



EVIDENCE-BASED PROGRAMMING: INVESTIGATING WHAT WORKS AND WHY

Special Report

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The idea of supporting programs with a proven record of success is gaining popularity among policymakers and other funders of human services whose enthusiasm for investing in interventions not subjected to rigorous study has been dampened by dwindling resources.

This heightened interest in evidence-based programming is placing greater faith in scientists and their research. The demand that programs be forged from scientific evidence seems, on the surface, to be a prudent approach, particularly when trying to stretch limited funds. Evidence-based programming, however, is a complex issue.

Evidence that a program is effective in one community does not necessarily mean it will work just as well in another. Inconsistencies in the quality of studies cloud evidence of program effectiveness. In some program areas, the evidence is too thin to shed much light on whether programs are effective. Some interventions are not studied at all, leaving policymakers little more than anecdotes and assumptions to work with. Some social and behavioral problems themselves defy rigorous scientific study.

Relying on programs shown to be effective elsewhere requires policymakers to consider whether the assumptions they make about evidence-based programs hold up in each case. Common assumptions about these programs include the following:

- Evidence is available for one or more programs that address the issue in question.
- The program is described and packaged in a way that allows others to easily implement it the way it is intended to work.
- Characteristics critical to a program's success are clearly identified and defined.
- The program can be replicated successfully on the local level.
- It is clear that the program is truly evidence-based and worthy of being implemented elsewhere.

Accepting such assumptions has its risks. If any prove false, programs successful elsewhere may fail to live up to their promise when implemented locally.

Availability Of Evidence

The body of evidence available to measure the effectiveness of programs that address the well-being of children, youth, and families varies by domain. It is an important issue when policymakers rely heavily on an evidence-based approach in deciding which programs to support. As it stands today, policymakers have access to quality data on the effectiveness of some programs that address some problems, but little reliable data on which to judge other programs and address other problems.

Policymakers, for example, will find a large body of evidence addressing the effectiveness of programs designed to prevent problem behaviors among adolescents, such as substance abuse, violent behavior, delinquency, risky sexual activity, and school failure. However, policymakers looking at early childhood education will not find much in the way of evidence shedding light on the effectiveness of curricula to promote early literacy and appropriate social-emotional development – areas that are just now emerging in the scientific literature.

In some cases, policymakers may never have sufficient evidence about the effectiveness of programs that address difficult-to-study issues, such as child abuse. Although child abuse is a dangerous and costly problem that raises concern among policymakers and the public alike, creating programs to prevent it and evaluating child abuse interventions is difficult, in part, because of the low frequency the problem occurs in the population.

Description And Packaging

A key factor in adopting a program that has had success elsewhere is whether information necessary to faithfully

replicate it is available. Unfortunately, descriptions of interventions are not always complete and may be lacking in detail.

Studies suggest that even when a program is carefully and faithfully implemented, outcomes may vary from site to site and population to population. Social and behavioral programs do not “travel well” in many cases. It is particularly important that all of the characteristics of a program that are crucial to its success be thoroughly described.

Some of the general characteristics service providers identify as critical to program success are the strength of the relationships built between providers and those they are reaching out to help, how well a program is matched to the needs of those it serves, and the value participants place in the program and its approach.

Such factors are difficult to write into program descriptions, training manuals, and evaluations. Without them, however, a program will not likely find the level of success demonstrated elsewhere that made it so attractive to policymakers in the first place.

Will It Work Locally?

Another question is whether a program will be implemented locally as described or will changes be made to tailor it to a specific site or population.

Skilled practitioners expect to modify programs to meet individual needs and agencies are often eager to match their programs to the characteristics of those they serve. Local regulations and agency policies may interfere with implementing certain aspects of a program as prescribed. In all of these cases, changes made or characteristics not implemented may affect the program and the outcomes produced.

Defining “Evidence-Based”

What qualifies as “evidence-based” is, in many ways, still uncertain. Finding a way to thoroughly assess the extent to which evidence validates a program’s effectiveness is essential.

One reported process¹ is based on the hierarchy of evidence in the Institute of Medicine’s report on prevention² and influenced by discussions in clinical psychology.³

The process leans heavily on randomized trial and interrupted time series design and replication to define progressively higher levels of evidence.

While it represents a strong start toward a reliable process, it has a few shortcomings that are important to consider. For example:

- The process ignores research that uses designs other than randomized trials and times series. By ignoring such studies, it denies policymakers a body of research that may, in fact, offer important insights into the effectiveness of programs, characteristics that contribute to effectiveness, and other information.

- It does not distinguish between failed programs and programs that were not evaluated. A program may get poor marks simply because it was not evaluated.

- It does not consider effect size, cost of implementation, or cost/benefit ratio – all factors that policymakers must carefully weigh.

- It does not have a provision for what characteristics of a program contribute to its success, denying policymakers information they need to be flexible and creative.

“Consensus” Strategy

Such shortcomings suggest that a broader, multifaceted strategy for assessing program effectiveness is needed to arm policymakers with more complete and reliable information on evidence-based services.

An alternative approach is to enlist professionals whose training helps them navigate the complexities, trade-offs, and ambiguities found within research literature. In other words, a consensus group of knowledgeable researchers, practitioners, and policymakers would judge the level of evidence available for programs and identify characteristics that help make programs successful.

An attempt at this process is the Pathways Mapping Initiative of the Project on Effective Interventions at Harvard University,⁴ which convenes groups of experienced researchers and practitioners to help policymakers and others understand what works by defining actions and goals that lead to desired outcomes as well characteristics of effectiveness, rationale, and evidence that certain interventions achieve outcomes.

Characteristics Of Effective Programs

Several common characteristics related to programs, personnel, and participants are often found among effective behavioral interventions.

Effective interventions share several program characteristics, including the following:

- Effective interventions are theory-based, offering a conceptual rationale in addition to evidence that they will achieve desired outcomes.

- They are family-focused. They address all relevant members of the family and seek to mend family relationships and dynamics, create a supportive home environment, and build support for families within their communities.

- Effective programs offer services at a time when people need them and are receptive to them, often during the early stages of a developing behavior.

- The people served by the intervention are sufficiently exposed to services, with those at greater risk receiving higher doses in terms of duration of services, frequency, and the amount of time they are engaged in activities known to result in positive outcomes.

- Services are accessible and convenient.

- Effective programs are careful to match services to the particular needs, culture, developmental level, and circumstances of the people they serve.

Effective interventions share several characteristics related to personnel. For example:

- Program staff are well educated and trained specifically for their responsibilities.

- Staff are well supervised and supported by supervisors who, themselves, are well-educated, trained, and competent.

- Structural supports are provided staff, such as giving them enough time, small caseloads or few children, equipment, consultants, and specialized services.

- Program personnel see participants as being competent and concerned and they build relationships with them that are based on trust and strengthened by warmth, empathy, and sincerity.

Effective interventions also share characteristics related to program participants.

- Participants are found to be engaged in programs that have been proven to be effective. They attend, take

part in services and activities offered, support others, and stay with the program until graduation.

- High risk participants tend to gain the most from the services offered.

The combination of a thorough process of assessing interventions and an inventory of the characteristics that promote success promotes a deeper understanding of programs and enables providers to tailor services to the needs of those they serve. Many of the characteristics of successful programs are seen across a variety of domains, suggesting they are more useful to a far greater range of interventions than any single program could hope to be and that they may have greater longevity, particularly in fields where new evidence surfaces regularly.

References

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This Special Report, written by Jeffery Fraser, is based on the above-referenced publication. It is not intended to be an original work, but a summary for the convenience of our readers. References noted in the text follow:

¹Biglan, A., Mrazek, P.J., Carnine, D., & Flay, B.R. (2003). The integration of research and practice in the prevention of youth problem behaviors. *American Psychologist*, *58*, 433-440.

²Mrazek, R.J., & Haggerty, R.J. (Ed.s) (1994). *Reducing risks for mental disorders: Frontiers for prevention intervention research*. Washington, DC: National Academy Press.

³Chambless, D.L., & Hollon, S.D. (1998). Defining empirically supported therapies. *Journal of Consulting and Clinical Psychology*, *66*, 7-18.

⁴Schorr, L.B. (2003). Determining "what works" in social programs and social policies: Toward a more inclusive knowledge base. <http://www.brook.edu/dybdocroot/views/papers/sawhill/20030226.pdf>.