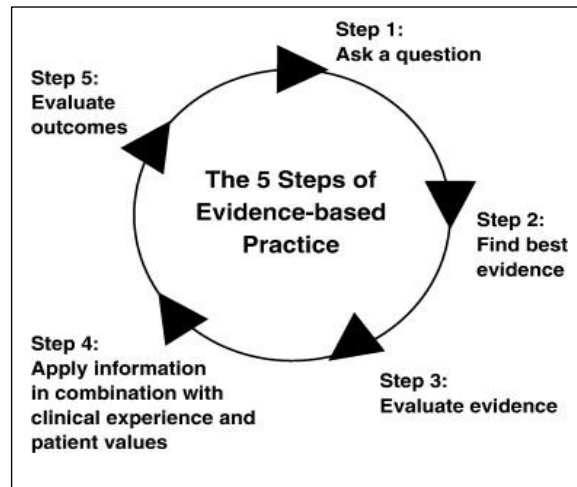


Are the Trainings Offered by the Community Resilience Initiative (CRI) in Walla Walla, Washington (<https://criresilient.org/trainings/>), Evidence Based?

A Summary Assessment - Dario Longhi, Ph.D., Marsha Brown, Ed.D., Oct. 25, 2020

Method – Three criteria need to be met for a practice to be ‘evidence based’. The criteria derive from a pioneering medical paper (Sackett et al., 1996) that discusses the five steps in evidenced-based medical practice: asking for the cause of poor health; finding diagnostic evidence; evaluating it; applying remedies based on past experiential evidence and the individual case conditions; and monitoring/evaluating the outcomes or results. Below is a visual display of the steps involved.



The three types of evidence required are:

1. Best evidence identifying key causes – based on the current state of scientific knowledge (generated ‘externally’ to clinical practices)
2. Evidence of what remedies work in practice - based on past clinical experience and case specific individual conditions
3. Evidence of outcomes/results of remedial practices, which may guide/improve what is asked and done in the future.

The main questions CRI addresses in their practices and trainings are not strictly medical, but the steps are the same, the kinds of questions asked and the kinds of evidence produced are the same:

1. “What causes poor physical and mental health, behavioral problems, poor education and work performance in our communities?” The science: What does new research, new progress of scientific knowledge, tell us?
2. “What can we do about it – how best can we improve well-being in our communities?” The practice: What are some of the best research-based, promising practices?
3. “What outcomes do we obtain from our efforts/trainings?” The learning: Do we learn from our successes and failures by asking deeper questions and by gathering necessary evidence?

Assessment – What kinds of evidence are CRI trainings based on?

The science

CRI trainings are based on what has been called NEAR science: the evolving evidence on human biological and psycho-social development provided by Neuro-biology, Epigenetics, Adverse Childhood Experiences (ACEs) and Resilience.

ACEs

Walla Walla's CRI members were exposed early to the new epidemiological evidence of Anda and Felitti on the health impacts of cumulative trauma generated by adverse childhood experiences (Felitti et al., 1998). Robert Anda came often to Washington, starting fifteen years ago, part of trainings to community networks provided by the Washington State Family Policy Council. Felitti actually visited Walla Walla. Washington was the first state in the country to collect data on the population prevalence of ACEs, providing evidence of the emerging health crisis that Anda wrote about in 2010. Data on prevalence of ACEs became available for many local communities (Hall et al., 2012; Longhi et al., 2020 in press).

CRI trainings now also include the expanding evidence of other sources of trauma, since the publication of the ACE study: race-ethnic and gender violence and food-shelter insecurity experiences plus ethnic minorities' historical experiences generating cultural trauma. Evidence for the traumatic impact of these experiences, named Dual ACEs are accumulating (Cronholm et al., 2015).

Neuro-biology and Epigenetics

Exposure to Van der Kolk's knowledge of ways the 'Body Keeps the Score' also occurred early as brain scan evidence was collected, mainly at Harvard, on the effects of trauma on the development of the frontal cortex and the ways biological inflammatory mechanisms affected physical health. (Shonkoff, 2014). Harvard's Martin Teicher also discussed his research in Washington State trainings ten years ago. New epigenetics evidence was then crucial to suggest the importance of a two or more generational strategy to decrease the prevalence of ACEs (Hall et al., 2012).

Resilience

The science of resilience is the newest to evolve and gain scientific consensus in the past two decades. From an individually based, biological, ability to overcome personal adversities, consensus is growing that resilience is a learned ability to cope with adversities, supported by multilayered, repetitive positive, trusting experiences called BCE (benevolent childhood experiences) (Masten & Barnes, 2018). CRI has followed closely this growing evidence and has been in the forefront of developing measures and strategies to increase so called 'contextual' resilience factors; social cohesion and collective efficacy among adults and supports for youth from families/adults, peers, schools and neighborhoods (Longhi et al., 2020 in press). Higher resilience has been found to be related to community capacity development and culture change (Longhi et al., 2020 in press; Porter et al., 2016, 2017; Srevastav et al., 2019).

The Practice

Evidence on what Walla Walla's Community Network and CRI leaders have achieved in their community intervention practices has been documented by various authorities and researchers.

Family Policy Council research (1998-2012)

The Walla Walla Community Network was found to be one of the twelve Networks to have the highest, 'thriving,' level of community capacity building practices among the forty-two in the State of Washington, consistently, over a period of 12 years. Independent state evaluators made these ratings based on documents provided to them by each Network's board, and approved at open-community meetings. Researchers then analyzed state ACE and resilience data and found that higher community capacity Networks had the highest levels of resilience and were 'bending the curve' downward from a rising national trend among younger generations (Hall et al., 2012; Longhi & Porter, 2009, 2010).

ACE Public Private Initiative (2012-2015)

A set of Washington State private foundations funded a three-year research project and contracted with a nation-wide evaluator, Mathematica, to assess the outcomes of five Networks, including Walla Walla. More thorough community capacity measures were developed (Hargreaves et al., 2017) and an interrupted time series analysis was conducted on a set of outcomes. They found that Walla Walla had developed a set of unique, entrepreneurial, community capacity practices and had made significant improvements on some measurable targeted outcomes (Hargreaves et al., 2015).

MARC, Mobilizing Action for Resilience in the Community (2015-2018)

Walla Walla applied for a Robert Wood Johnson grant and was one of fifteen recipients. The grant provided funding to both national and local evaluators to study practices that increased resilience. The 2018 research report showed how CRI had trained staff in their member organizations, focusing on Trauma Informed Practices (TIPs) that would increase resilience and assessing how organizations and staff had implemented them (Longhi & Brown, 2018).

Summary of Walla Walla Practices Published as 'Lessons Learned'

The set of strategies implemented by CRI were summarized in a paper reviewed and published in a community psychology peer-reviewed journal (Longhi et al., 2019). It covered:

- How prevention initiatives were scaffolded in Walla Walla's four stages of community capacity development, depending on community interest and focus, expanding leadership, learning and ability to work together
- How individual mind-sets changed with new information and evidence, but only if persons had empathy and compassion
- How an alternative school implemented a set of reinforcing system change practices that transformed the school's culture, so that students felt they belonged, felt supported and became more resilient.

The Learning

The advantage of teachers who are also practitioners, NEAR science and practice trainers who are also community organizers, is that they more readily reflect, learn, change.

Change in Trainings due to Findings of Factors that Facilitate Change in Practices (Evidence from a Collaborative Formative Evaluation)

As more Trauma Informed Care trainings were requested and implemented in Walla Walla and qualitative evidence grew about obstacles to change in mind-sets and actual practices, the need became more urgent for a systematic study:

What factors lead to the implementation of new Trauma Informed Practices? Are NEAR science trainings sufficient?

A survey of 217 Walla Walla professionals was conducted, among all recently trained, working in different areas (e.g., counselors, social and health professional, teachers, administrators) and working in agencies of different sizes. It was found that exposure to ACE information was important, and that it had to be accompanied by actual examples of resilience increasing practices, mind-set change exercises, support from work supervisors and from new organizational mission statements and policies (Longhi et al., 2019). Contents of trainings changed in order to include these factors. They were called KISS factors: Knowledge, Insight, Strategy and Structure. It was pointed out, visually and graphically, in the power point slides that Knowledge was necessary, but not sufficient.

Future Possible Changes due to Responses in Course Evaluation Forms –

- Lists of concrete resilience increasing practices are being developed and focus groups are starting to evaluate them
- The success of small teams of coaches helping implement school changes towards Trauma Informed Care in the Walla Walla district
- More time for question answer, dialogue and discussion sessions is being contemplated.

Summary

The CRI trainings meet the three criteria for evidence-based practice:

1. Most recent NEAR science findings,
2. Promising practices based on outcomes from formative evaluations and
3. Trainings that include factors that research shows facilitate implementation of Trauma Informed Care and Community Capacity Building, taught by actual practitioners who continue to learn.

References

- Cronholm, P. F., Forke, C. M., Wade, R., Bair-Merritt, M. H., Davis, M., Harkins-Schwarz, M., Pachter, L.M., & Fein, J. A. (2015). Adverse Childhood Experiences: Expanding the Concept of Adversity. *American Journal of Preventive Medicine*, 49(3): 354-61. <https://doi.org/10.1016/j.amepre.2015.02.001>
- Felitti, V.J., Anda, R.F., Nordenberg, D., Williamson, D.F., Spitz, A.M., Edwards, V., Koss, M.P., & Marks, J.S. (1998). Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults: The Adverse Childhood Experiences (ACE) Study. *American Journal of Preventive Medicine*, 14 (4).
- Hall, J., Porter, L., Longhi D., Becker-Green J., & Dreyfus S. (2012). Reducing Adverse Childhood Experiences (ACE) by building community capacity: A summary of Washington Family Policy Council research findings. *Journal of Prevention & Intervention in the Community*, 40(4): 325-34. DOI: [10.1080/10852352.2012.707463](https://doi.org/10.1080/10852352.2012.707463)
- Hargreaves, M.B., Verbitsky-Savitz, N., Penoyer, S., Vine, M., Ruttner L., & Davidoff-Gore. A. (2015). *APPI Cross-Site Evaluation: Interim Report*. Cambridge, MA: Mathematica Policy Research. Available at <http://www.appi-wa.org/>
- Hargreaves, M.B, Pecora, P.J., & Williamson, G. (2017). Aligning Community Capacity, Networks, and Solutions to Address Adverse Childhood Experiences and Increase Resilience. *Academic Pediatrics*, 17: S7-S8
- Longhi, D. & Brown, M. (2018). *Creating a Culture of Resilience: Lessons Learned*. MARC Grant Final Report. Available at <http://criresilient.org/>
- Longhi, D., Brown, M., Barila, T., Fromm Reed, S., & Porter, L. (2019). How to increase community-wide resilience and decrease inequalities due to adverse childhood experiences (ACEs): Strategies from Walla Walla, Washington. *Journal of Prevention & Intervention in the Community*. DOI: [10.1080/10852352.2019.1633071](https://doi.org/10.1080/10852352.2019.1633071)
- Longhi, D. & Porter, L. (2010). *Effects of higher community capacity among young adults: Fewer Adverse Childhood Experiences (ACEs), higher social/emotional support and better health*. Washington State Family Policy Council.
- Longhi, D., Brown, M., & Fromm Reed, S. (2020 in press). Community-Wide Resilience Mitigates Adverse Childhood Experiences on Adult and Youth Health, School/ Work, and Problem Behaviors. *American Psychology*.
- Masten, A. & Barnes, A. (2018). Resilience in Children: Developmental Perspectives. *Children*, 5(7), 98. <https://doi.org/10.3390/children5070098>
- Parsons, B.A. & Krenn, H. (2018). PCI: A Reflective Evaluation Framework for Systems Change. *The Foundation Review*, 10(1). <https://doi.org/10.9707/1944-5660.1405>

Porter, L., Martin, K., & Anda, R. (2016). *Self-healing communities - A transformational process model for improving intergenerational health*. Robert Wood Johnson Foundation. <http://www.rwjf.org/en/library/research/2016/06/self-healing-communities.html>

Porter L., Martin, K., & Anda, R. (2017). Culture matters: Direct service programs can't solve widespread, complex, intergenerational social problems. Culture-change can. *Academic Pediatrics*, 17, S22-S23. [https://www.academicpedsjnl.net/article/S1876-2859\(16\)30496-X/pdf](https://www.academicpedsjnl.net/article/S1876-2859(16)30496-X/pdf)

Sackett, D.L., Rosenberg, W.M.C, Muir Gray, J.A., Haynes, R.B., & Richardson, W.S. (1996). Evidence based medicine: what it is and what it isn't. *BMJ*, 312: 71-72.

Shonkoff, J.P. (2014). A healthy start before and after birth: Applying the biology of adversity to build the capabilities of caregivers. In K. McCartney, H. Yoshikawa, & L.B. Forcier (Eds.), *Improving the odds for America's children: Future directions in policy and practice* (pp. 28-39). Harvard Education Press.

Srivastav, A., Strompolis, M., Moseley, A., & Daniels, K. (2019). The Empower Action Model: A Framework for Preventing Adverse Childhood Experiences by Promoting Health, Equity, and Well-Being Across the Life Span. *Health Promotion Practice*. <https://doi.org/10.1177/1524839919889355>

Authors' Photos and Short Biographies



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