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

A Literature Review and Theoretical Framework

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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*.1 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.2 Finally, knowledge derived from theories and tests of problem behavior in children and youth was central to our review.3

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.4

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. 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. 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.
• **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.\(^\text{10}\)

• **Promotive factor.** Promotive factors exert positive effects on behavior regardless of levels of risk or risk exposure.\(^\text{11}\)

• **Construct.** A construct refers to internal attributes or characteristics that cannot be directly observed but are useful in describing and explaining behavior.\(^\text{12}\) 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”.\(^\text{13}\) 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.\(^\text{14}\)

• **Moderator.** Something (a variable) that affects the direction or strength of a relationship between an independent variable and an outcome or dependent variable.\(^\text{15}\)

Protective factors for general youth populations vary considerably by age.\(^\text{16}\) When possible, the following developmental stages were considered in this review:\(^\text{17}\):

• **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\(^{18}\) 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.\(^{19}\) 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\(^{20}\) and recognizes the wide acceptance of the ecological perspective in mental health, developmental psychopathology, and prevention science.\(^{21}\) In addition, the authors note the complex interactions between and among biological and genetic processes, individual psychological processes, and multiple levels of social contexts.\(^{22}\) 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\textsuperscript{23} and to theories of problem behavior in children and youth\textsuperscript{24}. 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.\textsuperscript{25}

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.\textsuperscript{26}

Considerable work on protective factors has also occurred in the fields of public health and prevention science.\textsuperscript{27} Numerous efficacious school- and community-based prevention programs have been developed using knowledge of risk and protective factors.\textsuperscript{28} 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 \textit{Positive Youth Development}.

\textbf{Positive Youth Development} (PYD) centers on the concept that children and youth have the capacity to \textit{thrive}, defined as “fulfilling one’s potential and contributing positively to one’s community”\textsuperscript{29}. PYD does not focus on risk exposure as the primary mechanism for unhealthy or negative behavior, but on protective factors or \textit{assets}\textsuperscript{30} 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.\textsuperscript{31} PYD and related approaches are relatively new, as is measurement of the constructs themselves.\textsuperscript{32}

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 (http://www.search-institute.org/assets). 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. 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.

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 [http://www.cssp.org/reform/strengthening-families](http://www.cssp.org/reform/strengthening-families).

**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 [http://www.cdc.gov/violenceprevention/childmaltreatment/essentials/](http://www.cdc.gov/violenceprevention/childmaltreatment/essentials/).

**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. 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 life-cycle, 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. 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 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. 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. 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 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.

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.51

**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†) 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.53 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.54 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.55 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.56

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.57 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.58 The goal was to understand the

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

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.
**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. 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.

Cardoso and Thompson examined resilience across cultures in a systematic review of resilience among Latino immigrant families. 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.
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<tr>
<th>Table 1. Protective Factors for ACYF Populations by Level of Influence</th>
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<td><strong>Individual Level</strong></td>
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<td><strong>Characteristics</strong></td>
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<td>Positive self-image</td>
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<td>Sense of purpose</td>
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<td>Sense of optimism</td>
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<td>Agency (self-efficacy)</td>
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<td>Cognitive ability (intelligence)</td>
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<td><strong>Skills and Developmental Tasks</strong></td>
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<td>Problem-solving skills</td>
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<td>Academic skills</td>
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<td>Involvement in positive activities</td>
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<td><strong>Relationship Level</strong></td>
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<td>Parenting competencies</td>
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<td>Parent or caregiver well-being</td>
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<td>Positive peers</td>
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<td>Caring adult(s)</td>
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<td>Living with family members</td>
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<td><strong>Community Level</strong></td>
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<td>Positive school environment</td>
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<td>Positive community environment</td>
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<td>Stable living situation</td>
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<td>Economic opportunities</td>
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*Emerging Evidence*: Preponderance of findings generated by cross-sectional studies, case studies, or qualitative investigations with non-representative samples.

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

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

****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).

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

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.

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. 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. 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.

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

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

**Individual factors:**
- Self-regulation skills
- Problem-Solving skills

**Relationship factors:**
- Parenting competencies
- Parental well-being

**Community factors:**
- Positive school environment
Interventions seeking to increase parental well-being are also associated with positive outcomes for children exposed to domestic violence. 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.

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.

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.86

**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.87 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.88 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.89 Competencies have also been linked to the likelihood of children being reunited with their parents.90

Living with family members and having caring adults are protective influences for 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 in kinship care placements (compared to traditional foster care or group homes) experienced fewer out-of-home placements, less antisocial conduct, and lower rates of juvenile justice involvement than young people placed in traditional foster care or group home placements.91 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.92

### Protective Factors with Moderate or Strong Evidence

### Levels of Evidence for Children and Youth in or Transitioning out of Foster Care

**Individual factors:**
- Self-regulation skills
- Relational skills
- Academic skills

**Relationship factors:**
- Parenting competencies
- Caring adult(s)
- Living with family members

**Community factors:**
- Positive school environment
- Stable living situation
- Supports for independent living
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. Evaluations 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.98 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.100 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.101 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.102 Finally, involvement in positive activities, specifically school connectedness, commitment and engagement, is protective for children who have been abused or neglected.103

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

**Individual factors:**
- Sense of purpose
- Agency (self-efficacy)
- Self-regulation skills
- Relational skills
- Problem-solving skills
- Involvement in positive activities

**Relationship factors:**
- Parenting competencies
- Positive peers
- Parent or caregiver well-being

**Community factors:**
- Positive school environment
- Positive community environment
- 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.

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.

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 socio-emotional 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 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.\textsuperscript{125} Economic opportunities and resources such as employment status and income are related to reductions in repeat pregnancies, infant care, financial independence, and academic achievement.\textsuperscript{126}

<table>
<thead>
<tr>
<th>Protective Factors with Moderate or Strong Levels of Evidence for Pregnant and Parenting Teens</th>
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<tr>
<td><strong>Individual factors:</strong></td>
</tr>
<tr>
<td>- Cognitive ability</td>
</tr>
<tr>
<td>- Sense of optimism</td>
</tr>
<tr>
<td>- Agency (self-efficacy)</td>
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<tr>
<td>- Academic skills</td>
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<tr>
<td>- Relational skills</td>
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<td>- Problem-solving skills</td>
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<tr>
<td>- Involvement in positive activities</td>
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<tr>
<td><strong>Relationship factors:</strong></td>
</tr>
<tr>
<td>- Parenting competencies</td>
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<tr>
<td>- Positive peers</td>
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<td>- Caring adult(s)</td>
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<td>- Supportive partner</td>
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<td>- Living with family members</td>
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<td><strong>Community factors:</strong></td>
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<tr>
<td>- Positive school environment</td>
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<tr>
<td>- Positive community environment</td>
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<tr>
<td>- Economic opportunities</td>
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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.\(^{127}\) 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.\(^{128}\) 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,\(^{131}\) 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.\(^{132}\) 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.\(^{133}\) 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 inner-city 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.\(^{135}\) 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.\(^{136}\) Investigators have also found connections between community or neighborhood factors related to poverty and family violence and child abuse.\(^{137}\) Exposure to CEV has also been linked to substance abuse.\(^{138}\) Moreover, exposure to neighborhood violence may have unique effects on immigrant families.\(^{139}\)
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.

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.

**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.\textsuperscript{147} *Agency* (self-efficacy)—often defined by social, behavioral, and
cognitive decision-making patterns displayed by young people\textsuperscript{148}—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.\textsuperscript{149} *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.\textsuperscript{150} *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.\textsuperscript{151}

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.\textsuperscript{152} 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.\textsuperscript{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.\textsuperscript{154} 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.\textsuperscript{155}

*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.\textsuperscript{156} 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.\textsuperscript{157} 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.\textsuperscript{158}

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.\textsuperscript{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 \textit{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.

\textbf{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 \textit{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.

\textbf{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, \textit{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.

\textbf{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.

\textbf{Summary}

\textit{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


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.


Endnotes

1 O’Connell, Boat, & Warner, 2009
2 e.g., Catalano & Hawkins, 1995; Hawkins, 2006; Hawkins, Catalano, & Miller, 1992
3 e.g., Jessor, Donovan, & Costa, 1991; Jessor & Jessor, 1997
4 Jenson & Fraser, 2011
5 Masten, 2007
6 Garmezy, 1983; Garmezy & Streitman, 1974; Masten, 1989; Werner & Smith, 1982
7 e.g., Hawkins, Catalano, & Miller, 1992; Jenson & Fraser, 2011
8 e.g., Rutter, 1987, 1999; Werner, 1993, 2000
9 Lou et al., 2008; Schofield & Beek, 2005
10 Fraser, Richman, & Galinsky, 1999
11 Jenson & Fraser, 2011; Lou et al., 2008
12 Gravetter & Wallnau, 2009
13 Kazdin, 2007
14 Baron & Kenny, 1986
15 Baron & Kenny, 1986
16 e.g., O’Connell et al., 2009
17 Lou, Anthony, Stone, Vu, & Austin, 2008; Stang & Story, 2005; Wulczyn, Barth, Yuan, Jones Harden, & Landsverk, 2005
18 O’Connell, Boat, & Warner, 2009
19 Mrazek & Haggerty, 1994
20 Bronfenbrenner, 1979
21 Kellam & Rebok, 1992; Masten, Faden, Zucker, & Spear, 2008; Weisz, Sandler, Durlak, & Anton, 2005
22 Crews et al., 2007; Luthar, 2003; O’Connell et al., 2009; Rutter, 1987; Werner & Smith, 1982, 1992
23 e.g., Catalano & Hawkins, 1995; Hawkins, Catalano, & Associates, 1992; Hawkins et al., 2000
25 Jenson & Fraser, 2011
26 Benard, 1991, 1996; Benson, Galbraith, & Espeland, 1994; Pransky, 1991; Search Institute, 1998
27 Botvin, 2004; Catalano, 2007; Hawkins 2006; Jenson, 2010
28 Catalano, 2007
29 Edborg, 2008
30 Scales et al., 2005; Schwartz et al., 2007; Lerner et al., 2005; Theokas et al., 2005
31 e.g., Lerner (2005) and (Pittman et al., 2001)
32 Phelps, Zimmerman, & Warren, 2009
33 Catalano et al., 2004
34 Catalano et al., 2004; Jenson et al., 2013
35 Catalano et al., 2004
36 Damon, 2004
37 Komro, Flay, Biglan, & Promise Neighborhoods Research Consortium, 2011
38 Komro, Flay, Biglan, & Promise Neighborhoods Research Consortium, 2011
41 Hawkins et al., 2009
42 Hawkins et al., 2012
43 Shonkoff, 2010
44 Dahlberg & Krug, 2002
45 Edberg, Yeide, & Rosenfeld, 2010
47 Bronfenbrenner, 1977, 1979
48 Masten, 2007
49 Garmezy, 1983; Garmezy & Streitman, 1974; Masten, 1989; Murphy & Moriarty, 1976; Werner, 1971; Werner & Smith, 1982
51 Fraser, Kirby, & Smokowski, 2004; Jenson & Fraser, 2011
52 Haglund et al., 2007
53 Cicchetti & Curtis, 2007
54 Shannon and colleagues, 2007
55 Bryck and Fisher (2011)
56 Loeb et al., 2007
57 Calkins, Blandon, et al., 2007
58 Kaufman et al., 2006
59 Bell, 2001
60 Samuels 2011a; Samuels 2011b
61 Aisenberg and Herrenkhol, 2008
62 Gewirtz and Edelson, 2007
63 Finkelhor, Ormrod, and Turner, 2007; Nurius et al., 2009
64 Grigorenko, 2007
65 Ungar 2004; 2005; 2008
66 Ungar, 2007
67 Cardoso and Thompson, 2010
68 Greene, Ringwalt, Kelly, Iachan, & Cohen, 1995
69 e.g., Kipke Simon, Montgomery, Unger, & Iversen, 1997
71 Altena et al., 2010; Bao et al. 2000; Bender et al., 2007; Rew & Horner 2003
72 Altena, Brilsehijper-Kater, & Wolf, 2010; Bender, Thompson, McManus, Lantry, & Flynn, 2007; Kennedy, Agbényiya, Kasiborski, & Gladden, 2010
73 Goering, Wasylenki, Lindsay, Lemire, & Rhodes, 1997; Hyman, Aubry, & Klodawsky, 2011; Slesnick, Dashora, Letcher, Erdem, & Serovich, 2009
74 Mara, Mannarino & Iyengar, 2011; Foshee et al., 2005; Kataoka et al., 2003; Katz, Hessler, & Annest, 2007; Martinez-Torteya et al., 2009; Stein et al., 2003.
75 Foshee et al., 2005; Kataoka et al., 2003; Stein et al., 2003
76 Harper, Arias, & House, 2003; Sousa et al., 2011; Tajima et al., 2011
77 Jouriles, & Skopp, 2006; Jouriles et al., 2009; Lieberman, van Horn, Ippe, 2005; Lieberman, Ippe, van Horn, 2006; McDonald, Graham–Bermann et al., 2007; McDonald, Jouriles, & Skopp, 2006
78 Levendosky, Huth–Bocks, & Semel, 2002; Martinez-Torteya, et al., 2009
79 Graham-Bermann et al., 2011; Jouriles et al., 2009; McDonald, Jouriles, & Skopp, 2006
80 Jouriles et al., 2009; McDonald, Jouriles, & Skopp, 2006
81 Stein et al., 2003; Kataoka et al., 2003.
83 Redding, Holdsworth, & HoganBruen, 2006; hook & Courtney, 2011; Naccarato, Brophy & Courtney, 2010; Redding, Fried & Britner, 2000
84 Metzger, 2008, Redding, Fried & Britner 2000; Schofield & Beek, 2005
85 Carey et al., 2010; Chamberlain et al., 2008; Kirk & Griffith, 2003; Reddy & Pfeiffer, 1997
86 Carey et al., 2010
87 Farineau & McWey, 2011; Metzger, 2008; Winokur et al., 2008
88 Ahrens et al., 2008; Courtne & 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
90 Pecora, 2012; Schofield & Beek, 2005; Urban Institute, 2008
92 Berkowitz, Stover, and Marans, 2010
93 Swenson et al., 2010; Kolko, 1996; Deblinger et al., 1996; Cohen and Mannarino, 1996; Cohen et al., 2004
94 Bolger & Patterson, 2001; Daigneault et al., 2007; Himelein & McElrath, 1996; Kim & Cicchetti, 2003
Lambert, Ialongo, Boyd, & Cooley, 2005

e.g., Salzinger (2010) and Luthar and Goldstein (2004)

Edberg, Yeide, & Rosenfeld, 2010; Lynch & Cicchetti, 1998

e.g., Brooks–Gunn, Duncan, & Aber, 1997; Tolan, Gorman–Smith, & Henry, 2003

Krug, Dahlbert, Mercy, Zwi, & Lozano, 2002

Walsh, MacMillan & Jamieson, 2003

Boutakidis et al., 2006; Edberg et al., 2010

Williams, 2007

Wood, 1997

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

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

Kirby & Lepore, 2007

e.g., Goodson et al, 2004; House et al., 2010

House et al., 2010

Goodson, Buhl, & Dunsmore, 2004

Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004

Rounds, 2011.

e.g., Gavin et al., 2010; Jenson & Fraser, 2011

Kirby and Lepore, 2007

Markham et al., 2010

e.g., Gavin et al., 2010; Jenson & Fraser, 2011

Markham et al, 2010

Rounds, 2011

Hawkins, 2006; Hawkins et al., 1992; Jenson & Fraser, 2011