Children and Youth Services Review 76 (2017) 142–153

Contents lists available at ScienceDirect

Children and Youth Services Review

journal homepage: www.elsevier.com/locate/childyouth

Advancing the measurement of collective community capacity to address adverse childhood experiences and resilience

Margaret B. Hargreaves [g], Natalya Verbitsky-Savitz [h], Brandon Coffee-Borden [g], Lexie Perreras [g], Catherine Roller White [f], Peter J. Pecora [a,*], Geoffrey B. Morgan [i], Theresa Barila [b], Andi Ervin [c], Lyndie Case [d], Renee Hunter [e], Kathy Adams [j]

[a] Casey Family Programs and School of Social Work, University of Washington, United States
[b] Walla Walla County Community Network, Children's Resilience Initiative, United States
[c] Okanogan County Community Coalition, United States
[d] Skagit County Child and Family Consortium, United States
[e] Coalition for Children and Families of North Central Washington, United States
[f] CRW Consulting, United States
[g] Community Science, Gaithersburg, MD, United States
[h] Mathematica Policy Research, Washington, DC, United State
[i] Whatcom Family and Community Network, United State
[j] K Adams Consulting, Bellingham, WA, United State

ARTICLE INFO

Article history:
Received 2 November 2016
Received in revised form 13 February 2017
Accepted 15 February 2017
Available online 17 February 2017

Keywords:
Adverse childhood experiences
Community capacity measurement
Community assessment
Community support
Child maltreatment
Community organization

ABSTRACT

In 2012, the ACEs Public-Private Initiative (APPI), a Washington State consortium of public agencies, private foundations, and local networks, was formed to study interventions to prevent and mitigate adverse childhood experiences (ACEs) and facilitate statewide learning and dialogue on these topics. The evaluation team assessed the extent to which five community sites developed sufficient capacity to achieve their goals, and examined the relationship of the sites' capacity to selected site efforts and their impact on ACEs-related outcomes. To help accomplish that a survey was created to measure the APPI sites' collective community capacity to address ACEs and increase resilience in their communities. This article describes the development, design, implementation, and results of the APPI evaluation's ACEs and Resilience Collective Community Capacity (ARC^3) survey.

1. Introduction

1.1. Focus of the present study

In 2012, the ACEs Public-Private Initiative (APPI), a Washington State consortium of public agencies, private foundations, and local networks, was formed to study interventions to prevent and mitigate adverse childhood experiences (ACEs) and facilitate statewide learning and dialogue on these topics. In 2013, APPI sponsored a rigorous, three-year mixed-methods evaluation of five multifaceted community-based initiatives across the state (APPI, 2013). The final report presents the evaluation's findings, including the results of the evaluation's ACEs and Resilience Collective Community Capacity (ARC^3) survey (Verbitsky-Savitz et al., 2016).

In contrast, this article focuses on the design, development, structure and implementation of the APPI evaluation's ACEs and Resilience Collective Community Capacity (ARC^3) survey – with a brief summary of the survey's results. The evaluation team created the survey to measure the APPI sites' collective community capacity to address ACEs and increase resilience in their communities. The survey was developed to fill a significant measurement gap; no valid and reliable measures of collective community capacity to address ACEs and resilience were found through an extensive literature review. This article answers three research questions regarding the ARC^3 survey: (1) Can a survey be developed to measure the multi-dimensional concept of *collective community capacity?* (2) Do the ARC^3 survey items cluster together in terms of how well they perform as *collective community capacity measures*? (3) Can the ARC^3 survey distinguish between how well various communities perform on different dimensions of *collective community capacity-building?*

1.2. Significance of adverse childhood experiences (ACEs) and resilience

ACEs—commonly defined as 10 types of child abuse, neglect, and family exposure to toxic stress — are a complex population health

* Corresponding author.
E-mail address: ppecora@casey.org (P.J. Pecora).

http://dx.doi.org/10.1016/j.childyouth.2017.02.021
0190-7409/

problem with significant detrimental outcomes. The ACEs are (1) emotional abuse, (2) physical abuse, (3) sexual abuse, (4) emotional neglect, (5) physical neglect, (6) mother treated violently, (7) household substance abuse, (8) household mental illness, (9) parental separation or divorce, and (10) incarcerated household member. (See https://www.aap.org/en-us/Documents/ttb_aces_consequences.pdf). The seminal ACE study, conducted among adult members of a health maintenance organization in Southern California in the late 1990s, had two major findings. First, exposure to ACEs is related to a range of poor adult outcomes, including increased risk of alcohol and drug use, mental health problems, poor physical health, and risky behaviors (Felitti et al., 1998). Subsequent research demonstrated that toxic stress, associated with exposure to ACEs, disrupts neurodevelopment and leads to (a) impaired decision making, impulse control, and resistance to disease; (b) increase in adoption of risky behaviors; and (c) early onset of disease, disability, and death (Center of the Developing Child at Harvard University, 2016).

Second, the ACE study found that ACEs are very common in the general population, with about one in four adults reporting three or more ACEs. The Centers for Disease Control and Prevention (CDC) confirmed these findings in their 2009 five-state study (CDC, 2010). (These findings are based on a large representative sample of adults in Arkansas, Louisiana, New Mexico, Tennessee, and Washington states using the 2009 Behavioral Risk Factor Surveillance System (BRFSS), ACE module data). Later research found that ACEs are even more prevalent among children living in non-parental care and children who had contact with the child welfare system (Bramlett & Radel, 2014; Stambaugh et al., 2013).

Because ACEs pose a significant public health problem, national leaders in health care, public health, and child development have identified ACEs as "the single greatest unaddressed public health threat facing our nation today" (Harris, 2014). In response, more national and state government leaders, foundations, researchers, social service agencies, and concerned communities are working (a) to increase awareness and understanding of the impact of ACEs, (b) to develop effective strategies to prevent ACEs, increase resilience, alleviate trauma, break the complex cycle of intergenerational transfer of ACEs from parents to their children, and (c) support communities as they promote healthy child and adult development (Robert Wood Johnson Foundation, 2015). These initiatives include broad dissemination of ACEs-related research, science-based prevention, early intervention, treatment interventions, and public health initiatives (Center on the Developing Child at Harvard University, 2016; CDC, 2016; Foundation for Healthy Generations, 2014).

There is also a substantial scientific literature (e.g., Cicchetti, 2013; Masten, 2014; Rolf, Masten, & Cicchetti, 1993) and an allied movement to increase resilience at both individual and community levels (Pinderhughes, Davis, & Williams, 2015; Ungar, 2011) that we lack space to review in this article, but we do find Ungar's work to be among the most informative for resiliency: "in the context of exposure to significant adversity, resilience is both the capacity of individuals to navigate their way to the psychological, social, cultural, and physical resources that sustain their well-being, and their capacity individually and collectively to negotiate for these resources to be provided in culturally meaningful ways" (Ungar, 2011, p. 1742). For example, new resilience-focused interventions are being developed to help individuals build more effective skills for coping with adversity (Center on the Developing Child at Harvard University, 2016) and community-level strategies are being implemented (e.g., Linkenbach, 2016; Sege & Linkenbach, 2014).

1.3. Washington State Family Policy Council networks

In 1992, the state of Washington enacted legislation creating an interagency Family Policy Council (FPC) to carry out principle-centered systemic reforms to improve outcomes for children, youth, and families. Additional legislation in 1994 authorized the FPC to create local networks to address specific issues: child abuse and neglect, domestic violence, youth violence, youth substance abuse, dropping out of school, teen pregnancy, youth suicide, and out-of-home placements of children in the child welfare system.

In 2002, FPC initiated a series of statewide network training sessions on the impact of early trauma and toxic stress on brain development in children. The trainings emphasized the roles that nurturing environments, protective factors, and resilience can play in preventing or mitigating the effects of childhood trauma (Biglan, Flay, Embry, & Sandler, 2012; Brownlee et al., 2013; Cohen, Chavez, & Chehimi, 2010; O'Connell, Boat, & Warner, 2009). The FPC encouraged local community networks to attend the trainings, disseminate ACEs and resilience information in their communities, and develop community-wide responses to the problem using a public health approach that included assessing community strengths and challenges, researching effective strategies, and building on local assets to develop and implement solutions to local concerns. But measurement of community capacity is more of an "art form" than based on science at this stage. The next section outlines the literature that was used to help formulate the ARC^3 survey.

2. Literature review: collective community capacity concepts

2.1. ARC^3 measurement challenges

The ARC^3 survey is grounded in collective community capacity-building theory and practice. Community capacity is commonly defined as "the interaction of human, organizational, and social capacity existing within a given community that can be leveraged to solve collective problems and improve or maintain the well-being of a given community" (Chaskin, 1999, p. 4). However, there are conceptual and technical challenges to defining and measuring collective community capacity:

- *The concept of community capacity is complex*, involving myriad elements that are multilayered – developed through a scaffolding process that shifts community norms and larger-level policies to support program- and organization-level changes (Grantmakers for Effective Organizations, 2014; Barila, Longhi, & Brown, 2015).
- *At the coalition level*, *capacity is mutable and dynamic*, enhanced through capacity-building and technical assistance, but also affected by shifts in coalition membership, developmental stage, and focus (Foster-Fishman, Berkowitz, Lounsbury, Jacobson, & Allen, 2001).
- *Different capacity-building models define community capacity differently,* using closely-related terms that are often used interchangeably. The term "community capacity" is often confused with capacity-building, community capacity-building, community development, and community mobilization (Morgan, 2015).
- Many community capacity *measures fail to differentiate conceptually between coalitions, networks, and communities*. "Many collaborative capacity measurement tools have mistakenly conceptualized community organizations as a single entity with one goal, when it is more accurate to describe them as a network of many agencies working on many related objectives" (Cross, Dickman, Newman-Gonchar, & Fagan, 2009, p. 313).
- *Community capacity is also difficult to measure for technical reasons;* including the scarcity of empirically validated instruments, the lack of differentiation between coalition-, network-, and community-level capacity measures; hard to measure capacity outcomes, and the length of time typically required for capacity building efforts to affect community-wide outcomes (Bush, Dower, & Mutch, 2002, pp. 3 and 7; MacLellan-Wright et al., 2007, p. 300; Marek, Brock, & Savia, 2015, p. 68).

According to Butterfoss's Community Coalition Action Theory, coalitions contribute to community-level change by "creating a context for organizations to develop relationships, forming a collaborative, inter-