

# INTEGRATING SAFETY, PERMANENCY AND WELL-BEING SERIES

February 2014



## A COMPREHENSIVE FRAMEWORK for Nurturing the Well-Being of Children and Adolescents



## Preface

This series of papers, *Integrating Safety, Permanency and Well-Being in Child Welfare*, describes how a more fully integrated and developmentally specific approach in child welfare could improve both child and system level outcomes. The papers were developed to further the national dialogue on how to more effectively integrate an emphasis on well-being into the goal of achieving safety, permanency and well-being for every child.

The overview, *Integrating Safety, Permanency and Well-Being: A View from the Field* (Wilson), provides a look at the evolution of the child welfare system from the 1970s forward to include the more recent emphasis on integrating well-being more robustly into the work of child welfare.

The first paper, *A Comprehensive Framework for Nurturing the Well-Being of Children and Adolescents* (Biglan), provides a framework for considering the domains and indicators of well-being. It identifies the normal developmental trajectory for children and adolescents and provides examples of evidence-based interventions to use when a child's healthy development has been impacted by maltreatment.

The second paper, *Screening, Assessing, Monitoring Outcomes and Using Evidence-based Practices to Improve the Well-Being of Children in Foster Care* (Conradi, Landsverk and Wotring), describes a process for delivering trauma screening, functional and clinical assessment, evidence-based interventions and the use of progress monitoring in order to better achieve well-being outcomes.

The third paper, *A Case Example of the Administration on Children, Youth and Families' Well-Being Framework: KIPP* (Akin, Bryson, McDonald, and Wilson), presents a case study of the Kansas Intensive Permanency Project and describes how it has implemented many of the core aspects of a well-being framework.

These papers are an invitation for further thinking, discussion and action regarding the integration of well-being into the work of child welfare. Rather than being a prescriptive end point, the papers build developmentally on the Administration on Children, Youth and Families' 2012 information memorandum *Promoting Social and Emotional Well-Being for Children and Youth Receiving Child Welfare Services* and encourage new and innovative next steps on the journey to support healthy development and well-being.

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## Introduction

This is the first in a series of three papers entitled *Integrating Safety, Permanency and Well-Being* written for the Administration on Children, Youth and Families at the U.S. Department of Health and Human Services to further dialogue regarding the more robust integration of well-being with the safety and permanency pillars of child welfare services. This paper presents a framework for ensuring the successful and healthy development of young people who have been maltreated or are at risk to be maltreated. Much research evidence about child and adolescent development has accumulated in the past 30 years, making it increasingly clear that it is both possible and necessary to integrate safety and permanency with efforts intended to ensure young people's successful development and well-being (Administration for Children & Families, 2012).

## The Problem of Child Abuse and the Need for Comprehensive Strategies

The harm child abuse does to a child is far more pervasive than previously believed. Recent biological studies of the effects of maltreatment indicate that, beyond its immediate physical harm, abuse causes significant effects on children's cognitive, social, behavioral, and physical development. Shonkoff, Boyce, and McEwen (2009) review evidence showing that maltreatment and related stressors such as poverty, family conflict, and parental substance abuse can produce latent effects on children's health and behavior that are not detected until much later. In addition, the cumulative effect of repeated exposure to stress produces myriad effects including "...coronary artery disease, chronic pulmonary disease, cancer, depression, and drug abuse (p. 2253)," as well as teenage pregnancy and obesity. Thus, preventing maltreatment and treating those who have been maltreated will have benefits that extend throughout the life of the individual and to those around the individual.

Even after maltreatment has ended and children are safe and have achieved permanency, it is likely that many will require further assistance to address their well-being and developmental needs. Recent neuroscience findings show that maltreatment has an impact on brain functioning in ways that affect emotional regulation and executive functioning. Evidence-based interventions can help children develop these self-regulatory capacities, control emotions and inhibit impulses in the interest of achieving longer term outcomes to include being successful at home, in school, at work, in the community and in relationships. In the absence of effective interventions, academic and employment challenges and social rejection are common, which, taken together, contribute to the development of numerous problems including drug abuse and delinquency (Biglan, Brennan, Foster, & Holder, 2004).

Comprehensive family support is also needed to help children heal and recover after abuse has occurred and to prevent maltreatment. Much child abuse is never reported or detected. For example, Theodore et al. (2005) found in phone surveys that rates of parental discipline practices considered abusive were 40 times greater than that of official child physical abuse reports. This implies that universally available strategies are needed to prevent and address child abuse among families who may never be identified (Prinz, Sanders, Shapiro, Whitaker, & Lutzker, 2009).

When families do come to the attention of child welfare, targeted and intensive interventions can be provided to increase family capacity and functioning while simultaneously promoting healing and recovery for children. Importantly, most children are never removed from their caregivers, and the majority of those who enter foster care return home. Within this overall context of parental and family relationships, children's well-being and developmental needs can and must be met. In sum, there are strong reasons for all of the agencies and organizations with responsibility

for child and adolescent development, such as child welfare, to develop integrated, coordinated approaches to helping families and caregivers increase the quality of their nurturance. Increasing the nurturing capacity of parents and caregivers can prevent maltreatment from occurring and buffer children from negative long-term effects of maltreatment in order to help them get back on track developmentally. This is critically important in child welfare as child abuse and neglect often occurs in a relationship context.

## **A Developmental Framework for Promoting Well-Being**

The Administration on Children, Youth and Families, in its *Promoting Social and Emotional Well-being for Children and Youth Receiving Child Welfare Services*, called on the child welfare field to embed a developmentally specific focus on well-being in all areas of its work (ACF, 2012). In child welfare and in other child and family serving systems, prevention and neurobiological science is increasingly informing this emphasis on promoting healthy development in the social/emotional, behavioral, cognitive, and physical domains. This focus on healthy development, rather than on preventing specific child-level problems, has been prompted by several lines of research. First, it has become clear that psychological, behavioral, and health problems tend to be inter-related, so that a young person with a problem such as substance abuse is highly likely to have other problems, ranging from academic failure and depression to risky sexual behavior (Biglan et al., 2004; Boles, Biglan, & Smolkowski, 2006). Second, most problems arise in environments that fail to nurture young people's positive social behavior and values (Biglan et al., 2004). Third, analysis of the ingredients of most evidence-based preventive interventions shows that they have preventive effects because they foster development of prosocial behaviors and values that are incompatible with problems (Biglan, Flay, Embry, & Sandler, 2012).

### **Caring and Productive Young Adults**

One way to think about how to nurture development is to imagine the caring and productive 19-year-olds envisioned in the Institute of Medicine's report on preventing mental and behavioral health problems (National Research Council & Institute of Medicine, 2009). They will be high school graduates pursuing further education: anything less than that would likely result in a life of under employment and low-paying jobs (Bynner & Parsons, 1997). To succeed in school, they will have developed the self-management skills and social relations that enable them to complete schoolwork, get support from others, and avoid conflict. They will be physically healthy and not obese, have a healthful diet, and exercise regularly. These skills and activities will be in place because they have developed self-regulation or executive functions enabling them to persist in the face of challenges and cope with distress without having to avoid or suppress it (Vohs & Baumeister, 2011). Finally, the caring young adults that their families and communities nurture will be strongly committed to helping others and contributing to their community's well-being.

Nurturing these qualities, throughout infancy, childhood and adolescence, will have additional advantages. Young people with these characteristics are unlikely to have any of the psychological, behavioral, or health problems that are so costly to young people and society: antisocial behavior, substance abuse, risky sexual behavior, or depression. Indeed, most of what has been learned about the environments that promote these positive qualities comes from prevention research that set out to prevent one or more of the most common and costly psychological and behavioral problems (NRC & IOM, 2009).

For their own well-being and for the good of society, children and young adults' healthy development requires a constellation of behaviors, values, and attitudes that involve working for the well-being of others and striving to develop themselves. Because of its centrality to the well-being of individuals and groups, this constellation has come to be called prosociality by a growing number of behavioral scientists (Biglan & Cody, 2013; Caprara, Alessandri, & Eisenberg, 2012; Wilson, O'Brien, & Sesma, 2009). If they are in nurturing and prosocial environments, they have fewer behavioral problems (Caprara, Barbaranelli, Pastorelli, Bandura, & Zimbardo, 2000; Kasser & Ryan, 1993; Sheldon & Kasser, 1998; Wilson & Csikszentmihalyi, 2008), do better in school (Caprara et al., 2000), have more and better friends (Clark & Ladd, 2000), and are healthier (Biglan & Hinds, 2009).

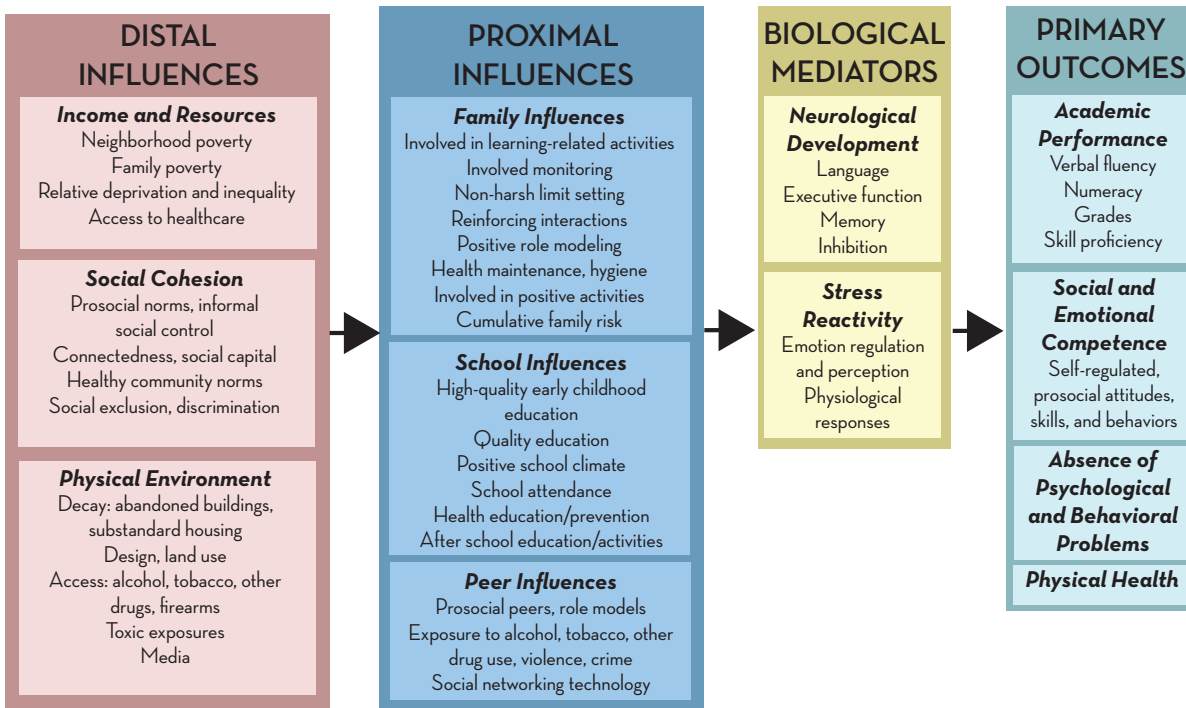
## **Nurturing Development from Pregnancy through Adolescence**

Prevention scientists have identified a set of programs, policies, and practices that can ensure positive well-being outcomes for most young people—if we can reach them with these interventions. Key ingredients of these interventions are that they make young people's environment more nurturing (Biglan et al., 2012). They (a) reduce socially and biologically toxic conditions; (b) teach, promote, and richly reinforce executive functions such as self-regulation and positive interactions/relationships with others; (c) limit opportunities for problem development; and (d) promote the pragmatic pursuit of prosocial values. Because children and youth who have experienced maltreatment are more likely to develop social/emotional, behavioral, and mental health problems than other children, it is important that interventions containing these essential ingredients be available in order to help bring them back onto a healthy developmental track. Examples of evidence-based interventions that contain these essential ingredients and promote positive development are provided later in this paper.

Figure 1 presents a framework for thinking about what is needed for all children, including those who have experienced maltreatment and trauma. It is adopted from an analysis by Komro, Flay, Biglan, and the Promise Neighborhoods Research Consortium (2011) of the last 30 years of developmental research. At every phase of development—from pregnancy through adolescence—young people need to develop cognitively, to develop social and emotional competence, and to be physically healthy. We also need to prevent them from developing any of the many psychological, behavioral, or health problems that can harm them and be costly to those around them and the society in general.



Figure 1: PNRC Model



The three most important proximal influences on young people’s development are the family, school, and peers. Effective community efforts to ensure successful development must ensure that these environments are nurturing, as just described. Families, schools, and peers, however, exist in a larger social context that affects the likelihood that they will be nurturing. As Figure 1 shows, more distal influences are also important, including the economic resources of families, schools, and neighborhoods. So is the degree of social cohesion in the neighborhood and community—the degree to which there are strong prosocial norms, positive social relations, and minimal social exclusion or discrimination. Finally, the quality of the physical environment, including physical decay of buildings; access to weapons, alcohol, tobacco, and other drugs; and access to nutritious food can have a strong influence on developmental outcomes.

Table 1 below shows the essential outcomes to be nurtured in the cognitive, social/emotional, behavioral, and physical domains across the developmental stages from prenatal/birth through adolescence. It is important to note that each of the indicators of these outcomes identified within the table is measurable. (See also Appendix 1 of the ACYF well-being framework; 2012.) Thus, it is possible to assess whether a child is on target developmentally across each of the domains. Advances in the use of valid and reliable screening and functional assessment tools also allow for on-going progress monitoring to determine if the interventions employed are helping to return the child to on target developmental functioning. Paper 2 in this series, *Screening, Assessing, Monitoring Outcomes and Using Evidence-Based Interventions to Improve the Well-Being of Children in Child Welfare* (Conradi, Landsverk & Wotring), provides more in-depth information about the use of screening and functional assessment tools to determine a child’s developmental trajectory in the cognitive, social/emotional, behavioral and physical domains.

After Table 1 are descriptions of each developmental phase in more detail, including outcomes and the major proximal influences at each stage. Examples are provided of interventions that have been shown to promote positive development and well-being during each developmental stage. As noted previously, these interventions can meet many of the needs of children who have experienced abuse and neglect by reducing socially and biologically toxic conditions, reinforcing self-regulation and positive relationships, limiting opportunities for problem development and

promoting prosocial values. The lists of interventions in each section are not exhaustive or prescriptive. It is worth noting that most of the example interventions noted in this paper are targeted or intensive rather than universal and are designed to remediate and to prevent further problems from occurring given the abuse and neglect encountered.

Additional evidence-based and evidence-informed interventions can be explored in databases such as the National Registry of Evidence-based Programs and Practices. The appendix to this document provides resources for exploring evidence-based interventions.

**Table 1. Key outcomes by developmental phase**

Outcome Domain				
Developmental Phase	Cognitive development	Social & emotional competence	Psychological & behavioral development	Physical health
<i>Prenatal-infancy (birth-age 2)</i>	Language development; executive functioning	Social/emotional development; attachment	Self awareness develops; behavioral development	Birth weight; physical and motor skill development; injuries
<i>Early childhood (3-5)</i>	Language and early literacy development (e.g., picture naming, rhyming, letter naming); executive functioning	Self-regulation; emotional symptoms; social relations; prosocial behavior, skills, attitudes	Self-concept develops; behavioral development; attentional and hyperactivity difficulties; conduct problems	Physical development; injuries; asthma-like illness; diet; physical activity; height/weight percentiles; oral health
<i>Childhood (6-11)</i>	Reading proficiency; mathematics proficiency (at or above grade level); executive functioning	Same as above, plus: gradual shift in control from parents to child; peers assume a more central role	Same as the above, plus: self-concept becomes more complex; disruptive and aggressive behavior; depressive symptoms	Same as above, plus: strength and athletic skills improve
<i>Early adolescence (12-14)</i>	Same as above, plus: intellectual development, abstract thinking	Same as above, plus: central role of peer group, identity formation	Same as above, plus: violent behaviors; drug use; risky sexual behaviors	Same as above, plus: more rapid physical growth and changes; puberty and reproductive maturity; diet; physical activity; BMI; type 2 diabetes; self-inflicted injuries; STDs; unplanned pregnancy; repeat pregnancy; any pregnancy injuries
<i>Adolescence (15-19)</i>	Executive functioning; intellectual development; critical and rational thinking; high school graduation	Same as above, plus: moral development; intimacy development	Same as above	Same as above

## Pregnancy and the First Two Years of Life

**Milestone outcomes.** The first step on the road to adult well-being is being born healthy. This requires that mothers have good nutrition and do not smoke, drink, or take drugs (Olds, Henderson, Tatelbaum, & Chamberlin, 1986) and are not stressed (Coussons-Read, 2012). During the first two years of life, infants develop the rudiments of self-regulation, as they become able to calm themselves.

Other key milestones in infancy include the development of fine and gross motor skills that are the foundation for physical competence, the rudiments of language, and attachment and positive interactions with others, which are the basic building blocks of social competence (Greenspan & Greenspan, 1985; Lerner & Ciervo, 2003; NRC & IOM, 2000). This development requires patient parents who are skilled at soothing their baby when she is distressed.

**Support for new parents and their infants.** A number of programs help families who are at risk of having problems during pregnancy and the first two years of their child's life. The most extensively evaluated among these is the Nurse-Family Partnership, in which a nurse provides support to poor, first-time mothers during pregnancy and the first two years of the baby's life. Three randomized trials offered evidence that the program reduced child-abuse and neglect, prevented children from developing disruptive behavior disorders, increased the time between the mother's first pregnancy and her second, and improved the mother's economic situation (Olds, Hill, O'Brien, Racine, & Moritz, 2003). A long-term follow-up of the program showed that it even reduced the likelihood that the children whose mothers had received the program would be arrested at age 15 (Olds, 2008; 2010). A cost-benefit analysis (Aos et al., 2011) showed that the program yields more than \$3 in benefits to recipients and taxpayers for every dollar invested in it. The IOM report on prevention (NRC & IOM, 2009) reviewed additional programs of this sort.

Another intervention showing promise in improving the language and social development of infants born into high-risk families is Play and Learning Strategies I (PALS; Landry, Smith, & Swank, 2006). The program teaches parents responsive parenting skills designed to strengthen the parent-child bond and promote early language, cognitive, and social development. It uses videotaped examples of parents and children interacting in order to demonstrate parenting skills. Then parents are given opportunities to discuss and practice the skills.

## Early Childhood (ages 2 to 5)

**Milestone outcomes.** During early childhood the basic foundation of language, numeracy, and preliteracy skills are established and children begin to develop the self-regulatory and social skills that are vital to the further development of most every other skill. For example, children who do not learn to restrain their first impulsive responses in stressful situations may act aggressively or refuse to cooperate with adults in ways that harm their relationships with others and prevent them from learning from adults or their peers (Denham et al., 2003). Such restraint is shaped by hundreds of interactions in which others reinforce self-regulated behavior (e.g., Agran, Blanchard, Wehmeyer, & Hughes, 2001). Thanks to such socialization, children become better able to cooperate with others: an important step in developing prosociality.

Empathy is also foundational for success in life (Eisenberg, Miller, Shell, McNalley, & Shea, 1991). Children develop empathy as they learn to take the perspective of others through hundreds of interactions in which they are asked about what they see, hear, or are doing, and what they see and hear others doing (McHugh & Stewart, 2012).



At the same time, young children must develop steadily increasing fine and gross motor skills, be physically active, have a healthful diet, and not be overweight. To the extent that we ensure these cognitive, social, verbal, and physical developments, we will prevent diverse psychological and behavioral problems (NRC & IOM, 2009). In particular, it is important to prevent aggressive social behavior, since it is a major pathway toward academic failure, social rejection, delinquency, substance abuse, and even depression (Biglan et al., 2004).

***Influencing the development of young children.*** Families, preschools, and childcare settings influence young children's development. It is vital that communities ensure these environments nurture every young child. Families need to actively and positively engage children. Parents can patiently and skillfully engage children by following their children's lead and actively teaching them through playful interactions in which the children's attention to any given thing is the basis for the parents to extend the children's knowledge. Parents must keep harsh and inconsistent discipline to a minimum by using mild but effective consequences for problem behavior, anticipating and preventing situations that would evoke misbehavior, and richly reinforcing the children's active, positive engagement with others and their world.

Children in foster care are often removed from their homes and communities and placed into the homes of others who temporarily become their primary caretakers. They can experience multiple placement moves during their time in care. Multiple placements are associated with poorer outcomes for children (Dregan & Gulliford, 2012; Newton, Litrownik, & Landsverk, 2000) and are more likely when children have significant behavior problems (Newton et al., 2000). However, interventions that support effective parenting or caregiving can significantly reduce both the likelihood of removal from home and multiple placements, and can increase the chances of reunification at the same time that they improve children's well-being (Price et al., 2008).

***Family interventions.*** Table 2 lists examples of family interventions that have been shown to help families and other caregivers strengthen the nurturing conditions that young children need. These interventions have multiple benefits. They help families and other caregivers replace harsh and inconsistent discipline with much more positive ways of supporting children's development. Parents learn to reinforce children's positive behavior through attentive and engaging interactions and, when needed, use rewards such as stickers and fun activities. They learn how to use mild negative consequences like timeout, if necessary.

Multidimensional Treatment Foster Care for Preschoolers (MTFC-P; Fisher, Burraston, & Pears, 2005; Fisher, Ellis, & Chamberlain, 1999) provides intensive training and support to caregivers, children in foster care, and the parents or others who might provide a permanent placement for the child. Caregivers receive 12 hours of intensive training, receive support and supervision via daily phone calls, and have back-up assistance and consultation available around the clock. When provided for young children in foster care, the program has been shown to reduce child behavior problems (Fisher et al., 2005), reduce blunted hypothalamic-pituitary-adrenal (HPA) axis functioning (Fisher, Gunnar, Dozier, Bruce, & Pears, 2006), and reduce caregiver stress (Fisher & Stoolmiller, 2008).

Trauma-Focused Cognitive Behavior Therapy has been shown in at least two randomized trials to benefit families of children who have been diagnosed with PTSD due to sexual abuse (Cohen & Mannarino, 1996; Cohen, Deblinger, Mannarino, & Steer, 2004). The program helps children who have been abused develop skills in expressing and coping with feelings, and recognizing relationships among thoughts, feelings, and behavior. The program gradually exposes the chil-

dren to increasingly intense reminders of their traumatic experiences and helps them talk and write about and share these descriptions with their parents. Evaluations of the program indicate that, compared with alternative treatments, it produces significantly lower levels of depression, shame, and behavior problems among children. Parents were less distressed and more supportive toward their children.

**Table 2: Evidence-based family interventions for early childhood**

Program	Outcomes affected
<p><i>Multidimensional Treatment Foster Care for Preschoolers (MTFC-P)</i></p> <p>Fisher, Burraston, &amp; Pears, 2005; Fisher, Ellis, &amp; Chamberlain, 1999</p>	<ul style="list-style-type: none"> <li>• Reduced child behavior problems</li> <li>• Improved HPA axis functioning</li> <li>• Reduced caregiver stress Reduction in number of placements</li> </ul>
<p><i>Incredible Years</i></p> <p>Barrera et al., 2002; Gardner, Hutchings, Bywater, &amp; Whitaker, 2010; Hurlburt, Nguyen, Reid, Webster-Stratton, &amp; Zhang, in press; Lees &amp; Ronan, 2008; Webster-Stratton &amp; Reid, 2010</p>	<ul style="list-style-type: none"> <li>• Increases praise and use of non-violence discipline and decreases criticism, harsh discipline, negative commands</li> <li>• Reduces parental depression and increases parental self-confidence</li> <li>• Increases involvement with teachers and schools</li> <li>• Increases communication, problem-solving strategies, conflict management, social behavior, and play skills</li> <li>• Reduces conduct problems at home and school</li> </ul>
<p><i>Family Check-Up (FCU)</i></p> <p>Dishion &amp; Stormshak, 2009; Dishion, Nelson, &amp; Kavanagh, 2003; Dishion, Stormshak, &amp; Siler, 2010; Lunkenheimer et al., 2008; Moore, Dishion, &amp; Shaw, 2012; Shaw, Dishion, Supplee, Gardner, &amp; Arnds, 2006; Stormshak &amp; Dish-ion, 2009; Van Ryzin, Stormshak, &amp; Dishion, 2012</p>	<ul style="list-style-type: none"> <li>• Prevents behavioral and emotional disorders</li> <li>• Reduces family conflict and problem behavior</li> <li>• Prevents substance abuse</li> <li>• Motivates parenting monitoring</li> <li>• Increases parents' positive behavior support</li> <li>• Decreases depression, improves self-regulation, and increases youth school engagement</li> </ul>
<p><i>Triple P</i></p> <p>Nowak &amp; Heinrichs, 2008; Prinz et al., 2009; Sanders, Cann, &amp; Mark-ie-Dadds, 2003</p>	<ul style="list-style-type: none"> <li>• Improves the quality and effectiveness of parents' interactions with their children</li> <li>• Prevents child abuse and resulting foster care placement</li> <li>• Reduces children's uncooperative and aggressive behavior</li> </ul>

**Table 2: Evidence-based family interventions for early childhood**

Program	Outcomes affected
<p><i>Play and Learning Strategies II (PALS) for young children</i></p> <p>Landry et al., 2006; Landry, Anthony, Swank, &amp; Monseque-Bailey, 2009; Landry, Swank, Anthony, &amp; Assel, 2011</p>	<ul style="list-style-type: none"> <li>• Improves parents' skill in developing children's verbal and cognitive skills</li> <li>• Improves children's vocabulary and their engagement when others read to them</li> </ul>

**School interventions.** Substantial evidence indicates that a high-quality preschool can significantly and cost-effectively improve a child’s cognitive and social skills and prevent development of behavioral and academic problems (Pianta, Barnett, Burchinal, & Thornburg, 2009). To nurture young children’s social, language, and literacy development, adults must provide a safe and structured environment characterized by sensitive and engaging interactions, including teacher-led instruction and opportunities for children to lead in play (Burchinal et al., 2008; 2009; Pianta & Stuhlman, 2004). Verbal stimulation, engagement, and feedback in less structured interactions are vital to reinforcing and extending children’s cognitive and literacy development (Burchinal et al., 2008). Unfortunately, a sizable gap in quality exists between conditions tested in randomized trials and those in typical preschools (Pianta et al., 2009). Thus, recent research has focused on how to improve preschools’ quality.

Landry and colleagues provide the best-developed and most extensively evaluated strategy for improving preschool quality. Landry et al. (2009) developed a facilitated online professional development training that emphasizes language and literacy development. In a randomized trial involving 158 preschools across four states, they found that the training program significantly improved the quality of teaching and led to improvements in children’s phonological awareness, expressive vocabulary, and language competence. In a randomized trial in a large sample of Texas preschools, Landry et al. (2011) subsequently showed that these methods improved most aspects of teaching and children’s competence. Other studies show that mentoring and feedback can improve the quality of preschool and childcare environments (Lonigan, Farver, Phillips, & Clancy-Menchetti, 2011; Rusby, Smolkowski, Marquez, & Taylor, 2008; Wasik & Hindman, 2011).

### **Childhood (ages 6 through 11)**

**Milestone outcomes.** In this period a child must begin to develop the key reading and arithmetic skills that form the basis for virtually all later learning. Children who do not learn to read in early elementary school will not be able to read to learn in later grades. Children who are not reading at grade level by grade 3 are at high risk of never learning to read adequately (Fiester & Smith, 2010). They are likely to have increasing academic problems in school as they progress. Those problems not only affect later learning, they make development of behavioral and psychological problems more likely.

Emotional regulation and social development are also vital. Children with problems controlling their emotions are likely to act impulsively in ways that interfere with making and keeping friends and with their effective participation in the classroom (Graziano, Reavis, Keane, & Calkins, 2007; Kashdan & Rottenberg, 2010; Spinrad et al., 2006). It is also essential that children are not uncooperative or aggressive at home and in school, as these behaviors predict social rejection and academic failure (Walker, Colvin, & Ramsey, 1995).

Finally, it is important that children be physically healthy, are not overweight, stay physically active, and eat healthful foods.

**Key influences on development.** Families, of course, continue to have a critical influence on children’s development. As with early childhood, it is vital during this stage that parents remain involved with their children on a daily basis, listening to them, and supporting their cognitive and social development. Increasingly, parents should monitor their children’s activities outside the home and set limits that prevent them from becoming involved in risky behavior. It continues to be essential that parents richly reinforce children’s desirable behavior through their attention, interest, and love and use mild, consistent methods of discipline, such as timeout, when discipline becomes necessary.

**Supports for families.** Families having trouble maintaining this kind of nurturing environment need access to supportive, evidence-based family interventions that can help them strengthen their family life. Table 3 lists examples of interventions shown to help families become more nurturing during childhood. These programs are similar to and in some cases the same as the programs listed above for families of young children. They reliably improve families’ nurturance and reduce children’s aggressive behavior.

**Table 3: Examples of evidence-based interventions for childhood**

Program	Outcomes affected
<b>Families</b>	
<p><i>Parent Management Training-Oregon (PMTO)</i></p> <p>Forgatch, Patterson, &amp; DeGarmo, 2005; Forgatch, Patterson, DeGarmo, &amp; Beldavs, 2009; Ogden, Forgatch, Askeland, Patterson, &amp; Bullock, 2005</p>	<ul style="list-style-type: none"> <li>• Reduces coercive discipline practices and increases warm and positively reinforcing relationships among family members</li> <li>• Reduces children’s aggressive and uncooperative behavior</li> </ul>
<i>Incredible Years</i>	See Table 2
<i>Triple P</i>	See Table 2
<b>Schools: Instruction</b>	
<p><i>Response to Intervention</i></p> <p>Burns, 2007; Fuchs &amp; Fuchs, 2006; Jimerson, Burns, &amp; VanDerHeyden, 2007</p>	<ul style="list-style-type: none"> <li>• Identifies academic and behavioral needs of individual students</li> <li>• Uses data to inform the problem-solving process</li> <li>• Designs and modifies instruction to meet student needs</li> <li>• Evaluate the effectiveness of instruction at different levels of the system</li> <li>• Regularly assesses students’ progress in learning and behavior so teachers can identify which students need more help, which are likely to make good progress without extra help, and which need their learning accelerated</li> <li>• Conducts brief progress monitoring assessments to determine if students are progressing adequately</li> </ul>

**Table 3: Examples of evidence-based interventions for childhood**

Program	Outcomes affected
<p><i>Direct Instruction</i></p> <p>Barrera et al., 2002; Engelmann, 2007; Engelmann, Becker, Carnine, &amp; Gersten, 1988; Gunn, Biglan, Smolkowski, &amp; Ary, 2000; Smolkowski et al., 2005; Stockard &amp; Engelmann, 2010</p>	<ul style="list-style-type: none"> <li>• Increases the ability of all children to learn</li> <li>• Children improve academically and in terms of their self images</li> <li>• Teachers are able to succeed with adequate training and materials, regardless of circumstance</li> <li>• Low performers and disadvantaged learners are able to catch up to their higher-performing peers</li> <li>• DI minimizes the chance of students’ misinterpreting the information being taught and maximizes the reinforcing effect of instruction</li> </ul>
<p><i>Cooperative Learning</i></p> <p>Johnson, Johnson, &amp; Hulobec, 2008; Johnson, Johnson, &amp; Smith, 1991; 1998; Wenzel, 2000</p>	<ul style="list-style-type: none"> <li>• Students learn significantly more, remember it longer, and develop better critical-thinking skills</li> <li>• Students enjoy Cooperative Learning more than traditional lecture classes, and are more likely to attend class and finish the course.</li> <li>• Students develop the skills necessary to work on projects too difficult and complex for any one person</li> <li>• Prepares students to assess outcomes linked to accreditation</li> </ul>
<p><b>Schools: Social</b></p>	
<p><i>Good Behavior Game (GBG)</i> Embry, 2002; Kellam et al., 2008; Poduska et al., 2008</p>	<ul style="list-style-type: none"> <li>• Reduces disruptive behavior and increases cooperation in classrooms</li> <li>• Children who received Good Behavior Game (only in first or second grade had fewer drug abuse problems, antisocial behavior, or suicidality as young adults, compared with those who did not receive GBG</li> </ul>
<p><i>Positive Behavioral Intervention and Support (PBIS)</i></p> <p>Bradshaw, Koth, Bevans, Jalongo, &amp; Leaf, 2008; Bradshaw, Koth, Thornton, &amp; Leaf, 2009; Bradshaw, Mitchell, &amp; Leaf, 2010; Horner et al., 2009; Horner &amp; Sugai, 2000; Metzler, Biglan, Rusby, &amp; Sprague, 2001; Sugai &amp; Horner, 2002</p>	<ul style="list-style-type: none"> <li>• Reduces discipline problems in schools.</li> <li>• Increases academic engagement and achievement.</li> </ul>



**Table 3: Examples of evidence-based interventions for childhood**

Program	Outcomes affected
<p><i>Positive Action</i> Beets et al., 2008; Flay &amp; Allred, 2003</p>	<ul style="list-style-type: none"> <li>• Reduces disruptive behavior, prevents substance use, and improves academic achievement</li> <li>• Teaches youth specific positive actions in the physical, emotional, intellectual, and social domains of life</li> <li>• Helps youth identify positive feelings and treat others the way they want to be treated</li> </ul>
<p><i>Promoting Alternative Thinking Strategies (PATHS)</i> Domitrovich, Cortes, &amp; Greenberg, 2007; Kam, Greenberg, &amp; Kusche, 2004</p>	<ul style="list-style-type: none"> <li>• Improves children’s social competence, reduces social withdrawal, and prevents the development of aggressive social behavior, anxiety, and depression</li> </ul>

**School interventions.** Table 3 also lists examples of the instructional approaches and social and behavior interventions that can effectively support children’s development. As noted above, it is vital that children learn to read in elementary school, because programs to remediate reading deficiencies later are seldom available. Effective reading instruction requires that students learn how to decode the phonemes in words and blend them with sufficient skill and speed in order to comprehend what they are reading (Gunn et al., 2000).

At the same time, schools must create a climate that promotes positive social behavior and minimizes the use of punishment from adults and bullying and harassment from other students. Table 3 lists interventions that have proven valuable in helping children develop positive, cooperative social behavior. Each intervention has been shown in rigorous randomized trials to reduce aggressive behavior and contribute to children’s social and academic development. As the value of these interventions becomes clearer, more schools are adopting them. For example, Positive Behavioral Intervention and Support (PBIS) is now in more than 15,000 schools across the nation and the Good Behavior Game (GBG) is being implemented throughout the province of Manitoba and in more than 20 U.S. school districts.

### Early Adolescence (ages 12-14)

**Milestones outcomes.** In early adolescence, problems not effectively addressed in childhood tend to escalate. During this time, grades can fall off and the rates of substance use, delinquency, risky sexual behavior, and depression increase. This is not to say that every adolescent will have problems at this time. It is more that problems begin to emerge among children who are already having academic, social, and behavioral challenges.

Cognitive and academic skill development must continue during early adolescence. Adolescents must be at or beyond grade level in their subjects. Falling behind, especially when middle schools emphasize academic competition, can undermine early adolescents’ interest in school (Roeser & Eccles, 1998) and influence them to seek reinforcement through association with other youth who are having difficulty in school (Biglan et al., 2004).

Good peer relationships are critical at this stage. Young people whose friends value education and prosocial activities will be supported in their own commitment to these values. Conversely, early

adolescents who have few friends or have conflict with peers will be more likely to form friendships with rejected and deviance prone peers (Dishion, 2000; Dishion & Piehler, 2007). Finally, as in other periods of development, it is vital the early adolescents be physically active, eat a healthful diet, and not be overweight.

***Influences on development.*** Families and schools continue to be the most important influences. It is vital that there are places where young people's prosocial behavior is richly reinforced and conflict and coercion are minimized. This is also the stage when heightened monitoring of young people's behavior and setting effective limits on risky behavior is essential. Richardson and colleagues (Richardson et al., 1989; Richardson, Radziszewska, Dent, & Flay, 1993) found that early adolescents who were at home unsupervised after school were at greater risk to use substances, engage in other risky behaviors, become depressed, and be less successful at their academic achievements. The risk was especially high if they were spending this time with other youth. This is one reason why the use of after-school programs is growing.

Obviously, it is impossible for some parents to be home at these times. However, parents who communicate well with their children and establish consistent cooperation can monitor what their children are doing at home in the afternoon, and can ensure that they do homework and chores, as well as play and relax safely.

An additional important influence during this period is puberty. During the onset of puberty young people learn how to establish relationships with potentially intimate partners.

***Family interventions.*** Table 4 lists examples of family-based interventions for families with early adolescents. These interventions have been shown in randomized trials to strengthen the quality of parenting and prevent the development of diverse problems.

***School interventions.*** Table 4 also lists examples of evidence-based school interventions of two types. The first are school wide interventions that have been shown to ensure that the social environment of the school minimizes harassment and bullying and teaches and reinforces positive behavior. Both PBIS and Positive Action are beneficial and are being implemented widely.

Of particular interest in this case is Cognitive Behavior Intervention for Trauma in Schools (Jaycox, Kataoka, Stein, Langley, & Wong, 2012). It is a program designed to help children in school settings who have been exposed to violence, including maltreatment. It provides a series of 10 class sessions for groups of 8 to 10 students (Jaycox, Langley, & Dean, 2009). The sessions focus on helping students to change "maladaptive thoughts," promote positive behavior, and enlist support from peers and adults. Stein et al. (2003) reported a randomized control trial of this program for sixth-grade children in two Los Angeles middle schools who had been exposed to violence and had PTSD symptoms. Students received the 10-session program immediately or in a wait-list control condition. At three-month follow-up, those who had received the program had fewer PTSD symptoms, lower levels of depression, and lower scores on a measure of psychological dysfunction.

The second type of intervention consists of a classroom-based program designed to prevent one or more specific problem, such as tobacco use, substance use more generally, or risky sexual behavior. In addition to the two examples listed in Table 4, there is a growing body of evidence for the value of several different school-based programs to prevent teenage pregnancy and risky sexual behavior (Kirby, 2007).

Table 4: Examples of evidence-based interventions for early adolescence

Program	Outcomes affected
<b>Family interventions</b>	
<p><i>Strengthening Families</i></p> <p>Kumpfer, Molgaard, &amp; Spoth, 1996; Molgaard, Kumpfer, &amp; Spoth, 1994; Spoth &amp; Molgaard, 1999</p>	<ul style="list-style-type: none"> <li>• Reduces problem behaviors, delinquency, and alcohol and drug abuse in children</li> <li>• Improves social competencies and school performance</li> <li>• Decreases child maltreatment as parents strengthen bonds with their children and learn more effective parenting skills</li> </ul>
<p><i>Family Check-Up</i></p>	<p>See Table 2</p>
<p><i>Communities that Care</i></p> <p>Catalano, Haggerty, Oesterle, Fleming, &amp; Hawkins, 2004; Hawkins et al., 2008; 2012</p>	<ul style="list-style-type: none"> <li>• Exposure to targeted risk factors increased less rapidly in Communities That Care than in control communities</li> <li>• Eighth graders were less likely to initiate delinquent behavior, to initiate the use of alcohol, to initiate cigarette use, or to initiate the use of smokeless tobacco (ST)</li> <li>• Less likely to use alcohol or ST in the past 30 days and less likely to have been binge drinking in the past two weeks</li> <li>• Eighth-grade students committed 31% fewer different delinquent behaviors than students in the control communities</li> </ul>
<b>School-based interventions</b>	
<p><i>Parents and Children Against Tobacco (PACT)</i></p> <p>Gordon, Biglan, &amp; Smolkowski, 2008</p>	<ul style="list-style-type: none"> <li>• Influenced parents to discourage children’s tobacco use</li> <li>• Promotes not smoking by associating not smoking with social acceptance</li> <li>• Decreased smoking prevalence and use of smokeless tobacco in the prior month at two-year follow-up</li> <li>• Developed an intervention manual to help other communities replicate the study</li> </ul>

Table 4: Examples of evidence-based interventions for early adolescence

Program	Outcomes affected
<p><i>Life Skills Training</i></p> <p>Botvin, Griffin, az, &amp; Ifill-Williams, 2001; Botvin, Griffin, &amp; ichols, 2006; Eng-berg &amp; Morral, 2006; Griffin Botvin, &amp; Nichols, 2006; NC-CDPHP, 2009; Spoth, Randall, Trudeau, Shin, &amp; Redmond, 2008; Thornton, Craft, ahl-berg, Lynch, &amp; Baer, 2000</p>	<ul style="list-style-type: none"> <li>• Decreases substance use</li> <li>• Teaches substance use resistance, anxiety reduction, and stress management</li> <li>• Significantly cuts tobacco, alcohol, and marijuana use initiation; reduces smoking, drinking, drunkenness, inhalant use, and polydrug use; prevents cigarette, marijuana, and immoderate alcohol use</li> <li>• Reduces violence and delinquency</li> <li>• Has a direct, positive effect on the cognitive, attitudinal, and personality factors that play a part in substance use</li> <li>• Emphasizes communication skills, general social skills, dating skills, and assertiveness</li> <li>• Teaches and provides practice in making social contacts, giving and receiving compliments and other feedback, effective listening, being persistent, having self-awareness, feelings toward others, communication, conversation, and creative thinking</li> <li>• Teaches communication skills to avoid misunderstandings, clarifying, asking questions, paraphrasing, and being specific</li> <li>• Emphasizes refl cting on actions taken, types of responses, consequences, decision-making, awareness of persuasive tactics, refusal responses, self-respect, planning, and goal setting</li> <li>• Increases interpersonal and communication skills</li> </ul>

### Adolescence (ages 15-19)

**Key outcomes.** Among the sentinel outcomes in adolescence are graduation from high school and preparedness for, and interest in, further education. In the social realm, adolescents need to have formed strong ties with a set of prosocial friends and be skilled in maintaining respectful, safe, healthy, and supportive romantic relationships. However, as noted above, children in foster care often experience placement moves that disrupt their formation of friendships. As in earlier periods, teens should not be involved in antisocial behavior, substance abuse, or risky sexual behavior, and should have no problems with depression, anxiety, or other psychological problems, such as schizophrenia. Aspects of physical health that may be a particular concern at this age include eating healthfully, engaging in regular physical activity, not self-infl i ting injuries, or having STDs, obesity, or diabetes.

**Family interventions.** By this age most youth are doing just fi e but a small subgroup of adolescents has developed multiple problems (Biglan et al., 2004). For this reason the most prominent

interventions are designed to remediate problems among youth who already have problems and to prevent further ones from developing. These such programs have been extensively evaluated.

Multidimensional Treatment Foster Care (Chamberlain, 2003) was originally developed for adjudicated youth, but is now in widespread use for children placed in foster care due to abuse or neglect. Unlike much foster care, however, these foster care placements provide intensive skills training for the adolescent and the foster parents, and around the clock support of the family. Foster parents closely monitor adolescents activities and provide a structured behavioral program that is designed to reinforce appropriate academic and social behavior and limit opportunities for and involvement in problem behavior. A series of randomized trials have shown that, compared with usual care conditions, the program significantly reduces recidivism and pregnancies and increases school attendance and homework completion (Chamberlain, Leve, & DeGarmo, 2007; Leve & Chamberlain, 2007; Leve, Chamberlain, & Reid, 2005).

Multisystemic Therapy (Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 2009) is a similarly intensive intervention that keeps adolescents in their homes and works with entire families. As the name implies, it focuses on all systems within which the adolescent lives—home, school, peers, and community. It tries to ensure that adolescents are closely monitored and that parents and schools increase reinforcement and support for appropriate behavior and prevent opportunities for problem behavior such as unsupervised involvement with deviant peers. Numerous randomized trials have evaluated the program. It has shown value in reducing recidivism among delinquent youth, reducing substance abuse, reducing emotional and behavioral disturbances among youth with emotional disorders, and in reducing abuse in families that have been found to be abusing children or adolescents (Multisystemic Therapy, 2013).

Functional Family Therapy (Alexander, Waldron, Robbins, & Neeb, 2013) is an intensive family intervention in which a therapist works with the family typically for eight or more sessions. Alexander et al. (2013) characterize treatment in terms of five processes: establishing engagement with the family, developing family motivation to change, clarifying typical sequences of interactions in the relations among family members, facilitating behavior change of individuals and change in the interactions of family members, and supporting the generalization of learned skills to a wider number of settings. The program has been evaluated in at least 19 randomized trials involving adolescents with problems including delinquency, substance abuse, and alcohol abuse. It has generally been found to produce bigger reductions in these problems than interventions with which it has been compared. The evidence indicates that it does so by improving family functioning and reducing parental depression (Alexander et al., 2013).

### **Cost-Benefit Analyses**

Several economic experts have conducted cost-benefit analyses for the programs detailed in Tables 2 through 4 and the ones identified in the previous section. Based on their reports, most programs have proven return on investment. (See Aos, Lieb, Mayfield, Miller, & Pennucci, 2004; O'Neill, McGilloway, Donnelly, Bywater, & Kelly, 2013.)

For example, the Washington State Institute for Public Policy reports \$25.61 in benefits per \$1 spent in implementing Life Skills Training (Washington State Institute for Public Policy, 2004) and Pennsylvania State University reports \$25.72 in benefits per \$1 spent, with an estimated \$16,160,000 in potential economic benefit statewide (Jones, Bumbarger, Greenberg, Greenwood, & Kyler, 2008).



Another source for cost-benefit analyses is the Blueprints programs website: (<http://www.blueprintsprograms.com/>).

## **Convergence**

Traditionally, approaches to ensuring successful youth development and well-being have been fragmented. Different organizations have worked on different aspects of the same problem with little coordination and without a shared understanding of what young people need. Education has worked on ensuring young people's academic skills, but has typically given social and emotional development much less attention. Agencies addressing child abuse have typically done so as though this problem could be solved with a focus on safety and permanency. Organizations exist to prevent teenage pregnancy but often focus narrowly on sexual activity, as though it has nothing to do with coercive family and social environments. Criminal justice deals with delinquency, but rarely intervenes in families to prevent delinquency from developing. Drug abuse treatment treats drug abuse, but not mental illness, while mental health treatment is provided by other agencies, as if problems like depression and anxiety are unrelated to drug abuse. And few of these efforts take into account the effect of maltreatment and trauma on the developing brain architecture and stress response system, which are significant causes of derailed development across all domains of well-being.

All of this is changing thanks to the accumulation of a huge amount of evidence about neuro-biological, behavioral, and psychological development. Increasingly diverse organizations are coming together around a coordinated and integrated strategy that is helping communities significantly increase the proportion of young people who develop the skills, interests, and health habits they need to become productive and caring members of their community. As these coordinated efforts spread and are refined, we will see a steady decline in the rates of most of the psychological and behavioral problems that impose heavy costs on young people, their families, and their communities.

The core insights that guide these efforts are (a) the recognition that throughout development children and adolescents need warm, sensitive, reinforcing families, schools, and communities that minimize punishment, conflict, and coercion and (b) the evidence that providing these conditions can prevent the entire range of psychological, behavioral, and health problems.

Now that tested and effective school and family interventions are available to ensure these nurturing conditions, it is clear that every community organization that has responsibility for child or adolescent well-being should make it their highest priority to work with all other relevant organizations on ensuring that these nurturing conditions increasingly characterize life in the community. With the strategic use of resources, it is possible to achieve dramatic improvements in the well-being of our young people with enormous societal benefits.

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## Appendix: Resources

Best Evidence Encyclopedia (BEE) — <http://www.bestevidence.org/>  
Blueprints for Healthy Youth Development — <http://www.blueprintsprograms.com/>  
California Evidence-based Clearinghouse for Child Welfare — <http://www.cebc4cw.org/>  
Coalition for Evidence-based Policy — <http://toptierevidence.org>  
Find Youth Info — <http://findyouthinfo.gov>  
Florida Center for Reading Research (FCRR) — <http://www.fcrr.org/>  
Identifying and Implementing Education Practices Supported by Rigorous Evidence:  
A User Friendly Guide — <http://www2.ed.gov/rschstat/research/pubs/rigorousetid/index.html>  
The Center for Substance Abuse Prevention (CSAP) — <http://www.samhsa.gov/prevention/>  
The National Institute on Drug Abuse (NIDA) — <http://www.drugabuse.gov/>  
The National Registry of Evidence-based Programs and Practices (NREPP) — <http://www.nrepp.samhsa.gov/>  
The Office of Justice Programs Crime Solutions — <http://www.crimesolutions.gov/>  
The Office of Juvenile Justice and Delinquency Prevention (OJJDP) Model Programs Guide—  
<http://www.ojjdp.gov/mpg/>  
The U.S. Department of Education (USDOE) — <http://www.ed.gov/>  
The White House Office of National Drug Control Policy (ONDCP) — <http://www.whitehouse.gov/ondcp>  
Vanderbilt Kennedy Center — <http://kc.vanderbilt.edu/site/default.aspx>  
What Works Clearinghouse (WWC) — <http://ies.ed.gov/ncee/wwc/>  
IES Practice Guides — [http://ies.ed.gov/ncee/wwc/publications\\_reviews.aspx](http://ies.ed.gov/ncee/wwc/publications_reviews.aspx)