from the editors

Practice–Based Evidence: Delivering What Works

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Many methods claim to be Evidence-Based Practices. Yet success comes not from a particular practice, but principles that underlie all effective helping. This article uses the principle of consilience to tap knowledge from science, values, and practical experience.
Searching for Evidence

The Evidence-Based movement began in the health care field in the early 1990s. The so-called “gold standard” for medical research was the randomized comparative trial, for example, testing a new drug against a placebo. Such methods may work in medicine but are of limited use in evaluating success in the natural environment. In common usage, Evidence Based refers to practices supported by scientific research. What qualifies as evidence is debated, but more than testimonials or folk psychology are required. With the rationale of accountability and economics, regulators and funders are calling for Evidence-Based Practices. The unintended result is that advocates of every ilk are touting their approaches as “evidence based.”

Even if a method can qualify on a list of Evidence-Based Practice, this says nothing about the quality of the evidence. Evaluating scientific studies (meta-analysis) is itself a separate science. However, these unbiased big picture examinations are complex, so researchers “only rarely accumulate evidence scientifically” (Chalmers, Hedges, & Cooper, 2002, p. 12).

The Dodo Bird Effect

Psychologist Saul Rosenzweig (1936) compared the competition between different treatment methods to a race described in Lewis Carroll’s Alice in Wonderland. As contestants crossed the finish line, the Dodo Bird declared that “everybody has won so all shall have prizes.” Rosenzweig noted that successful treatment outcomes were not due to methods but to common positive factors, notably the helping relationship. If outcome studies favor a particular method, these differences may only be biases. For example, the allegiance effect occurs when advocates hype their approach, while the nonallegiance effect is a negative bias against other methods (Luborsky et al., 2002).

What Helps? What Harms? Based on What Evidence?

These questions highlight the masthead of the Campbell Collaboration website (campbellcollaboration.org). This independent nonprofit organization conducts systematic reviews of social, behavioral, and educational interventions. Methods of meta-analysis are used to compare all relevant research, including studies with contradictory findings that might be hard to locate. Only by pooling and quality checking data can one know what effect the method actually has. And, like a referee calling fouls, bias and research rule breaking are exposed.

The Dodo Bird Effect is provided by Julia Littell (2010) who co-chairs the Campbell Collaboration social welfare group. That analysis evaluated research studies on Multisystemic Treatment (MST) which is a behaviorally-oriented, community-based wrap-around model. On the website for this method, the creators claim, “MST is evidence based and has been shown in rigorous, scientific, gold-standard tests to be superior to other interventions for adolescents exhibiting severe anti-social and criminal behavior” (mstservices.com). But the Dodo Bird Effect prevails. In spite of scores of endorsements by researchers and government bodies, “MST is not consistently better or worse than other services” (Littell, 2010, p. 178).

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The MST findings are typical across models; however, this does not mean that such programs do not work. In fact, most treatments examined in clinical trials meet the criteria to be classified as evidence based, but no particular method is likely to be superior to other purposeful interventions (Wampold, 2010). Of course, a formal model can help engage participants to work collaboratively, and the lack of a systematic approach can cause confusion about goals.

The Search for Success

If highly diverse methods all can claim legitimate research support, what factors actually account for real-world success? The most in-depth discussion of what works in practice is found in The Heart & Soul of Change (Duncan, Miller, Wampold, & Hubble, 2010). This research challenges the medical model that specific treatments produce cures. Instead, universal factors underlie the success—or failure—of interventions.

A cherished principle of medicine is primum non nocere which means first, do no harm. The highest priority is to protect children from biologically and socially toxic experiences. Yet our most troubled and troublesome children are subjected to crisis in families, exclusion from “zero tolerance” schools, rejection by the community, and system abuse by political policies that treat them as disposable kids (Mitchell, 2003).
Only nurturing environments can prevent emotional and behavioral problems and enable children to flourish (Biglan, Flay, Embry, & Sandler, 2012). But the science of positive youth development is at odds with policy and practice, and the currency of caring has been devalued. A powerful voice challenging the depersonalization of helping is that of Mark Smith (2009) who trains child and youth care professionals at the University of Edinburgh. He describes how bureaucrats in the UK declared the term children in care to be stigmatizing and mandated a new label: looked after children. Stripped of the ethic of care, human bonds are replaced by tics in boxes and procedures from “best practices” guides. Smith calls for restoring the traditional vocabulary of helping with terms like curiosity, play, and joy. Similarly, trauma psychiatrist Bruce Perry considers empathy and love endangered in a society that keeps troubled children at arm’s length (Perry & Szalavitz, 2011).

Incredibly, the profession that launched the search for Evidence-Based Practices is profusely prescribing drugs to troubled children, regardless of questions about the long term effects on brain and body (Smith, 2012; Sparks, Duncan, Cohen, & Antonuccio, 2010). This is a particular problem with children in the care system as seen in the accompanying article in this issue (Administration on Children, Youth, and Families, 2012). The American Psychological Association also studied psychoactive medications for children and concluded that “the preponderance of available evidence indicates that psychosocial treatments are safer than psychoactive medications” (APA, 2006, p. 16). Benjamin Franklin was much more direct: He is the best physician that knows the worthlessness of the most medicines.

In spite of rhetoric, do evidence based interventions actually make a difference? A study by the Annenberg Center for School Reform concludes:

The current emphasis on scientific research that demonstrates “what works” overlooks a second critical question for the practitioner. What works, given the needs and values of my students and community and the condition and capacity of my school and district? If this second question is ignored, schools can be led to choose research-based designs and programs that don’t address the needs of their learners and practitioners. (Simmons, 2005, p. 9)

Consilience: The Search for Truth

Difficult problems are best solved by bringing together multiple perspectives, a concept from the philosophy of science called consilience (Brendtro, Mitchell, & McCall, 2009). This little known term literally means the “jumping together” of ideas. But researchers who operate in silos are unaware of how findings from other fields might point to fresh solutions. The historic concept of consilience was reclaimed by Harvard social biologist E. O. Wilson (1998) who notes that modern science is drowning in data and needs some means of identifying what is important.

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Consilience is the search for powerful, simple truths. This requires tapping knowledge from different domains, including natural sciences, social sciences, experience, and values (Wilson, 1998). The sciences are rich sources of untapped data. But unique knowledge also comes from experience—including that of the professional as well as students or families we serve. Finally, interventions must be rooted in humane values lest they mutate into malpractice.

Without a breadth of knowledge, researchers and practitioners lock into narrow views and propose solutions that are simplistic or simply wrong. A French phrase describes this myopia as déformation professionnelle. Psychiatrists Lewis, Amini, and Lannon (2000) provide examples of such professional blindness:

• Psychoanalysis got sidetracked studying sexual urges.
• Behaviorism claimed status of a science but ignored thought and motivation.
• Cognitive psychology left out the deep brain emotions that make us human.
• Drugs, prescribed or not, failed to heal human sorrow, bitterness, or despair.

The search for truth can be informed by fields as diverse as psychology and pedagogy, brain science and anthropology, history and ethics. Insights drawn from different domains can converge around core truths. To illustrate, here are examples from four domains of knowledge:

1. Natural Science: Humans have social brains designed for building trust, empathy, and love (Perry & Szalavitz, 2011).
2. **Social Science**: Behavior is best understood as an individual interacting in the ecology of interpersonal relationships (Bronfenbrenner, 2005).

3. **Experience**: “As I look back over the years, I think our greatest success came as we tried to develop a culture of caring” (Morse, 2008, p. 1).

4. **Values**: In a society which is organized around values of mutual respect, children flourish (Bolin, 2006).

Human relationships are at the core of human happiness and the science of positive psychology (Roffey, 2012).

**Trust and Hope**

A *positive alliance* (trust) and *positive expectations* (hope) are among the most powerful forces to foster learning and therapeutic change. The therapeutic alliance has been documented in more than 1,000 studies (Norcross, 2010; Orlinsky, Ronnestad, & Willutzki, 2004). The helping alliance is also essential to successful living in the family (Bowlby, 1988), school (Bryk & Schneider, 2002), and peer group (Ladd, 2005).


**What Works with Relationship-Wary Youth?**

A fascinating account of how relationships trump technique comes from early research at Achievement Place (Phillips, Fixen, & Wolf, 1973) which evolved into the Teaching-Family Model. This successful pilot used a token economy in group homes for pre-delinquent boys. But attempts to replicate the system failed with staff who could not relate to youth (Wolf, 1978). Researchers set out to discover what led to positive or negative relationships. They enlisted youth to view videos of interactions between staff and students and identify specific adult behaviors they most liked and disliked.

- The youth gave A's to the following teaching-parent behaviors: a calm and pleasant voice tone, offers to help, joking, fairness, explanations, concern, enthusiasm, politeness, and getting to the point.

- F's were given to the following teaching-parent behaviors: throwing objects, accusing, blaming statements, shouting, no opportunity provided to speak, insulting remarks, unfair point exchanges, and profanity. (Wolf, 1978, p. 208)
When staff members were taught these positive behaviors, ratings from students improved. To be effective, techniques must convey genuine empathy and warmth.

Writing in the *Encyclopedia of Brain and Behavior*, Brendtro and Longhurst (2006) synthesized research on neuroscience and resilience to identify practice-based principles for success with youth at risk. A positive alliance enables youth to learn to manage emotions, solve problems, and build strengths. Here is a summary of practical strategies that integrate experience, science, and values:

1. **Reach out to relationship-resistant youth.**
   Young people who most need positive connections have a history of conflict with adults. A classic finding from resilience research (Werner & Smith, 1992) is that youth who evoke negative reactions from adults are on the path to lousy life outcomes, while those who get positive feedback from adults flourish. This requires adults who can override the instinct to respond in kind to kids who attack, avoid, or manipulate. Connecting may not require a major investment of time since bonds are built in natural moment-by-moment interactions. Small doses of nurturance are most effective since forcing intimacy frightens away youth who are in an approach-avoidance conflict with adults. Children not connected to adults are strongly influenced by small cues of respect, humor, and good-will. Their emotional brain signals, “This person is safe.”

2. **Avoid a judgmental tone.**
   Two centuries ago, pioneering educator Johann Pestalozzi worked with rag-tag children roaming the streets of Europe after the Napoleonic wars. He believed that the crowning achievement of education was being able to criticize a youth’s behavior while at the same time conveying love. Unless adults have high expectations, they become what Fritz Redl (Redl & Wineman, 1951) called “friends without influence.” The dilemma is this: we cannot ignore problems out of a desire to be liked by the youth, but criticism conveying anger or disgust only drives youth away. As researchers in the Teaching Family model found, criticism must be delivered in tandem with empathy and positive concern (McElgunn, 2012). A hostile and blaming tone triggers an amygdala alarm in the brain, mobilizing to fight or flee from a perceived enemy. In bold contrast, a respectful tone sends the deep brain message: “This person cares about me.”

3. **Connect in times of conflict.**
   Humans are biologically primed for attachment which is the foundation of safety and security. In crisis, the child seeks support, but punishment intensifies the threat. Troubled youth show pain based behavior, but punitive discipline is designed to administer pain to a youth who shows problems. This archaic system is the vestige of dominator cultures that failed to respect children. It persists under the banner of “zero tolerance” in spite of research showing that punishment and exclusion have zero effectiveness (Skiba & Knesting, 2002). Behavioral problems offer unique opportunities to build trust, respect, and understanding. When in trouble, the child’s brain signals, “Find a trusted person for support.”

4. **Clarify challenging problems.**
   Response Ability Pathways (RAP) uses practice-based principles to help youth develop more effective coping strategies (Brendtro & du Toit, 2005). Successful coping includes two broad goals: managing emotions and solving problems. After connecting, the youth and adult can explore a problem or challenging event to make sense out of what actually happened. For example, a girl was kicked out of class. What triggered this problem, what were her goals and private logic, what was she feeling, how did others respond, and what might be a better way of responding? Reflecting on challenging events can help children learn to manage emotions and intelligently solve problems—the core of resilience. With these new brain pathways, the private logic becomes, “I have the power to direct my destiny.”

5. **Restore harmony and respect.**
   The ultimate goal of a helping alliance is to enable young people to meet their basic needs and live in balance. Peter Benson (1997) of the Search Institute identified 40 Developmental Assets, half which are internal strengths and half which involve external supports. An example of internal strengths is self-control, while external supports could include a caring adult mentor. Both inner conflict and interpersonal discord disrupt what psychiatrist Karl Menninger (1963) called *The Vital Balance*. Many symptoms of emotional and behavioral problems
are attempts to restore balance in brain, body, and social bonds. Menninger called for moving beyond a preoccupation with pathology. Fifty years before the positive psychology movement, Menninger called for a higher goal, helping people to become weller than well.

Gathering Practice-Based Evidence

Science can be an important tool for change. But when empirically validated programs for problem behavior are tested in real world settings, effect can drop to zero: “Clearly the scientific community is in need of feedback” (Dishion & Kavanagh, 2003, p. 186) and researchers have much to learn from practitioners. Practice-Based Evidence comes from systematic, ongoing feedback on how we are delivering what works. That topic is explored by authors of articles in this issue and will become an ongoing regular feature in the Reclaiming journal. Guided by the standard of consilience, powerful truths can be found by integrating science, experience, and values.

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References


**Erratum**

In *Reclaiming Children and Youth, 17*(1), page 55, the author biography should read as follows:

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