## Protective Factors for Populations Served by the Administration on Children, Youth, and Families

## **A Literature Review and Theoretical Framework**

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#### **Submitted to:**

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# Protective Factors for Populations Served by the Administration on Children, Youth, and Families

## A. Purpose and Methodology

## A.1. Study Purpose

This report reviews literature on protective factors for populations served by the Administration on Children, Youth and Families (ACYF). It offers a foundation for the development of a protective factors framework that is applicable to children, youth, and families receiving ACYF-funded services. The report:

- Reviews the literature and evidence pertaining to protective factors for children, youth, and families targeted by ACYF-funded initiatives; and
- ➤ Develops a protective factor framework for these in-risk populations that may be used to inform and guide practice and policy.

Findings from this report provide information about protective factors for in-risk populations of primary concern to ACYF. Evidence pertaining to protective factors for general populations of children and youth is not reviewed. Therefore, protective factors found in systematic reviews of general child and youth populations may not appear in the study's findings.

The review focused on five key population groups who have experienced traumatic or otherwise adverse events and can be considered *in-risk*. For *in-risk* children and youth like those served by ACYF, the issue is not so much prevention of a problem, but coping with or transitioning through one or more existing problem situations. For purposes of this review, the following populations are considered separately and collectively and are referred to as in-risk or ACYF populations.

- Infants, children, and adolescents who are victims of child abuse and neglect;
- > Runaway and homeless youth;
- > Youth in or transitioning out of foster care;
- > Children and youth exposed to domestic violence; and
- > Pregnant and parenting teens.

While the developmental stage represented within these in risk populations is an important consideration, the scope and number of studies in this review did not provide sufficient evidence to draw conclusions about the salience of protective factors for different developmental stages. The one exception to this trend was for adolescent populations. A majority of studies examined protective factors among children and youth over the age of 12. In contrast, few studies assessed protective factors for infants, toddlers, or children under 12 years old.

Protective factors are conditions or characteristics that have a body of evidence from research or experience connecting them with positive outcomes. As a result, the protective factors can be defined as desired intermediary results which suggest a trajectory to improved outcomes for children, youth, and families. Recent research has concentrated on positive aspects of functioning and on protective factors and aspects of resilience that reduce risk and enhance positive outcomes for young people. Thus, the creation of a model and corresponding plan to increase protective factors among in-risk children and youth is a logical next step in improving the efficacy of the organization's interventions and policies.

## A.2. Methodology

The methodology for conducting the literature review is based on a two-stage approach that combines expert guidance and systematic, Web-based searches. We have also drawn on the knowledge of Expert Panelists and federal partners to identify core literature and effective search terms across relevant domains. The review was guided by the following questions:

- ➤ What is the nature of protective factors for children, youth, and families served by ACYF-funded services?
- ➤ What is the strength of evidence pertaining to protective factors?
- ➤ Which protective factors are most likely to be amenable to change in the context of programs and policies offered by ACYF?

#### A.3. Search Process

The primary literature base considered in this review represented studies that examined the relationship between one or more protective factors and commonly reported outcomes (e.g., abuse, runaway behavior, homelessness, violence, foster care placement, and pregnancy) among ACYF populations. An important starting point for our review was the Institute of Medicine's (IOM) report titled *Preventing Mental, Emotional, and Behavioral Disorders among Young People: Progress and Possibilities.*<sup>1</sup> The IOM report articulates a multilevel and ecological view of risk and protective factors and addresses a range of risky behaviors (e.g., substance abuse, sexual behavior, violence). Reflecting the literature, our review of protective factors research was also informed by widely known risk and protective factor approaches used in the field of prevention<sup>2</sup>. Finally, knowledge derived from theories and tests of problem behavior in children and youth was central to our review<sup>3</sup>.

Literature on protective factors typically draws from an etiological framework that specifies an algorithm of factors known to increase or decrease the likelihood that a given youth will experience homelessness, violence, abuse, or other outcomes common to ACYF populations. In this context, exposure to *risk* factors increases the likelihood of adverse outcomes, and exposure to *protective* factors buffers risk and reduces the likelihood of negative outcomes.<sup>4</sup>

The second source of literature included in this review included studies of resilience in children and youth. Many of these investigations first appeared during the 1970s in conjunction with

advances in developmental psychopathology.<sup>5</sup> Early research on resilience aimed to explain instances of positive adaptation and recovery following mental illness, schizophrenia, and autism, as well as various kinds of abuse, exposure, and trauma.<sup>6</sup> These studies also concentrated on neurobiological mechanisms, though at the time these processes were not as easily measured as they are with current brain imaging and other advanced technology. Recent research efforts have returned to earlier themes related to neurobiological processes associated with resilience—this time, however, with better tools and substantial advances in scientific knowledge. In the context of the current review, it is important to recognize that most of the initial research on resilience examined individual characteristics such as temperament, psychological well-being, and coping capacity. Since that time, the concept of resilience has been expanded to include psychosocial factors at multiple levels of influence within a broader framework of social ecology. Relevant investigations stemming from the resilience literature are reviewed and summarized in the report.

#### The Nature of Studies on Protective Factors

The diverse populations served by ACYF-funded initiatives share a complex set of characteristics and circumstances that place them at risk for a host of adverse outcomes. Each population considered also has unique characteristics that present challenges to creating a framework that is applicable to all types of children and families of interest to ACYF. Studies aimed at understanding protective factors have largely focused on individual and family factors. Relatively few studies have examined the effects of community-level protective factors on children and families, so the existing evidence is much less detailed for these findings.

## A.4. Assumptions, Definitions, and Guidelines

A major impetus for the ACYF protective factors project is based on the acknowledged limits of risk, deficit, and pathology models for understanding and serving *at-risk* and *in-risk* populations. There is a body of research linking risk factors and deficits to negative or antisocial outcomes in children and youth. However, studies also show that many children and youth are able to avoid or mitigate the negative outcomes predicted by their exposure to risk more readily than others. The ability to thrive in the face of risk has prompted multiple efforts to understand the mechanisms and factors contributing to positive outcomes despite negative exposure.

Protective factors play a complex role in the context of risk, resilience, and child development. To that end, the following definitions apply to this review:

• **Resilience.** Resilience is defined as the ability to succeed or thrive in the face of high levels of risk or adversity.<sup>9</sup>

- **Protective factor.** A protective factor acts to modify risk, either by directly reducing a disorder or dysfunction or by moderating the relationship among risk factors and problems or disorders, often called buffering effects. <sup>10</sup>
- **Promotive factor.** Promotive factors exert positive effects on behavior regardless of levels of risk or risk exposure. 11
- *Construct.* A construct refers to internal attributes or characteristics that cannot be directly observed but are useful in describing and explaining behavior. <sup>12</sup> A construct connects a group of such attributes or characteristics in a way that provides substantive meaning.
- *Mechanism of change*. This term is defined as "the underlying psychological, social, cultural, or neuropsychological processes through which (therapeutic) change occurs (National Institutes of Health, various grant announcements)." It is also defined commonly as "the processes or events that are responsible for the change; the reasons why change occurred or how change came about" Mediation and moderation (see definitions of *mediator* and *moderator*, below) are statistical *indicators* of underlying mechanisms of change.
- *Mediator*. Something (a variable) that partially or fully *causes* an outcome that is associated with an independent variable. <sup>14</sup>
- *Moderator*. Something (a variable) that affects the *direction or strength* of a relationship between an independent variable and an outcome or dependent variable. <sup>15</sup>

Protective factors for general youth populations vary considerably by age. <sup>16</sup> When possible, the following developmental stages were considered in this review <sup>17</sup>:

- *Infancy and toddlerhood (approximately 0–3)*. Developmental changes, which occur most rapidly in this stage, include language development, solidification of an attachment relationship, growth, and ambulation. Developmental delays, motor deficits, and poor neurodevelopment are some of the potential impairments that characterize this stage as a period of extreme vulnerability.
- *Early childhood (approximately 4–5).* This stage is characterized by significant progress in language, cognitive, social, and emotional development.
- *Middle childhood* (*approximately 6–11*). This stage is characterized by increased competence to take on additional roles and responsibilities and the development of broader social networks. The stage is also marked by increased behavioral self-regulation and identity development; it also has been identified as a period when mental health problems begin to emerge.

- *Early adolescence* (*approximately 12–14*). This stage is often characterized by adjustment to a new body image and sexuality, early moral thinking, and significant peer effects.
- *Middle adolescence* (*approximately 15–17*). Emotional separation from parents, early abstract thinking, increased potential for risk behavior, and early vocational/career plans are common in this stage. Academic, mental health and social functioning are often the indicators of wellness for this age group.
- Late adolescence or early young adulthood (approximately 18–21). The late adolescent development literature often describes this stage as including the establishment of personal identity, increased impulse control, emerging social autonomy and increased separation from parents, and complex thinking.

## A.5. Evaluating and Determining Levels of Evidence

Finding and evaluating evidence pertaining to protective factors among ACYF populations presents numerous challenges. First, investigations assessing protective factors include qualitative and quantitative studies that encompass theoretical assertions, clinical and anecdotal accounts, and empirical findings. Developmental stages are not always clearly defined. In addition, protective factors are measured individually in some studies, while in other investigations factors are aggregated. Measurement tools used to assess protective factors are often unclear or inadequately described, or inconsistent across studies. Finally, the literature on protective factors is multidisciplinary, resulting in significant variations in terminology, constructs, and theoretical underpinnings. In our presentation of protective factors, we have grouped similar concepts from different literatures under single terms to simplify presentation. Protective factor definitions include descriptions of the concepts that are grouped.

To assess this varied body of evidence, we developed *evidence standards* that represent a pragmatic attempt to capture a range of criteria. These standards allow us to assess the evidence supporting various protective factors and help identify factors to pursue for program and policy development. While the standards fall short of those used in more formal systematic reviews or meta-analyses, they provide a logical approach to assessing the relative magnitude of effect that is generated by individual protective factors.

The level-of-evidence scheme presented below has two tiers: a) a *rating instrument* used to code the individual studies that are reported in the crosswalks for each of the five populations and b) a *summative scale* that takes evidence from each crosswalk and summarizes it on a matrix or Crosswalk of Protective Factors. The purpose of the rating instrument is to assess the quality and strength of individual studies. In contrast, the summative scale provides an average across studies and offers an overall assessment of the level of evidence for each particular protective factor.

#### Rating Instrument for Coding Individual Studies

Individual articles were rated on elements of research design and on strength of evidence pertaining to child and youth outcomes relevant to each of the five ACYF populations.

#### Research Design

- 1 = Non-experimental design with cross-sectional data (e.g., cross-sectional studies without longitudinal data, case studies, or qualitative investigations with non-representative samples).
- 2 = *Non-experimental design with longitudinal data* (e.g., one-group designs with two or more measurement points).
- 3 = *Quasi-experimental design* (e.g., well-conducted equivalent-comparison group or time-series designs with longitudinal data).
- 4 = Experimental design (e.g., randomized designs with longitudinal data).

#### Strength of Evidence

- 1 = Findings provide negative or no evidence of effect.
- 2 = Findings provide marginal evidence of effect (significant finding, small or no effect size reported).
- 3 = Findings provide moderate evidence of effect (significant finding, moderate effect size or impact).
- 4 = Findings provide strong evidence of effect (significant finding, large effect size or impact).

## Summative Rating Scheme for Assessing Overall Strength of Evidence for Protective Factors

Individual articles pertaining to each protective factor were pooled and rated in a summative fashion on elements of design and impact using the following scale:

**Emerging evidence** demonstrates a preponderance of findings generated by cross-sectional studies, case studies, or qualitative investigations with non-representative samples.

**Limited evidence** demonstrates a preponderance of findings that are generated by a single longitudinal study (significant findings with small, medium, or large effect sizes).

**Moderate evidence** demonstrates consistent findings that are generated by two or more longitudinal studies (significant findings with small, medium, or large effect sizes).

**Strong evidence** demonstrates findings generated from experimental or well-conducted quasi-experimental studies that demonstrate a significant effect on a protective factor and an outcome (e.g., findings demonstrate that the experimental effect on an outcome is mediated or moderated by the effect of a protective factor).

#### Anecdotal or Practice-Based Evidence

As noted above, the strategies used to find and rate studies of protective factors focused on publications and reports found in the empirical literature. However, the review and testimonials from the project's Expert Panel members as well as focus groups with practitioners also revealed potential protective factors that were not always evident in the published literature. For example, a mother's safety may be considered a protective factor in instances of domestic violence. Yet empirical studies supporting safety are not readily reported in the literature. Nonetheless, safety may indeed constitute an important protective factor for mothers confronted by domestic violence. Another example lies in the absence or shortage of community-level protective factors found in the literature. Community factors may be very important sources of protection for children and youth. However, the challenge associated with operationalizing and measuring the influence of community factors on children's lives has limited the number of rigorous studies that are reported. Finally, some factors are mentioned frequently in informal channels as protective influences stemming from intervention trials, clinical practice, and other work with specific populations. Later in this report, we highlight protective factors of this type that arose in focus groups conducted with parents and practitioners in April 2012 and 2013, and in discussions with ACYF staff working with specific populations.

## **B. Protective Factors: Origins, Evolution, and Frameworks**

## **B.1. Background**

A 2009 Institute of Medicine (IOM) report titled *Preventing Mental, Emotional, and Behavioral Disorders among Young People: Progress and Possibilities*<sup>18</sup> offered an important starting point for this review. This influential study builds on its highly regarded 1994 predecessor, *Reducing Risks for Mental Disorders: Frontiers for Preventive Intervention Research*.<sup>19</sup> Collectively, these reports serve as an important call for increased prevention resources to implement a developmental and multilevel perspective on preventing child and adolescent problems. Further, the reports provide extensive guidance about current knowledge and the impact of risk, protective, and promotive factors for a range of mental, emotional, and behavioral conditions and behavioral/social consequences.

The 2009 IOM Report advances a multilevel and ecological view of risk and protective factors that includes a range of behaviors (e.g., substance abuse, sexual behavior, violence). The report underscores the ecological context of development<sup>20</sup> and recognizes the wide acceptance of the ecological perspective in mental health, developmental psychopathology, and prevention science.<sup>21</sup> In addition, the authors note the complex interactions between and among biological and genetic processes, individual psychological processes, and multiple levels of social contexts.<sup>22</sup> The IOM Report also acknowledges poverty as a major, yet understudied, risk factor for MEB disorders and related consequences. Notably, factors identified in the report are oriented primarily to the prevention of individual and behavioral problems. This emphasis differs somewhat from the current review, as the majority of children, youth, and families served by ACYF are from *in-risk* (versus at-risk) populations. For *in-risk* children and youth like those

served by ACYF, the issue is not so much prevention of a problem, but coping with or transitioning through one or more existing problem situations.

Studies of protective factors are closely linked to constructs of risk and resilience<sup>23</sup> and to theories of problem behavior in children and youth<sup>24</sup>. The widely used risk and protective factor approach, based on a synthesis of predictive research, specifies a range of factors associated with an increased or decreased likelihood that a given youth will engage in problem behaviors such as violence, delinquency, substance abuse, school dropout, and HIV/AIDS risk behavior. Thus, based on a risk and protective model, exposure to *risk factors* increases the likelihood of problem behavior, and exposure to *protective factors* buffers the risk factors and reduces the likelihood of problem behavior. Under this model, protective and risk factors are often categorized by *individual, peer, school, community*, and sometimes *environmental* domains.<sup>25</sup>

Protective factors under typical risk-based models are often not well specified. To compensate for risk exposure in these models, a limited set of protective traits has been offered, including *individual characteristics, social bonding, healthy beliefs,* and *clear standards for behavior*. Interventions based on such models seek to identify the complex of risk and protective factors in a particular community or population and strive to mitigate risk. Other contemporaneous approaches seek to fill the gap related to *protective factors* rather than focusing on risk factors.<sup>26</sup>

Considerable work on protective factors has also occurred in the fields of public health and prevention science.<sup>27</sup> Numerous efficacious school- and community-based prevention programs have been developed using knowledge of risk and protective factors.<sup>28</sup> Pertinent to this review, numerous protective influences have also been found to mediate the effects of preventive interventions on child and adolescent problems such as delinquency, substance abuse, aggression, and school dropout. These approaches have been tested less with in-risk populations. The protective factor and resilience approaches applied in the context of public health prevention science were progenitors of later developments that fall under the rubric of *Positive Youth Development*.

**Positive Youth Development** (PYD) centers on the concept that children and youth have the capacity to *thrive*, defined as "fulfilling one's potential and contributing positively to one's community"<sup>29</sup>. PYD does not focus on risk exposure as the primary mechanism for unhealthy or negative behavior, but on protective factors or *assets*<sup>30</sup> and interaction with a multilayered, ecological web—a *person-context relationship*. The elements necessary for thriving within the PYD approach have been operationalized under the constructs *competence*, *confidence*, *connection*, *character*, *caring or compassion*, *and contribution*.<sup>31</sup> PYD and related approaches are relatively new, as is measurement of the constructs themselves.<sup>32</sup>

Other measures and indicators that may be applicable to a PYD context are still developing. For example, some investigators have used the Search Institute's list of 40 external and internal developmental assets (<a href="http://www.search-institute.org/assets">http://www.search-institute.org/assets</a>). It is important to note, however, that none of the Search Institute assets addresses broader societal or economic factors that form a context for many risks, and are often the cornerstone on which protective factors are established.

Efforts have been made to integrate protective factors with PYD models in recent years. Common risk and protection and PYD models share common goals of encouraging the development of individual and social competencies and promoting healthy youth development. Yet for much of the past decade the two models have been presented as competing frameworks in the child and adolescent intervention and research literature. Recently, investigators have noted the advantage of viewing risk-based and PYD models as complementary, rather than opposing, intervention frameworks. Evidence pertaining to the similarities between risk and resilience and PYD models is reviewed below.

The most direct comparison of similarities and differences in risk and resilience and PYD models has been conducted by Catalano and colleagues from the Social Development Research Group.<sup>35</sup> The authors' review underscores the striking parallels between the two models. First, risk, resilience and PYD frameworks all recognize the importance of protective factors and assets in young people's lives. To this end, constructs in each model extend beyond simple notions of risk and adversity by acknowledging the important role that individual, social, and community strengths and resources play in healthy child and adolescent development. Also important, risk, resilience and PYD models reject the idea of targeting single child or adolescent behaviors. Rather, each framework recognizes the need to support the "whole person" by providing interventions and services that address a range of emotions, attitudes, and behaviors during childhood and adolescence. Catalano and colleagues note further that programs and policies based on risk, resilience and PYD models are influenced by ecological and systems theories, models that recognize the influence of individual, peer, family, school, and community factors on child and adolescent behavior. Finally, both frameworks recognize the importance of environmental influences and contextual development in supporting young people—a major shift from earlier sociological and psychological theories that focused narrowly on individual pathology.<sup>36</sup>

The notion of risk is also fundamental to understanding the social injustices and inequities that many young people face. Advocates of risk, resilience, and PYD acknowledge that many children and adolescents are raised in environments that offer few positive opportunities for a healthy life. Poverty, violence, addiction, abuse, unsafe neighborhoods, exploitation and child trafficking, and war are but a few of the problems confronting young people around the world. Likewise, a child raised in a low-literacy home faces many challenges in school and at work. While all children have, and indeed *are*, resources, we cannot deny the reality of risk and separate young people from their contexts. Identifying and addressing youth and environmental interactions in such circumstances is key; understanding the intersection of risk and protective factors and promoting personal assets is at the heart of finding effective pathways to a positive and healthy childhood and adult life for all young people.

#### **B.2. Protective Factor Frameworks**

Interventions based on principles of risk and protective factors and PYD have been implemented and tested frequently in school and community prevention settings. In recent years, several research and policy groups have also developed separate protective factor frameworks for children and youth considered to be *in-risk*. Several frameworks are described below, each developed to address specific problems (e.g., child abuse) or developmental stages. These

frameworks were used as a starting point for our thinking about protective factors found commonly among in-risk children and youth.

Strengthening Families. Strengthening Families is a protective factors framework that includes five key elements: 1) parental resilience; 2) social connections; 3) knowledge of parenting and child development; 4) concrete support; and 5) social and emotional development. Developed by the Center for the Study of Social Policy, the Strengthening Families framework includes a policy component for applying protective factors in practice settings across multiple service systems. Dissemination efforts also include inserting protective factors into licensing standards, staff training, and requests for proposals. A detailed description of the Strengthening Families framework is available at <a href="http://www.cssp.org/reform/strengthening-families">http://www.cssp.org/reform/strengthening-families</a>.

Essentials for Childhood Framework. The Centers for Disease Control recently developed the Essentials for Childhood framework. The model identifies the importance of safe, stable, and nurturing relationships and environments as key components in preventing child maltreatment. The goals of Essentials for Childhood are to: 1) raise awareness and commitment to preventing child maltreatment; 2) use data to inform intervention and action strategies; 3) use changes in norms and structured programs to enhance healthy development in children and youth; and 4) impact social policies aimed at child well-being and positive outcomes. Information about the framework is available at <a href="http://www.cdc.gov/violenceprevention/childmaltreatment/essentials/">http://www.cdc.gov/violenceprevention/childmaltreatment/essentials/</a>.

**Promise Neighborhoods Research Consortium.** The Promise Neighborhoods Research Consortium has outlined an empirically based, school-centered framework for enhancing child development and promoting protective factors among children living in poverty.<sup>37</sup> The model identifies important developmental outcomes for children and youth and applies knowledge of risk and protective factors to outline a comprehensive continuum of interventions across the lifecycle, focused on school success. The group's Creating Nurturing Environments framework provides a rationale for increasing protective factors among children in poverty and offers a set of individual, family, and community level strategies to help children thrive in the face of economic deprivation.<sup>38</sup> Empirical studies of the model are in their early stages.

Related frameworks. Several related frameworks have been developed that share similarities with protective factors frameworks. The well-known Communities That Care (CTC) model<sup>39</sup> uses a risk and protective factor framework as a guide to selecting and implementing prevention efforts that target child and adolescent problems such as delinquency, substance use, aggression, school dropout, and runaway behavior. CTC is a community prevention system that provides tools for communities to plan, implement, and evaluate a comprehensive prevention plan. In the CTC model, coalitions are formed to engage in systematic prevention planning that requires communities to identify prevalent risk and protective factors for adolescent problems in their localities. Following the assessment of such factors, communities are encouraged to select efficacious prevention strategies on the basis of available empirical evidence (Hawkins et al., 1992). Initial outcome studies of CTC reported significantly lower risk levels and less delinquent behavior among seventh grade students in CTC communities after only 1.7 years of intervention. Analyses of data from subsequent time intervals revealed significantly lower rates of alcohol and cigarette use and delinquency at the end of the eighth grade for CTC participants compared to control group subjects. More important, a recent evaluation of CTC found

significantly less alcohol and cigarette use and lower rates of delinquent and violent behavior at the end of the 10th grade.<sup>42</sup> The 10th grade findings are particularly noteworthy, as these results reflect student behaviors that occurred 18 months after the last intervention period.

Jack Shonkoff, the Director of the Harvard Center on the Developing Child, proposed a *biodevelopmental* framework for early childhood policy that integrates the neuroscience involved in child development with behavioral science.<sup>43</sup> The model aims to specify origins of disparities in learning, behavior, and health and the causal mechanisms for resulting behavior. The model is intended to inform development of programs and policies to address these disparities, and contains three sets of target domains: 1) interactions among foundations of healthy development and sources of early adversity; 2) measures of physiological adaptation and disruption; and 3) positive and negative outcomes in learning, behavior, and health.

The CDC developed and disseminated an *ecological* model in connection with a youth violence prevention initiative adopted by the World Health Organization. The framework incorporates the logic of a risk and protective factor approach and targets individual, relational, and community domains. In addition, a recent CDC effort led to an organizational framework that is helpful in understanding the relationship between macroeconomic factors and youth violence the framework includes a temporal dimension and individual, situational, and community domains through which macroeconomic factors are hypothesized to operate.

The United Nations Children's Fund (UNICEF, Latin America–Caribbean Region) created the *Adolescent Well-Being Framework*<sup>46</sup> to monitor positive adolescent behavior and development, together with supportive factors. Domains were selected to represent dimensions of adolescent well-being and include 1) health status, 2) subjective well-being, 3) identity and equity, 4) legal protections and enforcement, 5) educational opportunity and performance, 6) access to supportive services and relationships, 7) socioeconomic opportunity, and 8) participation in community and society.

Finally, on a broader theoretical level, Bronfenbrenner's ecological model is referred to in numerous studies and interventions addressing the multiple systems that affect children and youth. This well-established framework includes *microsystem* (individual), *mesosystem* (family, neighborhood play settings, childcare center or school), *exosystem* (community, workplace, friends/neighbors, extended family, etc.), and *macrosystem* (customs, laws, values) levels of influence <sup>47</sup>

#### **B.3.** Resilience and Protective Factors

Concepts of resilience are integral to any discussion of protective factors in children, youth, and families. The emergence of theory and research on resilience appeared in the 1970s in conjunction with the evolution of developmental psychopathology. Initial work aimed to explain instances of positive adaptation and recovery following mental illness, schizophrenia, and autism, as well as various kinds of abuse, violence exposure, and trauma. In one early influential study, Rutter noted that attention should be paid to understanding the mechanisms present during important milestones in young people's lives. Specifically, he outlined protective processes that were hypothesized to reduce risk, decrease negative chain reactions,

and increase self-esteem, self-efficacy, and positive opportunities. In the context of the current review, it is important to recognize that most of the early research on resilience examined individual characteristics such as temperament, psychological well-being, and coping capacity. Since that time, the concept of resilience has been expanded to include psychosocial factors at multiple levels of influence within a framework of social ecology.<sup>51</sup>

Neurobiological processes, genetics, and resilience. Recent research has returned to earlier themes related to neurobiological processes associated with resilience—this time, however, with better tools and substantial advances in scientific knowledge. Haglund and colleagues reviewed research addressing individual level factors, including neurohormonal (e.g., CRH,\* cortisol, DHEA<sup>†</sup>) and neurochemical factors (the locus coeruleus–norepinephrine system, serotonin, etc.). 52 They also examined the neural circuitry of anxiety and fear, and of psychobiological factors (e.g., positive emotions, active coping style). A recent volume of Development and Psychopathology was devoted to studies that explore the processes and pathways to maladaptation and resilience.<sup>53</sup> Collectively, articles in this issue illustrate the promise and limits of this line of research. Many of the studies revealed evidence supporting the role of neurobiological processes in the mediation or moderation of risk. For instance, Shannon and colleagues found that high respiratory sinus arrhythmia and electrodermal response could be protective factors for children developing conduct problems.<sup>54</sup> However, the protective degree diminished with an increase in paternal antisocial personality disorder. Nigg and colleagues found that resilient children were characterized by more effective response inhibition and that genotype was "a reliable resilience indicator against development of Attention Deficit-Hyperactivity Disorder and Conduct Disorder... in the face of psychosocial adversity" (Shannon et al., 767). In addition, Bryck and Fisher reviewed research on neural plasticity and concluded that there are emerging methods of "training the brain" to reverse early brain deficits (such as those resulting from child maltreatment) and improve cognitive functioning.<sup>55</sup> Others, though, found little support for the impact of such processes on outcomes of interest. Loeber and colleagues for example, found that none of the cognitive, physiological, parenting, or community factors was associated with desistance from delinquency.<sup>5</sup>

Numerous studies assessing biological or neurobiological factors have done so in combination with other elements of resilience. Calkins, Blandon, and colleagues examined the relationship between several hypothesized protective factors and behavioral outcomes in children and youth. The protective factors were organized in biological, behavioral, and relational categories. Findings were somewhat inconsistent with other work; high levels of externalizing problem behaviors were associated with higher contextual risk, lower frustration tolerance, and lower persistence. Higher internalizing risk behaviors were associated with higher contextual risk and lower frustration tolerance.

Other studies are seeking to identify genetic–environmental interaction with respect to risk and protective factors and the potential implications for intervention, including a 2006 quasi-experimental study of 196 children ages 5–15, consisting of 109 children who had been removed from their homes and 87 community-recruited controls.<sup>58</sup> The goal was to understand the

\*CRH is corticotrophin-releasing hormone, released by the hypothalamus in response to stress.

<sup>&</sup>lt;sup>†</sup>DHEA, produced by the adrenal glands, is a steroid hormone related to metabolism, stress control, and other functions.

connection between child maltreatment and the met allele of the BDNF gene and two short alleles of 5–HTTLPR for effects on depression outcomes. Maltreated children with specified alleles had the highest depression scores. Social support was a moderator of depression. These results were viewed as evidence supporting the utility of understanding gene—environment interaction as a way to identify those children more (and less) vulnerable to adverse outcomes.

Individual characteristics and resilience. A variety of individual personality and temperament characteristics, as well as skills, have been associated with resilience. For example, Bell's definition of resilience illustrates the breadth of components that may be considered relevant to definitions of resilience. He includes having curiosity and intellectual mastery, compassion, ability to conceptualize, conviction of one's right to survive, ability to remember and invoke images of good and sustaining figures, and ability to accept emotions as elements of resilience. Other resilience literature includes characteristics such as coping skills, optimistic outlook, self-efficacy, and self-regulation. Based on the research literature, ACYF Commissioner Bryan Samuels has developed an initial working framework that centers on social and emotional well-being that includes four general domains. Drawing from Lippman and colleagues, Commissioner Samuels highlights four critical areas: 1) understanding experiences; 2) developmental tasks; 3) coping strategies; and 4) environmental buffers.

Interaction of individual resilience characteristics and environments. Much of the current resilience research situates individual characteristics of resilience in the context of an environment of multiple stressors, sometimes cumulative, where resilience must be addressed across different domains. These domains may include only individual and family levels of influence or extend outward to social networks, neighborhoods, and communities.

The E–RISK study, funded in 1998 by the Medical Research Council in the United Kingdom, was an important effort to investigate how specific environmental risk factors contribute to the early emergence of disruptive behavior at ages 5 and 7. This investigation aims to develop knowledge about children's disruptive behavior by addressing 1) the effect of environmental risk factors on disruptive behavior, 2) interactions between environmental and genetic risk, 3) child-specific parenting experiences, and 4) mediating effects of children's neuropsychological executive functions, social-information processing, and verbal skills on risk. Kim–Cohen and associates analyzed E–RISK data to understand correlates of resilience among children exposed to socioeconomic deprivation. Their analyses showed that maternal warmth, cognitively stimulating activities, outgoing child temperament, and social support were protective against the effects of socioeconomic deprivation. Using E–RISK data, Jaffee and colleagues found that individual strengths were protective for maltreated children, but only when family and neighborhood stress was low.<sup>61</sup>

Other investigators have shed light on the relationship between individual and environmental resilience. In one such study, Aisenberg and Herrenkhol examined youth exposed to community violence as a risk factor for emotional and behavioral problems or violent behavior. They found that family factors such as maternal closeness, positive coping of parents, healthy parenting norms, positive parent—child bonds, and family cohesion; school factors such as perceived safety and positive social networks; and community factors such as shared responsibility for children operated as protective influences in children's lives. 62

**Resilience as an ecological outcome.** Studies have also framed resilience in multilevel and ecological terms. For example, in a review of children exposed to both intimate partner violence (IPV) and poverty, Gewirtz and Edelson found that risk factors related to IPV usually occur in clusters, and that chronic exposure is harmful to children over the long term. Exposure to violence, for example, negatively affected children's ability to regulate emotions. The authors also found that secure attachments, social competence, and living in a supportive and safe community operated as protective factors.

Violence exposure and resilience is complex, and considerations of resilience may need to account for the complexity of violence exposure. Findings from recent studies by Finkelhor, Ormrod, and Turner as well as Nurius and colleagues reveal that exposure to violence is related to a host of negative behavioral outcomes.<sup>64</sup> In other words, young people who are subjected to one type of victimization, even if they suffer chronic exposure, generally experience fewer negative outcomes than those youth who experience multiple victimization types (polyvictimization).

Resilience from a cross-cultural perspective. Another important direction in recent studies of resilience has been the attempt to assess and adapt formulations of resilience in cross-cultural contexts. Grigorenko notes the general lack of theories, concepts, and assessment instruments that are productively applied to the developing world, where a majority of the world's population lives and where vast numbers of children—estimated at 200 million—fail to reach the developmental potential because of multiple risk factors such as severe poverty, poor health, and lack of developmental stimulation and engagement. These conclusions may also be relevant in a domestic context with respect to poverty, economic vulnerability, and an increasingly diverse and globalized population.

Similarly, there has been criticism of much of the resilience literature for over-emphasizing individual and relational factors and traditionally healthy outcomes, while being insensitive to community and cultural factors that contextualize how resilience is defined by different populations and manifested in everyday practice. Based on extensive cross-cultural research with 1400 children in 11 countries, Ungar identified seven keys to resilience that included: 1) availability of financial, educational, medical, and employment assistance and/or opportunities, as well as access to food, clothing, and shelter; 2) access to supportive relationships; 3) development of a desirable personal identity; 4) experiences of power and control; 5) adherence to cultural traditions; 6) experiences of social justice; and 7) social cohesion with others. From the control of the contr

Cardoso and Thompson examined resilience across cultures in a systematic review of resilience among Latino immigrant families.<sup>68</sup> They found four risk and protective factor domains relevant to resilience that included individual characteristics, family strengths, cultural factors, and community supports. These domains were classified as: 1) individual factors such as temperament, intelligence, competence, self-efficacy, self-mastery, personal agency, and coping strategies; 2) family factors that emphasized *familismo* and included high levels of family cohesion, loyalty, communication, extended kin networks, mutual support, and high regard for academic success; 3) cultural factors such as loyalty, *personalismo* (importance of personal relationships), *respeto* (respect), *consejos* (mutual advice), *dichos* (folk sayings, wisdom), and

*fatalismo* (acceptance); and 4) community factors that included support networks through involvement in school, church, and community activities and elements of social capital.

## **B.4. Summary**

The research base on protective factors is evolving rapidly. We now know a great deal about the protective influences in general and at-risk youth populations. Protective factors frameworks have recently been developed by researchers, practitioners, and policymakers to help disentangle and understand protective factors by levels of influence. Most important, frameworks like *Strengthening Families* and *Essentials for Childhood* have been developed to address the needs of *in-risk* child and youth populations that are of primary concern to ACYF and other service delivery systems.

Studies of resilience, an oft-referenced and related term in the context of protective factors, are still at a relatively early stage. For example, terms used to define and measure resilient traits or processes are often poorly specified. Further, investigations of resilience use a wide range of research designs, assess multiple and diverse outcomes, and often lack longitudinal data. Finally, there is no agreed-on resilience framework from which to create practice strategies or policies. However, despite these limitations, findings from the resilience literature do capture the importance of characteristics that buffer adversity and risk in the lives of many young people. Such knowledge will be useful in designing and testing intervention and policy strategies for children and youth receiving ACYF-funded services.

## C. Protective Factors Relevant to Specific ACYF Populations

The previous section provided a summary of the evolution and current knowledge of protective factors and resilience. We now turn our attention to the specific protective factors that are relevant to ACYF populations.

Evidence for protective factors among ACYF populations is presented in three formats. These include:

- 1. A summary of factors for all populations as shown in Table 1;
- 2. A narrative that describes protective factors for each ACYF population; and
- 3. A matrix or crosswalk for each ACYF population that presents detailed information from empirical studies (Appendix 2).

Table 1 shows protective factors by individual, relationship, and community levels of influence across the five populations. The number of stars in each cell denotes the strength of evidence to date for each factor by population. Thus, this table provides a visual indication of factors that have low, moderate, or high levels of current empirical evidence. Table 1 also allows readers to see differences in level of evidence across the five populations. An empty cell in the table means that there is no current evidence for that particular protective factor or population. In some cases, lack of evidence is simply a product of insufficient research for a particular protective factor or population. Similarly, protective factors with only emerging or limited evidence may be labeled

as such primarily because of a lack of research, not necessarily because a factor is unimportant in improving children's outcomes.

Table 1 is followed by brief narratives that provide additional details about protective factors for each population. Finally, crosswalks found in Appendix 2 provide details about the evidence base of protective factors for each ACYF population. Thus, from summary table to narrative to crosswalk, these three formats provide increasingly detailed information from the research literature. A summary of key findings follows.

## C1. Key Findings across all ACYF Populations

Empirical evidence for protective factors among ACYF populations is found at all levels of influence. As noted in Table 1, both shared and unique protective factors are present among children and youth who typically receive ACYF services. For example, protective factors such as agency, self-regulation and problem-solving skills are common among children and youth in ACYF populations. It should be noted that terms like agency and self-efficacy, common in the protective factor literature, refer generally to the same construct. Thus, in our review, both terms refer to the capacity of an individual to take action or perform effectively in social situations. Relationship level factors such as parenting competencies, caring adults, and positive peers are also important protective factors for children and youth receiving ACYF services. Finally, evidence increasingly indicates that community protective factors play an important role in the lives of at-risk or troubled children and youth. To illustrate, positive school and community environments and economic opportunities and resources were identified as protective factors in several ACYF populations.

Ten protective factors were identified with the highest levels of evidence across ACYF populations. The strength of evidence for protective factors among ACYF children and youth varies by factor and population. We reviewed evidence across populations to identify and select a subset of protective factors that had the most empirical support. Our selection process was based on both evidence and programmatic considerations. Protective factors were considered to be in the subset of most influential factors if they had moderate or strong evidence across 4 of the 5 ACYF populations. In several cases, protective factors were also included for programmatic reasons. This process yielded a set of 10 protective factors that displayed moderate to strong evidence across populations. These factors, shown below, are representative of individual, relationship, and community levels of evidence.

Table 1. Protective Factors for ACYF Populations by Level of Influence

	Runaway/ Homeless Youth	Youth Exposed to Domestic Violence	Youth in or Transitionin g Out of Foster Care	Victims of Child Abuse and Neglect	Pregnant and Parenting Teens
Individual Level					
Characteristics					
Positive self-image	*			*	**
Sense of purpose	*	*	*	***	**
Sense of optimism	*	*	*	**	***
Agency (self-efficacy)	*		*	***	***
Cognitive ability (intelligence)			**	**	***
Skills and Developmental Tasks					
Self-regulation skills	*	***	****	****	*
Relational skills	*	**	****	***	***
Problem-solving skills	*	***	**	****	***
Academic skills			***	*	***
Involvement in positive activities			**	***	***
Relationship Level					
Parenting competencies	*	****	****	***	****
Parent or caregiver well-being	*	***	**	***	*
Positive peers	**	*	*	***	****
Caring adult(s)	*		***	*	****
Living with family members			****		****
Community Level					
Positive school environment		***	***	***	****
Positive community environment	*		*	***	****
Stable living situation			***	****	_
Economic opportunities	**		**	*	****

<sup>\*</sup>Emerging Evidence: Preponderance of findings generated by cross-sectional studies, case studies, or qualitative investigations with non-representative samples.

Note: The absence of a star (\*) indicates an absence of studies and/or evidence for a particular protective factor and population.

<sup>\*\*</sup> Limited Evidence: Preponderance of findings generated by a single longitudinal study (significant findings with small, medium, or large effect sizes).

<sup>\*\*\*</sup> Moderate Evidence: Consistent finding that are generated by two or more longitudinal studies (significant finding with small, medium, or large effect sizes).

<sup>\*\*\*\*</sup>Strong Evidence: Findings generated from one or more experimental or well-conducted quasi-experimental studies that demonstrate a significant effect on a protective factor and an outcome (e.g., findings demonstrate that the experimental effect on an outcome is mediated by the effect of a protective factor).

## **Top 10 Protective Factors Across ACYF Populations**

#### Individual level

**Relational skills:** Relational skills encompass two main components: 1) a youth's ability to form positive bonds and connections (e.g., social competence, being caring, forming positive attachments and prosocial relationships); and 2) interpersonal skills such as communication skills, conflict resolution skills, and self-efficacy in conflict situations.

**Self-regulation skills**: Self-regulation skills refer to a youth's ability to manage or control emotions and behaviors. This skill set can include self-mastery, anger management, character, long-term self-control, and emotional intelligence.

**Problem-solving skills**: Includes general problem-solving skills, self-efficacy in conflict situations, higher daily living scores, decision-making skills, planning skills, adaptive functioning skills and task-oriented coping skills.

**Involvement in positive activities:** Refers to engagement in and/or achievement in school, extra-curricular activities, employment, training, apprenticeships or military.

### Relationship level

**Parenting competencies:** Parenting competencies refers to two broad categories of parenting: 1) parenting skills (e.g., parental monitoring and discipline, prenatal care, setting clear standards and developmentally appropriate limits) and 2) positive parent-child interactions (e.g., close relationship between parent and child, sensitive parenting, support, caring).

**Positive peers:** Refers to friendships with peers, support from friends, or positive peer norms.

Caring adult(s): This factor most often refers to caring adults beyond the nuclear family, such as mentors, home visitors (especially for pregnant and parenting teens), older extended family members, or individuals in the community.

#### Community level

**Positive community environment**: Positive community environment refers to neighborhood advantage or quality, religious service attendance, living in a safe and higher quality environment, a caring community, social cohesion, and positive community norms.

**Positive school environment:** A positive school environment primarily is defined as the existence of supportive programming in schools.

**Economic opportunities**: Refers to household income and socioecomic status; a youth's self-perceived resources; employment, apprenticeship, coursework and/or military involvement; and placement in a foster care setting (from a poor setting).

A summary of protective factors for each of the five ACYF populations follows. The evidence presented for each population is limited to research that specifically assessed protective factors for that population; thus in many cases protective factors found in the general literature or in the literature pertaining to other specific populations do not appear. In addition, because the research literature for children exposed to domestic violence and pregnant/parenting teens is often embedded in studies addressing community violence and pregnancy prevention, respectively, we have added two brief sections that summarize these related literatures in order to capture potential protective factor information relevant for the two ACYF populations.

## C.2. Runaway and Homeless Youth

#### **Overview**

The runaway and homeless youth population consists of two distinct subgroups. It is important to note that there are distinct similarities and differences between young people who are homeless and/or runaway. Runaway youths are typically defined as young people under 18 who left home and have stayed away at least one night without permission. Running away, however, does not mean that young people are always living on the streets. In many cases, runaways may be staying temporarily with friends or in shelters. As runaways, there is often still an implied connection with a home and family, even if it is a difficult or dysfunctional connection.

Homeless youths, by contrast, are typically defined as those who lack stable longer-term housing. Homeless youths may be living on the street, in shelters, or in unstable residences with friends or acquaintances. Under the Missing, Exploited, and Runaway Children Protection Act (P.L. 106–71, Section 387, 2000), homeless youths are defined as individuals between the ages of 16 and 21 for whom it is not possible to live in a safe environment with a relative and who have no other safe alternative living arrangement.

The number of studies examining protective factors for runaway and homeless youth is small, and the research is less rigorous overall, when compared to other ACYF populations. The literature addressing runaway and homeless youth is noteworthy for its relatively limited scope and lack of methodological rigor, with only a few exceptions. Sample sizes in the studies we reviewed were typically small. This may be due to the difficulty associated with locating runaway and homeless youth in places such as outreach and street-based programs. These constraints likely contribute to a lack of experimental or quasi-experimental designs in the literature. Finally, the majority of studies for this population focused on homeless, rather than runaway, youth. Much of the evidence is from a single qualitative study that used rigorous methodology to conduct interviews with 208 homeless youths. To Clearly, additional studies are needed to better assess protective factors among homeless and runaway youth.

Runaway and particularly homeless youth are very likely to appear in other ACYF populations as well – thus the protective factors important for other populations may also be relevant for runaway and homeless youth. Homeless youths often require services and supports that lead to involvement in other types of ACYF services. On a related note, the U.S. Interagency Council on Homelessness identifies four subpopulations of homeless youth: 1) youth transitioning out of foster care; 2) lesbian, gay, bisexual, transgendered and questioning youth; 3) youth who are

pregnant and/or parenting; and 4) youth involved in the criminal justice system. These subpopulations of youth are overrepresented among the homeless youth population. Three of these subpopulations are also served by ACYF programs.

## Protective Factors for Runaway and Homeless Youth

Evidence for protective factors for runaway and homeless youth is emerging and limited. As shown in Table 1, evidence of protective factors for runaway and homeless youth is at a relatively early stage. In fact, there were no protective factors for runaway and homeless youth at the strongest levels of evidence. Several noteworthy protective factors are highlighted below.

The influence of *positive peers* was associated with positive outcomes for homeless and runaway youth. These outcomes included decreases in depressive symptoms, safety, and meeting basic survival needs<sup>72</sup>.

Several investigators found that access to support services and resources were important protective factors for runaway and homeless youth. Support services and resources included intensive case management, positive experiences with shelter staff, informal resources, counseling services that include cognitive-behavioral components and brief motivational interviewing, and interventions providing supportive housing. Access to these types of support services and resources was also related to increased self-esteem, survival on the streets, and resilience in some studies<sup>73</sup>.

The protective factor with the strongest evidence for homeless and runaway youth is the *availability of shelter*. Three studies revealed moderate evidence linking the availability of shelter to positive and child youth outcomes.<sup>74</sup> Increases in school participation, reductions in the number days on the run, fewer school and employment-related problems, and reductions in behavioral and emotional problems were related to availability of shelter in these studies.

Please see Table 1 and Appendix 2 for additional information about protective factors for homeless and runaway youth.

## C.3. Children and Youth Exposed to Domestic Violence

#### **Overview**

Evidence of protective factors for children and youth exposed to domestic violence is found at individual, relationship, and community levels of influence. Young people who are exposed to incidents of domestic violence are at significant risk for a number of adverse outcomes during childhood and adolescence. Our review indicates that there are protective factors at the individual, relationship, and community level for children and youth exposed to domestic violence that reduce risk for adverse outcomes. In comparison to other ACYF populations, evidence of protective factors for children exposed to domestic violence is greater than what is reported for runaway and homeless youth, but less than what is found for the three other population groups shown in Table 1. However, this evidence should be considered in

combination with evidence related to children exposed to broader community violence as described in Section C.7.

Several intervention studies with children and youth exposed to domestic violence have yielded important information about protective factors for this population. Findings from a randomized trial of Safe Dates, a school-based prevention program for middle and high school students aimed at preventing the victimization and perpetration of violent behavior revealed that problem-solving and self-regulation skills were important protective factors for young people who witness domestic violence. Similarly, two evaluations of the Cognitive Behavioral Intervention for Trauma in Schools program provided evidence for the protective nature of problem-solving skills, self-regulation skills, and presence of a positive school environment for children exposed to domestic violence.

## Protective Factors for Children and Youth Exposed to Domestic Violence

At the individual level, *self-regulation skills* is an important protective factor for young people exposed to domestic violence. Investigators define and measure self-regulation skills as emotional awareness, anger management, stress management, and cognitive coping skills. For children exposed to domestic violence, self-regulation skills were related to resiliency, having supportive friends, reductions in internalizing problems, better cognitive functioning, less psychological and sexual abuse and decreases in PTSD, anxiety, depression and overall behavior problems. *Problem-solving skills* were also found to be important protective factors for many children who are exposed to domestic violence.

Relationship factors such as *parenting competencies* and *parental well-being* are important protective factors among children and youth who are exposed to domestic violence. Investigators typically define parenting competencies as parental acceptance or responsiveness, maternal warmth, strong parent-child bonds, and emotional support. Parental competencies were related to such positive outcomes as increases in self-esteem, lower risk of antisocial behavior, and a lower likelihood of running away and teen pregnancy.<sup>77</sup> Interventions aimed at improving parenting competencies have also had a positive impact on children exposed to violence. Many of these programs focus on increasing family management skills, nurturing abilities, meeting

children's developmental and individual needs, strengthening family relationships, and improving relationships between children and mothers.<sup>78</sup>

Parental well-being is also an important protective factor for children exposed to domestic violence. Children whose parents demonstrate positive psychological functioning (e.g., lower rates of depression and other mental health problems) have shown higher levels of resilient behavior and better mental health outcomes than other young people who are exposed to

## Protective Factors with Moderate or Strong Levels of Evidence for Children Exposed to Domestic Violence

### Individual factors:

- o Self-regulation skills
- o Problem-Solving skills

#### Relationship factors:

- o Parenting competencies
- o Parental well-being

### Community factors:

o Positive school environment

domestic violence.<sup>79</sup> Interventions seeking to increase parental well-being are also associated with positive outcomes for children exposed to domestic violence.<sup>80</sup> For example, parental involvement in Project Support, an instrumental and emotional support intervention for mothers who have experienced domestic violence, is related to lower rates of conduct problems and positive social relationships for child participants.<sup>81</sup>

Presence of a *positive school environment* is a community-level protective factor for children exposed to domestic violence. Findings from evaluations of the Cognitive Behavioral Intervention for Trauma in Schools program reported significant reductions in traumatic stress disorder symptoms, depression, and psychosocial dysfunction for children exposed to violence. Also, Safe Dates, a school-based primary and secondary prevention program for middle and high school students designed to stop or prevent the initiation of dating violence, was related to reductions in physical dating violence among victims of dating violence. 83

Please see Table 1 and Appendix 2 for additional information about protective factors for children and youth exposed to violence.

## C.4. Children and Youth in or Transitioning out of Foster Care

#### **Overview**

Children in foster care is one of the largest constituent groups served by ACYF programs and policies. Children and youth enter foster care for many reasons including abuse and neglect, emotional or behavioral problems, or owing to parental inability to effectively supervise their children.

Evidence pertaining to protective factors for youth in foster care comes from a broad range of studies and research designs. Evidence of protective factors for children and youth in or transitioning out of foster care is seen in a broad spectrum of cross-sectional, longitudinal, and intervention studies. Investigations have also assessed attributes and characteristics of resilience among children placed in foster homes. Studies that have examined the effects of foster care placements and interventions on subsequent child and youth outcomes have also been helpful in identifying protective factors for this population.

## Protective Factors for Children and Youth in or Transitioning out of Foster Care

Self-regulation, relational, and academic skills are important individual level protective factors for children in or transitioning out of foster care. Studies support the protective influence of emotional and behavioral self-regulation skills for children in foster care. Children and youth who effectively regulate or control their emotions have fewer placement disruptions and are more likely to find employment and avoid antisocial behavior following release from foster care. Relational skills, including the ability to interact with foster parents, teachers, and positive peers, are related to stability and satisfaction with foster care placements, reductions in delinquency, and fewer disruptions in placement. Finally, there is evidence linking academic

*skills* to positive outcomes for foster care youth. Children and youth who perform well in school and who remain committed to education while in foster care, fare better than other young people in foster care. <sup>86</sup>

Relationships with natural and foster parents have a protective influence on children and youth in or transitioning out of foster care. Relational protective factors for children and youth in foster care include factors such as parenting competencies. These competencies pertain to both natural and foster parents and include specific skills such as supervising and disciplining children and relational factors that promote bonds between children and parents. Parenting style appears to be particularly important for foster parents. For example, findings from one study revealed that effective foster parents are more likely to have authoritative parenting styles, as opposed to authoritarian or permissive parenting styles.<sup>87</sup> In addition, being sensitive and responsive to children's needs, providing stimulation for children, and the availability of social support are all related to positive outcomes for children in foster care.<sup>88</sup> Evaluations of interventions with natural and foster parents suggest that parenting competencies are related to reductions in child behavior problems, disruptions and out-of-home placements and increases in social skills and psychological adjustment.<sup>89</sup> Competencies have also been linked to the likelihood of children being reunited with their parents.<sup>90</sup>

Living with family members and having caring adults are protective influences children and youth in or transitioning out of foster care. Living with family members, often defined as placement in kinship care, is an important relationship-level protective factor for children and youth in foster care. Findings from three different studies indicate that youth kinship care placements (compared traditional foster care or group homes) experienced fewer outof-home placements. antisocial conduct, and lower rates of juvenile justice involvement than young people placed in traditional foster care

## Protective Factors with Moderate or Strong Evidence Levels of Evidence for Children and Youth in or Transitioning out of Foster Care

#### Individual factors:

- o Self-regulation skills
- o Relational skills
- Academic skills

#### *Relationship factors*:

- o Parenting competencies
- o Caring adult(s)
- o Living with family members

#### Community factors:

- Positive school environment
- o Stable living situation
- o Supports for independent living

or group home placements. <sup>91</sup> Finally, evidence suggests that the presence of a *caring adult* is a protective factor for foster care youth. Caring adults may be mentors, advocates, teachers, or other adults involved in the life of a child in foster care. The presence of a caring adult is related to numerous positive outcomes for children and youth including greater resilience, lower stress, less likelihood of arrest, reductions in homelessness, higher levels of employment, less delinquent conduct, favorable health, and less suicidal ideation. <sup>92</sup>

Positive school environments, stable living situations, and access to supportive independent living programs are community-level protective factors for foster care youth. A positive school environment offers an important source of protection for children and youth in the foster care system. Environmental and program characteristics such as educational liaisons for elementary and middle school students and supports for older adolescents transitioning from foster care to college are related to school performance, knowledge of college requirements and awareness of college life, and resilience. A stable living situation, such as placement stability, permanency, or aging out of foster care at a later age, is related to adaptability and success after leaving foster care. Finally, a protective factor unique to the foster care population is support for independent living. Levels of support for transitioning from foster care to independent living are related positively to educational attainment, employment, housing, health, and a range of life skills.

Please see Table 1 and Appendix 2 for additional information about protective factors for children and youth in or transitioning out of foster care.

## C.5. Victims of Child Abuse and Neglect

#### **Overview**

The literature addressing maltreated children and youth is extensive and generally includes studies of greater rigor than investigations that focus on other ACYF populations. Two reasons account for the relative abundance of well-designed studies in this area. First, the child welfare infrastructure in place to address the widespread problem of abuse and neglect includes systems for data collection. This means there are large sample sizes that provide greater statistical power for sophisticated analyses. These data also include measurements at various levels of the ecological system, which in turn allow for a better examination of family and community measures. Second, longitudinal studies such as the Environmental Risk Longitudinal Study, Rochester Youth Development Study, Lehigh Longitudinal Study, Bucharest Early Intervention Project, National Survey on Child and Adolescent Well-Being, and Longitudinal Studies on Child Abuse and Neglect have produced rich findings pertaining to maltreated individuals from a very young age through adolescence and into young adulthood.

Findings from well-designed intervention studies have increased knowledge of protective factors among child victims of abuse and neglect. Programs like Child and Family Traumatic Stress Intervention (CFTSI), a four-session intervention for children and their caregivers aimed at preventing chronic posttraumatic stress after exposure to a traumatic event such as maltreatment, have yielded important information about protective factors for victims of child abuse and neglect. The intervention seeks to improve individual-level protective factors such as self-regulation skills by focusing on thought replacement, breathing and relaxation techniques, and coping strategies. The program also emphasizes problem-solving and relational skills by teaching effective communication and coping strategies. Finally, CFTSI targets positive changes in relationship-level protective factors such as parenting competencies and parent or caretaker well-being. Studies of CFTSI reveal lower levels of posttraumatic stress disorder and anxiety for children between 7 and 18 years old. Pevaluations of interventions such as Multisystemic

Therapy, Alternatives for Families, and Trauma-Focused Cognitive Behavioral Therapy have provided additional evidence for protective factors among victims of child abuse and neglect. 97

## Protective Factors for Victims of Child Abuse and Neglect

Individual characteristics such as self-efficacy and positive sense of purpose offer important sources of protection for victims of child abuse and neglect. Self-efficacy, defined generally as having a positive internal locus of control, is related to resilience and improvements in internalizing behaviors in studies of abuse and neglect victims. Sense of purpose, measured by attitudes toward religiosity, faith or spirituality, is related to reductions in substance abuse and antisocial conduct, less sexual activity, improvements in internalizing and externalizing behavior, and school performance. 99

Self-regulation skills, problem-solving skills, relational skills, and involvement in positive activities are also key protective factors for victims of child abuse and neglect. Interpersonal skills are important sources of protection for children who have been neglected or abused. Self-regulation skills, defined typically as the ability to control emotions and cognitive thought processes, are related to resilience, reductions in mental health problem symptoms, fewer out-of-home placements, and reductions in stress and anxiety for victims of child abuse and neglect. Increases in problem-solving skills are linked to improvements in academic performance, positive internalizing and externalizing behaviors, and fewer placement disruptions for victims of abuse and neglect. Also, relational skills that increase children's abilities to perform effectively in social situations offer important sources of protection for children who have been abused or neglected. Finally, involvement in positive activities, specifically school connectedness, commitment and engagement, is protective for children who have been abused or neglected.

## Protective Factors with Moderate or Strong Levels of Evidence for Victims of Child Abuse and Neglect

#### *Individual factors*:

- o Sense of purpose
- o Agency (self-efficacy)
- o Self-regulation skills
- o Relational skills
- o Problem-solving skills
- o Involvement in positive activities

#### Relationship factors:

- o Parenting competencies
- o Positive peers
- o Parent or caregiver well-being

#### Community factors:

- o Positive school environment
- o Positive community environment
- o Stable living situation

Parenting and peer factors play important roles in increasing protection for victims of child abuse and neglect. Parenting competencies such as setting clear expectations about children's behavior, using positive and consistent supervision and disciplinary practices, and rewarding children for good behavior are strongly related to a wide range of positive outcomes for child victims of abuse and neglect. These outcomes include internalizing behaviors and reductions in substance use and other forms of antisocial conduct. Parental or caregiver well-being also serves as a source of protection for children who have experienced abuse or neglect. Parents or caregivers with strong emotional skills and social supports are a key protective factor for children who are at-risk for or have experienced abuse or neglect. Positive peers can also play an important protective role in the lives of abused or neglected children. Support from positive friends is related to lower levels of substance use, antisocial behavior, suicide, and academic performance among children exposed to abuse and neglect. 106

*Victims of child abuse and neglect benefit from positive community and school environments and from stable living situations.* Supportive community members, teachers, and other adults are important sources of protection for children who experience abuse and neglect. A stable living environment, whether it be in a foster or adoptive home, is related to school success, higher levels of attachment, and fewer internalizing problems for children exposed to abuse and neglect. <sup>107</sup>

Please see Table 1 and Appendix 2 for additional information about protective factors for victims of child abuse and neglect.

## **C.6. Pregnant and Parenting Teens**

#### **Overview**

Literature examining pregnant and parenting teens includes: 1) studies that assess outcomes related to protective factors for mothers and their children before and after giving birth; and 2) investigations that evaluate the effects of programs and services for pregnant and parenting teens.

A large number of well-designed studies led to the identification of numerous protective factors for pregnant and parenting teens and their children at the individual, relationship, and community levels. Common outcomes of interest in these studies include repeat pregnancy and measures of depression and socio-emotional adjustment among mothers. Mothers' nurturance and empathy skills were also frequently reported. Some investigators examined ways in which characteristics of mothers affected child outcomes like cognitive competency, developmental progress, school success, and other long-term outcomes. Similar to studies of other at-risk populations, much of the teen pregnancy literature focuses on exposure to risk as opposed to protection.

## Protective Factors among Pregnant and Parenting Teens

A number of individual-level protective factors are related to mother and child well-being. Protective elements include individual characteristics and skills. Cognitive ability, measured by

math and verbal skills and other measures of academic achievement, is related to healthy socioemotional adjustment, socioeconomic status, lower risk for child abuse, resilient behavior, less likelihood of repeat pregnancy, and lower parenting stress among mothers. Cognitive ability of teen mothers is also related to reductions in school dropout rates and subsequent aggressive behavior among mothers' children in several studies. A sense of optimism is a common protective factor among teen mothers. Optimism was measured by educational aspirations to stay in school and graduate, trusting others, levels of depression, and plans for the future. These measures of optimism led to educational success and reductions in rapid repeat pregnancies. In some studies, a teen mother's sense of optimism was related to children's cognitive competence at 54 months and to positive academic outcomes during elementary school.

Self-efficacy or agency (see earlier definitions) is related to positive outcomes for pregnant and parenting teens and/or their children including independence and self-sufficiency, personal competence, and self-care. Self-efficacy, measured in many ways by investigators, is also positively related to reductions in substantiated child maltreatment, depressive symptoms, resilience, the belief that college and job training is important, a health promoting lifestyle, repeat pregnancy, birth weight for babies, infant-mother functioning, and a positive life course. Academic skills include verbal and math skills, years of education, high school or GED graduation, and enrollment in gifted classes. These and other academic skills are related to reduced risk of a second birth, nurturing skills, breastfeeding, stress and depression, and resiliency. Academic skills of teen parents are also related to higher cognitive competence among children. Problem-solving skills and relational skills were also noted as a protective factor for teen mothers. Involvement in positive activities at school or in the community is related to having a healthy lifestyle, reductions in repeat pregnancies, socioeconomic status following the birth of a child, and resilient behavior.

Protective factors at the relationship level include parenting competencies, positive peers, caring adults, and living with family members. Parenting competencies of pregnant and parenting teens is related to the quality of infant and mother relationships and to a young mother's ability to properly feed and care for their infant child. Positive parent-child interactions are related to higher levels of cognitive competence among preschool age children<sup>118</sup> and other positive outcomes for both the teen mother and the child. Additionally, the nurturance and support that teen mothers receive from their parents is associated with positive outcomes. The effect of positive peers, often defined and measured by indicators of social support, is related to lower rates of depression and reductions in repeat pregnancies. There is also moderate evidence linking support from a boyfriend, husband, and/or the father of the child to positive child and mother outcomes.

The *presence of a caring adult* serves as an important protective factor for many pregnant and parenting teens. Caring adults, generally unrelated to teen mothers, include compassionate adults, neighbors, and counselors and staff from teen parenting programs. The influence of home visitors and other programmatic staff who frequently serve as mentors and sources of information and support yielded much of the evidence for this factor. Finally, at this level, *living with a family member* is related to reductions in repeat births, higher self-esteem, educational achievement, and lower rates of depression among teen mothers.

Positive school and community environments and economic opportunities and resources are important community-level protective factors for pregnant and parenting teens. Positive school and community environments, characterized by availability of teen parent programs and services, neighborhood safety, and access to support services and resources, are associated with positive child and mother outcomes. Economic opportunities and resources such as employment status and income are related to reductions in repeat pregnancies, infant care, financial independence, and academic achievement. 126

## Protective Factors with Moderate or Strong Levels of Evidence for Pregnant and Parenting Teens

#### Individual factors:

- Cognitive ability
- o Sense of optimism
- o Agency (self-efficacy)
- o Academic skills
- o Relational skills
- o Problem-solving skills
- o Involvement in positive activities

### Relationship factors:

- o Parenting competencies
- o Positive peers
- o Caring adult(s)
- Supportive partner
- o Living with family members

#### Community factors:

- o Positive school environment
- o Positive community environment
- o Economic opportunities

Please see Table 1 and Appendix 2 for additional information about protective factors for pregnant and parenting teens.

## **C.7.** Analogous Populations

Two sections are included below that summarize literature on protective factors for young people exposed to community violence and for youth exposed to pregnancy prevention interventions. This material is included because the literature on protective factors for these two populations is very closely related to the literature on protective factors for two ACYF populations – namely, children exposed to domestic violence and pregnant/parenting teens, respectively. In fact, the national Expert Panel that provided critical input to this review recommended inclusion of at

least brief summaries of the literature on protective factors for youth exposed to community violence and for pregnancy prevention interventions.

## Children and Youth Exposed to Community Violence

#### **Overview**

The impact of community violence on children and youth is significant. Young people's exposure to community violence (CEV) has significant individual and societal costs. Homicide is the second-leading cause of death for young people between 10 and 24 years old in the United States. <sup>127</sup> It is the leading cause of death for African American youth in this age category, the second-leading cause of death for Latino youth, and the third-leading cause for American Indian and Alaska Native and Asian/Pacific Islander youth. A recent comprehensive national survey of children's exposure to violence indicated that more than 60 percent of children were exposed to either direct or indirect violence in the year immediately preceding the study. <sup>128</sup> These data indicate that exposure to violence is common among youth.

An early study by Bell and Jenkins prompted subsequent efforts to understand the impacts of community violence on children. 129 Assessing the consequences of children's exposure to community violence is complex, in part because of the difficulties and inconsistencies in defining and measuring what constitutes community violence. 130 Some reviews also link exposure to community and family violence as a general exposure phenomenon. Moreover, multiple or chronic exposure to violence has a more pronounced impact than limited exposure, <sup>131</sup> and consequences vary by the type of violence, gender, age, and other factors. In general, consequences may include posttraumatic stress disorder, substance abuse, externalizing problems such as aggression and antisocial behavior, internalizing problems such as anxiety and depression, attachment issues, social cognition problems, poor peer relations, and poor educational outcomes, as well as other consequences. Directionality is also complex; research has shown that aggressive behavior can itself increase the likelihood of exposure to community violence, but this likelihood is moderated by depression and other internal factors, and by peer relations and parent monitoring.<sup>133</sup> The integration of community and other violence exposure has prompted researchers such as Salzinger as well as Luthar and Goldstein to conclude that reductions in community violence are necessary to improve behavioral outcomes among innercity youth. 134

*There are significant links between exposure to community violence, family violence, and child development.* Exposure to community violence often intersects with domestic violence. Both types of exposure are common in high-poverty communities, and there are numerous interactions between the stress of living in a violent community and domestic violence. Much of the work in this area comes from a larger body of research that examines family risk factors and youth violence in the context of neighborhood settings. Investigators have also found connections between community or neighborhood factors related to poverty and family violence and child abuse. Exposure to CEV has also been linked to substance abuse. Moreover, exposure to neighborhood violence may have unique effects on immigrant families.

Links have also been established between exposure to community violence and child development. Williams found that exposure to community violence was significantly related to young people's acceptance of aggression. Wood found that the relationship between CEV and violence perpetration was mediated by social information-processing deficits. Involvement in illegal street activities like drug distribution is associated with increases in youth violence. Finally, Dodge (2002) noted that some youth develop violence-promotive behaviors as a consequence of harsh parenting practices.

## Protective Factors and Exposure to Community Violence

Evidence of protective factors for children exposed to community violence occurs primarily at the relationship level. The literature to date shows that factors such as positive maternal—child relationships and the presence and availability of caring adults are among the strongest protective factors for children exposed to general community violence. Emerging evidence is also found for community-level protective factors such as neighborhood cohesion, collective norms about violence, and social support. 144

The breadth of circumstances experienced by this population poses unique challenges in assessing and interpreting sources of protective factors for children and youth exposed to violence. Community violence and domestic violence overlap in terms of key impacts (e.g., trauma), but they also differ in important ways: for example, exposure to domestic violence affects significant personal relationships within a fundamental social unit, while community violence may be more generalized, affecting an individual's broader sense of safety and security. Consequently, the research base provides evidence of significant findings across various domains and conditions, providing room for a multifaceted analysis of protective factors for this population.

## Pregnancy Prevention

#### **Overview**

Pregnancy prevention has long been a focal point of public health campaigns, medical services, and school-, family, and community-based interventions. Thus, it is not surprising that considerable knowledge about protective factors associated with adolescent sexuality and pregnancy has been accumulated in the past several decades. In this context, we reviewed existing evidence of protective factors for teen pregnancy as part of a comprehensive effort to identify factors across the continuum of pregnancy prevention, childbirth, and parenting. The following section provides a brief overview of findings from studies and reviews of protective factors aimed at understanding unsafe sexual behaviors and the early onset of pregnancy.<sup>145</sup>

## Protective Factors and Pregnancy Prevention

*Individual level protective factors are important in preventing pregnancy. Knowledge and endorsement of safe sexual practices* have been found to be important protective factors for early and unwanted teen pregnancy in several longitudinal studies. Young people who recognize the risks associated with unsafe sex are at lower risk for pregnancy than other adolescents. On a

similar note, *use of contraception* is associated with reductions in both initial and repeat pregnancies. Agency (self-efficacy)—often defined by social, behavioral, and cognitive decision-making patterns displayed by young people Has—has been identified as an influential protective factor for at-risk youths. House and colleagues reviewed more than a hundred published studies and found that *cognitive*, social, and behavioral competence were important protective factors in relation to positive reproductive health outcomes and to the prevention of early and unwanted pregnancy. Cognitive ability in the form of consequential thinking and refusal skills has been identified as a key protective factor against early pregnancy in longitudinal studies of adolescent girls. Academic skills are also associated with lower rates of teen pregnancy. In a review of positive youth development constructs and programs, Catalano and colleagues found that academic skills, including the ability to use logic and abstract reasoning, served as protective factors against teen pregnancy in at-risk adolescents.

A strong sense of optimism and the ability to think positively about the future are related to lower rates of teen pregnancy among teenagers at risk for early and unwanted pregnancy in several investigations. Finally, findings from the general prevention literature suggest that involvement in positive activities is associated with the prevention of unsafe sexual practices and early pregnancy. 153

Relationship and community protective factors suggest the importance of involving family and neighborhood in pregnancy prevention. Kirby and Lepore identified family factors of positive parent—child interaction and frequency of family communication about sexual behavior as among the most important protective factors for early and unwanted pregnancy. They also noted that having peers who are not sexually active, and/or who engage in safe sex practices, are important protective factors. Markham and associates reviewed close to 200 studies that studied the relationship between connectedness—defined as bonds and attachments young people make to social relationships in family, peer, school, and community settings—and reproductive health outcomes for youth. The authors found that family connectedness, effective parenting skills, and parent—adolescent communication about sexuality served as protective factors for adverse sexual and reproductive health outcomes among adolescents.

High levels of school engagement and supportive school and community environments are protective factors associated with the prevention of unsafe sexual practices and early pregnancy. <sup>156</sup> Markham and colleagues found that school and community connectedness, measured by social bonds to teachers and support received from neighbors and community members, are protective factors for adolescent sexual and reproductive outcomes. <sup>157</sup> Additional evidence from the general prevention literature suggests that positive community norms about sexual behavior are also associated with lower rates of teen pregnancy and may be an important protective factor for adverse adolescent sexual outcomes. <sup>158</sup>

In sum, findings from the general pregnancy prevention literature suggest that protective factors related to initial pregnancy are quite similar in nature to those noted in our more comprehensive review of protective factors for pregnant and parenting teens. The strongest protective factors are again found at the individual level of influence. In particular, it appears that agency and the ability to use cognitive skills in high-risk situations are important protective factors for teen pregnancy. Social bonds in the context of family, school, peers, and community are also salient

protective factors for teen pregnancy. Finally, social and community norms appear to play an increasingly important role in reducing risk and increasing protective factors for early and unwanted pregnancy. It is also noteworthy that a majority of protective factors pertaining to adolescent sexuality and pregnancy are similar to factors related to other problem behaviors during adolescence such as delinquency, drug use, and school dropout. 159

#### C. 8. A Note on Protective Factors with Anecdotal or Practice-Based Evidence

Several protective factors were noted in focus groups conducted with parents and practitioners representing ACYF-funded projects, as well as in targeted discussions with ACYF staff who work with specific populations. These factors do not currently have a sufficient evidence base with respect to in-risk or ACYF populations, and therefore do not appear elsewhere in this review. However, because they arise consistently among practitioners, they are noted here as potential factors for further investigation.

One important protective factor mentioned consistently by focus group participants is a variation of the often-cited peer support protective factor called peer support structures. This factor refers to fictive kin relationships between peers in a neighborhood, sometimes associated with one household that is a base or gathering place. We are calling these relationships structural because, as described, they are ongoing support units in which the participants view themselves almost as siblings, and that are associated with a neighborhood or a place. Such relationships appear to be very strong and constitute more than the presence of supportive peers, which may be more situational.

A second protective factor highlighted by practitioners is represented by the skills and capacities of parents to negotiate educational and social service systems. As described in focus groups, parental resource skills include elements of social capital, cultural capital, and self-efficacy. Parents with this protective factor were characterized as being capable of interacting effectively with individuals at different system levels. Focus group participants noted that these skills led to greater success in obtaining help and support for their children and youth.

A third group of factors includes protective assets viewed as highly relevant for practitioners working with specific populations. For example, for children/youth exposed to domestic violence, several factors were cited: optimism as an individual characteristic of exposed children, a positive relationship between parents/partners, and a range of community-level factors (availability of shelters, protective services, economic resources). The parent/partner relationship factor may have evidence related to violence outcomes for adults, but not necessarily for child outcomes.

## **Summary**

Empirical evidence for protective factors is found at the individual, relationship, and community levels of influence for all five ACYF populations. Numerous shared and unique protective factors are found for the five ACYF populations reviewed in this report. It is, therefore, important for readers to examine the protective factors that are most important for each of the ACYF populations.

A subset of protective factors is important for nearly all in-risk children and youth in the ACYF focus populations. The strength of evidence for protective factors among in-risk children and youth varies by factor and population. We reviewed evidence across populations to identify and select a subset of protective factors that had the most empirical support. Our selection process was based on both evidence and programmatic considerations. Protective factors were considered to be in the subset of most influential factors if they had moderate or strong evidence across 4 of the 5 ACYF populations. In several cases, protective factors were also included for programmatic reasons. These factors included involvement in positive activities, positive peers, caring adults, positive community environment, and economic opportunities. This process yielded a set of 10 protective factors that displayed moderate to strong evidence across ACYF populations:

#### Individual level

- > Involvement in positive activities
- > Relational skills
- ➤ Problem-solving skills
- > Self-regulation

#### Relationship level

- > Parenting competencies
- Caring adults
- Positive peers

#### Community level

- > Positive community environment
- > Positive school environment
- > Economic opportunities

Findings provide a foundation for understanding protective factors among children and youth receiving ACYF-funded services. The documentation of protective factors for in-risk children and youth is important because it offers an initial empirical foundation to develop, enhance, implement, and test interventions in the context of ACYF programs and initiatives. It also identifies areas where further research is necessary. Findings from this review should be considered in ACYF efforts to improve outcomes for vulnerable children, youth, and families.

Findings reinforce conclusions reached in previous studies suggesting that multiple levels or domains of influence are important in the context of protective factors:

- ➤ Protective factors often occur as individual attributes of children or youth, or as adult caregiver characteristics and skills.
- ➤ Protective mechanisms found in families, peers, schools, and communities directly influence children and youth development and behavior.
- Multiple levels of influence are found among protective factors across all ACYF populations; however, few studies have longitudinally examined interactions across

levels of influence. Thus, current understanding of the way in which protective factors *interact* across levels or domains of influence is limited.

Evidence of protective factors for ACYF populations is strongest for the developmental period of adolescence. The scope and number of studies in this review did not provide sufficient evidence to draw conclusions about the salience of protective factors for all developmental stages. One exception to this trend, however, was for adolescent populations. A majority of studies examined protective factors among children and youth over the age of 12. In contrast, fewer studies assessed protective factors for infants, toddlers, or children under 12 years old. Noted trends in protective factors by key developmental stages include:

- ➤ Recent evidence of neurological and cognitive factors is concentrated on infancy and early childhood.
- ➤ Consistent with many social and behavioral theories, family protective factors are particularly important during early and middle childhood.
- ➤ Peer, school, and community protective factors are important in all stages of development.

Protective factors for different developmental stages also vary by individual, relationship, and community levels of influence:

- Individual level factors such as involvement in positive activities are important during adolescent development, while self-regulation and other skills are critical during early and middle childhood.
- ➤ Relationship level factors like parenting competencies and parent or caregiver well-being are critical during all developmental stages.
- ➤ Community level factors reflected by the stability of children's living situations are important during infancy and early childhood. The availability of economic resources and opportunities are most salient for adolescent and young adult populations.

Additional research is necessary to further understand the way in which protective factors affect the major outcomes of interest to practitioners and policymakers working to improve outcomes for these in risk populations. Among the challenges confronting the field:

- ➤ Definitions, applications, and measures of protective factors are inconsistent across studies. Variations in these factors limit the ability to interpret and generalize evidence of protective factors across ACYF populations.
- Most studies of protective factors among young people have been conducted with at-risk youth or have addressed the onset of individual problems such as delinquency or substance abuse. Comparatively few studies of protective factors have been conducted with samples of *in-risk* children and youths like those served by ACYF, where the issue

is not prevention of a problem but coping with or transitioning through one or more extant problem situations. Further, the distinction between *at-risk* and *in-risk* youth is not always clear. Evidence pertaining to the stability of relationships between protective factors and outcomes will likely increase over time, as findings from current and new longitudinal studies are reported.

- ➤ The relative strength or level of evidence of protective factors varies and, in some cases, is not well documented or understood. Consistent evidence of the effect sizes associated with individual protective factors is also lacking.
- There is no single model or framework for identifying, measuring, or testing *protective* factors among ACYF population groups. Heightened interest in understanding the needs of in-risk children and youth and recent convergence between public health models of prevention and principles of positive youth development may increase understanding of protective factors among children and youth receiving ACYF-funded services.
- ➤ Knowledge of the change mechanisms and mediating or moderating roles performed by protective factors is at an early stage. Evidence suggests that protective factors are cumulative in their effects. However, the mediating and moderating mechanisms of protective factors are not well understood.
- There has been a significant increase in research addressing neurobiological phenomena related to abuse, trauma, and violence exposure. To date, much of this research has examined these as risk factors, and the implications for intervention are not always clear.
- ➤ Current research on protective factors and resilience does not sufficiently account for cross-cultural and gender-specific factors, processes, or mechanisms.

## **Conclusion**

This study of protective factors for in-risk populations represents an area of study with great potential. To date, research on protective factors has focused primarily on children and youth who display high levels of risk for involvement in problem behaviors. ACYF's decision to examine protective factors for children and youth considered to be *in-risk* represents an important next step understanding and promoting well-being in the nation's young people. Study findings suggest that a number of protective factors display moderate or strong levels of evidence across ACYF populations. These factors should be used to enhance and develop new interventions and to improve well-being among children and youth in ACYF programs, together with a continuing effort to assess the strength of emerging community-level factors.

The strength of evidence for protective factors among children and youth varies by type of factor and specific population. However, moderate to strong levels of evidence were found for selected factors at the individual, relationship, and community levels of influence across the at-risk population groups. In this regard, a general model depicting protective factors for which there is

some evidence across ACYF populations is shown in Appendix 3. Population-specific models for the five groups examined in this review are also shown in this appendix.

The results of this review suggest the following steps: 1) disseminate the results of the review to practitioners, so that they can better address, in their interventions, protective factors for which the current evidence of effectiveness is moderate or strong; 2) implement and test additional interventions that address protective factors for which the current evidence of effectiveness is moderate or strong; 3) conduct additional research on protective factors for which the current evidence is promising -- whether emerging, limited, or moderate -- but not strong; 4) develop, test, and establish psychometric properties of measures purporting to assess protective factors among in-risk populations; and 5) conduct basic research and intervention research that tests the linkages among protective factors across the individual, relational, and community factors.

## References

- Afifi, T. O., & MacMillan, H. L. (2011). Resilience following child maltreatment: A review of protective factors. *Canadian Journal of Psychiatry*, 56(5), 266–72.
- Ahrens, K. R., DuBois, D. L., Richardson, L. P., Fan, M.–Y. Fan, & Lozano, P. 2008. Youth in foster care with adult mentors during adolescence have improved adult outcomes. *Pediatrics*, 121(2), e246–52.
- Aisenberg, E., & Herrenkohl, T. (2008). Community violence in context. *Journal of Interpersonal Violence*, 23(3), 296–315.
- Alford, N. P. (2003). *Bearing witness: Inner-city youth exposed to chronic community violence*. Rochester, NY: University of Rochester, Margaret Warner Graduate School of Education and Human Development.
- Altena, A. M., Brilleslijper–Kater, S. N., & Wolf, J. R. L. M. (2010). Effective interventions for homeless youth: A systematic review. *American Journal of Preventive Medicine*, 38(6), 637–45.
- Anderson, K. M., & Bang, E. J. (2012). Assessing PTSD and resilience for females who during childhood were exposed to domestic violence. *Child & Family Social Work, 17*(1), 55–65.
- Bandy, T., Andrews, K. M., & Moore, K. A. (2012). Disadvantaged families and child outcomes: the importance of emotional support for mothers. In *Child Trends Research-to-Results Briefs*. Retrieved from <a href="http://www.childtrends.org/Files//Child\_Trends-2012\_03\_21\_RB\_MaternalSupport.pdf">http://www.childtrends.org/Files//Child\_Trends-2012\_03\_21\_RB\_MaternalSupport.pdf</a>
- Barnet, B., Duggan, A. K., Devoe, M., & Burrell, L. (2002). The Effect of Volunteer home visitation for adolescent mothers on parenting and mental health outcomes: A randomized trial. *Archives of Pediatrics & Adolescent Medicine*, 156(12).
- Barnet, B., Liu, J., DeVoe, M., Alperovitz–Bichell, K., & Duggan, A. K. (2007). Home visitation for adolescent mothers: Effects on parenting, maternal life course, and primary care linkage. *Annals of Family Medicine*, *5*(3), 224–32.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, *51*, 1173–82.
- Bell, C. C. (2001). Cultivating resiliency in youth. *Journal of Adolescent Health*, 29(5), 375–81.
- Bell, C. C., & Jenkins, E. J. (1993). Community violence and children on Chicago's Southside. *Psychiatry*, *56*, 47–54.
- Bell, C. C., & Suggs, H. (1998). Using sports to strengthen resiliency in children: Training heart. *Child and Adolescent Psychiatric Clinics of North America* 7(4), 859–65.
- Benard, B. (1991). [Fostering resiliency in kids: Protective factors in the family, school, and community.] Unpublished paper.
- Benard, B. (1996). Mentoring: New study shows the power of relationship to make a difference. Research Report. Berkeley, CA: Resiliency Associates.
- Benavides, L. E. (2012). A phenomenological study of spirituality as a protective factor for adolescents exposed to domestic violence. *Journal of Social Service Research*, 38, 165–74.
- Bender, K., Thompson, S., McManus, H., Lantry, J., & Flynn, P. (2007). Capacity for survival: Exploring strengths of homeless street youth. *Child and Youth Care Forum*, 36(1), 25–42.
- Benson, P. L., Galbraith, J., & Espeland, P. (1994). What kids need to succeed. Search Institute and Free Spirit Publishing, Inc.

- Berkowitz, S. J., Stover, C. S., & Marans, S. R. (2010). The child and family traumatic stress intervention: secondary prevention for youth at risk of developing PTSD. *Journal of Child Psychology and Psychiatry*. Advance online publication. doi: 10.1111/j.1469-7610.2010.02321.x. <a href="http://www.med.upenn.edu/traumaresponse/documents/cftsi.pub.pdf">http://www.med.upenn.edu/traumaresponse/documents/cftsi.pub.pdf</a>
- Birkeland, R., Thompson, J. K., & Phares, V. (2005). Adolescent motherhood and postpartum depression. *Journal of Clinical Child and Adolescent Psychology*, 34(2), 292–300.
- Black, C., & Ford–Gilboe, M. (2004). Adolescent mothers: Resilience, family health work and health-promoting practices. *Journal of Advanced Nursing*, 48(4), 351–60.
- Black, M. M., Siegel, E. H., Abel, Y., & Bentley, M. E. (2001). Home and videotape intervention delays early complementary feeding among adolescent mothers. *Pediatrics*, 107(5).
- Bolger, K. E., & Patterson, C. J. (2001). Pathways from child maltreatment to internalizing problems: Perceptions of control as mediators and moderators. *Development and Psychopathology*, 13(04), 913–40.
- Bolger, K. E., Patterson, C. J. & Kupersmidt, J. B. (1998). Peer relationships and self-esteem among children who have been maltreated. *Child Development*, 69(4), 1171–97.
- Bos, K., Zeanah, C. H., Fox, N. A., Drury, S. S., McLaughlin, K. A., & Nelson, C. A. (2011). Psychiatric outcomes in young children with a history of institutionalization. *Harvard Review of Psychiatry*, 19(1), 15–24.
- Botvin, G. J., & Griffin, K. W. (2004). Life Skills Training: Empirical findings and future directions. *Journal of Primary Prevention*, 25(2), 211–32.
- Bowland, S., Edmond, T/. and Fallot, R. D. (2012). Evaluation of a spiritually focused intervention with older trauma survivors. *Social Work* 57(1), 73–82.
- Brodhagen, A., & Wise, D. (2008). Optimism as a mediator between the experience of child abuse, other traumatic events, and distress. *Journal of Family Violence*, 23(6):403–11.
- Bronfenbrenner, U. (1977). Toward an experimental ecology of human development. *American Psychologist*, 32, 513–31.
- Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University Press.
- Brookmeyer, K. A., Fanti, K. A., & Henrich, C. C. (2006). Schools, parents, and youth violence: A multilevel, ecological analysis. *Journal of Clinical Child and Adolescent Psychology*, 35(4), 504–14.
- Brooks-Gunn, J., Duncan, G. J., & Aber, J. L. (1997). *Neighborhood poverty: Context and consequences for children. Volume I.* New York, NY: Russell Sage Foundation.
- Brown, E. J., & Kolko, D. J. (1999). Child victims' attributions about being physically abused: an examination of factors associated with symptom severity. *Journal of Abnormal Child Psychology*, 27(4), 311–22.
- Brubaker, S. J., & Wright, C. (2006). Identity transformation and family caregiving: Narratives of African American teen mothers. *Journal of Marriage and Family*, 68(5), 1214–28.\
- Bryck, R. L. & Fisher, P. A. (2011). Training the brain: Practical applications of neural plasticity from the intersection of cognitive neuroscience, developmental psychology, and prevention science. *American Psychologist*, 67(2), 87–100.
- Budd, K. S., Heilman, N. E., & Kane, D. (2000). Psychosocial correlates of child abuse potential in multiply disadvantaged adolescent mothers. doi: 10.1016/S0145–2134(00)00122–8. *Child Abuse & Neglect*, 24(5), 611–25.

- Budd, K. S., Holdsworth, M. J. A., & HoganBruen, K. D. (2006). Antecedents and concomitants of parenting stress in adolescent mothers in foster care. doi: 10.1016/j.chiabu.2005.11.006. *Child Abuse & Neglect*, 30(5), 557–74.
- Cabrera, P., Auslander, W., & Polgar, M. 2009. Adolescent Trauma, Vol. 2, No. 4, Mar 2009. Future orientation of adolescents in foster care: Relationship to trauma, mental health, and HIV risk behaviors. *Journal of Child & Adolescent Trauma*, 2, 271–86.
- Calkins, S. D., Blandon, A. Y., Williford, A. P., & Keane, S. P. (2007). Biological, behavioral, and relational levels of resilience in the context of risk for early childhood behavior problems. *Development and Psychopathology*, 19(3), 675–700.
- Camacho, K., Ehrensaft, M. K., & Cohen, P. (2012). Exposure to intimate partner violence, peer relations, and risk for internalizing behaviors. *Journal of Interpersonal Violence*, 27(1), 125–41.
- Cardoso, J. B., & Thompson, S. J. (2010). Common themes of resilience among Latino immigrant families: A systematic review of the literature. *Families in Society: The Journal of Contemporary Social Services*, 91(3), 257–65.
- Carey, S. M., Sanders, M. B., Waller, M. S., & Aborn, J. A. (2010). *Jackson County community family court process, outcome and cost evaluation final report.* NPC Research, Inc. Oregon Criminal Justice Commission, United States. Retrieved from <a href="https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=257213">https://www.ncjrs.gov/App/Publications/abstract.aspx?ID=257213</a>
- Catalano, R. F. (2007). Prevention is a sound public and private investment. *Criminology and Public Policy*, 6, 377–398.
- Catalano, R. F., Berglund, M. L., Ryan, J. A. M., Lonczak, H. S., & Hawkins, J. D. (2004). Positive Youth Development in the United States: Research findings on evaluations of Positive Youth Development programs. *Annals of the American Academy of Political and Social Science*, 591(1), 98–124.
- Catalano, R. F., & Hawkins, J. D. (1995). *Risk-focused prevention: Using the social development strategy*. Seattle, WA: Developmental Research and Programs, Inc.
- Catalano, R. F., Hawkins, J. D., et al. (2002). Prevention science and Positive Youth Development: Competitive or cooperative frameworks? *Journal of Adolescent Health*, 31(6S), 230–39.
- (CDC) Centers for Disease Control and Prevention. N.d. *Safe*, *stable*, *and nurturing relationships* (*SSNR model*). http://www.cdc.gov/violenceprevention/pdf/CM Strategic Direction--Long-a.pdf.
- (CDC) Centers for Disease Control and Prevention. 2010. Accessed at <a href="www.cdc.com">www.cdc.com</a>, May 2012. Center for the Study of Social Policy. N.d.
  - http://www.cssp.org/reform/strengtheningfamilies/thebasics/protective factors.
- Chablani, A., & Spinney, E. R. (2011). Engaging high-risk young mothers into effective programming: The importance of relationships and relentlessness. doi: 10.1080/10522158.2011.588544. *Journal of Family Social Work, 14*(4), 369–83.
- Chaffin, M., Hecht, D., Bard, D., Silovsky, J. F., & Beasley, W. H. (2012). A statewide trial of the SafeCare home-based services model with parents in Child Protective Services. *Pediatrics*, 129(3), 509–15.
- Chamberlain, P. (2003). The Oregon multidimensional treatment foster care model: Features, outcomes, and progress in dissemination. *Cognitive and Behavioral Practice*, 10(4), 303–12.

- Chamberlain, P., Leve, L. D., & DeGarmo, D. S. (2007). Multidimensional treatment foster care for girls in the juvenile justice system: 2-year follow-up of a randomized clinical trial. *Journal of Consulting and Clinical Psychology*, 75(1), 187–93.
- Chamberlain, P., Price, J., Leve, L., Laurent, H., Landsverk, J., & Reid, J. (2008). Prevention of behavior problems for children in foster care: Outcomes and mediation effects. *Prevention Science*, 9(1), 17–27.
- Chamberlain, P., & Reid, J. B. (1998). Comparison of two community alternatives to incarceration for chronic juvenile offenders. *Journal of Consulting and Clinical Psychology*, 66(4), 624–33.
- Chandy, J. M., Blum, R. W., & Resnick, M. D. (1996). History of sexual abuse and parental alcohol misuse: risk, outcomes and protective factors in adolescents. *Child and Adolescent Social Work Journal*, 13(5), 411–32.
- Children's Bureau. (2011). *Trends in foster care and adoption, 2002–2010.* Washington, DC: Administration for Children and Families, DHHS.
- Cicchetti, D., & Curtis, W. J. (2006). The developing brain and neural plasticity: Implications for normality, psychopathology, and resilience. In D. Cicchetti & D. Cohen (Eds.), *Developmental psychopathology (2nd ed.).: Developmental neuroscience (Vol. 2)*, 1–64. New York, NY: Wiley.
- Cicchetti, D., & Curtis, W. J. (2007). Multilevel perspectives on pathways to resilient functioning. *Development and Psychopathology*, 19(3), 627–29.
- Cicchetti, D., & Rogosch, F. A. (1997). The role of self-organization in the promotion of resilience in maltreated children. *Development and Psychopathology*, *9*(4), 797–815.
- Cicchetti, E., & Rogosch, F. A. (2007). Personality, adrenal steroid hormones, and resilience in maltreated children: A multilevel perspective. *Development and Psychopathology*, 19, 787–809.
- Clemmens, D. (2001). The relationship between social support and adolescent mothers' interactions with their infants: A meta-analysis. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 30(4), 410–20.
- Cohen, J. A., Mannarino, A. P., & Iyengar, S. (2011). Community treatment of posttraumatic stress disorder for children exposed to intimate partner violence: A randomized controlled trial. *Archives of Pediatrics & Adolescent Medicine*, 165(1), 16–21.
- Collins, B. 2010. *Resilience in teenage mothers: A follow-up study*. Wellington, New Zealand: Ministry of Social Development.
- Collis, S. M. (2009). The analysis of young people's experiences of domestic violence: spiritual and emotional journeys through suffering. *International Journal of Children's Spirituality*, 14(4), 339–53.
- Collishaw, S., Pickles, A., Messer, J., Rutter, M., Shearer, C., & Maughan, B. (2007). Resilience to adult psychopathology following childhood maltreatment: Evidence from a community sample. *Child Abuse & Neglect*, *31*(3), 211–29.
- Coohey, C., Renner, L. M., Hua L., Zhange, Y. J., & Whitney, S. D. (2011). Academic achievement despite child maltreatment: A longitudinal study. *Child Abuse & Neglect*, 35, 688–99.
- Cooley-Quille, M., Boyd, R. C., Frantz, E., & Walsh, J. (2001). Emotional and behavioral impact of exposure to community violence in inner-city adolescents. *Journal of Clinical Child Psychology*, *30*, 199–206.

- Coulton, C. J., Crampton, D. S., Irwin, M., Spilsbury, J. C., & Korbin, J. E. (2007). How neighborhoods influence child maltreatment: A review of the literature and alternative pathways. *Child Abuse & Neglect*, 31(11–12), 1117–42.
- Courtney, M. E., & Lyons, S. (2009). Mentoring relationships and adult outcomes for foster youth in transition to adulthood. Paper session presented at the 13th annual meeting of the Society for Social Work and Research, New Orleans, LA.
- Cox, C. E., Kotch, J. B., & Everson, M. D. (2003). A longitudinal study of modifying influences in the relationship between domestic violence and child maltreatment. *Journal of Family Violence*, 18(1), 5–17.
- Crews, S. D., Bender, H., Vanderwood, M., Cook, C. R., Gresham, F. M., & Kern, L. (2007). Risk and protective factors of emotional and/or behavioral disorders in children and adolescents: A mega-analytic synthesis. *Behavioral Disorders*, 32(2), 14.
- Crittenden, C. C., Boris, N. W., Rice, J. C., Taylor, C. A., & Olds, D. L. (2009). The role of mental health factors, behavioral factors, and past experiences in the prediction of rapid repeat pregnancy in adolescence. *Journal of Adolescent Health*, 44(1), 25-32.
- Crooks, C. V., Scott, K., Ellis, W., & Wolfe, D. (2011). Impact of a universal school-based violence prevention program on violent delinquency: Distinctive benefits for youth with maltreatment histories. *Child Abuse & Neglect*, 35(6), 393–400.
- Dahlberg, L. L., & Krug, E. G. (2002). Violence: A global public health problem. In E. G. Krug, L. L. Dahlberg, J. A. Mercy, A. B. Zwi, & R. Lozano (Eds.), *World report on violence and health*. Geneva, Switzerland: World Health Organization.
- Daigneault, I., Hébert, M., & Tourigny, M. (2007). Personal and interpersonal characteristics related to resilient developmental pathways of sexually abused adolescents. *Child and Adolescent Psychiatric Clinics of North America*, 16(2), 415–34.
- Damon, W. (2004). What is Positive Youth Development? *ANNALS of the American Academy of Political and Social Science*, 591(1), 13–24.
- Dashora, P., Erdem, G., & Slesnick, N. (2011). Better to bend than to break: Coping strategies utilized by substance-abusing homeless youth. *Journal of Health Psychology*, 16(1), 158–68.
- Devereux, P., Weigel, D., Ballard–Reisch, D., Leigh, G., & Cahoon, K. (2009). Immediate and longer-term connections between support and stress in pregnant/parenting and nonpregnant/nonparenting adolescents. *Child and Adolescent Social Work Journal*, 26(5), 431–46.
- Dodge, K. A. (2002). Mediation, moderation, and mechanisms in how parenting affects children's aggressive behavior. In J. Brokowski, S. Ramsey, and M. Bristol-Power (Eds.), *Parenting and the child's world: Influence on academic, intellectual, and social-emotional development.* Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Dozier, M., Peloso, E., Lindhiem, O., Gordon, M. K., Manni, M., Sepulveda, S., et al. (2006). Developing evidence-based interventions for foster children: An example of a randomized clinical trial with infants and toddlers. *Journal of Social Issues*, 62(4), 767–85.
- Drapeau, S., Saint–Jacques, M. C., Lépine, R., Bégin, G., & Bernard, M. (2007). Processes that contribute to resilience among youth in foster care. *Journal of Adolescence*, 30(6), 977–99.
- DuMont, K. A., Widom, C. S., & Czaja, S. J. (2007). Predictors of resilience in abused and neglected children grown-up: The role of individual and neighborhood characteristics. *Child Abuse & Neglect*, 31(3), 255–74.
- Dworsky, A., & Pérez, A. (2010). Helping former foster youth graduate from college through campus support programs. *Children and Youth Services Review*, 32(2), 255–63.

- East, P. L., Khoo, S. T., & Reyes, B. T. (2006a). Risk and protective factors predictive of adolescent pregnancy: A longitudinal, prospective study. *Applied Developmental Science*, 10(4), 188–99.
- East P. L., Slonim, A, Horn, E. J., Trinh, C., & Reyes, B. T. (2009). How an adolescent's childbearing affects siblings' pregnancy risk: a qualitative study of Mexican American youths. *Perspectives on Sexual and Reproductive Health*, 41(4), 210–17.
- East, P. L., Weisner, T. S., & Reyes, B. T. (2006). Youths' caretaking of their adolescent sisters' children: Its costs and benefits for youths' development. *Applied Developmental Science*, 10(2), 86–95.
- Easterbrooks, M. A., Chaudhuri, J. H., & Gestsdottir, S. (2005). Patterns of emotional availability among young mothers and their infants: A dydaic, contextual analysis. *Infant Mental Health Journal*, 26(4), 309–26.
- Edberg, M. C. (2008). Development of UNICEF Latin America/Caribbean adolescent well-being indicators: Background and proposed indicators. Report for UNICEF-LAC region, Panama City, Panama.
- Edberg, M. C. (2009). Preliminary set of UNICEF/LAC core adolescent well-being indicators for the MICS4 (and beyond), with rationale and sample module. New York, NY: UNICEF. Retrieved from <a href="http://www.unicef.org/lac/INDICATORS">http://www.unicef.org/lac/INDICATORS</a>
- Edberg, M. C., Cleary, S., & Vyas, A. (2010). A trajectory model for understanding and assessing health disparities in immigrant/refugee communities. *Journal of Immigrant and Minority Health*. doi: 10.1007/s10903–010–9337–5.
- Edberg, M. C., Cleary, S., Klevens, J., Collins, E., Leiva, R., Bazurto, M., Rivera, I., Taylor, A., Montero, L., & Calderon, M. (2010). The SAFER Latinos project: Addressing a community ecology underlying Latino youth violence. *Journal of Primary Prevention*, *31*, 247–57.
- Edberg, M. C., Yeide, M., & Rosenfeld, R. (2010). Macroeconomic factors and youth violence: A framework for understanding the literature. Report prepared for the U.S. Centers for Disease Control and Prevention, National Center for Injury and Violence Prevention and Control, by Development Services Group, Inc., Bethesda, MD.
- Edberg, M., & Bourgois. P. (Forthcoming, Fall 2012). Street markets, adolescent identity and violence: A generative dynamic. In R. Rosenfeld and M. Edberg (Eds), *Youth Violence and Economic Conditions*. New York: New York University Press.
- Eddy, J. M., Bridges Whaley, R., & Chamberlain, P. (2004). The prevention of violent behavior by chronic and serious male juvenile offenders. *Journal of Emotional and Behavioral Disorders*, 12(1), 2–8.
- Erdem, G., & Slesnick, N. (2010). That which does not kill you makes you stronger: Runaway youth's resilience to depression in the family context. *American Journal of Orthopsychiatry*, 80(2), 195–203.
- Eshbaugh, E. (2006). Adolescent mothers and depression: Predictors of resilience and risk through the toddler years. *Journal of Family Social Work, 10*(3).
- Estrada, O. (2012). Exploring Hispanic teenage pregnancy and school resiliency: A hermeneutic phenomenology study. Lynchburg, VA: Liberty University
- Fagan, A. A., Hanson, K., Hawkins, J. D., & Arthur, M. W. (2008). Bridging science to practice: Achieving prevention program implementation fidelity in the Community Youth Development study. *American Journal of Community Psychology*, 41, 235–49.
- Fagan, A. A., Hawkins, J. D., Catalano, R. F. (2008). Using community epidemiologic data to improve social settings: The Communities That Care prevention system. In M. Shin (Ed.)

- Toward positive youth development: Transforming schools and community programs. New York, NY: Oxford University Press, 292–312.
- Farineau, H. M., & McWey, L. M. (2011). The relationship between extracurricular activities and delinquency of adolescents in foster care. *Children and Youth Services Review*, 33(6), 963–68.
- Fasula, A. M., & Miller, K. S. (2006). African American and Hispanic adolescents' intentions to delay first intercourse: parental communication as a buffer for sexually active peers. *Journal of Adolescent Health*, 38(3), 193–200.
- Finkelhor, D., Ormrod, R. K., & Turner, H. A. (2007). Polyvictimization and trauma in a national longitudinal cohort. *Development and Psychopathology*, 19(1), 149–66.
- Finkelhor, D., Turner, H., Ormrond, R., Hamby, S., & Kracke, K. (2009). Children's exposure to violence: A comprehensive national survey. *Juvenile Justice Bulletin*. Washington, DC: U.S. Department of Justice, Office of Justice Programs.
- Flay, B. R. (1999). Understanding environmental, situational and intrapersonal risk and protective factors for youth tobacco use: The theory of triadic influence. *Nicotine and Tobacco Research*, *I*(S), 111–S–114.
- Flay, B. R., Graumlich, S., Segawa, E., Burns, J. L., & Holliday, M. Y. (2004). Effects of two prevention programs on high-risk behaviors among African American youth: A randomized trial. *Archives of Pediatrics & Adolescent Medicine*, 158(4), 377–84.
- Flores, E., Cicchetti, D., & Rogosch, F. A. (2005). Predictors of resilience in maltreated and nonmaltreated Latino children. *Developmental Psychology*, 41(2), 338–51.
- Flynn, L. (1999). The adolescent parenting program: improving outcomes through mentorship. *Public Health Nursing*, *16*(3), 182–89.
- Foshee, V. A., Bauman, K. E., Ennett, S. T., Suchindran, C., Benefield, T., & Linder, G. F. (2005). Assessing the effects of the dating violence prevention program "Safe Dates" using random coefficient regression modeling. *Prevention Science*, 6(3), 245–58.
- Fraser, M., Kirby, L., & Smokowski, P. (2004). Risk and resiliency in childhood. In M Fraser (Ed.), *Risk and resiliency in childhood, an ecological perspective (2nd ed.)*. Washington, DC: National Association of Social Workers, 13–66.
- Fraser, M. W., Richman, J. M., & Galinsky, M. J. (1999). Risk, protection, and resilience: Toward a conceptual framework for social work practice. *Social Work Research*, 23(3), 131–43.
- Gall, T. L., Basque, V., Damasceno–Scott, M. & Vardy, G. (2007). Spirituality and the current adjustment of adult survivors of childhood sexual abuse. *Journal for the Scientific Study of Religion*, 46(1):101–17.
- Gardner, M., & Brooks–Gunn, J. (2009). Adolescents exposure to community violence: Are neighborhood youth organizations protective? *Journal of Community Psychology*, *37*(4), 505–25.
- Garmezy, N. (1983). Stressors of childhood. In N. Garmezy and M. Rutter (Eds.), *Stress, Coping, and Development in Children*. New York, NY: McGraw–Hill, 43–84.
- Garmezy, N. (1991). Resiliency and vulnerability to adverse developmental outcomes associated with poverty. *American Behavioral Scientist 34*(4), 416–30.
- Garmezy, N., & Streitman, S. (1974). Children at risk: The search for the antecedents of schizophrenia (Part 1. Conceptual models and research methods). *Schizophrenia Bulletin* 8(8), 14–90.

- Gavin, L. E., Catalano, R. F., David–Ferdon, C., Gloppen, K. M., & Markham, C. M. (2010). A review of positive youth development programs that promote adolescent sexual and reproductive health. *Journal of Adolescent Health*, 46(3), S75–91.
- Geenen, S., & Powers, L. E. (2007). Tomorrow is another problem: The experiences of youth in foster care during their transition into adulthood. *Children and Youth Services Review*, 29(8), 1085–1101.
- Gewirtz, A., & Edleson, J. (2007). Young children's exposure to intimate partner violence: Toward a developmental risk and resilience framework for research and intervention. *Journal of Family Violence*, 22(3), 151–63.
- Goodson, P., Buhi, E. R., & Dunsmore, S. C. (2004). Self-esteem and adolescent sexual behaviors, attitudes, and intentions: A systematic review. *Journal of Adolescent Health*, *38*, 310–19.
- Gorman–Smith, D., Henry, D. B., & Tolan, P. H. (2004). Exposure to community violence and violence perpetration: The protective effects of family functioning. *Journal of Clinical Child & Adolescent Psychology*, 33(3), 439–49.
- Graham-Bermann, S. A., Howell, K. H., Lilly, M., & DeVoe, E. (2011). Mediators and moderators of change in adjustment following intervention for children exposed to intimate partner violence. *Journal of Interpersonal Violence*, 26(9), 1815–33.
- Graham-Bermann, S. A., Lynch, S., Banyard, V., DeVoe, E. R., & Halabu, H. (2007). Community-based intervention for children exposed to intimate partner violence: An efficacy trial. *Journal of Consulting and Clinical Psychology*, 75(2), 199–209.
- Gravetter, F. J., & Wallnau, L. B. (2009). *Statistics for the behavioral sciences*. Belmont, Calif.: Wadsworth.
- Greene, J., Ringwalt, C., Kelly, J., Iachan, R., Cohen, Z. (1995). *Youth with runaway, throwaway, and homeless experiences: Prevalence, drug use, and other at-risk behaviors.* Washington, DC: U.S. Department of Health and Human Services, Administration on Children, Youth and Families.
- Griffin, G., McEwen, E., Samuels, B. H., Suggs, H., Redd, J. L., & McClelland, G. M. (2011). Infusing protective factors for children in foster care. *Psychiatric clinics of North America* 34, 185–203.
- Grigorenko, E. L., Jarvin, L., Kaani, B., Kapungulya, P. P., Kwiatkowski, J., & Sternberg, R. J. (2007). Risk factors and resilience in the developing world: One of many lessons to learn. *Development and Psychopathology*, 19(3), 747–65.
- Haglund, M. E. M., Nestadt, P. S., Cooper, N. S., Southwick, S. M., & Charney, D. S. (2007). Psychobiological mechanisms of resilience: Relevance to prevention and treatment of stress-related psychopathology. *Development and Psychopathology*, 19(3), 889–920.
- Haight, W., Finet, D., Bamba, S., & Helton, J. (2009). The beliefs of resilient African American adolescent mothers transitioning from foster care to independent living: A case-based analysis. *Children and Youth Services Review*, 31, 53–62.
- Haight, W. L., Shim, W. S., Linn, L. M., & Swinford, L. (2007). Mothers' strategies for protecting children from batters: The perspectives of battered women involved in child protective services. *Child Welfare*, 86(4), 41–62.
- Hall, J., Sylva, K., Melhuish, E., Sammons, P., Siraj–Blatchford, I., & Taggart, B. (2009). The role of preschool quality in promoting resilience in the cognitive development of young children. *Oxford Review of Education*, *35*(3), 331–52.

- Hammack, P. L., Richards, M. H., Luo, Z., Edlynn, E. S., & Roy, K. (2004). Social support factors as moderators of community violence exposure among inner-city African American young adolescents. *Journal of Clinical Child and Adolescent Psychology*, 33(3), 450–62.
- Hardaway, C. R., McLoyd, V. C., & Wood, D. (2012). Exposure to violence and socioemotional adjustment in low-income youth: An examination of protective factors. American Journal of Community Psychology, 49(1–2), 112–26.
- Harper, F. W. K., Arias, I., & House, A. S. (2003). The moderating role of parental warmth on the effects of exposure to family violence. *Violence and Victims*, 18(3), 353–67.
- Harris, M. B., & Franklin, C. G. (2003). Effects of a cognitive-behavioral, school-based, group intervention with Mexican American pregnant and parenting adolescents. *Social Work Research*, 27(2), 71-83.
- Hawkins, C. A., & Bland, T. (2002). Program evaluation of the Crest Project: Empirical support for kinship care as an effective approach to permanency planning. *Child Welfare* 81(2), 271–92.
- Hawkins, J. D. (2006). Science, social work, prevention: Finding the intersections. *Social Work Research*, 30(3), 137–52.
- Hawkins, J. D., Brown, E. C., Oesterle, S., Arthur, M. W., Abbot, R. D., & Catalano, R. F. (2008). Early effects of Communities That Care on targeted risks and initiation of delinquent behavior and substance use. *Journal of Adolescent Health*, 43, 15–22.
- Hawkins J. D., Catalano R. F., & Associates. (1992). Communities That Care: Action for drug abuse prevention. San Francisco, CA: Jossey–Bass, Inc.
- Hawkins, J. D., Catalano, R. F., & Miller, J. Y. (1992). Risk and protective factors for alcohol and other drug problems in adolescence and early adulthood: Implications for substance abuse prevention. *Psychological Bulletin*, 112, 64–105.
- Hawkins, J. D., Herrenkohl, T. I., Farrington, D. P., Brewer, D., Catalano, R. F., Harachi, T. W., & Lynn, C. (2000). Predictors of youth violence. *Juvenile Justice Bulletin*. Washington, DC: Office of Juvenile Justice and Delinquency Prevention.
- Hawkins, J. D., Oesterle, S., Brown, E. C., Monahan, K. C., Abbott, R. D., Arthur, M. W., Catalano, R. F. (2012). Sustained decreases in risk exposure and youth problem behaviors after installation of the Communities That Care Prevention system in a randomized trial. *Archives of Pediatrics & Adolescent Medicine*, 166(2), 141–48.
- Herrenkohl, T. I., Sousa, C., Tajima, E. A., Herrenkohl, R. C., & Moylan, C. A. (2008). Intersection of child abuse and children's exposure to domestic violence. *Trauma, Violence, & Abuse, 9*(2), 84–99.
- Herrenkohl, T. I., Tajima, E. A., Whitney, S. D., & Huang, B. (2005). Protection against antisocial behavior in children exposed to physically abusive discipline. *Journal of Adolescent Health*, 36(6), 457–65.
- Hess, C. R., Papas, M. A., & Black, M. M. (2002). Resilience among African American adolescent mothers: Predictors of positive parenting in early infancy. *Journal of Pediatric Psychology*, 27(7), 619–29.
- Hill, H. M., & Madhere, S. (1996). Exposure to community violence and African American children: A multidimensional model of risks and resources. *Journal of Community Psychology*, 24(1), 26–43.
- Himelein, M. J. & McElrath, J. V. (1996). Resilient child sexual abuse survivors: Cognitive coping and illusion. *Child Abuse & Neglect*, 20(8), 747–58.

- Hook, J. L., & Courtney, M. E. (2011). Employment outcomes of former foster youth as young adults: The importance of human, personal, and social capital. *Children and Youth Services Review*, 33(10), 1855–65.
- House, L. D., Bates, J., Markham, C. M., & Lesesne, C. (2010). Competence as a predictor of sexual and reproductive health outcomes for youth: A systematic review. *Journal of Adolescent Health*, 46(3), S7–22.
- (HRSA) Health Resources and Services Administration (2010). Rethinking MCH: The life-course model as an organizing framework. Concept paper. Rockville, MD: U.S. Department of Health and Human Services, HRSA, Maternal and Child Health Bureau. <a href="http://www.hrsa.gov/ourstories/mchb75th/images/rethinkingmch.pdf">http://www.hrsa.gov/ourstories/mchb75th/images/rethinkingmch.pdf</a>.
- Hudson, D. B., Elek, S. M., & Campbell–Grossman, C. (2000). Depression, self-esteem, loneliness, and social support among adolescent mothers participating in the New Parents Project. *Adolescence*, 35(139), 445–53.
- Hyman, S., Aubry, T., & Klodawsky, F. (2011). Resilient educational outcomes: participation in school by youth with histories of homelessness. *Youth & Society*, 43(1), 253–73.
- Jaffee, S. R., Caspi, A., Moffitt, T. E., Polo–Tomás, M., & Taylor, A. (2007). Individual, family, and neighborhood factors distinguish resilient from nonresilient maltreated children: A cumulative stressors model. *Child Abuse & Neglect*, 31(3), 231–53.
- Jain, S., Buka, S. L., Subramanian, S. V., & Molnar, B. E. (2012). Protective factors for youth exposed to violence: Role of developmental assets in building emotional resilience. *Youth Violence and Juvenile Justice*, 10(1), 107–29.
- Jenson, J. M. (2010). Advances in preventing childhood and adolescent problem behavior. *Research on Social Work Practice*, 20(6), 701–13.
- Jenson, J. M., & Fraser, M. W. (2006). Social policy for children and families: A risk and resilience perspective (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Jenson, J. M., & Fraser, M. W. (2011). A risk and resilience framework for child, youth, and family social policy for children and families: A risk and resilience perspective (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc., 5–24.
- Jessor, R., Donovan, J., & Costa, F. (1991). Beyond adolescence: Problem behavior and young adult behavior: New York, NY: Cambridge University Press.
- Jessor, R., & Jessor, S. L. (1997). Problem behavior and psychosocial development: A longitudinal study of youth. New York, NY: Academic Press.
- Johnson, V., & Lieberman, A. (2007). Variations in behavior problems of preschoolers exposed to domestic violence: the role of mothers' attunement to children's emotional experiences. *Journal of Family Violence*, 22(5), 297–308.
- Johnson, K. & Wagner, D. (2005). Evaluation of Michigan's foster care case management system. *Research on Social Work Practice*, 15(5), 372–80.
- Jouriles, Ernest N., McDonald, R., Rosenfield, D., Stephens, N., Corbitt-Shindler, D. & Miller, P. C. (2009). Reducing conduct problems among children exposed to intimate partner violence: A randomized clinical trial examining effects of Project Support. *Journal of Consulting and Clinical Psychology* 77(4), 705-717.
- Kalil, A., & Kunz, J. (2002). Teenage childbearing, marital status, and depressive symptoms in later life. *Child Development*, 73(6), 1748–60.
- Kaminski, J. W., Valle, L. A., Filene, J. H., & Boyle, C. L. (2008). A meta-analytic review of components associated with parent training program effectiveness. *Journal of Abnormal Child Psychology*, 36(4), 567–89.

- Kaplan, H. B. (1999). Toward an understanding of resilience: A critical review of definitions and models. In M. D. Glantz & J. R. Johnson (Eds.). *Resilience and development: Positive life adaptations*. New York, NY: Plenum.
- Kataoka, S. H., Stein, B. D., Jaycox, L. H., Wong, M., Escudero, P., Tu, W., Zaragoza, C., & Fink, A. (2003). A school-based mental health program for traumatized Latino immigrant children. *Journal of the American Academy of Child & Adolescent Psychiatry* 42(3), 311–18.
- Katz, L. F., Hessler, D. M., & Annest, A. (2007). Domestic violence, emotional competence, and child adjustment. *Social Development*, 16(3), 513–38.
- Kaufman, J., Yang, B.–Z., Douglas–Palumberi, H., Grasso, D., Lipschitz, D., Houshyar, S., et al. (2006). Brain-derived neurotrophic factor–5–HTTLPR gene interactions and environmental modifiers of depression in children. *Biological Psychiatry*, 59(8), 673–80.
- Kazdin, A.E. (2007). Mediators and mechanisms of change in psychotherapy research. *Annual Review of Clinical Psychology*, *3*, 1–27.
- Kellam, S. G., & Rebok, G. W. (1992). Building developmental and etiological theory through epidemiologically based preventive intervention trials. In J. McCord & R. E. Tremblay (Eds.), *Preventing antisocial behavior: Interventions from birth through adolescence*. New York, NY: Guilford Press, 162–95.
- Kelsey, M., Johnson, A., & Maynard, R. (2001). The potential of home visitor services to strengthen welfare-to-work programs for teenage parents on cash assistance. University of Pennsylvania and Mathematica Policy Research.
- Kennedy, A. C. (2005). Resilience among urban adolescent mothers living with violence. *Violence Against Women, 11*(12), 1490–1514.
- Kennedy, A. C., Agbényiga, D. B. L. F., Kasiborski, N., & Gladden, J. (2010). Risk chains over the life course among homeless urban adolescent mothers: Altering their trajectories through formal support. *Children and Youth Services Review*, 32(12), 1740–49.
- Kennedy, A. C., Bybee, D., Sullivan, C. M., & Greeson, M. (2010). The impact of family and community violence on children's depression trajectories: Examining the interactions of violence exposure, family social support, and gender. *Journal of Family Psychology*, 24(2), 197.
- Key, J. D., Barbosa, G. A., & Owens, V. J. (2001). The Second Chance Club: Repeat adolescent pregnancy prevention with a school-based intervention. doi: 10.1016/S1054–139X(00)00186–5. *Journal of Adolescent Health*, 28(3), 167–69.
- Kidd, S. A., & Carroll, M. R. (2007). Coping and suicidality among homeless youth. *Journal of Adolescence*, 30(2), 283–96.
- Kidd, S. A., & Davidson, L. (2007). "You have to adapt because you have no other choice": The stories of strength and resilience of 208 homeless youth in New York City and Toronto. *Journal of Community Psychology*, 35(2), 219–38.
- Kidd, S., & Shahar, G. (2008). Resilience in homeless youth: The key role of self-esteem. *American Journal of Orthopsychiatry*, 78(2), 163–72.
- Kim, J. (2008). The protective effects of religiosity on maladjustment among maltreated and nonmaltreated children. *Child Abuse & Neglect*, *32*, 711–20.
- Kim, J., & Cicchetti, D. (2003). Social self-efficacy and behavior problems in maltreated and nonmaltreated children. *Journal of Clinical Child and Adolescent Psychology*, 32(1), 106–17.

- Kim, J., & Cicchetti, D. (2004). A longitudinal study of child maltreatment, mother–child relationship quality and maladjustment: The role of self-esteem and social competence. *Journal of Abnormal Child Psychology*, 32(4), 341–54.
- Kim, J., Cicchetti, D., Rogosch, F. A., & Manly, J. T. (2009). Child maltreatment and trajectories of personality and behavioral functioning: Implications for the development of personality disorder. *Development and Psychopathology*, 21, 889–912.
- Kim-Cohen, J., Moffitt, T. E., Caspi, A., & Taylor, A. (2004). Genetic and environmental processes in young children's resilience and vulnerability to socioeconomic deprivation. *Child Development*, 75(3), 651–68.
- Kim–Spoon, J., Haskett, M. E., Longo, G. S., & Nice, R. (2012). Longitudinal study of self-regulation, positive parenting, and adjustment problems among physically abused children. *Child Abuse & Neglect*, 36(2), 95–107.
- Kipke, M. D., Simon, T. R., Montgomery, S. B., Unger, J. B., & Iversen, E. F. (1997). Homeless youth and their exposure to and involvement in violence while living on the streets. *Journal of Adolescent Health*, 20(5), 360-367.
- Kirby, D., & Lepore, G. (2007). Sexual risk and protective factors: Factors affecting teen Sexual behavior, pregnancy, childbearing and sexually transmitted disease: Which are important? Which can you change? ETR Associates and the National Campaign to Prevent Teen and Unplanned Pregnancy.
- Kirk, R., & Day, A. (2011). Increasing college access for youth aging out of foster care: Evaluation of a summer camp program for foster youth transitioning from high school to college. *Children and Youth Services Review*, 33(7), 1173–80.
- Kirk, R. S., & Griffith, D. P. (2003). Intensive family preservation services: Demonstrating placement prevention using event history analysis. *Social Work Research*, 28(1), 5–16.
- Kliewer, W., Cunningham, J. N., Diehl, R., Parrish, K. A., Walker, J. M., Atiyeh, C., et al. (2004). Violence exposure and adjustment in inner-city youth: Child and caregiver emotion regulation skill, caregiver–child relationship quality, and neighborhood cohesion as protective factor. *Journal of Clinical Child and Adolescent Psychology*, 33(3), 477–87.
- Kolko, D. J. (1996). Individual cognitive behavioral treatment and family therapy for physically abused children and their offending parents: A comparison of clinical outcomes. *Child Maltreatment*, 1, 322–42.
- Komro, K. A., Flay, B. R., Biglan, A., & Promise Neighborhoods Research Consortium (2011). Creating nurturing environments: A science-based framework for promoting child health and development within poverty neighborhoods. *Clinical Child Family and Psychology Review*, 14, 111–34.
- Koniak–Griffin, D., Anderson, N. L. R., Brecht, M.–L., Verzemnieks, I., Lesser, J., & Kim, S. (2002). Public health nursing care for adolescent mothers: impact on infant health and selected maternal outcomes at 1 year postbirth. doi: 10.1016/S1054–139X(01)00330–5. *Journal of Adolescent Health*, 30(1), 44–54.
- Krug, E. G., Dahlbert, L. L., Mercy, J. A., Zwi, A. B., & Lozano, R., (Eds.) (2002). *Chapter 2: Youth violence. First world report on violence and health.* Geneva, Switzerland.
- Kumsta, R., Stevens, S., Brookes, K., Scholtz, W., Castle, J., Beckett, C., Kreppner, J., Rutter, M., & Songua–Barke, E. (2010). 5HTT genotype moderates the influence of early institutional deprivation on emotional problems in adolescence: evidence from the English and Romanian (ERA) study. *Journal of Child Psychology and Psychiatry*, 51(7), 755–62.

- Kurlychek, M. C., Krohn, M. D., Dong, B., Hall, G. P., & Lizotte, A. J. (2012). Protection from risk: Exploration of when and how neighborhood-level factors can reduce violent youth outcomes. *Youth Violence and Juvenile Justice*, 10(1), 83–106.
- Lambert, S. F, Ialongo, N. S., Boyd, R. S., & Cooley, M. R. (2005). Risk factors for community violence exposure in adolescence. *American Journal of Community Psychology*, *36*, (½), 29–48.
- Landy, S., & Munro, S. (1998). Shared parenting: Assessing the success of a foster parent program aimed at family reunification. *Child Abuse & Neglect*, 22(4), 305–318.
- Lansford, J. E., Malone, P.S., Stevens, K. I., Dodge, K. A., Bates, J. E., & Pettit, G. S. (2006). Developmental trajectories of externalizing and internalizing behaviors: Factors underlying resilience in physically abused children. *Development and Psychopathology*, 18, 35–55.
- LeBlanc, M., Self-Brown, S., Shepard, D., & Kelley, M. (2011). Buffering the effects of violence: Communication and problem-solving skills as protective factors for adolescents exposed to violence. Journal of Community Psychology, 39(3), 353–67.
- Lerner, R.M., Lerner, J., Almerigi, J. B., Theokas, C., Phelps, E., & Gestsdottir, S. (2005). Positive youth development, participation in community youth development programs, and community contributions of fifth grade adolescents: Findings from the first wave of the 4–H study of positive youth development. *Journal of Early Adolescence*, 25, 17–71.
- Leve, L. D., & Chamberlain, P. (2005). Association with delinquent peers: Intervention effects for youth in the juvenile justice system. *Journal of Abnormal Child Psychology*, 33(3), 339–47
- Leve, L. D., Chamberlain, P., & Reid, J. B. (2005). Intervention outcomes for girls referred from juvenile justice: effects on delinquency. *Journal of Consulting and Clinical Psychology*, 73(6), 1181–84.
- Leve, L. D., Fisher, P. A., & Chamberlain, P. (2009). Multidimensional treatment foster care as a preventive interventions to promote resiliency among youth in the child welfare system. *Journal of Personality* 77, 1869–1902.
- Levendosky, A. A., Huth–Bocks, A., & Semel, M. A. (2002). Adolescent peer relationships and mental health functioning in families with domestic violence. *Journal of Clinical Child and Adolescent Psychology*, 31(2), 206–18.
- Lewin, A., Mitchell, S. J., Hodgkinson, S., Burrell, L., Beers, L. S. A., & Duggan, A. K. (2011). Parental nurturance and the mental health and parenting of urban African American adolescent mothers. doi: 10.1080/10522158.2011.587177. *Journal of Family Social Work,* 14(4), 311–25.
- Lewis, L. N., Doherty, D. A., Hickey, M., & Skinner, S. R. (2010). Predictors of sexual intercourse and rapid repeat pregnancy among teenage mothers: An Australian prospective longitudinal study. *Medical Journal of Australia*, 193(6), 338–42.
- Lewis, L. N., Doherty, D. A., Hickey, M., & Skinner, S. R. (2010). Implanon as a contraceptive choice for teenage mothers: a comparison of contraceptive choices, acceptability and repeat pregnancy. *Contraception*, 81(5), 421–26.
- Lieberman, A. F., Ghosh Ippen, C., & Van Horn, P. (2006). Child-parent psychotherapy: 6-month follow-up of a randomized controlled trial. *Journal of the American Academy of Child and Adolescent Psychiatry*, 45(8), 913–18.
- Lieberman, A. F., Van Horn, P., & Ippen, C. G. (2005). Toward evidence-based treatment: child-parent psychotherapy with preschoolers exposed to marital violence. *Journal of the American Academy of Child & Adolescent Psychiatry*, 44(12), 1241-48.

- Lindsey, E. W., & Ahmed, F. U. (1999). The North Carolina Independent Living Program: A comparison of outcomes for participants and nonparticipants. *Children and Youth Services Review*, 21(5), 389–412.
- Lindsey, E. W., Kurtz, P. D., Jarvis, S., Williams, N. R., & Nackerud, L. (2000). How runaway and homeless youth navigate troubled waters: Personal strengths and resources. *Child and Adolescent Social Work Journal*, 17(2), 115–40.
- Lippman, L., Moore, K., & McIntosh, H. (2011). Positive indicators of child well-being: A conceptual framework, measures, and methodological issues. *Applied Research in Quality of Life*, 6(4), 425–49.
- Loeber, R., Pardini, D. A., Stouthamer–Loeber, M., & Raine, A. (2007). Do cognitive, physiological, and psychosocial risk and promotive factors predict desistance from delinquency in males? *Development and Psychopathology*, 19(3), 867–87.
- Logsdon, M. C., Birkimer, J. C., Ratterman, A., Cahill, k., & Kahill, N. (2002). Social support in pregnant and parenting adolescents: research, critique, and recommendations. *Journal of Child & Adolescent Psychiatric Nursing*, 15(2), 75.
- Lou, C., Anthony, E. K., Stone, S., Vu, C. M., & Austin, M. J. (2008). Assessing child and youth well-being. *Journal of Evidence-Based Social Work*, 5(1–2), 91–133.
- Ludwig, K.A. & Warren, J.S. (2009). Community violence, school-related protective factors, and psychosocial outcomes in urban youth. *Psychology in Schools*, 46(10), 1061–73.
- Lundahl, B. W., Nimer, J., & Parsons, B. (2006). Preventing child abuse: A meta-analysis of parent training programs. *Research on Social Work Practice*, 16(3), 251–62.
- Luster, T., Bates, L., Fitzgerald, H., Vandenbelt, M., & Key, J. P. (2000). Factors related to successful outcomes among preschool children born to low-income adolescent mothers. *Journal of Marriage and Family*, 62(1), 133–46.
- Luthar, S. S. (2003). Resilience and vulnerability: Adaptation in the context of childhood adversities. New York, NY: Cambridge University Press.
- Luthar, S. S., & Brown, P. J. (2007). Maximizing resilience through diverse levels of inquiry: Prevailing paradigms, possibilities, and priorities for the future. *Development and Psychopathology*, 19(3), 931–55.
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The construct of resilience: A critical evaluation and guidelines for future work. *Child Development*, 71(3), 543–62.
- Luthar, S. S., & Goldstein, A. (2004). Children's exposure to community violence: Implications for understanding risk and resilience. *Journal of Clinical Child and Adolescent Psychology*, 33(3), 499–505.
- Lynch M. (2003). Consequences of children's exposure to community violence. *Clinical Child and Family Psychology Review*, 6(4), 265–74.
- Lynch, M., & Cicchetti, D. (1998). An ecological–transactional analysis of children and contexts: The longitudinal interplay among child maltreatment, community violence, and children's symptomatology. *Development and Psychopathology, 10,* 235–57.
- Manlove, J., Mariner, C., & Papillo, A. R. (2000). Subsequent fertility among teen mothers: Longitudinal analyses of recent national data. *Journal of Marriage and Family*, 62(2), 430–48.
- Manlove, J., Terry–Humen, E., & Ikramullah, E. (2006). Young teenagers and older sexual partners: Correlates and consequences for males and females. *Perspectives on Sexual and Reproductive Health*, 38(4), 197–207.

- Mares, A. S. & Kroner, M. J. (2011). Lighthouse Independent Living Program: Predictors of client outcomes at discharge. *Children and Youth Services Review, 33*(9), 1749–58.
- Markham, C. M., Lormand, D., Gloppen, K. M., Peskin, M. F., Flores, B., Low, B., et al. (2010). Connectedness as a predictor of sexual and reproductive health outcomes for youth. *Journal of Adolescent Health*, 46(3), S23–41.
- Martinez-Torteya, C., Anne Bogat, G., von Eye, A., & Levendosky, A. A. (2009). Resilience among children exposed to domestic violence: The role of risk and protective factors. *Child Development*, 80(2), 562–77.
- Masten, A. S. (1989). Resilience in development: Implications of the study of successful adaptation for developmental psychopathology. In D. Cicchetti (Ed.), *The emergence of a discipline: Rochester symposium on developmental psychopathology*. Hillsdale, NJ: Erlbaum, 261–94.
- Masten, A. S. (1994). Resilience in individual development: Successful adaptation despite risk and adversity. In M. C. Wang & E. W. Gordon (Eds.), *Educational resilience in inner-city America: Challenges and prospects*. Mahwah, NJ: Lawrence Earlbaum Associates, Inc., 3–25.
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56(3), 227–38.
- Masten, A. S. (2007). Resilience in developing systems: Progress and promise as the fourth wave rises. *Development and Psychopathology*, 19(3), 921–30.
- Masten, A. S., Best, K. M., & Garmezy, N. (1990). Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology*, 2(4), 425–44.
- Masten, A. S., & Coatsworth, J. D. (1998). The development of competence in favorable and unfavorable environments. *American Psychologist*, 53(2), 205–20.
- Masten, A. S., Faden, V. B., Zucker, R. A., & Spear, L. P. (2008). Underage drinking: A developmental framework. *Pediatrics*, 121(Supplement), S235.
- Masten, A. S., & Powell, J. L. (2003). A resilience framework for research, policy and practice. In S. S. Luthar (Ed.), *Resilience and vulnerability: Adaptation in the context of childhood adversities.* New York, NY: Cambridge University Press, 1–28.
- McCroskey, J., Franke, T, Christie, T., Pecora, P. J., Lorthridge, J., Fleischer, D., & Rosenthal, E. (2010). *Prevention Initiative Demonstration Project (PIDP): Year 2 evaluation summary report.* Los Angeles, CA: L.A. County Department of Children and Family Services; and Seattle, WA: Casey Family Programs. Retrieved from <a href="http://www.casey.org/Resources/Publications/PIDP/year2.htm">http://www.casey.org/Resources/Publications/PIDP/year2.htm</a>.
- McDonald, R., Jouriles, E. N., Skopp, N. A. (2006). Reducing conduct problems among children brought to women's shelters: Intervention effects 24 months following termination of services. *Journal of Family Psychology*, 20(1),127–36.
- McLewin, L.A., & Muller, R. T. (2006). Attachment and social support in the prediction of psychopathology among young adults with and without a history of physical maltreatment. *Child Abuse & Neglect*, *30*, 171–91.
- Mercy, J. A., & Saul, J. (2009). Creating a healthier future through early interventions for children. *Journal of the American Medical Association*, 301(21), 2262–64.
- Metzger, J. 2008. Resiliency in Children and Youth in Kinship Care and Family Foster Care. *Child Welfare*, 87(6), 115–140.

- Milan, S., Lewis, J., Ethier, K., Kershaw, T., & Ickovics, J. R. (2004). The impact of physical maltreatment history on the adolescent mother–infant relationship: Mediating and moderating effects during the transition to early parenthood. *Journal of Abnormal Child Psychology*, 32(3), 249–61.
- Miller, A. L., Notaro, P. C., & Zimmerman, M. A. (2002). Stability and change in internal working models of friendship: Associations with multiple domains of urban adolescent functioning. *Journal of Social and Personal Relationships*, 19(2), 233–59.
- Montgomery, P., Donkoh, C., & Underhill, K. (2006). Independent living programs for young people leaving the care system: The state of the evidence. *Children and Youth Services Review*, 28(12), 1435–48.
- Morris, P., Duncan, G. J., & Clark–Kauffman, E. (2005). Child well-being in an era of welfare reform: The sensitivity of transitions in development to policy change. *Developmental Psychology*, 41(6), 919.
- Mrazek, P. J., & Haggerty, R. J. 1994. Reducing risks for mental disorders: Frontiers for preventive intervention research. Washington, DC: Institute of Medicine, National Academies Press.
- Munson, M. R., & McMillen, J. C. (2009). Natural mentoring and psychosocial outcomes among older youth transitioning from foster care. *Children and Youth Services Review*, 31(1), 104–11.
- Murphy, L., and Moriarty, A. (1976). *Vulnerability, coping, and growth from infancy to adolescence*. New Haven, CT: University Press.
- Naccarato, T., Brophy, M. & Courtney, M. E. (2010). Employment outcomes of foster youth: The results from the Midwest evaluation of the adult functioning of foster youth. *Children and Youth Services Review*, 32(4), 551–59.
- Nadeem, E., Whaley, S. E., & Anthony, S. (2006). Characterizing low-income Latina adolescent mothers: Living arrangements, psychological adjustment, and use of services. *Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine*, 38(1), 68–71.
- National Research Council (1993). *Understanding child abuse and neglect*. Washington, DC: National Academy of Sciences.
- National Scientific Council on the Developing Child. (2005). Excessive stress disrupts the architecture of the developing brain: Working paper #3. http://developingchild.harvard.edu/index.php/resources/reports\_and\_working\_papers/working\_papers/wp3/.
- Nelson, C. A., Zeanah, C. H., Fox, N. A., Marshall, P. J., Smyke, A. T., & Guthrie, D. (2007). Cognitive Recovery in Socially Deprived Young Children: The Bucharest Early Intervention Project. *Science*, 318(5858), 1937–40.
- Nigg, J., Nikolas, M., Friderici, K., Park, L., & Zucker, R. A. (2007). Genotype and neuropsychological response inhibition as resilience promoters for attention-deficit/hyperactivity disorder, oppositional defiant disorder and conduct disorder under conditions of psychosocial adversity. *Development and Psychopathology*, 19(3), 767–86.
- Norman v. Johnson, United States District Court, N.D. Illinois, E.D., 739 F.Supp. 1182 (1990).
- Nurius, P. S., Russell, P. L., Herting, J. R., Hooven, C., & Thompson, E. A. (2009). Risk and protective profiles among never exposed, single form, and multiple form violence exposed youth. *Journal of Child & Adolescent Trauma*, 2(2), 106–23.
- O'Connell, M. E., Boat, T., & Warner, K. E. (2009). Preventing mental, emotional and behavioral disorders among young people: Progress and possibilities. Committee on the

- Prevention of Mental Disorders and Substance Abuse among Children, Youth, and Young Adults: Research Advances and Promising Interventions. Board on Children, Youth, and Families, Division of Behavioral and Social Sciences and Education. National Research Council and Institute of Medicine. Washington, DC: National Academies Press. Retrieved from <a href="http://www.nap.edu">http://www.nap.edu</a>.
- Olds, D. L., Henderson, C. R., Cole, R., Eckenrode, J., Kitzman, H., Luckey, D., Pettit, L., Sidora, K., Morris, P., and Powers, J. (1998). Long-term effects of nurse home visitation on children's criminal and antisocial behavior: 15-year follow-up of a randomized controlled trial. *Journal of the American Medical Association*, 280(14), 1238–44.
- Olds, D. L., Kitzman, H. J., Cole, R. E., Hanks, C. A., Arcoleo, K. J., Anson, E. A., et al. (2010). Enduring effects of prenatal and infancy home visiting by nurses on maternal life course and government spending: Follow-up of a randomized trial among children at age 12 years. *Archives of Pediatrics & Adolescent Medecine*, 164(5), 419–24.
- Osofsky, J. D. (1997). Children and youth violence: An overview of the issue. In Osofsky, J. D. (Ed.), *Children in a Violent Society*. New York, NY: Guilford Press.
- Osofsky J. D., Wewers, S., Hann, D. M., & Fick, A. C. 1993. Chronic community violence: what is happening to our children? *Psychiatry*, *56*, 36-45.
- Osterling, K. L., & Hines, A. M. (2006). Mentoring adolescent foster youth: promoting resilience during developmental transitions. *Child & Family Social Work, 11*(3), 242–53.
- Owen, A., Thompson, M., Shaffer, A., Jackson, E., & Kaslow, N. (2009). Family Variables that Mediate the Relation Between Intimate Partner Violence (IPV) and Child Adjustment. *Journal of Family Violence*, 24(7), 433–45.
- Oyserman, D., & Packer, M. J. (1996). Social cognition and self-concept: A socially contextualized model of identity. In J. L. Nye and A. M. Brower (Eds.), *What's social about social cognition? Research on socially shared cognition in small groups*. Thousand Oaks, CA: Sage Publications.
- Padgett, D. K., Gulcur, L., & Tsemberis, S. (2006). Housing First services for people who are homeless with co-occurring serious mental illness and substance abuse. *Research on Social Work Practice*, 16(1), 74–83.
- Pantin, H., Schwartz, S. J., Sullivan, S., Coatsworth, J. D., & Szapocznik, J. (2003). Preventing substance abuse in Hispanic immigrant adolescents: An ecodevelopmental, parent-centered approach. *Hispanic Journal of Behavioral Sciences*, 25(4), 469.
- Park, Y. K., Meier, E. R., & Song, W. O. (2003). Characteristics of teenage mothers and predictors of breastfeeding initiation in the Michigan WIC program in 1995. *Journal of Human Lactation*, 19(1), 50–56.
- Pearce, M. J., Jones, S. M., Schwab-Stone, M. E., & Ruchkin, V. (2003). The protective effects of religiousness and parent involvement on the development of conduct problems among youth exposed to violence. Child Development, 74(6), 1682–96.
- Pecora, P. J. (2012). Maximizing educational achievement of youth in foster care and alumni: Factors associated with success. *Children and Youth Services Review*, *34*(6), 1121–29.
- Pecora, P. J., Williams, J., Kessler, R. J., Downs, A. C., O'Brien, K. Hiripi, E., & Morello, S. (2003). Assessing the effects of foster care: early results from the Casey National Alumni Study. Seattle, WA.: Casey Family Programs.
- Pereira, J., Vickers, K., Atkinson, L., Gonzalez, A., Wekerle, C., & Levitan, R. (2012). Parenting stress mediates between maternal maltreatment history and maternal sensitivity in a community sample. *Child Abuse & Neglect*, 36(5), 433–37.

- Perkins, D. F., & Jones, K. R. (2004). Risk behaviors and resiliency within physically abused adolescents. *Child Abuse & Neglect*, 28(5), 547–63.
- Perrin, K. M., & Dorman, K. A. (2003). Teen parents and academic success. *Journal of School Nursing*, 19(5), 288–93.
- Phelps, E., Zimmerman, S., Warren, A. E. A., et al. (2009). The structure and developmental course of positive youth development in early adolescence: Implications for theory and practice. *Journal of Applied and Developmental Psychology*, *30*, 571–84.
- Pittman, K., Irby, M., Tolman, J., Yohalem, N., & Ferber, T. (2001). Preventing problems, promoting development, encouraging engagement: competing priorities or inseparable goals? Based on K. Pittman & M. Irby (1996), *Preventing problems or promoting development?* Washington, DC: The Forum for Youth Investment, Impact Strategies, Inc. Available online at <a href="http://www.forumfyi.org">http://www.forumfyi.org</a>.
- Pitzer, L. M. & Fingerman, K. L. (2010). Psychosocial resources and associations between childhood physical abuse and adult well-being. *The Journals of Gerontology 65B*(4), 425–33
- Pransky, J. (1991). *Prevention: The critical need*. Springfield, Mo.: Burrell Foundation; Greenbrae, Ca.: Paradigm Press.
- Quinby, R. K., Fagan, A. A., Hanson, K., Brooke-Weiss, B., Arthur, M. W., & Hawkins, J. D. (2008). Installing the Communities that Care prevention system: Implementation progress and fidelity in a randomized controlled trial. *Journal of Community Psychology*, *36*, 313–32.
- Raneri, L. G., & Wiemann, C. M. (2007). Social ecological predictors of repeat adolescent pregnancy. *Perspectives on Sexual and Reproductive Health*, 39(1), 39–47.
- Ratner, H. H., Chiodo, L., Covington, C., Sokol, R. J., Ager, J., & Delaney–Black, V. (2006). Violence exposure, IQ, academic performance, and children's perception of safety: Evidence of protective effects. Merrill Palmer Quarterly, 52(2), 264–87.
- Redding, R. E., Fried, C., & Britner, P. A. (2000). Predictors of placement outcomes in treatment foster care: Implications for foster parent selection and service delivery. *Journal of Child and Family Studies*, 9(4), 425–47.
- Reddy, L. A., & Pfeiffer, S. I. (1997). Effectiveness of treatment foster care with children and adolescents: A review of outcome studies. *Journal of the American Academy of Child & Adolescent Psychiatry*, 36(5), 581–88.
- Renker, P. R. (1999). Physical abuse, social support, self-care, and pregnancy outcomes of older adolescents. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 28(4), 377–88.
- Rew, L., Taylor–Seehafer, M., Thomas, N. Y., & Yockey, R. D. (2001). Correlates of resilience in homeless adolescents. *Journal of Nursing Scholarship*, 33(1), 33–40.
- Rew, L., & Horner, S. D. (2003). Personal strengths of homeless adolescents living in a high-risk environment. *Advances in Nursing Science*, 26(2), 90–101.
- Reynolds, A. J., Mathieson, L. C., & Topitzes, J. W. (2009). Do early childhood interventions prevent child maltreatment? *Child Maltreatment*, *14*(2), 182–206.
- Rhule, D., McMahon, R., Spieker, S., & Munson, J. (2006). Positive adjustment and associated protective factors in children of adolescent mothers. *Journal of Child and Family Studies*, 15(2), 224–44.
- Rosenthal, S., Feiring, C., & Taska, L. (2003). Emotional support and adjustment over a year's time following sexual abuse discovery. *Child Abuse & Neglect*, 27(6), 641–61.

- Rosenthal, B. S., & Wilson, W. C. (2008). Community violence and psychological distress: The protective effects of emotional social support and sense of personal control among older adolescents. Adolescence, 43(172), 623–712.
- Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *American Journal of Orthopsychiatry*, 57(3), 316–31.
- Rutter, M. (1999). Resilience concepts and findings: Implications for family therapy. *Journal of Family Therapy*, 21(2), 119–44.
- Sachs-Ericsson, N., Gayman, M. D., Kendall-Tackett, K., Lloyd, D. A., Medley, A., Collins, N., Corsentino, E., & Sawyer, K. (2010). The long-term impact of childhood abuse on internalizing disorders among older adults: The moderating role of self-esteem. *Aging & Mental Health*, 14(4), 489–501.
- Saewyc, E. M., & Edinburgh, L. D. (2010). Restoring healthy developmental trajectories for sexually exploited young runaway girls: Fostering protective factors and reducing risk behaviors. *Journal of Adolescent Health*, 46(2), 180–88.
- Sagy, S. & Dotan, N. (2001). Coping resources of maltreated children in the family: a salutogenic approach. *Child Abuse & Neglect*, 25(11), 1463–80.
- Salzinger, S., Feldman, R. S., Rosario, M., & Ng-Mak, D. S. (2010). Role of parent and peer relationships and individual characteristics in middle school children's behavioral outcomes in the face of community violence. *Journal of Research on Adolescence*, 21(2), 395–47.
- Sampson, R. J. (2003). The neighborhood context of well-being. *Perspectives in Biology and Medicine* 46(3S), S53–64.
- Sampson, R. J., Morenoff, J. D., & Raudenbush, S. (2005). Social anatomy of racial and ethnic disparities in violence. *American Journal of Public Health*, 95(2), 224–32.
- Sampson, R. J., & Wilson, W. J. (1995). Race, crime, and urban inequality. In J. H. R. Peterson (Ed.), *Crime and Inequality*. Palo Alto, CA: Stanford University Press.
- Samuels, B. (2011a). Opportunities for the future: Standing in the bright spots. Presentation, preventing child maltreatment and promoting well-being: Network for action. DHHS/ACYF.
- Samuels, B. (2011b). Promoting social and emotional well-being by facilitating healing and recovery: The critical interplay of relationships and brain development. Washington, DC: Children's Bureau Policy to Practice Conference, Oct. 12.
- Scales, P. C., Benson, P. L., Leffert, N., & Blyth, D. A. (2000). Contribution of developmental assets to the prediction of thriving among adolescents. *Applied Developmental Science*, 4(1), 27–46.
- Scales, P. C., Foster, K. C., Mannes, M., Horst, M. A., Pinto, K. C., & Rutherford, A. (2005). School-business partnerships, developmental assets, and positive outcomes among urban high school students: A mixed-methods study. *Urban Education 40*, 144–89.
- Schelble, J. L., Franks, B. A., & Miller, D. M. (2010). Emotion dysregulation and academic resilience in maltreated children. *Child Youth Care Forum*, *39*, 289–303.
- Schofield, G., & Beek, M. (2005). Risk and resilience in long-term foster care. *British Journal of Social Work*, 35(8), 1283–1301.
- Schultz, D., Tharp-Taylor, S., Haviland, A., & Jaycox, L. (2009). The relationship between protective factors and outcomes for children investigated for maltreatment. *Child Abuse & Neglect*, *33*, 684–98.
- Schvaneveldt, P. L., Miller, B. C., Berry, E. H., & Lee, T. R. (2001). Academic goals, achievement, and age at first sexual intercourse: longitudinal, bidirectional influences. *Adolescence*, *36*(144), 767–87.

- Schwartz, S. J., Pantin, H., Coatsworth, J. D., & Szapocznik, J. (2007). Addressing the challenges and opportunities for today's youth: Toward an integrative model and its implications for research and intervention. *Journal of Primary Prevention*, 28(2), 117–44.
- Scott, L., Munson, M., McMillen, J., & Ollie, M. (2006). Religious involvement and its association to risk behaviors among older youth in foster care. *American Journal of Community Psychology*, 38(3), 223–36.
- Search Institute. (1998). Developmental assets: An investment in youth. Retrieved from <a href="http://www.search-institute.org/assets">http://www.search-institute.org/assets</a>.
- Secco, L. M., Profit, S., Kennedy, E., Walsh, A., Letourneau, N., & Stewart, M. (2007). Factors affecting postpartum depressive symptoms of adolescent mothers. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 36(1), 47–54.
- Shannon, K. E., Beauchaine, T. P., Brenner, S. L., Neuhaus, E., & Gatzke-Kopp, L. (2007). Familial and temperamental predictors of resilience in children at risk for conduct disorder and depression. *Development and Psychopathology*, 19(3), 701–27.
- Shearer, D., Mulvihill, B. A., Klerman, L. V., Wallander, J. L., Hovinga, M. E., & Redden, D. T. (2002). Association of early childbearing and low cognitive ability. *Perspectives on Sexual and Reproductive Health*, 34(5), 236–43.
- Shonkoff, J. P. (2010). Building a new biodevelopmental framework to guide the future of early childhood policy. *Child Development*, 81(1), 357–67.
- Singer, M. (1994). AIDS and the health crisis of the urban poor: The perspective of critical medical anthropology. *Social Science and Medicine* 39(7), 931–48.
- Singer, M. C., Erickson, P. I., Badiane, L., Diaz, R., Ortiz, D., Abraham, T., & Nicolaysen, A. M. (2006). Syndemics, sex, and the city: Understanding sexually transmitted diseases in social and cultural context. *Social Science and Medicine*, 63(8), 2010–21.
- Sionéan, C., DiClemente, R. J., Wingood, G. M., Crosby, R., Cobb, B. K., Harrington, K., et al. (2002). Psychosocial and behavioral correlates of refusing unwanted sex among African American adolescent females. *Journal of Adolescent Health*, 30(1), 55–63.
- Skinner, M. L., Haggerty, K. P., Fleming, C. B., & Catalano, R. F. (2009). Predicting functional resilience among young-adult children of opiate-dependent parents. *Journal of Adolescent Health*, 44(3), 283–90.
- Slater, H. M., Mitschke, D. B. & Douthit, P. (2011). "Understanding qualities of positive relationship dynamics between adolescent parents and their school-based counselors." *Journal of Family Social Work, 14*, 354–68.
- Slesnick, N., Dashora, P., Letcher, A., Erdem, G., & Serovich, J. (2009). A review of services and interventions for runaway and homeless youth: Moving forward. *Children and Youth Services Review*, 31(7), 732–42.
- Smith, C. A., Park, A., Ireland, T. O., Elwyn, L., & Thornberry, T. P. (2012). Long-term outcomes of young adults exposed to maltreatment: The role of educational experiences in promoting resilience to crime and violence in early adulthood. *Journal of Interpersonal Violence*, 28(1), 121-156.
- SmithBattle, L. (2007). "I wanna have a good future": Teen mothers' rise in educational aspirations, competing demands, and limited school support. *Youth & Society*, 38(3), 348–71.
- Sparks, C. F. (2010). "Filial therapy with adolescent parents: The effect on parental empathy, acceptance, and stress." Lynchburg, VA: Liberty University Faculty of the School of Education.

- Stang, J., & Story, M. (2005). Adolescent growth and development. *Guidelines for adolescent nutrition services*, 1–8. http://www.epi.umn.edu/let/pubs/img/adol\_ch1.pdf
- Stein, B. D., Jaycox, L.H., Kataoka, S. H., Wong, M., Tu, W., Elliott, M. N., & Fink, A. (2003). A mental health intervention for schoolchildren exposed to violence: a randomized controlled trial. *Journal of the American Medical Association*, 290(5), 603–11.
- Stevenson, W., Maton, K. I., & Teti, D. M. (1999). Social support, relationship quality, and well-being among pregnant adolescents. doi: 10.1006/jado.1998.0204. *Journal of Adolescence*, 22(1), 109–21.
- Stevens–Simon, C., Kelly, L., & Kulick, R. (2001). A village would be nice but...: It takes a long-acting contraceptive to prevent repeat adolescent pregnancies. doi: 10.1016/S0749–3797(01)00316–6. *American Journal of Preventive Medicine*, 21(1), 60–65.
- Stevens–Simon, C., Kelly, L., & Singer, D. (1999). Preventing repeat adolescent pregnancies with early adoption of the contraceptive implant. *Family Planning Perspectives*, 31(2), 88–93.
- Swenson, C. C., Schaeffer, C. M., Henggeler, S. W., Faldowski, R., & Mayhew, A. M. (2010). Multisystemic therapy for child abuse and neglect: A randomized effectiveness trial. *Journal of Family Psychology*, 24(4), 497–507.
- Szapocznik, J., & Coatsworth, J. D. (1999). An ecodevelopmental framework for organizing the influences on drug abuse: A developmental model of risk and protection. In M. D. Glantz & C. R. Hartel (Eds.), *Drug abuse: Origins and interventions*. Washington, DC: American Psychological Association, 331–36.
- Tajima, E. A., Herrenkohl, T. I., Moylan, C. A., & Derr, A. S. (2011). Moderating the effects of childhood exposure to intimate partner violence: The roles of parenting characteristics and adolescent peer support. *Journal of Research on Adolescence*, 21(2), 376–94.
- Tarakeshwar, N., Hansen, N. B., Kochman, A., Fox, A., & Sikkema, K. J. (2006). Resiliency among individuals with childhood sexual abuse and HIV: Perspectives on addressing sexual trauma. *Journal of Traumatic Stress*, 19(4), 449–60.
- Tevendale, H., Lightfoot, M., & Slocum, S. (2009). Individual and environmental protective factors for risky sexual behavior among homeless youth: An exploration of gender differences. *AIDS and Behavior*, 13(1), 154–64.
- Theokas, C., Almerigi, J. B., Lerner, R. M., Dowling, E. M., Benson, P. L., Scales, P. C., et al. (2005). Conceptualizing and modeling individual and ecological asset components of thriving in early adolescence. *Journal of Early Adolescence*, 25, 113–43.
- Tolan, P. H., Gorman–Smith, D., & Henry, D. B. (2003). The developmental ecology of urban males' youth violence. *Developmental Psychology*, 39(2), 274–91.
- Turner, R. J., Sorenson, A. M., & Turner, J. B. (2000). Social contingencies in mental health: a seven-year follow-up study of teenage mothers. *Journal of Marriage and Family*, 62(3), 777–91.
- Turney, H. M., Conway, P., Plummer, P., Adkins, S. E., Hudson, G. C., McLeod, D. A., et al. (2011). Exploring behavioral intentions among young mothers. doi: 10.1080/10522158.2011.588552. *Journal of Family Social Work, 14*(4), 298–310.
- Ungar, M. (2004). A constructionist discourse on resilience: Multiple contexts, multiple realities among at-risk children and youth. *Youth and Society*, *35*(3), 341–65.
- Ungar, M. (2005). Introduction: Resilience across cultures and contexts. In M Ungar (Ed.), *Handbook for working with children and youth: Pathways to resilience across cultures and contexts.* Thousand Oaks, CA: Sage Publications, xv–xxxix.

- Ungar, M. (2008). Research note: Resilience across cultures. *British Journal of Social Work*, 38, 218–35.
- Ungar, M., Brown, M., Liebenberg, L., Othman, R., Kwong, W. M., Armstrong, M., & Gigun, J. (2007). Unique pathways to resilience across cultures. *Adolescence*, 42, (166), 287–310.
- Urban Institute (2008). Coming of age: Employment outcomes for youth who age out of foster care through their middle twenties. Rockville, MD: U.S. Department of Health and Human Services.
- Volpe, E. M., & Bear, M. (2000). Enhancing breastfeeding initiation in adolescent mothers through the Breastfeeding Educated and Supported Teen (BEST) Club. *Journal of Human Lactation*, 16(3), 196–200.
- Walsh, C. E., MacMillan, H. L., & Jamieson, E. (2003). The relationship between parental sbustance abuse and child maltreatment: Findings from Ontario Health Supplement. *Child Abuse & Neglect*, 27, 1409–25.
- Walter, K. H., Horsey, K. J., Palmieri, P. A., & Hobfoll, S. E. (2010). The role of protective self-cognitions in the relationship between childhood trauma and later resource loss. *Journal of Traumatic Stress*, 23(2), 264–73.
- Wambach, K. A., & Cole, C. (2000). Breastfeeding and adolescents. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 29(3), 282–94.
- Weed, K., Keogh, D., & Borkowski, J. (2000). Predictors of resiliency in adolescent mothers. doi: 10.1016/S0193-3973(99)00036-2. *Journal of Applied Developmental Psychology*, 21(2), 207-31.
- Weisz, J. R., Sandler, I. N., Durlak, J. A., & Anton, B. S. (2005). Promoting and protecting youth mental health through evidence-based prevention and treatment. *American Psychologist*, 60(6), 628–48.
- Werner, E. E. (1971). The children of Kauai: A longitudinal study from the prenatal period to age 10. Honolulu, HI: University of Hawaii Press.
- Werner, E. E. (1993). Risk, resilience, and recovery: Perspectives from the Kauai Longitudinal Study. *Development and Psychopathology*, *5*, 503–15.
- Werner, E. E. (2000). Protective factors and individual resilience. In J. Shonkoff & S. Meissels (Eds.), *Handbook of early childhood intervention*. New York, NY: Cambridge University Press, 115–32.
- Werner, E. E. & Smith, R. S. (1982). Vulnerable but invincible: A longitudinal study of resilient children and youth. New York, NY: McGraw-Hill.
- Werner, E. E., & Smith, R. S. (1992). Overcoming the odds: high-risk children from birth to adulthood. Ithaca, NY: Cornell University Press.
- Werner, E. E., & Smith, R. S. (2001). *Journeys from childhood to midlife: risk, resilience, and recovery.* Ithaca, NY: Cornell University Press.
- Whitbeck, L. B., Adams, G. W., Hoyt, D. R., & Chen, X. (2004). Conceptualizing and measuring historical trauma among American Indian people. *American Journal of Community Psychology* 33(3/4), 119–30.
- Whitbeck, L. B., McMorris, B. J., Hoyt, D. R., Stubben, J. D., & Lafromboise, T. (2002). Perceived discrimination, traditional practices, and depressive symptoms among American Indians in the Upper Midwest. *Journal of Health & Social Behavior*, 43(4), 400–418.
- Whitson, M. L., Martinez, A., Ayala, C., & Kaufman, J. S. (2011). Predictors of parenting and infant outcomes for impoverished adolescent parents. doi: 10.1080/10522158.2011.587173. *Journal of Family Social Work, 14*(4), 284–97.

- Widom, C. S. 1998. Childhood victimization: Early adversity and subsequent psychopathology. In B. P. Dohrenwend (Ed.), *Adversity, Stress, & Psychopathology*. New York, N.Y.: Oxford University Press.
- Williams, J., & Nelson–Gardell, D. (2012). Predicting resilience in sexually abused adolescents. *Child Abuse & Neglect*, *36*(1), 53–63.
- Williams, N. R., & Lindsey, E. (2004). Spirituality and religion in the lives of runaway and homeless youth: Coping with adversity. *Journal of Religion and Spirituality in Social Work: Social Thought*, 24(4), 19–38.
- Williams, S. M. (2007). Relationship of exposure to community violence to attitudes towards guns and violence, social-maladjustment, and aggressive behavior among an inner-city youth sample. Los Angeles, CA: Alliant International University.
- Wilkinson, D. L., & Carr, P.J. (2008). Violent youth's response to high levels of exposure to community violence: What violent events reveal about youth violence. *Journal of Community Psychology*, 36(8), 1026–51.
- Wilson, W. C., Rosenthal, B. S., & Battle, W. S. (2007). Effects of gender, ethnicity and educational status on exposure to community violence and psychological distress in adolescence. *Journal of Aggression, Maltreatment and Trauma, 15*, 93–111.
- Winokur, M. A., Crawford, G. A., Longobardi, R. C., & Valentine, D. P. (2008). Matched comparison of children in kinship care and foster care on child welfare outcomes. *Families in Society: The Journal of Contemporary Social Services*.
- Wood, J. L. (1997). The relationship between exposure to multiple forms of chronic violence and psychological mediators of violent behavior among incarcerated adolescents. Los Angeles, CA: UCLA.
- Wulczyn, F., Barth, R. P., Yuan, Y., Jones Harden, B. & Landsverk, J. A. (2005). *Beyond common sense: Child welfare, child well-being, and the evidence for policy reform.* Piscataway, NJ: AldineTransaction.
- Zeltin, A., Weinberg, L., & Kimm, C. (2004). Improving education outcomes for children in foster care: Intervention by an education liaison. *Journal of Education for Students Placed at Risk*, 9(4), 421–29.

## **Endnotes**

<sup>1</sup> O'Connell, Boat, & Warner, 2009

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<sup>2</sup> e.g., Catalano & Hawkins, 1995; Hawkins, 2006; Hawkins, Catalano, & Miller, 1992
<sup>3</sup> e.g., Jessor, Donovan, & Costa, 1991; Jessor & Jessor, 1997
<sup>4</sup> Jenson & Fraser, 2011
<sup>5</sup> Masten, 2007
Garmezy, 1983; Garmezy & Streitman, 1974; Masten, 1989; Werner & Smith, 1982
<sup>7</sup> e.g., Hawkins, Catalano, & Miller, 1992; Jenson & Fraser, 2011
<sup>8</sup> e.g., Rutter, 1987, 1999; Werner, 1993, 2000
<sup>9</sup> Lou et al., 2008; Schofield & Beek, 2005
<sup>10</sup> Fraser, Richman, & Galinsky, 1999
<sup>11</sup> Jenson & Fraser, 2011; Lou et al., 2008
<sup>12</sup> Gravetter & Wallnau, 2009
13 Kazdin, 2007
<sup>14</sup> Baron & Kenny, 1986
<sup>15</sup> Baron & Kenny, 1986
<sup>16</sup> e.g., O'Connell et al., 2009
<sup>17</sup> Lou, Anthony, Stone, Vu, & Austin, 2008; Stang & Story, 2005; Wulczyn, Barth, Yuan, Jones Harden, &
Landsverk, 2005
<sup>18</sup> O'Connell, Boat, & Warner, 2009
<sup>19</sup> Mrazek & Haggerty, 1994
<sup>20</sup> Bronfenbrenner, 1979
<sup>21</sup> Kellam & Rebok, 1992; Masten, Faden, Zucker, & Spear, 2008; Weisz, Sandler, Durlak, & Anton, 2005
<sup>22</sup> Crews et al., 2007; Luthar, 2003; O'Connell et al., 2009; Rutter, 1987; Werner & Smith, 1982, 1992
<sup>23</sup> e.g., Catalano & Hawkins, 1995; Hawkins, Catalano, & Associates, 1992; Hawkins et al., 2000
<sup>24</sup> e.g., Jessor, Donovan, & Costa, 1991; Jessor & Jessor, 1997
<sup>25</sup> Jenson & Fraser, 2011
<sup>26</sup> Benard, 1991, 1996; Benson, Galbraith, & Espeland, 1994; Pransky, 1991; Search Institute, 1998
<sup>27</sup> Botvin, 2004; Catalano, 2007; Hawkins 2006; Jenson, 2010
<sup>28</sup> Catalano, 2007
<sup>29</sup> Edberg, 2008
<sup>30</sup> Scales et al., 2005; Schwartz et al., 2007; Lerner et al., 2005; Theokas et al., 2005 e.g., Lerner (2005) and (Pittman et al., 2001)
<sup>32</sup> Phelps, Zimmerman, & Warren, 2009
<sup>33</sup> Catalano et al., 2004
<sup>34</sup> Catalano et al., 2004; Jenson et al., 2013
<sup>35</sup> Catalano et al., 2004
<sup>36</sup> Damon, 2004
<sup>37</sup> Komro, Flay, Biglan, & Promise Neighborhoods Research Consortium, 2011
<sup>38</sup> Komro, Flay, Biglan, & Promise Neighborhoods Research Consortium, 2011
<sup>39</sup> Fagan, Hawkins, & Catalano, 2008; Hawkins, Catalano, & Associates, 1992
<sup>40</sup> Hawkins, Brown, Oesterle, Arthur, Abbot, & Catalano, 2008
<sup>41</sup> Hawkins et al., 2009
<sup>42</sup> Hawkins et al., 2012
43 Shonkoff, 2010
<sup>44</sup> Dahlberg & Krug, 2002
<sup>45</sup> Edberg, Yeide, & Rosenfeld, 2010
46 Edberg, 2008, 2009; http://www.unicef.org/lac/indicators
<sup>47</sup> Bronfenbrenner, 1977, 1979
<sup>48</sup> Masten, 2007
<sup>49</sup> Garmezy, 1983; Garmezy & Streitman, 1974; Masten, 1989; Murphy & Moriarty, 1976; Werner, 1971; Werner &
Smith, 1982
<sup>50</sup> Rutter, M. (1987).
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<sup>51</sup> Fraser, Kirby, & Smokowski, 2004; Jenson & Fraser, 2011
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- <sup>52</sup> Haglund et al., 2007
- <sup>53</sup> Cicchetti & Curtis, 2007
- <sup>54</sup> Shannon and colleagues, 2007
- <sup>55</sup> Bryck and Fisher (2011)
- <sup>56</sup> Loeber et al., 2007
- <sup>57</sup> Calkins, Blandon, et al., 2007
- <sup>58</sup> Kaufman et al., 2006
- <sup>59</sup> Bell, 2001
- 60 Samuels 2011a; Samuels 2011b
- <sup>61</sup> Jaffee et al., 2007; Kim–Cohen and colleagues, 2004
- <sup>62</sup> Aisenberg and Herrenkhol, 2008
- <sup>63</sup> Gewirtz and Edelson, 2007
- <sup>64</sup> Finkelhor, Ormrod, and Turner, 2007; Nurius et al., 2009
- 65 Grigorenko, 2007
- 66 Ungar 2004; 2005; 2008
- <sup>67</sup> Ungar, 2007
- <sup>68</sup> Cardoso and Thompson, 2010
- <sup>69</sup> Greene, Ringwalt, Kelly, Iachan, & Cohen, 1995
- <sup>70</sup> e.g., Kipke Simon, Montgomery, Unger, & Iversen, 1997
- 71 Kidd & Davidson, 2007; Kidd & Carroll, 2007; Kidd & Shahar, 2008
- <sup>72</sup> Altena et al., 2010; Bao et al. 2000; Bender et al., 2007; Rew & Horner 2003
- <sup>73</sup> Altena, Brilleslijper-Kater, & Wolf, 2010; Bender, Thompson, McManus, Lantry, & Flynn, 2007; Kennedy, Agbényiga, Kasiborski, & Gladden, 2010

  74 Goering, Wasylenki, Lindsay, Lemire, & Rhodes, 1997; Hyman, Aubry, & Klodawsky, 2011; Slesnick, Dashora,
- Letcher, Erdem, & Serovich, 2009
- <sup>75</sup> Cohen, Mannarino & Iyengar, 2011; Foshee et al., 2005; Kataoka et al., 2003; Katz, Hessler, & Annest, 2007; Martinez-Torteya et al., 2009; Stein et al., 2003.
- <sup>76</sup> Foshee et al., 2005; Kataoka et al., 2003; Stein et al., 2003
- <sup>77</sup> Harper, Arias, & House, 2003; Sousa et al., 2011; Tajima et al., 2011
- <sup>78</sup> Jouriles, & Skopp, 2006; Jouriles et al., 2009; Lieberman, van Horn, Ippen, 2005; Lieberman, Ippen, van Horn. 2006; McDonald, Graham-Bermann et al., 2007; McDonald, Jouriles, & Skopp, 2006
- <sup>79</sup> Levendosky, Huth–Bocks, & Semel, 2002; Martinez-Torteya, et al., 2009 <sup>80</sup> Graham-Bermann et al., 2011; Jouriles et al., 2009; McDonald, Jouriles, & Skopp, 2006
- <sup>81</sup> Jouriles et al., 2009; McDonald, Jouriles, & Skopp, 2006
- <sup>82</sup> Stein et al., 2003; Kataoka et al., 2003.
- 83 Foshee et al., 2005
- <sup>84</sup> Dozier, et al., 2006; Kirk and Griffith, 2003; Mares & Kroner, 2011; Redding, Fried & Britner, 2000;
- 85 Farineau & McWey, 2011; Kirk & Griffith, 2003; Redding, Fried & Britner, 2000
- <sup>86</sup> Budd, Holdsworth, & HoganBruen, 2006; Hook & Courtney, 2011; Naccarato, Brophy & Courtney, 2010; Redding, Fried & Britner, 2000
- <sup>87</sup> Redding, Fried & Britner 2000
- 88 Metzger, 2008, Redding, Fried & Britner 2000; Schofield & Beek, 2005
- <sup>89</sup> Carey et al., 2010; Chamberlain et al., 2008; Kirk & Griffith, 2003; Reddy & Pfeiffer, 1997
- <sup>90</sup> Carey et al., 2010
- 91 Farineau & McWey, 2011; Metzger, 2008; Winokur et al., 2008
- <sup>92</sup> Ahrens et al., 2008; Courtney & Lyons, 2009; Drapeau et al., 2007; Farineau & McWey, 2011; Geenen & Powers. 2007; Haight et al., 2009; Kirk & Day, 2011; Munson & McMillen, 2009; Osterling & Hines, 2006

  <sup>93</sup> Dworsky & Perez, 2010; Kirk & Day, 2011; Zeltin, Weinberg & Kimm, 2004
- 94 Pecora, 2012; Schofield & Beek, 2005; Urban Institute, 2008
- 95 Geenen & Powers, 2007; Lindsey & Ahmed, 1999; Montgomery, Donkoh & Underhill, 2006
- <sup>96</sup> Berkowitz, Stover, and Marans, 2010
- 97 Swenson et al., 2010; Kolko, 1996; Deblinger et al., 1996, Cohen and Mannarino, 1996; Cohen et al., 2004 98 Bolger & Patterson, 2001; Daigneault et al., 2007; Himelein & McElrath, 1996; Kim & Cicchetti, 2003

- 99 Chandy et al., 1996; Herrenkohl et al., 2005; Kim, 2008; Perkins & Jones, 2004
- <sup>100</sup> Cicchetti & Rogosch, 1997; Schelble et al., 2010; Kim et al., 2009; Curtis & Cicchetti, 2007; Kim & Cicchetti, 2010; Cicchetti & Rogosch, 2007; Flores, Cicchetti, & Rogosch, 2005; Kolko, 1996; Berkowitz, Stover, and Marans, 2010; Swenson et al., 2010; Deblinger et al 1996; Cohen and Mannarino 1996; Cohen et al. 2004
- <sup>101</sup> Berkowitz, Stover, and Marans 2010; Coohey et al., 2011; Kim & Cicchetti, 2003; Schultz et al., 2009; Swenson et al., 2010
- <sup>102</sup> Berkowitz, Stover, and Marans, 2010; Bolger, Patterson & Kupersmidt, 1998; Kim & Cicchetti, 2003; Kolko, 1996; McLewin & Muller, 2006; Schultz et al., 2009; Swenson et al., 2010
- <sup>103</sup> Herrenkohl et al., 2005; Williams & Nelson-Gardell, 2012; Zingraff & Leiter, 1995
- <sup>104</sup> Chaffin, et al., 2012; Collishaw et al., 2007; Herrenkohl et al., 1994; Kim-Spoon et al., 2012; Kolko, 1996; Lansford et al., 2006; Lundahl, Nimer & Parsons, 2006; Prinz et al., 2009
- <sup>105</sup> Berkowitz, Stover, and Marans, 2010; Rosenthal et al., 2003; Williams & Nelson-Gardell 2012
- <sup>106</sup> Bolger, Patterson & Kupersmidt 1998; Collishaw et al., 2007; Herrenkohl et al., 2005; Perkins & Jones, 2004; Schultz et al., 2009
- <sup>107</sup> Bos et al., 2011; Croft et al., 2007; Herrenkohl et al., 1994
- <sup>108</sup> Noria, 2005; Shearer et al., 2002; Budd et al., 2006; Budd et al., 2000; Kalil & Kunz, 2002; Kennedy, 2005 <sup>109</sup> Jaffee et al., 2001
- <sup>110</sup> Raneri & Wiemann, 2007; Estrada, 2012; Shearer et al., 2002; Perrin & Dorman, 2003.
- <sup>111</sup> Luster et al., 2000; ; Rhule et al., 2006
- <sup>112</sup> Gruber, 2012
- <sup>113</sup>Easterbrooks et al., 2010; Haight, 2009; Turney et al., 2011; Turner et al., 2000; Black & Ford-Gilboe, 2004; Birkeland et al., 2005' Sims & Luster, 2002; Renker, 1999; Easterbrooks et al., 2005; Eshbaugh, 2006; Kennedy, 2005.
- Manlove, Mariner, et al., 2000; Manlove, Mariner, et al., 2000; Hess, Papas & Black, 2002; Park et al., 2003;
   Weed, Keogh, & Borkowski, 2000; Eshbaugh et al., 2006; Budd et al., 2006; Kalil & Kunz, 2002
   Luster et al., 2000
- Black et al., 2001; Kennedy, 2005; Crittenden et al., 2009; Harris & Franklin, 2003; Hess, Papas & Black, 2002;
   Nadeem et al., 2006; Stevenson et al., 1999
- <sup>117</sup> Key et al., 2001; Manlove, Mariner, et al., 2000; Raneri & Wiemannn, 2007; Noria, 2005; Black & Ford-Gilboe, 2004; Collins, 2010
- 118 Luster et al., 2000
- <sup>119</sup>Black et al., 2001; Carothers et al., 2006; Deutscher et al., 2006; Flynn, 1999; Gruber, 2012; Koniak-Griffin et al., 2002; Rhule et al., 2006; Volpe & Bear, 2000
- <sup>120</sup> Brubaker & Wright, 2006; Easterbrooks et al., 2005; Estrada, 2012; Hess, Papas & Black, 2002; Lewin et al., 2011; Luster et al., 2000; Stevenson et al., 1999; Milan et al., 2004; Wambach & Cole, 2000
- <sup>121</sup> Raneri & Wiemann, 2007; Turner et al., 2000; Key et al., 2001
- <sup>122</sup> Milan et al., 2004; Clemmens, 2001; Wambach & Cole, 2000; Perrin & Dorman, 2003; Estrada, 2012; Stevenson et al., 1999; Brosh, Weigel & Evans, 2007; Easterbrooks et al., 2005; Kalil & Kunz, 2002; Collins, 2010; Luster et al., 2000.
- <sup>123</sup> Black & Ford-Gilboe, 2004; Kennedy et al., 2010; Flynn, 1999; Klerman, 2004; Chablani & Spinney, 2011; Barnet, et al., 2002; Barnet, et al., 2007; Black et al., 2001; Key et al., 2001; Kelsey et al., 2001
- <sup>124</sup> Manlove, Mariner, et al., 2000; Nadeem et al., 2006; Lanzi et al., 2009
- <sup>125</sup> Black & Ford-Gilboe, 2004; Brosh, Weigel & Evans, 2007; Clemmens, 2001; Collins, 2010; Easterbrooks et al., 2005; Estrada, 2012; Haight, 2009; Kennedy et al., 2010; Key et al., 2001; Luster et al., 2000; Manlove, Mariner, et al., 2000; Renker, 1999; SmithBattle, 2007; Sparks, 2010; Wambach & Cole, 2000.
- Black et al., 2001; Black & Ford-Gilboe 2004; Corcoran & Pillai, 2007; Eshbaugh et al., 2006; Luster et al., 2000; Manlove, Marina, et al., 2000; Perrin & Dorman, 2003; Secco et al., 2007.
   CDC. 2010
- <sup>128</sup> Finkelhor, Turner, Ormrod, Hamby, & Kracke, 2009.
- <sup>129</sup> Bell and Jenkins (1993)
- <sup>130</sup> Lynch, 2003
- <sup>131</sup> Finkelhor, Ormrod, & Turner, 2007; Nurius, Russell, Herting, Hooven, & Thompson, 2009
- <sup>132</sup> Cooley–Quille, Boyd, Frantz, & Walsh, 2001; Finkelhor et al., 2009; Luthar & Goldstein, 2004; Lynch, 2003; Lynch & Cicchetti, 1998; Widom, 1998

- <sup>133</sup> Lambert, Ialongo, Boyd, & Cooley, 2005
- e.g., Salzinger (2010) and Luthar and Goldstein (2004)
- 135 Edberg, Yeide, & Rosenfeld, 2010; Lynch & Cicchetti, 1998
- 136 e.g., Brooks-Gunn, Duncan, & Aber, 1997; Tolan, Gorman-Smith, & Henry, 2003
- 137 Krug, Dahlbert, Mercy, Zwi, & Lozano, 2002
- <sup>138</sup>Walsh, MacMillan & Jamieson, 2003
- 139 Boutakidis et al., 2006; Edberg et al., 2010
- 140 Williams, 2007
- 141 Wood, 1997
- <sup>142</sup> Dodge, 2002
- e.g., Johnson & Lieberman, 2007; Ludwig & Warren, 2009; Nurius, Russell, Herting, Hooven, & Thompson, 2009; Owen Thompson, Shaffer Jackson & Kaslow 2009; Tajima Herrenkohl, Moylan & Derr 2010
- 2009; Owen, Thompson, Shaffer, Jackson, & Kaslow, 2009; Tajima, Herrenkohl, Moylan, & Derr, 2010 <sup>144</sup> e.g., Cohen, Mannarino, & Iyengar, 2011; Flay, Graumlich, Segawa, Burns, & Holliday, 2004; Jain, Buka, Subramanian, & Molnar, 2012; Kurlychek, Krohn, Dong, Hall, & Lizotte, 2012
- Goodson, Buhl, & Dunsmore, 2004; House, Bates, Markham, & Lesesne, 2010; Kirby & Lepore, 2007
- 146 Kirby & Lepore, 2007
- <sup>147</sup> Kirby & Lepore, 2007
- <sup>148</sup> e.g., Goodson et al, 2004; House et al., 2010
- <sup>149</sup> House et al., 2010
- 150 Goodson, Buhi, & Dunsmore, 2004
- <sup>151</sup> Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004
- <sup>152</sup> Rounds, 2011.
- <sup>153</sup> e.g., Gavin et al., 2010; Jenson & Fraser, 2011
- 154 Kirby and Lepore, 2007
- <sup>155</sup> Markham et al., 2010
- 156 e.g., Gavin et al., 2010; Jenson & Fraser, 2011
- <sup>157</sup> Markham et al, 2010
- 158 Rounds, 2011
- 159 Hawkins, 2006; Hawkins et al., 1992; Jenson & Fraser, 2011