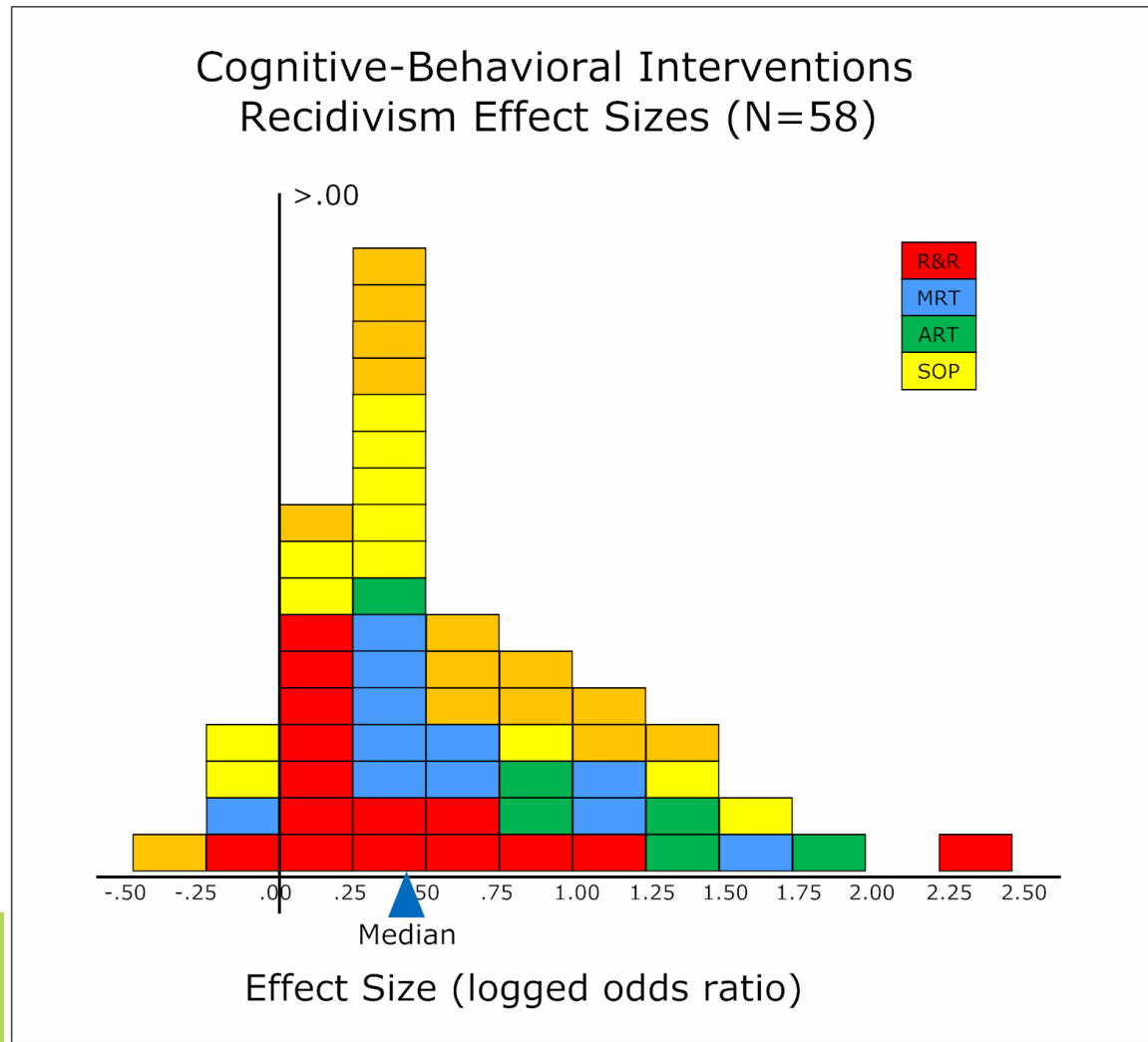
Effect size: The key feature

- Statistical indices of the direction and magnitude of quantitative relationships
- Standardized in ways that allow comparison across different measures of the outcome of interest
- Defined so they do not confound the size of the effect with its statistical significance (a function of sample size)
- Allows statistical analysis of the distribution of effects found across studies
- Contrasts sharply with “vote counting” of statistically significant findings

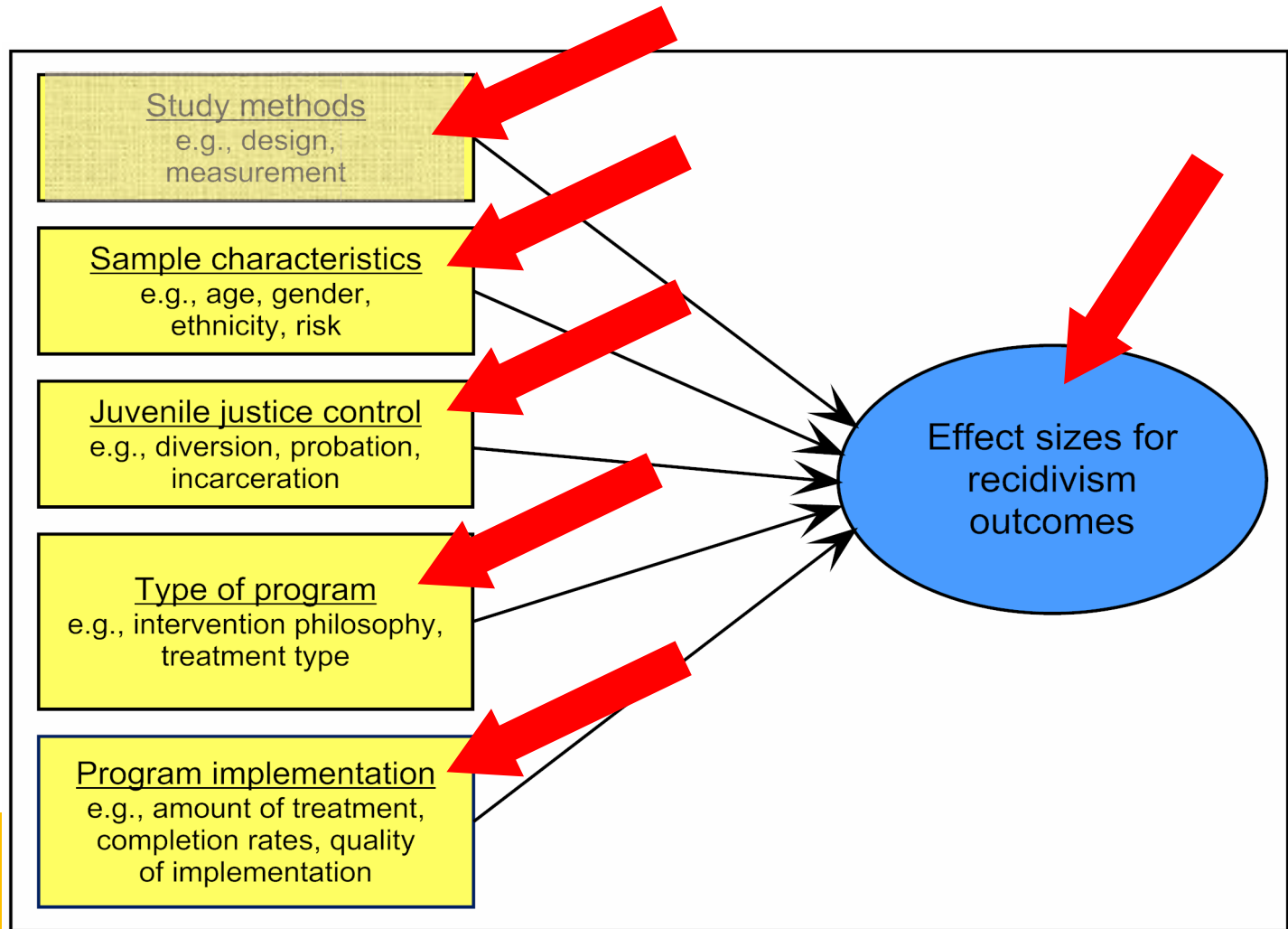
Effect size distribution: Reoffense outcomes of CBT programs for juvenile and adult offenders



Mix of brand name and home grown CBT programs represented in the available studies



Effect sizes analyzed as a function of study and program characteristics



Characteristics of CBT programs associated with larger effects on reoffense rates

Higher risk offenders

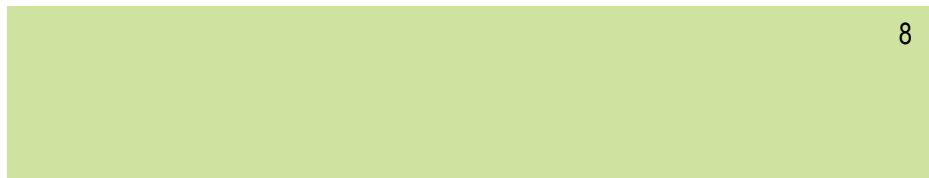
Number of sessions per week (2x or more)

Quality of treatment implementation

- small proportion of noncompleters
- monitoring of program implementation for fidelity

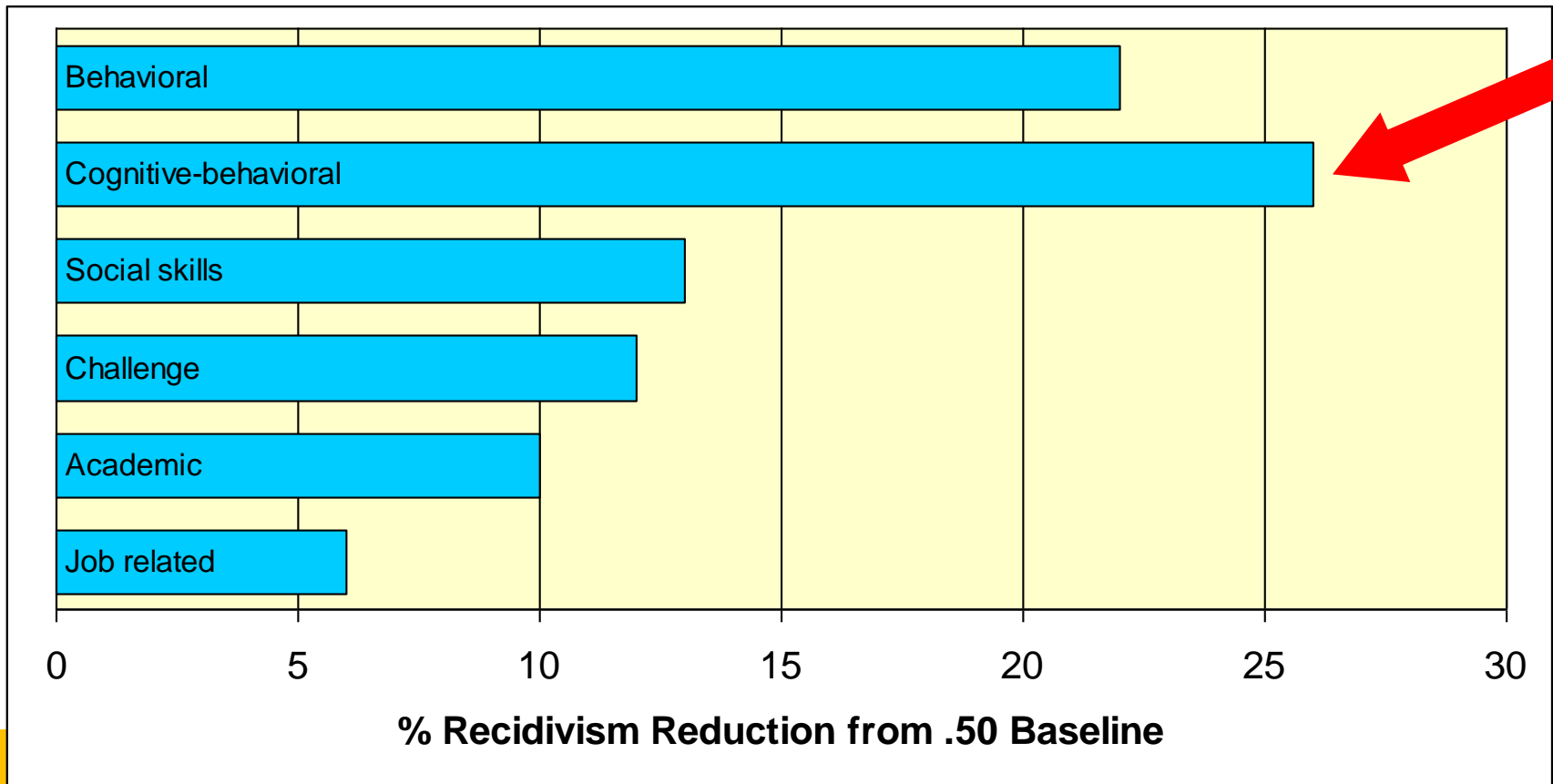
Program components included

- anger control
- interpersonal problem solving

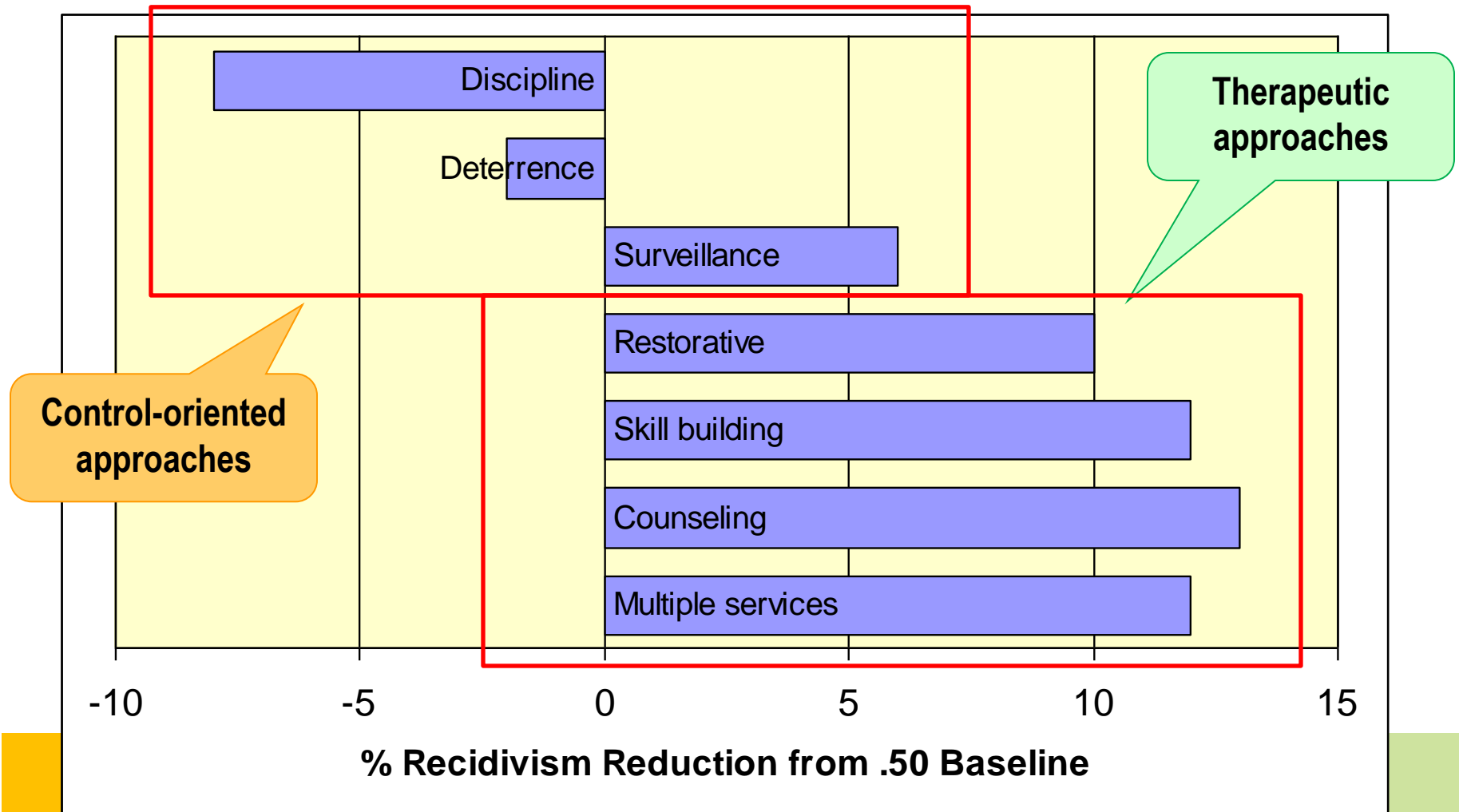


Comparative meta-analysis: Which type of intervention has the largest effects?

Mean effect sizes for skill building interventions with juvenile offenders



Comparative meta-analysis: Which intervention approach has the largest effects?



Where to find high quality systematic reviews

- The **Campbell Collaboration**: Crime & justice, social welfare, education, international development
<http://www.campbellcollaboration.org/>
- The **Cochrane Collaboration**: Health care and health policy <http://www.cochrane.org>
- Publications by many agencies, knowledge transfer organizations, and academic researchers

Campbell Collaboration systematic reviews of interventions for violence

Court-mandated interventions for individuals convicted of domestic violence. Feder, Austin, & Wilson, 2008.

Advocacy interventions to reduce or eliminate violence and promote the physical and psychosocial well-being of women who experience intimate partner abuse. Ramsay, Carter, Davidson, et al., 2009.

Cognitive behavioural therapy for men who physically abuse their female partner. Smedslund, Clench-Aas, Dalsbo, Steiro, & Winsvold, 2007.

Serious (violent and chronic) juvenile offenders: A systematic review of treatment effectiveness in secure corrections. Garrido & Morales, 2010.

Effects of second responder programs on repeat incidents of family abuse. Davis & Weisburd, 2008.

Thanks!

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