The Circle of Courage and RAP Training: The Evidence Base

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*Developing evidence-based interventions is a key focus in programs for children and youth. This concern is shared by researchers and practitioners in education, mental health, and youth justice. It is particularly crucial that children in conflict benefit from true and tested programs. Yet there is much confusion about just what “evidence-based” should mean, and Googling these linked terms yields about thirteen million hits. This article highlights the foundation of evidence for the Circle of Courage and related trainings.*

**Identifying evidence-based interventions turns out to be a complicated process.**

Typically, researchers or government agencies seek to develop lists of approved interventions. This opens a host of issues since the definition of evidence determines who gets a place at the funding table. Debates about research methods, economics, politics, and even blatant conflicts of interest can confuse the search for evidence-based approaches.

Some propose that the “gold standard” for evidence-based research should be the random clinical trial, such as that used in the drug industry. But there is no magic method and, whatever the research methodology, conclusions may be erroneous, biased, or purposely skewed.

Any experimental design can be arranged to maximize the likelihood of an outcome favouring a particular intervention. For example, it is common to compare subjects receiving a carefully planned treatment intervention against a group given no treatment (business as usual). The placebo effect would predict that subjects getting attention would do better just because they are receiving special treatment.

Published research on program effectiveness may not reflect best practices. Thus, many practitioners know how to create successful programs but do not have the expertise to document the effectiveness of these promising practices. Many researchers know how to create tidy research designs but do not know what the most important practical issues might be in designing solid interventions. A related problem is the “file cabinet” dilemma where positive outcomes make it to publication while negative outcomes do not or are even stashed out of sight.

Truth is at risk if key “evidence” is only put forth by investigators who are advocates of a particular method. This may not be intentional deception, but a basic thinking bias of “cognitive dissonance” innate to the human brain (Festinger, 1957). We are comfortable with ideas that fit our existing mindset and seek out evidence that supports these beliefs. But information which challenges our beliefs creates mental stress and the motivation to reject such evidence. Thus, we should maintain a healthy scientific scepticism towards any evidence produced by advocates of a methodology.
Interventions that initially seem to have some positive effects can also produce unintended outcomes. Zero tolerance school policies were supposedly designed to create safer school climates but have the side effect of disengaging from our most needy students. These practices may remove the disruptive individuals but do harm to students at risk and those in negative climates (Skiba & Nesting, 2002).

Drug treatments touted as evidence-based may also backfire with certain individuals. Thus, a drug being marketed for teens with mood problems is Abilify, certainly a slick, strengthsounding branding. The drug passed evidence-based trials by showing improved scores on a “Young Mania Rating Scale.” While it may medicate moods, it does not solve life problems. Worse, it violates the most basic ethic of medicine, “do no harm.” Teens taking this drug can develop Tardive Dyskinesia and endure a lifetime of facial grimacing, tongue protrusion, wild jerking of limbs, and uncontrollable finger movements as if playing an invisible guitar or piano. Ask your doctor about Abilify, an evidence-based intervention.

Evidence-based interventions do not necessarily mean powerful interventions.

There is a big difference between statistically significant change in a study and significant life change in an individual. For example, social skills training might improve tested skills but not transfer to natural situations. Or, discipline systems may change superficial behavior without making life-altering transformation. In neurological terms, enduring change is a result of deep brain learning which creates new neural connections with lasting impact (Brendtro, Mitchell, & McCall, 2009).

Methods which do not target powerful, life-impacting variables will have token effects. Even if studies support a particular program, only people change people. Notably, research in both education (Gold, 1995) and therapy (Safran & Muran, 2000) shows that interpersonal relationships have twice as much clout as methodology. A meta-analysis of therapeutic change published by the American Psychological Association (Hubble, Duncan, & Miller, 1999) shows the impact on outcome of these factors:

<table>
<thead>
<tr>
<th>Factors</th>
<th>Impact (in %)</th>
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<tbody>
<tr>
<td>Personal factors</td>
<td>40</td>
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<tr>
<td>Therapeutic relationships</td>
<td>30</td>
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<tr>
<td>Positive expectations</td>
<td>15</td>
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<td>Techniques</td>
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If interventions are tailored to the person and delivered with positive relationships and expectations, this accounts for the bulk of the variance in positive change. Practices that do not target these powerful variables are nibbling around the edges of change. Thus, it is not surprising that even with methods that have an empirical evidence base, up to half of a group of persons may not respond well to that particular intervention (Messer, 2004).

Bessel van der Kolk, the premiere world expert on trauma in children, has been on the forefront of researching effective interventions with children in conflict for twenty years. He strongly opposes anointing particular methods as “evidence-based” merely because they

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1 From an advertisement in Child and Adolescent Psychiatry, 47(9), 2008.
prevail in narrow comparative studies. In reality, the push to pass out seals of approval for “treatments of choice” violates the spirit of science:

This concern is particularly relevant as long as the findings of neuroscience, attachment, and cross-cultural research remain isolated from an increasingly prescriptive approach to intervention and treatment. (van der Kolk, McFarland, & Weisaeth, 2007, p. xi)

As he is suggesting, only by taking a bio-ecological perspective can we tap the rich range of evidence necessary to meet the needs of those we seek to serve (Bronfenbrenner, 2005).

Children in trouble need powerful, transformative interventions. This will require more than isolated technique, but also comprehensive strategies to strengthen positive human connections and school cultures. To achieve these powerful outcomes, we must move beyond narrow tests of evidence to develop programs that meet the measure of “consilience.”

**Consilience sets a higher standard for evidence: finding powerful simple truths.**

Harvard socio-biologist E. O. Wilson (1998) indicates that all fields of modern science are overwhelmed by the mass of isolated bits of data. The solution to this chaos is to identify simpler, more powerful universal principles. This will require moving beyond the narrow isolation of a particular discipline and its sub-specialty. Consilience involves bringing together relevant findings from both the natural sciences and the social sciences. These can be further cross-checked with knowledge drawn from practice and from values.

As shown in Figure 1, the area of consilience is the circle at the crossroads where these sources of knowledge overlap. This is where evidence for truth is most likely to be found.
Success with challenging youth requires all the knowledge we can muster. When we tap varied perspectives, we avoid trivial pursuit of factoids and the big picture becomes clear. For example, note the consilience in these four views about the essential needs of these children and youth:

- **BIOLOGICAL SCIENCE** reveals that children’s brains have oxytocin-based attachment programs motivating them to seek trusting bonds with caregivers.

- **SOCIAL SCIENCE** shows that children quickly bond to adults who show them respect but that autocratic or permissive adult leaders fuel rebellion or chaos.

- **PRACTICE EXPERTISE** documented by youth work pioneers since Pestalozzi demonstrates that trusting relationships have strong healing power.

- **VALUES** of human dignity call for creating caring environments where every young person, even those most troubled, is treated with dignity and respect.

Consilience is an antidote to simplistic approaches which seek to generate lists of evidence based programs. A good example of consilience is the approach to evidence-based practice of the American Psychological Association (APA, 2006). The world’s largest behavioral research body calls for integrating research from multiple perspectives with practice expertise and individual characteristics. This is shown in Figure 2 which shows three legs of the Evidence-Based Practice stool. One leg is grounded in knowledge from scientific research, broadly defined to incorporate multiple methodologies and fields of knowledge. Next, a foundation of practice expertise includes knowledge, skills, and values which the helper brings to the situation. Finally, knowledge from and about the person being helped informs the choice of intervention methods.
Evidence-based principles are more potent than evidence-based programs.

We are in the business of creating total learning environments. Specific “evidence based” programs can never be exactly duplicated to the original experimental conditions. This core dilemma is how to insure fidelity to some model without blindly following an overly prescriptive or simplistic program. The more one seeks to adhere to a rigid system, the more one sacrifices flexibility to adapt to the unique personal and ecological factors that account for success.

To balance fidelity with flexibility, one must be very clear about the key principles which are at play (Kendall et al., 2008). It is becoming clear that to create powerful environments for learning and growth, principles must inform practice rather than having some pre-packaged program dictating practice.
Ongoing evaluation of the effectiveness of our interventions is hugely important. But, even with a massive research budget, no program will ever come close to “proving” its effectiveness, and with changing conditions, the most marvellous model becomes outdated.

Fortunately, most of the principles that govern successful outcomes have already been extensively researched. This becomes the evidence by which successful practice is measured. We identify evidence-based principles by tapping the broad evidence base of science and practice relevant to the problems we are addressing. In simpler terms, this involves:

a) Fidelity to universal principles that derive from our common human nature.

b) Flexibility in applying these to unique persons, populations, and ecologies.

This will require a “unifying theme” that is shared by all staff and other stakeholders in a program (Wozner, 1982). Otherwise, everyone does their own thing following contradictory or naïve theories of learning and behavior. And, the voice of the student or client must be a primary source of data to inform practice.

**The most fundamental evidence-based principles target universal human needs.**

Decades of research on resilience and positive youth development point to a limited number of factors that have powerful influence on healthy life outcomes. The Circle of Courage resilience model pulls together this evidence from multiple sources. It is based on cross-cultural research on universal human needs by psychologist Larry Brendtro, Native American anthropologist Martin Brokenleg, and education professor Steve Van Bockern (1990, 2002). The Circle of Courage synthesizes positive psychology and practice expertise including indigenous principles of child rearing and education.

The Circle of Courage posits four universal growth needs which apply to children and youth in any culture or learning environment: Belonging, Mastery, Independence, and Generosity. When these needs are met, children thrive. When neglected, children present a host of social, emotional, learning, and behavior problems. The Circle of Courage is being employed in diverse cultural settings world-wide. Figure 3 shows its translation into Maori language and images for use in New Zealand.
Belonging, mastery, independence, and generosity are crucial to learning and positive youth development. These are parallel to the four foundations of self-worth as established in the extensive early research by Stanley Coopersmith (1967) and in recently recovered writings of Abraham Maslow which update his hierarchy of human needs (Koltko-Rivera, 2006). Blending developmental psychology with Maslow’s concepts, we summarize these four growth needs which are universal across cultures:

- Attachment provides safety, significance, and belonging.
- Achievement brings knowledge, competence, and esteem.
- Autonomy builds efficacy, power, and self-actualization.
- Altruism fosters morality, virtue, and self-transcendence.

Recent research indicates that these needs are “hard-wired” in the human brain (Commission on Children at Risk, 2003; Brendtro, Mitchell, & McCall, 2009). Much of the human genome is dedicated to brain processes. Specialized genes build neural pathways preparing us to meet the challenges shared by humans throughout history. These genes interact with experience to enable children to learn to cope with life challenges, the essence of resilience. The large size of the human brain and its twenty-some-year period of maturation are designed to acquire social and cultural learning so children can not only survive but thrive.
Table 1 highlights the evidence base supporting these four growth needs as drawn from key resilience studies (Brendtro & Larson, 2006).

<table>
<thead>
<tr>
<th>Table 1: The Circle of Courage: Evidence Base in Resilience Research</th>
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<tbody>
<tr>
<td><strong>Belonging: Developing Attachment</strong></td>
</tr>
<tr>
<td>• Social competence (1)</td>
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<tr>
<td>• A network of friends, a community where one is respected, humor. (2)</td>
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<tr>
<td>• Caring family; if parents are absent, extended family, siblings, and other adults provide counsel, safety, and support; participation in school and community programs. (3)</td>
</tr>
<tr>
<td>• Relationships, humor, intimate and fulfilling ties to others. (4)</td>
</tr>
<tr>
<td><strong>Mastery: Developing Achievement</strong></td>
</tr>
<tr>
<td>• Problem solving (1)</td>
</tr>
<tr>
<td>• Creativity, open-minded, receptive to new ideas, range of interests, recognizes gifts and talents, willing to dream, creative solutions, redefines problems to find solutions. (2)</td>
</tr>
<tr>
<td>• High expectations, academic success, communication skills. (3)</td>
</tr>
<tr>
<td>• Insight, initiative, creativity, takes on demanding tasks, asks tough questions, gives honest answers, brings order and purpose to chaos. (4)</td>
</tr>
<tr>
<td><strong>Independence: Developing Autonomy</strong></td>
</tr>
<tr>
<td>• Autonomy (1)</td>
</tr>
<tr>
<td>• Independence of thought and action, personal discipline and responsibility, insight into feelings, tolerance of distress, distances from destructive relationships. (2)</td>
</tr>
<tr>
<td>• Personal efficacy, control over one’s environment. (3)</td>
</tr>
<tr>
<td>• Independence, keeps boundaries and emotional distance from troubled persons, initiative, takes charge of problems, exerts control. (4)</td>
</tr>
<tr>
<td><strong>Generosity: Developing Altruism</strong></td>
</tr>
<tr>
<td>• Sense of purpose. (1)</td>
</tr>
<tr>
<td>• Commitment, hope, faith, purpose, understands feelings of others, a sense of destiny. (2)</td>
</tr>
<tr>
<td>• Empathy, caring, productive roles in family and community. (3)</td>
</tr>
<tr>
<td>• Empathy, capacity to give, morality with an informed conscience, values decency, compassion, honesty, fair play, responds to needs and suffering of others. (4)</td>
</tr>
</tbody>
</table>

**Resilience Research Citations:**

Because it addresses universal principles, the Circle of Courage model is relevant across populations and settings. It has been used to create positive climates in schools (Villa & Thousand, 2000) and treatment settings (Brendtro & Shahbazian, 2004). It is particularly applicable to students with disabilities (Meyen, Vergason, & Whelan, 1998), and emotional and behavioral problems (Seita & Brendtro, 2005).

The Circle of Courage provides a value base and unifying theme for practice, but it is not a curriculum or methodology. In practical terms, how does one create total learning environments based on these principles? To address this goal, a specific staff development training, RAP, has been designed to prepare persons to implement the Circle of Courage in their direct work with children and youth.

**Response Ability Pathways [RAP] puts Circle of Courage principles into practice.**

RAP was piloted in newly democratic South Africa where the Circle of Courage informed transformation of services to children and youth. The RAP curriculum was co-authored by Larry Brendtro, Circle of Courage Institute, and Lesley du Toit, of the Interministerial Committee of Young People at Risk in the administration of South African President Nelson Mandela (Brendtro & du Toit, 2005). RAP is now offered by certified trainers in Africa, Australasia, Europe, and North America.

RAP is a universal design training which transcends culture, clientele, and learning environment. It is relevant to educators and youth professionals from any discipline as well as a full range of mentors and caregivers. Grounded in universal human needs, RAP is relevant to all populations of youth.

RAP taps these three natural helping processes:

- **Connecting** to provide support
- **Clarifying** challenges and problems
- **Restoring** harmony (i.e., belonging, mastery, independence, generosity)

RAP strengthens the ability to respond to the needs of youth rather than react to problems. It also builds strengths in youth to take responsible pathways. It avoids reverting to pain-based punishment which mirrors the pain-based behavior of children and youth (Anglin, 2002) and reactivates relationship trauma (Perry, 2008).

RAP courses translate emerging evidence from brain science and varied psycho-educational research into practical terms for success with challenging children and youth. Training is experiential with extensive use of videos and small group practice. A RAP text presents key concepts in highly readable format. Every concept and strategy is carefully referenced to its evidence base.

**Connecting** is the centrepiece of RAP. Urie Bronfenbrenner famously declared that every child needs at least one adult who is crazy about him or her. The developing brains of children are designed to develop over two decades during which elders transmit cultural values. It is not until their twenties that youth gain the full maturity to manage their emotions and make wise and responsible decisions. Throughout most of history, this need for adult guidance was met naturally as children were reared in close caring communities. These
“cultures of respect” still exist in some areas isolated from modern society. For example, in tribal cultures of Highland Peru, every youngster feels valued and nurtured, and children and teens eagerly learn and smoothly grow towards responsibility (Bolin, 200).

Cultural psychologist Rogoff (2002) observes that adults in contemporary culture are themselves isolated from support of relatives and community, and often are less able to attend to meeting the children's needs. The greatest risk facing many of today's youth is they lack positive adult bonds and seek out substitute belonging among other disconnected peers. In sum, youth in modern culture suffer from a veritable “elder deficit disorder.” When the youth subculture is the primary source of values and belonging, children are vulnerable to many risks. RAP addresses this problem by strengthening the ability of adults to build positive bonds, even with youth who distrust or fight adults. Such relationships provide the foundation for building positive peer cultures and pro-social values among youth (Brendtro, Mitchell, & McCall, 2007).

While RAP procedures are grounded in established research, organizations using RAP are encouraged to conduct their own ongoing evaluations. For example, the Mount Richmond special school in Auckland, New Zealand, has trained all school personnel in RAP. External researchers are tracking changes in staff and students using multiple evaluation methods. Initial results suggest that RAP, in combination with crisis prevention training, has led to dramatic reductions in restraints in this setting serving a diverse population of special needs students. During a recent site visit, a group of students who all had been excluded from regular secondary schools were involved with staff mentors in transition planning for their futures around Circle of Courage principles of belonging, mastery, independence, and generosity (Guild, 2008).

Researchers from Pennsylvania State University conducted a preliminary outcome study of RAP training in a school district (Forthun & McCombie, 2007). Teachers trained in RAP were compared with similar teachers who had not completed RAP. Educators with RAP training were less likely to endorse narrow causal factors to explain behavior. They were also less likely to use restrictive interventions or to refer students to others for disciplinary action. RAP-trained professionals were more likely to give encouragement and express warmth to students than those without this training. Negative strategies such as suspension or sending the student from the room were used more often by the untrained group. Thus, RAP training impacts not only ideology about pupil control but decisions on how to address problems by encouraging students to be more positive rather than imposing more restrictions.

The Pennsylvania researchers concluded that these results show that RAP training achieved its goal of encouraging more restorative approaches to challenging behavior. Such outcomes are also notable because it is often difficult to change the orientation of teachers from a custodial style of interaction to one that is more respectful and collaborative. In fact, prior research has shown that classroom teachers tend to become more custodial with longer experience, making it more difficult to alter these established beliefs. Not only beliefs but behavior changed as RAP participants were more likely to use specific interventions to connect with the student and less likely to use coercive or exclusionary methods. The experimenters called for future studies to evaluate the beliefs and behavior of school personnel as well as use experimental designs that tease out the causal processes.
The Developmental Audit® is also based in Circle of Courage and RAP principles.

The Audit is a strength-based assessment model for education, mental health, and youth justice (Brendtro, du Toit, Bath, & Van Bockern, 2007). Traditional diagnosis focuses narrowly on the child’s problems while ignoring the broader ecological forces which create problem behavior. It is often more concerned with diagnosis than prognosis and change (Morse, 2008). The Audit addresses the thinking and emotions behind the behavior to develop a plan for positive learning and development.

The Audit involves the young person as a partner in this assessment process. The Audit includes an ecological scan to identify the nature of the child’s connections in the life space of family, school, peer group, and community. As described in the Journal of the Academy of Child and Adolescent Psychiatry, the Developmental Audit “is a comprehensive tool for identifying a youth’s problems, significant life events, supports and strengths, private logic and coping strategies, and goals for growth in the areas of belonging, mastery, independence, and generosity” (Martindale & Palmes, 2005, p. 504).

Advances in brain science also inform the Developmental Audit process. In particular, many youngsters who have poor control of emotions and impulses are now understood to be showing the effects of early relationship trauma. Early secure bonds with caregivers teach children to calm emotions and gain self control. But this brain maturation process is thwarted by disruptions in early relationships (van der Kolk, McFarlane, & Weisaeth, 2007). Abuse, neglect, loss, and violence disrupt secure bonds leading to terror and utter helplessness. Current diagnostic labels do not fit traumatized children whose core problem is a lack of emotional self-regulation by higher brain processes. They show a range of symptoms including anxiety, fear, guilt, depression, attention deficits, and oppositional or conduct problems. They are alert to cues of rejection and inadvertently re-enact past pain.

By correctly understanding relationship trauma, educators, treatment staff, foster parents, and family members can play important roles in helping these children to heal. Restorative relationships offer trust and the opportunity to explore and reframe past pain in safe environments. While therapists can be helpful, deep healing will require restoring connections with caring adults that counter the thousands of traumatic memories buried in the minds of these children (Perry, 2008). Thus, the Developmental Audit is an important component of a comprehensive strength-based approach to children in conflict in home, school, and community.

Implementing evidence-based principles requires sound professional development.

The best ideas falter if staff members are not able to put principles into practice. We need evaluation models that connect training with our ultimate goal of impacting student outcomes. Guskey (2002) describes five important levels of evaluation of staff development as portrayed in Figure 4. Is the training popular with participants? Do they learn what is intended? If so, is there organizational support to implement changes? Do participants do so with frequency and fidelity? And, finally, the crucial question: Are there positive student outcomes?
Hurdles in Evaluating Staff Training

Hurdle 1: PARTICIPANT REACTION
Rated interesting, clear, relevant

Hurdle 2: PARTICIPANT LEARNING
Gains in knowledge, skills, understanding

Hurdle 3: ORGANIZATIONAL CLIMATE
Supportive team, leaders, resources

Hurdle 4: APPLYING LEARNING
Implemented with frequency and fidelity

Hurdle 5: STUDENT OUTCOMES
Improved behavior, learning, values

Keep focused on student outcomes.

For example, if a staff training curriculum operated with 50% effectiveness at each level, the cumulative impact decays to only about 3% by the time one gets to student outcomes. Thus, from the onset, powerful training needs to focus like a laser on changes we seek in students:

At the level of the individual child or youth:

- Does training focus on meeting universal growth needs of all young persons?
- Does training equip staff to attend to each person’s unique nature and needs?

At the level of the organization and broader community:

- Does training create a unifying theme in staff, youth, and all stakeholders?
- Does training build interpersonal ecologies of dignity and mutual respect?

The “gold standard” for evidence-based interventions with individual youngsters is to provide opportunities to meet their universal growth needs for belonging, mastery, independence, and generosity – and to insure that voices of individual youth are heard so their unique needs and goals can be addressed.

Organizationally, a unifying theme is essential to build a community of shared values among families, schools, peer groups, and the broader community. Only such environments can enlist youth as full partners in their own transformation.


