

**Child Well-Being:**  
*Constructs to Measure Child Well-Being  
and Risk and Protective Factors that  
Affect the Development of Young  
Children*

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## Contents

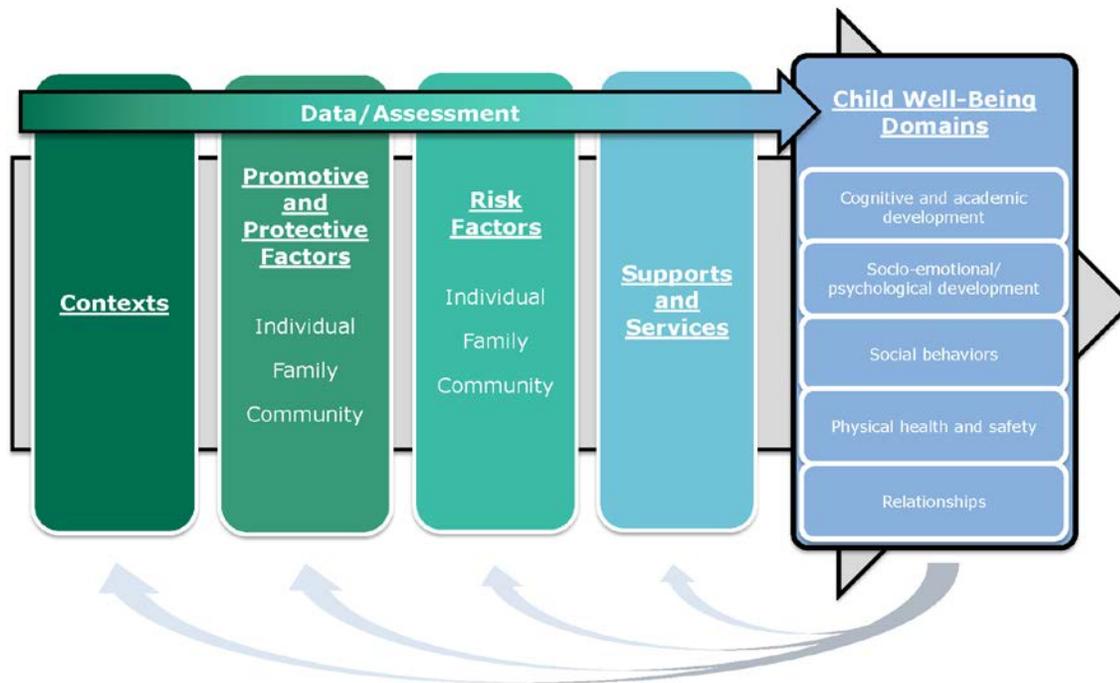
Executive Summary .....	4
Chapter 1: Introduction and Background .....	12
I. Introduction.....	12
II. Key concepts and themes in this review .....	18
Child well-being.....	18
Risk and promotive/protective factors .....	18
Themes affecting conceptualization and measurement in child development.....	20
Chapter 2: Child Well-Being .....	24
I. Domains.....	24
Cognitive and academic development.....	25
Socio-emotional/psychological development .....	28
Social behaviors .....	32
Physical health and safety.....	33
Relationships.....	36
II. Summary .....	38
Chapter 3: Risk and Protective Factors .....	41
I. Environmental promotive/protective factors .....	42
Family/relational promotive and protective factors .....	43
Contextual/community promotive and protective factors .....	51
II. Risk factors.....	52
Family/relational risk factors .....	54
Contextual/community risk factors.....	60
III. Discussion.....	62
Chapter 4: Supports and Services .....	64
Chapter 5: Conclusions and Implications .....	71
A broad perspective on child well-being .....	71
Measurement issues that need to be addressed .....	73
Potential next steps.....	75
Conclusion.....	76

## Executive Summary

### ***Purpose***

What is flourishing in a young child? How can we know whether a child is flourishing? And, what does it take for a child to flourish? Unfortunately, researchers and policy makers tend to focus on problems, dangers, and risks. Very little attention is paid to thriving – that is, positive behaviors, learning, and emotions -- and resilience in the face of challenges. Negative outcomes are, of course, important to understand, but an exclusive focus on them offers an incomplete view of child development. As shown in Figure 1, this white paper focuses on child well-being, and highlights positive outcomes, not just negative aspects of well-being. We also identify risk and protective factors, and we provide brief summaries, drawn from the research literature, of associations among the various factors and with the child well-being constructs. The model is defined by a large arrow that reflects the life course model of development, where child well-being is both a goal (outcome), and a process that unfolds over time.

**Figure 1:** Conceptual model of the determinants of child well-being



In this paper, we propose a set of child well-being constructs (factors that represent important dimensions of child development) for children ages 0 to 8. We also explore the various factors that can affect these outcomes, and suggest strategies for intervention. More work is needed, however, to develop the specific measures required to measure child flourishing and to assess progress toward these child well-being goals.

Our primary goals are to focus on flourishing and to incorporate the critical recognition that positive as well as negative outcomes need to be conceptualized and measured. The intention is also to flag the critical promotive and protective factors that contribute to positive development, not simply factors that represent potential precursors of poor outcomes for young children, so that measures of these factors can be developed. These measures can then be used to monitor child well-being among vulnerable children. Risks to children's development are undoubtedly important to understand and address, but promotive and protective factors are frequently overlooked in existing data collection systems. Programs and policies need to not only reduce risks, but also build and support protective factors. A set of valid measures could help communities identify the assets/strengths already present in their children and families, and provide a platform on which to build additional supports.

### ***Theories and themes***

This review draws on several widely accepted perspectives in the child development field. While we recognize that individual well-being is a product of interactions between one's genetic "program" and a particular environment, we give particular attention to the multiple environments and domains that affect positive development. *Ecological theory*, for example, recognizes the importance of the family and community, along with child characteristics, in affecting children's development, while the *whole child* perspective posits the interactivity of all domains of child outcomes, including cognitive, socio-emotional, social behaviors, physical health, and relationships. As noted, we draw on models of *risk and protective factors* to highlight the important reality that virtually all children, even those experiencing multiple challenges, have protective factors and assets within their families, communities, and themselves.

A number of additional themes appear throughout the paper. One theme is that well-being occurs along a continuum. Also, outcomes are dynamic and “in progress.” That is, outcomes at one age contribute to outcomes at subsequent stages. In addition, as implied by the feedback arrows in Figure 1, developments at one age can trigger risk and protective factors as well as supports, services, and even contexts, if a child’s outcomes lead to a change in context (e.g., moving to a new neighborhood or changing schools). At the same time, *cumulative disadvantages* increase developmental challenges. Also, while many individual and social factors are effectively non-malleable, their importance needs to be recognized in conceptual models and measurement strategies, as well as policy and program initiatives. These theories and themes underlie child development research and are critical for understanding the development of vulnerable young children.

- **Domain:** *The highest and broadest category of child well-being elements.*
- **Constructs:** *The factors or elements of child well-being within a domain that comprise that domain*
- **Measures:** *The actual tools used to assess a construct: this includes scales, indices, observational codes, etc.*
- **Items:** *The individual questions or checklist codes that comprise*

### ***A whole-child perspective on child well-being***

As noted, this paper takes a “whole child” perspective. Much research on children takes place within silos, where researchers consider a single area of development. For example, education researchers focus on cognitive development and academic attainment, while health researchers typically focus on physical health. If we are to understand how to foster flourishing children, we need more integrative work that addresses the child across all five developmental domains—education, health, social behavior, psychological/ emotional development, and relationships. However, questions of causality— and sometimes even the direction of relationship—often remain unresolved. For the purposes of this review, these five domains organize our identification of constructs that call for improved measurement in studies of young children facing adversity. (By “constructs”, we mean the categories of behaviors, attitudes, knowledge, and emotions that child development research has identified and classified with a common label.) The constructs identified within the five well-being domains are depicted below and discussed in Chapter 2 of the white paper.

**Table A:** Constructs (factors) that have been found to comprise child development in each of the domains of child well-being

Child Well-being domain	Constructs
Cognitive and academic development	<ul style="list-style-type: none"> <li>• Language development</li> <li>• Early academic skills</li> <li>• Age-appropriate general knowledge</li> <li>• Engagement in learning/approaches to learning; problems with concentration/focus</li> <li>• Executive functioning</li> <li>• Learning difficulties</li> <li>• Developmental delay</li> </ul>
Socio-emotional/ psychological development	<ul style="list-style-type: none"> <li>• Emotion understanding</li> <li>• Self-regulation, positive coping</li> <li>• Depression/anxiety disorders, PTSD</li> <li>• Self-efficacy; mastery</li> <li>• Planning for the future</li> </ul>
Social behaviors	<ul style="list-style-type: none"> <li>• Social skills/global social competence</li> <li>• Behavior problems, including aggression, oppositional/defiant disorder and bullying</li> </ul>
Physical health and safety	<ul style="list-style-type: none"> <li>• Overall health status</li> <li>• Special health care needs/ chronic conditions</li> <li>• Growth and weight</li> <li>• Physical safety</li> <li>• Stress-related disorders (hormonal, metabolic, immunologic)</li> <li>• Sleep problems</li> <li>• Age appropriate self-care</li> </ul>
Relationships	<ul style="list-style-type: none"> <li>• Safe, stable, and nurturing relationships (SSNRs) with caregivers</li> <li>• Caregiver-child attachment</li> <li>• Positive relationships with trustworthy non-parent adults</li> <li>• Positive peer relationships</li> <li>• Bonding/ bridging social capital</li> </ul>

As a next step, it will be necessary to compare these constructs with the constructs and measures included in databases such as the Early Childhood Longitudinal Survey—Birth and Kindergarten Cohorts—and the National Survey of Child and Adolescent Well-Being, as well as measures used in community studies and clinical screeners.

While it is important to assess how these constructs are already measured, it is also important to identify constructs that are not currently measured. For example, for

vulnerable children, it may not be sufficient to ask about closeness and support from parents alone, but about an array of additional persons who may buffer hardship or mistreatment.

Also, it is important to assess the response categories. Is there sufficient variation in the response categories to capture serious problems and to identify change over time? For example, response categories that record “never, sometimes, and always” may be inadequate to capture behavioral frequencies.

### ***Risk and promotive/protective factors***

Our review has sought to identify both positive and negative correlates of children’s developmental trajectories; and the value of including both risk and protective constructs is an important implication of this work. Another implication of a focus on promotive and preventive factors is an emphasis on prevention. While treatment is necessary and needs to be a priority, prevention is less costly in every sense of the word. Understanding and monitoring the presence of promotive and preventive factors represents an important element in a prevention strategy. This point is reviewed in Chapter 3.

**Table B:** Promotive/protective constructs (factors) that affect children’s development, across relational/family, and contextual/community levels

Promotive/Protective factor level	Constructs
Relational/family	<ul style="list-style-type: none"> <li>• Family support for children’s executive functioning</li> <li>• Caregiver/adult responsiveness</li> <li>• Caregiver/adult warmth</li> <li>• Shared family activities</li> <li>• Control over the number and timing of children in the family</li> <li>• Parent/caregiver engagement with school and community</li> <li>• Safe and supportive home environment</li> <li>• Family routines</li> <li>• Stimulating home environment</li> <li>• Parenting skills and attributes (“authoritative” style)</li> <li>• Religious involvement</li> <li>• Enduring presence and positive support of caring adults and kin</li> </ul>
Contextual/community	<ul style="list-style-type: none"> <li>• Relevant, high-quality, culturally appropriate available local services</li> <li>• Safe and healthy school environment</li> <li>• Safe and cohesive neighborhoods, safe housing</li> </ul>

**Table C:** Risk factors across relational/family, and contextual/community levels

Risk factor level	Constructs
Relational/family	<ul style="list-style-type: none"> <li>• Economic downturns and material hardship</li> <li>• Parental depression/mental health problems</li> <li>• Parental substance abuse</li> <li>• Parental unemployment</li> <li>• Parental social isolation</li> <li>• Parenting rigidity, harshness, or inconsistent discipline</li> <li>• Conflict/domestic violence</li> <li>• Parental history of maltreatment</li> <li>• Family stress</li> <li>• Family instability/turbulence</li> <li>• Toxic trauma, high level of ACES, accumulation of stresses</li> <li>• Younger child age at maltreatment, type of maltreatment</li> <li>• Removal from caregivers, placement with kin, placement stability</li> <li>• Inconsistent medical care</li> </ul>
Contextual/community	<ul style="list-style-type: none"> <li>• Exposure to violence/unsafe environment</li> <li>• Unavailable, inconsistent, poor-quality child care and other services</li> <li>• Negative peers</li> <li>• Unsupportive, negative child welfare service providers</li> <li>• Absence of foster care families</li> <li>• Lack of emergency housing</li> <li>• Inadequate recreational opportunities</li> </ul>

### ***Supports and services***

Supports and services that are delivered early in a child's life often have powerful effects on child and family outcomes. Many interventions for young children target multiple well-being domains. On the other hand, some interventions focus on specific aspects of well-being, and, in some cases, they are designed for particular populations. This review, provided in chapter 4, identifies a variety of opportunities to support child well-being. These include:

- Promoting health and well-being by modifying features of children's physical environment, such as supporting safe housing;
- Promoting safe, stable, and nurturing environments and relationships;
- Simultaneously addressing the well-being of parents and children through dual-generation approaches and by targeting protective factors that enhance the capabilities of parents;

- Providing resources to parents that allow them to have control over their childbearing;
- Teaching specific skills or healthy habits for children;
- Helping caregivers to develop parenting skills and to care for children who have experienced trauma;
- Engaging families through early care and education and home visiting approaches; and
- Providing concrete supports, such as health care and child care.

Appropriate strategies will vary based on the needs of a particular child, family, or community. Practitioners delivering interventions should consider that strengths-based approaches have been found to be most effective, and they should also take into account the characteristics of individual children and the larger social contexts in which a given intervention operates. Additionally, it is important to determine programs' effectiveness with different populations, and/or to determine if an intervention that has been adapted for a specific population is equally or more effective than the original intervention. To conclude this discussion, we identify possibilities for evaluation through assessment and screening.

### ***Measurement issues***

Efforts to improve measurement pose a number of challenges:

- There is substantial developmental variability between infants and 8-year-olds. Therefore, while the constructs may be constant across ages, the measures need to differ.
- The best reporter will vary by age of child. A parent or other caregiver is necessarily the most knowledgeable reporter for infants and toddlers. For school-age children, the child and a parent or caregiver/teacher can each provide different kinds of information. Choosing a reporter is more complex when children are removed from their home.
- Medical personnel represent possible reporters. Medical providers see large numbers of children, and almost all children see a medical provider at least once and generally more often. In addition, they have clinical training and keep detailed records. Accordingly, working with medical providers represents a promising approach to obtaining better measures of child development.
- Beyond consideration of who should be the reporter is concern about accurate reporting. Few people want to report their own negative behaviors with their children or the poor home conditions in which they may be raising their children. Moreover, parents whose children have been removed or who are at risk of removal from home have a serious incentive to report good outcomes and positive environments. It requires care, thought, and time to

design questions and procedures that increase the odds of accurate reporting, for example, by highlighting family strengths along with challenges and using neutral, descriptive language about behaviors or conditions in order to avoid blaming families or eliciting shame.

- The response categories used for measures need to be assessed, to ascertain whether they have enough variation at the high and low ends.
- In addition, it is critical to give attention to social and cultural differences. It is important to be sensitive to not only the language that people use, but also their feelings about sharing information with non-family members and cultural variations in childrearing. Parents' view of what constitutes a high or low level of risk, for example, can vary across social groups. And the appropriateness of the measures available should be examined for varied contexts, including low-income and immigrant populations.

It is of course not possible to ask every potentially important question. However, because many constructs have not been explored or they have been poorly measured, we currently lack the research base necessary to distinguish those constructs which are most useful from those that are least useful. Community input into identifying priorities would inform choice of constructs.

### ***Summary***

An important initial step in the process of conceptualizing flourishing is the identification of the priority constructs that characterize child well-being and the risk, promotive, and protective factors that affect children's development. This review provides a platform for a comparison of the list of constructs we have identified with those that are measured in national surveys, evaluation studies, and community initiatives. In some cases, appropriate measures of early childhood well-being are not yet available for particular constructs or populations. These gaps can be addressed by the development and testing of new items and measures, with sensitive wording and response categories that are appropriate for varied population groups.

# Chapter 1: Introduction and Background

## I. Introduction

What is positive development – flourishing -- for young children? What influences children’s well-being? How can programs and policies increase the odds of children’s positive development, especially for children who face adversity?

Many government and private agencies that serve families with young children have the goal of preventing or treating problems. However, prevention and treatment alone will not ensure that children flourish. Optimal well-being depends on a child having an array of personal, social, and material resources. This is especially true during the early years (between birth and the early elementary grades), because this period is a critical time for children to establish a positive developmental trajectory.

Putting these concepts into practice, however, has been challenging. This report aims to address these questions, and others, as well as the potential solutions for systematic improvement. Specifically:

- What constitutes “well-being” – flourishing – among children from birth to age eight? What protective or promotive factors enhance well-being?
- What protective or promotive factors enhance well-being?
- What risk factors undermine children’s access to a positive developmental trajectory?
- What expansions of current concepts are needed in order to reflect the continuum and interplay of promotion/protection versus risk that affect young children’s development?
- How can assessments of young children and their families be shaped to more fully capture thriving?

In this document, we take a *whole-child* approach.<sup>a</sup> In this view, a child’s well-being is considered as an integrated whole, encompassing multiple domains or spheres of life. Thus, young children who flourish are physically healthy, prepared do well in school, and engage positively with both adults and other children. They also effectively regulate their own emotions and responses to other people in their lives.

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<sup>a</sup> For other examples of Child Trends’ work that takes this approach, see: Moore, K. A., Caal, S., Carney, R., Lippman, L., Li, W., & Muenks, K. (2014). Making the grade: Assessing the evidence for integrated student supports. Bethesda, MD: Child Trends. Retrieved from <http://www.childtrends.org/wp-content/uploads/2014/02/2014-07ISSPaper2.pdf>; Moore, K. A., & Emig, C. (2014). Integrated student supports: A summary of the evidence base for policymakers. Bethesda, MD: Child Trends. Retrieved from <http://www.childtrends.org/wp-content/uploads/2014/02/2014-05ISSWhitePaper3.pdf>; Tout, K., Daily, S., Gooze, R. A., Moodie, S., Lowe, C., & Hirilall, A. (2015). Birth through eight state policy framework: Research at a glance – revised. Bethesda, MD: Child Trends. Retrieved from <http://www.childtrends.org/?publications=birth-through-eight-state-policy-framework-research-at-a-glance-revised>.

This framework builds on scholarship in child development<sup>143</sup> and on decades of work conducted by research teams at Child Trends and the Child Health and Measurement Initiative (CAHMI). The description of domains of well-being that are used in the National Survey of Children's Health, for example, is based on Child Trends' conceptual work. In this document we include relationships as an additional domain of child well-being, though by definition relationships involve multiple partners. Nevertheless, supportive, close, positive relationships are critically important for all children, particularly those who are or have been at risk of maltreatment.<sup>130</sup> These relationships also mediate outcomes for young children, as they play a central role in promoting healthy development and buffering the impact of adverse experiences. Positive impacts extend beyond the child. Positive relationships are fundamental to optimal development throughout a person's life. Also, as is true for all child outcomes, a positive or negative outcome at one age, such as the presence or lack of a positive relationship, becomes a factor that influences the outcomes a child attains at a later age.

The five domains used to organize this work are:

- Cognitive and academic development;
- Socio-emotional/psychological development;
- Social behaviors;
- Physical health and safety; and
- Relationships.

The whole-child perspective has gained wide acceptance among researchers, and is reflected in the work of the Federal Interagency Forum on Child and Family Statistics, for example, in the *America's Children* report. However, many aspects of development, especially in areas of positive development, are not measured or monitored adequately, if at all. Additionally, it is important to consider strengths, not just weaknesses, when discussing children's outcomes. Practice shows that adults and children both benefit from programs and policies that draw on their strengths, rather than exclusively focusing on ameliorating deficits and risks.

Within the perspective adopted here, we seek to identify characteristics of the positive "pole" of development.<sup>b</sup> Thus we seek to identify the positive constructs, derived from research, that create a more balanced picture of development. In turn, researchers, policymakers, and practitioners may utilize this resource to guide

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<sup>b</sup> Much of Child Trends' work over time has sought to include positive outcomes. See, for example: Lippman, L. H., Moore, K. A., Guzman, L., Ryberg, R., McIntosh, H., Ramos, M., Caal, S., Carle, A., & Kuhfeld, M. (2014). *Flourishing children: Defining and testing indicators of positive development*. New York: Springer; Moore, K. A., & Halle, T. G. (2001). Preventing problems vs. promoting the positive: What do we want for our children? In S. L. Hofferth & T. J. Owens (Eds.), *Children at the millennium: Where have we come from, where are we going?* (Vol. 6, pp. 141-170). New York: Elsevier Science; Moore, K. A., & Lippman, L. H. (2005). *What do children need to flourish? Conceptualizing and measuring indicators of positive development* (Vol. 3). New York, NY: Springer Science & Business Media.

more holistic approaches to defining and measuring well-being in early childhood. This viewpoint is consistent with other approaches that stand in contrast to traditional deficits perspectives, including strengths-based approaches,<sup>176</sup> a resilience perspective,<sup>133,136,172,216</sup> positive youth development,<sup>125,127</sup> and positive psychology.<sup>183</sup>

***Positive outcomes are possible, even following severe adversity.*** A recent *Washington Post* feature provides an example.<sup>192</sup> Referring to the principal of Washington, DC's, first public, all-male, college-preparatory high school, the article reported that "he wants prospective students to know that whether they come from a foster home or care for their younger siblings, a prosperous career is still a possibility" (p. B). The principal, Ben Williams, had a difficult story of his own and spent much of his childhood in foster care: "My father never met me. My mom was a prostitute. My mother was a heroin fiend. I basically became the head of my household at the age of three" (p. B). Despite this history, Williams earned three degrees from the University of Virginia and is now working to empower young black teens and increase opportunities for their success.

In addition, this document adopts an *ecological model*,<sup>34</sup> which posits that individual development is affected by multiple spheres of influence, including family, peers, school, neighborhood, community, culture, and the larger society. These influences interact with one another, and with the child's own biology and temperament. In general, those influences in closest proximity to the child have the greatest influence on development. For example, family interactions will usually have greater weight in a child's development than the features of his or her community. However, we know that the presence or absence of resources in the childrearing

environment exerts a strong influence on parenting quality, which in turn directly affects a child's well-being.<sup>19</sup>

Drawing on ecological theory is the "two generation" approach, which explicitly acknowledges the value of programs that work to improve human capital and other outcomes for both parents and their children.<sup>102</sup> While implementing such programs and documenting positive outcomes has been a challenge, the approach is solidly rooted in research and theory on child development.

This work is also informed by a *life course perspective*.<sup>74</sup> Considerable research indicates that experiences at an early life-cycle stage affect development and well-being during later stages. Development is cumulative; well-being in middle childhood will affect the experiences of adolescence, which in turn shape those of adulthood.

Finally, we employ a model that recognizes both *risk and promotive/protective factors*.<sup>c</sup> Widely adopted in the field of public health, this approach takes account of determinants of well-being (or its absence) that encompass biological, behavior, and social factors that affect outcomes. Risk factors—regardless of their individual, relational, or social origin—are those that tend to undermine healthy development. Promotive factors, in contrast, are those that typically aid healthy development, while protective factors moderate, or buffer, adverse experiences, preventing or reducing their negative effects on development.

- **Domain:** *The highest and broadest category of child well-being elements.*
- **Constructs:** *The factors or elements of child well-being within a domain that comprise that domain*
- **Measures:** *The actual tools used to assess a construct: this includes scales, indices, observational codes, etc.*
- **Items:** *The individual questions or checklist codes that comprise measures*

We take as a given that nearly all families and communities want their children to flourish and they want to contribute to the positive development of their children. But what does positive development consist of, particularly at the critical early stage? And how can families and communities foster positive development?

Figure 1 depicts our working model. The large arrow reflects the life course model of development, where child well-being is both a goal (outcome), and a process that unfolds over time. *Five domains* of well-being are identified here as well. These are discussed in detail in Chapter 2. Our aim is to identify, within each of these domains, the critical components/constructs that, in our view, should be included in a comprehensive assessment for understanding, tracking, and improving child well-being.

*Supports and services* are listed after the well-being domains in Figure 1. These can be either public or private and are essential to child well-being. Such services may focus on prevention or treatment. They may be offered universally, or targeted to groups at high risk for compromised child well-being. Identifying the range of supports and services is not our primary goal here, but in Chapter 4 we highlight a

<sup>c</sup> For examples of other works that discuss risk and protective factors, see: Hawkins, D. J., Catalano, R. F., Morrison, D. M., O'Donnell, J., Abbott, R. D., & Day, L. E. (1997). The Seattle Social Development Project: Effects of the first four years on protective factors and problem behaviors. In R. W. Blum & P. M. Rinehart (Eds.), *Reducing the risk: Connections that make a difference in the lives of youth*. Bethesda, MA: Add Health; IOM (Institute of Medicine), & NRC (National Research Council). (2009). Using a developmental framework to guide prevention and promotion. In M. E. O'Connell, T. Boat, & K. E. Warner (Eds.), *Preventing mental, emotional, and behavioral disorders among young people: Progress and possibilities*. Washington, D.C.: The National Academies Press; Sameroff, A., Seifer, R., Zax, M., & Barocas, R. (1987). Early indicators of developmental risk: Rochester Longitudinal Study. *Schizophrenia Bulletin*, 13(3), 383-393. Retrieved from [http://psycnet.apa.org/index.cfm?fa=buy\\_optionToBuy&id=2005-09762-005](http://psycnet.apa.org/index.cfm?fa=buy_optionToBuy&id=2005-09762-005)

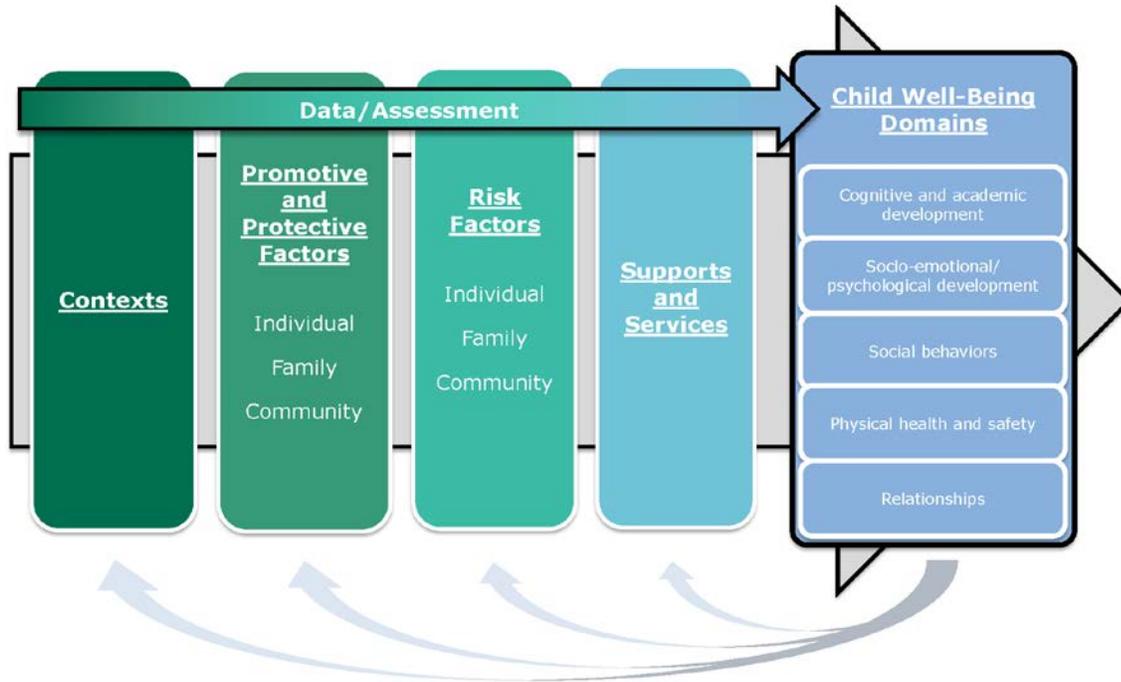
number of programs, practices, and policies to illustrate the types of interventions that can improve child well-being.

*Risk and promotive/protective factors*, as depicted in the Figure, interact to shape development, often prior to the enlistment of supports and services. Development, or well-being, is never a blank slate; it always reflects the dynamic interplay of factors—at the genetic, physiological, behavioral, and social levels—that are part of the child’s milieu. Some of these (such as toxic exposures and unresponsive caregivers) constitute risks to development, while others (such as nurturing relationships and family economic resources) constitute protective, or promotive, factors. In some cases, they represent opposite ends of a continuum (e.g., financially insecure to secure), while in other instances they constitute unique factors that are protective in the context of a particular situation or adversity (e.g., access to mental health services).

*Contexts*. The macro-level features of society and culture may not exert direct influence on the child, but they shape the contours of individual and family development nonetheless. These features include the level and distribution of income and opportunity; prevalent assumptions, attitudes, and beliefs; the environment of technology and media; and a host of cultural legacies. In pluralistic societies like our own, of course, there are multiple sub-contexts/cultures that exist along with, and sometimes in conflict with, the dominant frame.

The feedback arrows depicted at the bottom of Figure 1 highlight the reality that outcomes at one age trigger changes in risk and promotive/ protective factors. Changes may also be triggered in the supports, services, and even contexts, if a child’s outcomes lead to a change in context (e.g., moving to a new neighborhood or changing schools).

**Figure 1:** Conceptual model of the determinants of child well-being



## II. Key concepts and themes in this review

### Child well-being

There is an extensive body of research on the components and measurement of child well-being.<sup>36,78,103,144</sup> Child well-being outcomes encompass multiple developmental domains, including:

- Cognitive and academic development,
- Socio-emotional/psychological development,
- Social behaviors,
- Physical health and safety, and
- Relationships.

In our conceptual model (Figure 1), *well-being domains* are depicted at the right-most end. However, we describe these domains first, because it is important to “begin with the end in mind.” Only after establishing the contours of optimal development can we turn to the various factors that influence achievement of these goals. Within each well-being domain, we identify *constructs*. (As noted, these are the categories or elements within each domain into which we sort aspects of children’s development.) For example, within the cognitive and academic development domain, language development and early academic skills represent distinct constructs. Drilling down still further, one may identify *indicators* for each construct, and then specific *measures* for each indicator.

### Risk and promotive/protective factors

Having identified positive outcomes (by domain) for well-being, we can consider the various factors that may contribute to, or hinder, the achievement of such goals. Therefore, in addition to mapping the domains of child well-being, we identify risk and protective factors, focusing on constructs that have been, or could be, measured in surveys such as the National Survey of Child and Adolescent Well-Being. We also look at factors that are or could be useful for program evaluations and community level studies, including needs assessments and population profiles. Drawing on the ecological model widely employed in developmental research, we identify risk and protective factors at family and community levels.

We draw on the literature from multiple fields of study, including child health, child welfare, education, and child development research to identify the most frequently mentioned constructs. Our aim is to identify a developmentally comprehensive set that could form the basis for shared accountability across multiple service systems, one of which is young children in the child

Promotive factors **seek to foster well-being, while “Protective factors** are defined as characteristics at the individual, family, or community level that are associated with a lower likelihood of problem outcomes” (IOM & NRC 2009, p. 82). In this paper, we take a broad view of promotive/protective factors that also includes factors that promote healthy child development and positive outcomes.

A **risk factor** is “a measurable characteristic of a subject that precedes and is associated with an outcome. Risk factors can occur at multiple levels, including biological, psychological, family, community, and cultural levels” (IOM & NRC 2009, p. 81-82).

welfare system, or at risk for such involvement. This information can also inform interventions intended to prevent or address adversities and their precursors.

Our primary interest here is in aspects of well-being that are *malleable*—that is, characteristics that can be modified.<sup>d</sup> We recognize that some non-modifiable, “social address” characteristics may be important risk or protective factors—for example, immigration status. We also acknowledge that some risk and protective factors—such as poverty and racism—reflect deeply entrenched features of society and are relatively resistant to change. Their influence is great, but fully addressing them will require ongoing effort over generations.

Our goal for this document is to build on child development research on child well-being, in order to extend the list of flourishing outcomes and pertinent risk, promotive, and protective factors to inform work on vulnerable young children.

As noted earlier, we also seek to identify constructs that might be measured in community need assessments and collective impact projects, as well as through collections such as the National Survey of Child and Adolescent Well-Being or a new National Survey of Children. Having common constructs and measures will also likely facilitate knowledge-sharing and collaboration across research and evaluation silos. While a considerable body of research has used a developmental framework to assess child well-being, one aim here is to identify gaps in assessment, particularly as those apply to the child welfare and at-risk populations.

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<sup>d</sup> One way to infer malleability of characteristics is to examine their variability over time and across populations. Another is to determine whether a given construct has been found, through rigorous evaluation, to change in response to intervention.

Though it is not our purpose here to develop either single items or composite measures for the constructs we have highlighted, we do note that having population-appropriate items and response categories for all measures is critically important. Once measure development is underway, the birth-to-eight age group that is our focus here will need to be subdivided in order to address the distinct needs of children at different stages of development. In addition, we view this document as applicable beyond methods of measurement, extending to the identification of desired outcomes for programs and policies that seek to promote child well-being, as well as to reduce risk and prevent poor outcomes.

## Themes affecting conceptualization and measurement in child development

Several themes underlie our discussion, including the following:

***Well-being is dynamic and “in progress.”*** During life, development is always unfinished; and it is very much so during the years between birth and age eight. As we note below, it is an ongoing product of interaction with others, and with the other features of our environment. And, an outcome at one stage of development becomes an input into outcomes at a subsequent stage of development. Even among children exposed to adverse or traumatic circumstances, recovery is possible.<sup>47</sup>

***Well-being occurs along a continuum.*** As suggested earlier, all children and families can experience both good and bad outcomes. Society can help move outcomes toward the positive end of this continuum and prevent already bad outcomes from becoming worse. The response categories of measures need to be sufficiently nuanced to pick up these distinctions.

**Prevention is less costly in every sense of the word than treatment.**

Another implication of a focus on promotive and preventive factors is an emphasis on prevention. While recognizing that treatment is essential and needs resources and support, we note that many problems are preventable if appropriate promotive and protective resources are made available to children and families. Understanding and monitoring the presence of promotive and preventive factors represents an important element in a prevention strategy.

***Individual well-being is a product of both one’s genetic “program,” and environment.*** Genes influence many human characteristics, but *how* they operate (their expression, as well as its timing) is sensitive to physical and social environments, starting prenatally. To put it simply, under optimal environmental conditions—good nutrition, minimal exposure to toxins, manageable levels of stress, a stimulating and supportive social environment—genes are equipped to

maximize a child's chances for thriving. Ann Masten coined the term "ordinary magic" to capture children's remarkable response to unfavorable conditions: "Resilience appears to be a common phenomenon that results in most cases from the operation of basic human adaptational systems. If those systems are protected and in good working order, development is robust even in the face of severe adversity" (p. 227).<sup>137</sup> However, without sufficient buffering (e.g., the presence of a nurturing caregiver), adverse conditions can interfere with healthy growth and development, such as gene functioning, seriously throwing healthy development off balance.<sup>174</sup>

These gene-environment interactions play out internally (within a particular body), but there are similar external interactions between an individual child's characteristics and his or her environment. Development is sensitive, throughout the lifespan, to both risk and protective factors; for a given individual, it is the balance of these at a given point in time that affects well-being. Here it gets complicated, because risk and protective factors include not only those which are "external" to the child (poverty, a nurturing caregiver, etc.), but some which are internal.

Children differ in their responses, even to the "same" experience—we may call this dimension sensitivity or responsiveness to context. It means that some children are especially vulnerable to adversities of various kinds; however, they may also be more responsive to *positive* changes in their environment. In addition to "reactivity," children may possess other characteristics (themselves the product of prior development) that ease their path through life; these can also be considered protective factors, or (if relied upon to recover from prior adversity) resilience factors. These include intelligence, planfulness, high self-esteem, good self-control, flexibility, and self-efficacy (a person's belief that they can execute behaviors that affect their life).<sup>158</sup>

***Cumulative disadvantage increases challenges.*** Children's environments have many dimensions—physical, affective, social, sensory, and others—and may range from ones characterized by severe deprivation and toxic exposures, to those with consistent material advantages, optimal stimulation, and responsive, caring adults. In particular, a growing body of research has identified adverse childhood experiences (ACEs)—potentially traumatic events that can have negative, lasting effects on health and well-being. Lists of ACEs typically include physical, emotional, or sexual abuse; parental divorce or the experience of a parent's incarceration or drug abuse; witnessing violence; and severe economic hardship, among others. The cumulative effects of ACEs can be particularly detrimental to a child's well-being.<sup>175</sup>

***Outcomes differ from traits.*** We want to point out that outcomes should be distinguished from traits. Traits, such as introversion or agreeableness, are often

understood as inherently enduring, while outcomes are considered alterable. Children's trait-like characteristics (for example, whether they're "easy" or "fussy and irritable") of course elicit particular responses from others in their environment, so the influence between child and environment is two-way, and often "feeds back," strengthening existing conditions rather than altering them.

***There are aspects of the "macro" social context that powerfully shape the experiences of children and their families.*** Examples are poverty, racial discrimination, and other institutionalized disparities in risk and opportunity. While these features are more removed from the child, they can significantly influence the developmental contexts of children: family, school, and neighborhood. However, these proximal features are most easily leveraged, and doing so can either buffer, or amplify, the more distal contextual influences, respectively, of social disadvantage, or advantage.

***It is important to consider both individual and social factors, even if they are effectively non-malleable, because they matter for interventions.*** Individual characteristics and "macro"/social factors like those described above play important roles in the ecological model that informs this work. However, because our primary focus here is on factors that are modifiable, we focus mainly on family- and community-level factors which are more likely to be influenced by policies and programs. Individual and macro-contextual factors cannot be ignored, because the success of interventions may depend on how well matched they are to these factors. Although it is not possible to correct pervasive social disparities in a single program setting, they nevertheless remain appropriate targets for larger initiatives and policy efforts.

***Positive reinforcement is an effective intervention strategy.*** Research suggests that building and drawing upon an individual's strengths and rewarding positive behavior is more effective at changing behavior than is negative reinforcement, such as punishment.<sup>141</sup> Thus, surveys and other types of assessments should not only focus on negative outcomes and risk factors, but also positive outcomes and protective/promotive factors.

***We take a broad view of promotive/protective factors.*** In this paper, we consider factors that *protect against* negative outcomes or risk factors as well as those that *promote* healthy child development and positive outcomes. This view reflects our intent to identify characteristics of the positive "pole" of development.

### Themes

- Well-being occurs along a continuum.
- Prevention is less costly than treatment in every sense of the word.
- These outcomes are dynamic and “in progress.”
- Individual well-being is a product of both one’s genetic “program,” and a particular environment.
- Cumulative disadvantage increases challenges.
- Outcomes differ from traits.
- The “macro” social context can powerfully shape the experiences of children and their families.
- Individual and social factors must be considered, even if they are effectively non-malleable.
- Interventions should be informed by these factors, and by the evidence that positive reinforcement, in particular, is an effective strategy.
- We consider factors that protect against negative outcomes and that promote healthy development.

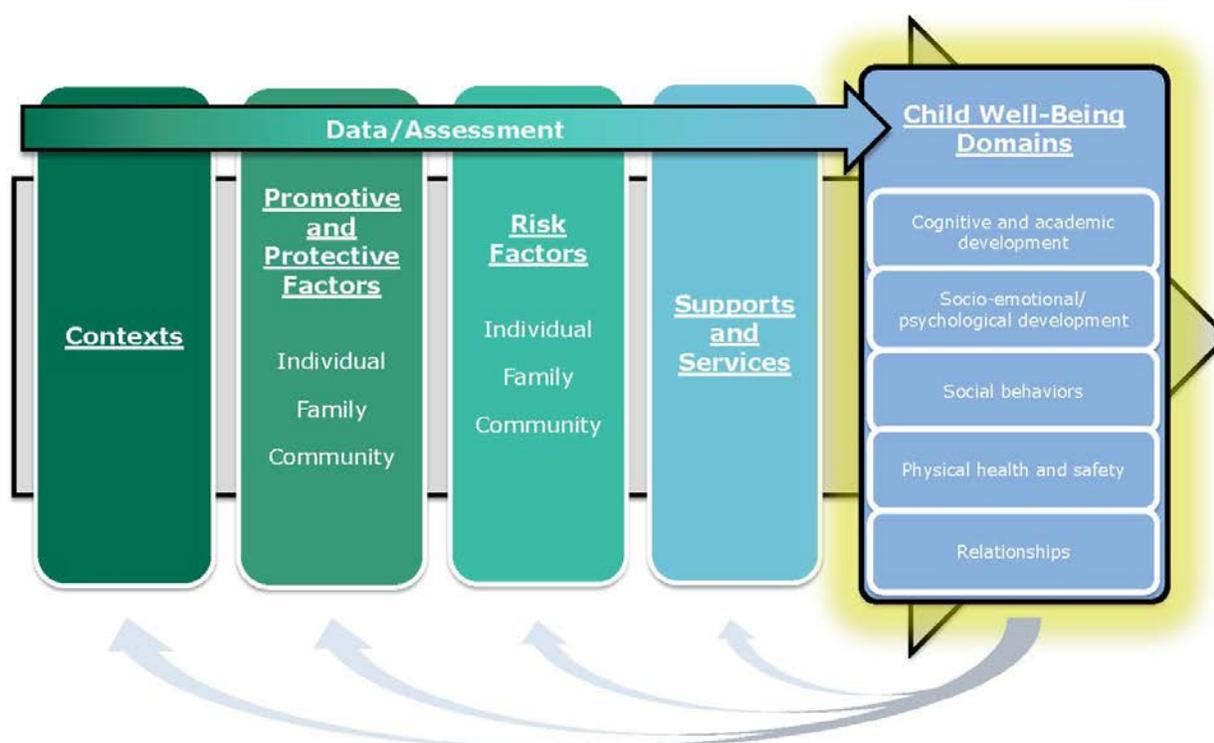
***In sum, in this document, we propose a set of child well-being constructs, explore the various factors that can affect these outcomes, and suggest strategies for intervention. More work needs to be done to develop the specific measures required to assess progress toward these child well-being goals.*** When it comes to risk and protective factors, we provide brief summaries, drawn from the research literature, of the associations among the various factors, and with the child well-being constructs. However, questions of causality— and sometimes even the direction of relationship—often remain unresolved. Including these constructs in future longitudinal studies, and in the development of early childhood policies and programs, will help us to understand more about these important relationships.

## Chapter 2: Child Well-Being

### I. Domains

Child well-being encompasses multiple developmental domains, including cognitive and academic development, socio-emotional/psychological development, social behaviors, physical health and safety, and relationships (see Figure 2). The domains influence each other and, in turn, are influenced by other factors over time, making for dynamic and ongoing developmental processes.

**Figure 2:** Domains of child well-being within our conceptual model



In this chapter, we identify important elements, or “constructs,” of child well-being (see Table 1). We summarize, for each domain, constructs that the developmental research finds to be important for children ages birth to eight. We also consider additional constructs that are often not included in the literature, but which have relevance to the aim of preventing or reducing risk for poor outcomes in early childhood. Sometimes these are constructs not currently included in surveys—for example, positive relationships with non-parental adults and other forms of social capital. In other cases, we highlight the need to scale items differently, in recognition of the often extreme levels of risk, paucity of protective factors, and adverse outcomes common among vulnerable children, especially those who have been maltreated. Questions on bullying, for example, are increasingly included in

surveys and evaluation studies. But the studies' range of responses may not capture the very high levels of perpetration and victimization frequent among children who suffer from or are at risk for maltreatment. We reiterate that a continuum perspective is called for in many, if not most, of these constructs. Children's experiences fall anywhere from the positive extreme to a negative extreme; therefore, measures and items should be adapted to reflect this range.

**Table 1:** Constructs for the domains of child well-being

Well-being domain	Constructs
Cognitive and academic development	<ul style="list-style-type: none"> <li>• Early academic development/school readiness</li> <li>• Engagement in learning/approaches to learning; problems with concentration/focus</li> <li>• Age-appropriate general knowledge</li> <li>• Executive functioning</li> <li>• Developmental delay</li> </ul>
Socio-emotional/psychological development	<ul style="list-style-type: none"> <li>• Emotion understanding</li> <li>• Self-regulation, positive coping</li> <li>• Mental health</li> <li>• Self-efficacy; mastery</li> </ul>
Social behaviors	<ul style="list-style-type: none"> <li>• Social competence and skills</li> <li>• Behavior problems, including aggression, oppositional/defiant disorder and bullying</li> </ul>
Physical health and safety	<ul style="list-style-type: none"> <li>• Overall health status</li> <li>• Special health care needs/chronic conditions</li> <li>• Growth and weight</li> <li>• Physical safety</li> <li>• Sleep</li> <li>• Self-care</li> </ul>
Relationships	<ul style="list-style-type: none"> <li>• Safe, stable, and nurturing relationships (SSNRs) with caregivers</li> <li>• Caregiver-child attachment</li> <li>• Positive relationships with trustworthy non-parent adults</li> <li>• Positive peer relationships</li> <li>• Bonding/bridging social connections</li> </ul>

## Cognitive and academic development

The period encompassing pregnancy and the first few years of life is one of exponential growth in neural connections and the establishment of preferred response patterns that have both short- and long-term implications for development. However, the brain continues to develop in significant ways, and to maintain a degree of plasticity, into (at least) young adulthood<sup>187,200</sup> Optimally, development proceeds through processes that involve progressive differentiation and integration of numerous skills and behavioral routines, where higher-order skills and competencies are built from a series of lower-order skills.<sup>12,178</sup>

### **Early academic development/school readiness**

Young children must acquire a number of skills across multiple developmental domains to prepare them for success in school, including social-emotional skills, executive functioning, and self-regulation. However, some of the constructs that are most traditionally associated with school readiness include language development, cognitive development, and approaches to learning. Skills associated with early literacy include phonological awareness, letter knowledge, vocabulary, awareness of print, early writing development, grammatical understanding, and sentence recall. Children who have larger vocabularies at age two start kindergarten with better academic and behavioral skills, according to one recent study.<sup>148</sup> Another well-known longitudinal study found that the rate of vocabulary growth at age three predicted children's third-grade school performance.<sup>100</sup> In turn, competence in reading by third grade is strongly associated with a child's further school achievement.<sup>7</sup> Communication skills (particularly receptive and expressive language) are often considered within the cognitive, or the social domain, or both.

Numeracy skills (the ability to reason with and apply simple numerical concepts) develop from repeated experiences with one-to-one correspondence. These, in turn, form a basis for further mathematical understanding. Similarly, the concepts of ordering, classifying, and transforming objects develop over time, as do notions of cause-and-effect, object permanence, concepts of time, and ideas about mental states (one's own and others'), as well as planning and other forms of metacognition ("thinking about thinking"). Such skills provide a foundation for numerous academic skills, including scientific inquiry, understanding of multiple perspectives, and managing one's work.

These, together with progressive development in language, fine-motor, and social skills, prepare young children for taking advantage of the classroom learning environment.

### **Engagement in learning/approaches to learning; problems with concentration/focus**

Young children's optimal cognitive development, as noted, includes a number of "soft" skills, sometimes called approaches to learning, that include curiosity, paying attention, shifting attention appropriately, following directions, memory, and following through on activities even when faced with distractions or challenges. This construct often includes eagerness to learn, independence, cooperation, flexibility, responsibility, and concentration.<sup>45</sup> Note that this construct overlaps substantially with executive functioning.

Difficulty learning, whether due to personal or environmental challenges, can pose serious challenges to young children's development. Some children may not simply

disengage from learning, but may be unable to attend due to problems with concentrating or focusing, which, in turn, may reflect problems of dissociation<sup>e</sup> or hypervigilance.<sup>f</sup> These difficulties can take many forms, including Attention Deficit Hyperactive Disorder (ADHD), and may be exacerbated or caused by adversities such as maltreatment. In fact, one study found that 19 percent of teens investigated by child welfare scored positively for ADHD.<sup>105</sup> This number is higher than the general prevalence estimates provided by the DSM-5: five percent among children and about two-and-a-half percent among adults.<sup>5</sup>

Of course, if children have difficulty with focus and concentration, then their academic achievement is not likely to reflect their actual ability. For example, one study found that abuse and neglect can have a significant impact on children's IQ scores, reading ability, general academic achievement, and expectations for future academic success. While both abuse and neglect are found to be associated with lower academic achievement, neglect is especially predictive of academic underachievement.<sup>164</sup>

Any number of learning difficulties can become evident, from birth onward, as a result of observed difficulties in school or in interactions at home. Some are clearly associated with physiological abnormalities such as vision or hearing problems and cerebral palsy. Others have a basis that is apparently more complex: these include various language/communications problems, including dyslexia; attentional problems, including hyperactivity; autism spectrum disorders; and others. Of course, any chronic health problem (such as depression, asthma, or diabetes) can interfere with a child's ability to learn under normal classroom conditions. Some of these learning difficulties can be addressed and corrected, if they are promptly identified, while others will remain life-long challenges.

### **Age-appropriate general knowledge**

Children need a certain amount of general knowledge, for example about the material and natural environments. Their ability to understand and use language depends on their having a minimum of knowledge about people, objects, and other features of their environment, including their community.

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<sup>e</sup> Dissociation describes a mental withdrawal from one's environment, as a strategy of protecting from perceived threats. This withdrawal may occur even in the absence of danger, if something in the environment acts to trigger a memory of trauma.

<sup>f</sup> Hypervigilance involves over-attending to everything in the environment, looking for signs of danger, rather than focusing on what's being taught. Children who are victims of maltreatment may be hypervigilant to perceived threats, such as others' anger. Although this response may be adaptive in the context of an abusive environment, for maltreated children, hypervigilance can also mediate anxiety symptoms.<sup>111</sup>

## **Executive functioning**

The Center on the Developing Child has termed executive functioning “the brain’s ‘air traffic control’ system.”<sup>41</sup> Often included in this category are working memory, mental flexibility, and self-control (which includes attention and inhibition of inappropriate responses). Planning, attention, and emotion regulation are additional concepts frequently listed as aspects of executive functioning.

These skills are considered essential building blocks for children’s cognitive development. They underlie a child’s ability to focus and operate with information; to filter out distractions; and to “switch gears” as needed.

Children who have experienced early abuse or neglect, institutional or frequently disrupted care, or prenatal or perinatal complications may have impaired executive functioning. These children can present behaviors that are disruptive and resistant to change, unless intervened with early in life.<sup>41</sup>

## **Developmental delay**

It is important to recognize that, in some instances, developmental delays among young children can signal the presence of serious physical or psychosocial problems. Because development during infancy and toddlerhood is rapid and cumulative, the success of early intervention depends on early identification. For example, “failure to thrive”—a condition in which inadequate nutrition and disturbed caregiver-child relationships contribute to insufficient weight gain and developmental delays—can also indicate the presence of serious neglect or maltreatment.<sup>27</sup> Moreover, a paucity of inputs for language, numeracy, general knowledge, or self-regulation, can result in serious cognitive deficits. Maltreated children, in particular, may not have had the opportunity to build higher-level skills from lower-level skills. For example, neglect often results in language and cognitive delays in children, because children do not have the verbal interactions that contribute to development in these areas. Children who are in foster care may also miss out on learning basic skills. Chronic stress, acting through impaired brain functioning, may lead to delays in development. In one study, 46 percent of children in the child welfare system, ages zero to six, exhibited developmental delays.<sup>190</sup>

## **Socio-emotional/psychological development**

For young children, emotional well-being is greatly dependent on the sense of security provided by caring adults. This domain also encompasses the self-regulation of emotion, and other executive functions that help maintain a sense of well-being, such as self-efficacy, being able to plan effectively, hopefulness/optimism, joy, spirituality, and other positive emotions.

## **Emotion understanding**

One important aspect of social competence is accurately interpreting others' behavior. In particular, misattributing hostile intent is associated with involvement in a "coercive cycle" that often leads to aggression and social exclusion.<sup>161,162</sup> However, the ability to identify the emotions of others (as well as one's own) is important for the development of smooth social interactions and, especially, for empathy. In extreme cases, the absence of this ability can manifest in hostile attribution disorder.

A key task in regulating emotions is the accurate processing of social cues. Many children who have experienced abuse and neglect have a lower threshold for perceiving anger cues, in particular. This may be a learned bias, as anger has been an important threat-cue for these children who have experienced abuse and neglect in the past.<sup>20</sup> As a result, a maltreated child may mistakenly assume that another child is teasing or threatening him or her when that is not the case.<sup>111</sup> When a child too readily assume another's hostile intent, he or she may pre-emptively respond with aggression, which can lead to retaliation and perpetuate a coercive cycle of hostility.<sup>69</sup>

Empathy—the ability to imagine how another is feeling in a particular situation and to offer a caring response—is important as a social skill and as a brake on aggression toward others. In young children, the precursors of empathy are evident at an early age. However, empathy depends on a number of fairly sophisticated cognitive developments, including self-awareness, the ability to recognize others' emotional states, perspective-taking, and judgment about what constitutes an appropriate response to another's distress. The development of empathy depends to a great extent on a child's early relationships with caregivers who model empathy themselves, prompt empathic responses with hypothetical questions, and help children more fully understand their own and others' emotions.

## **Self-regulation, positive coping**

Shifting from "other-regulation" to "self-regulation" is a part of normal child development.<sup>178,214</sup> Young infants overwhelmingly depend on others to monitor and attend to their physical and emotional needs. Nonetheless, self-regulation of emotions begins in infancy, when babies learn some self-soothing behaviors. Older children can learn simple techniques, like counting to 10, deep breathing, meditation, and so on.

Children with strong self-regulation skills are more successful in school, have greater persistence, cope better with challenges, keep track of how they are doing and change their approach when needed, make friends more readily, and are more

intrinsically motivated.<sup>13</sup> In the longer term, strong self-regulation skills underlie planning and goal-setting.<sup>13</sup>

Young children are not born with the skills to self-regulate, but rather have the potential to develop these skills in the context of supportive environments. In the absence of positive caregiving relationships, for example, a child's self-regulation skills may be delayed or seriously impaired. Maltreated children, particularly when they perceive a challenge or a threat, often struggle with self-regulation.<sup>209</sup> Serious problems with impulse control and aggression can be early signs that a child has been maltreated.<sup>22</sup>

Positive coping refers to the self-management of one's emotions, and the external influences on those emotions, in order to maintain well-being. Being able to use positive emotions to recover, or "bounce back", from an emotional upset is associated with physical and emotional health advantages.<sup>204</sup> A child's capacity to cope with stress is also influenced by certain predispositions ("constitutional" factors) that are themselves a dynamic product of both genetic inheritance and early experience. Thus, some children are more reactive (positively and negatively) to a range of stimuli, while others are generally more impervious. This latter group is sometimes termed "resilient," but that is a misnomer, because these children may be resistant to both negative and positive experiences. Resilience is an outcome, not a trait, and is influenced by a dynamic interplay among multiple factors of the child *plus* their environment.<sup>31,138</sup>

Optimism, or hopefulness, is another aspect of positive coping that has been identified in the literature.<sup>166</sup> By the same token, "learned helplessness," which is characterized by a sense of having no control over future outcomes, is associated with subsequent negative outcomes; one study found that "children who tended to explain bad events by internal, stable, and global causes and good events by external, unstable, and specific causes" (p. 440) showed more "helplessness deficits" in achievement and emotional well-being. This "maladaptive explanatory style" was also predictive of later depression when these children were compared with children who had optimistic styles of explaining events.<sup>157</sup> While less studied than the general population, children in the child welfare system, especially those with numerous unsuccessful placements or a long tenure of system involvement, can suffer from hopelessness. One study found a positive association between girls' experience of human trafficking and hopelessness.<sup>61</sup> Children who struggle with coping skills are often at higher risk for depression and anxiety disorders. This association is stronger when children experience maltreatment or other traumatic experiences.<sup>32</sup>

## Mental health

Good mental health in early childhood is an essential building block of flourishing. Sound mental health facilitates the formation of healthy relationships with parents, teachers, and peers; provides a solid foundation for the development of self-regulation skills; and supports learning. On the other hand, disruptions in mental health can impede these critical capacities.<sup>154</sup> Anxiety disorders, which are identified in a number of clinical diagnoses, are the most prevalent group of mental disorders in children. They include phobias, obsessive-compulsive disorder, post-traumatic stress disorder, and panic disorder. Children who have anxiety disorders experience fear, nervousness, and shyness, and often avoid particular places and activities. Anxiety disorders in children often co-occur with depression, eating disorders, and attention-deficit hyperactivity disorder.<sup>8</sup>

Once considered absent from, or rare, in early childhood, depression is now known to occur in children of all ages, and is the third most prevalent category of child mental disorders (after anxiety disorders and ADHD/disruptive behavior).<sup>46</sup> In young children, depression can have a number of possible origins, including attachment loss or other traumatic experience. Living with a depressed parent is strongly associated with childhood depression, which may reflect both inherited and environmental influences. However, depression in young children may be difficult to identify, because of their limited verbal ability, and because it may be expressed (as it is with some adults) through somatic complaints.

Early exposure to trauma and adversity places children at increased risk of internalizing symptoms (such as depression and anxiety), from early childhood through adolescence and adulthood. Furthermore, depression and anxiety may manifest themselves differently in children who have experienced maltreatment, compared to children who have not.

Post-traumatic stress disorder (PTSD) is an anxiety disorder that may develop following an individual's experiencing or witnessing of a traumatic event, where the natural "fight, flight or freeze" response is impaired.<sup>153</sup> Even when out of immediate danger, a child may have intense stress following a situation in which they or another person experienced a threat to life, or incurred severe injury.<sup>97</sup> Generally, symptoms of PTSD are of three types: re-experiencing symptoms, avoidance symptoms, and hyperarousal symptoms.<sup>153</sup> It is not surprising that more than 21 percent of children who have been in foster care suffer from PTSD, a rate that is higher than that of U.S. war veterans.<sup>163</sup>

The experience of trauma, directly or through family stress, is linked to abnormal (both elevated and low) levels of cortisol (a stress hormone) in children. Atypical cortisol levels have been linked with diminished cognitive ability at age four. Children with family instability, and harsh and emotionally distant caregivers, at

age two had elevated cortisol, while children with only family instability had lower-than-average levels.<sup>196</sup> An over-reactive stress-response system is also associated with other potentially harmful physiological profiles, including disruptions in normal immunologic and metabolic functions.<sup>66</sup>

### **Self-efficacy; mastery**

Self-efficacy is the belief that one is capable of accomplishing a task. Agency—and mastery—are related concepts: both have to do with a sense that one's own efforts are important in achieving goals.<sup>45</sup> In contrast, children lacking in self-efficacy may believe that their success or failure have to do with factors outside their control, such as innate characteristics. A young child's sense of agency is nurtured by early interactions with caring adults that involve treating the child as a reciprocal partner in communication and play, praising him or her for effort as well as achievement, and allowing children to experience, within reason, the consequences of their behavior. Conversely, stressful environments can thwart children's sense of self-efficacy. For instance, maltreated children often have internalized a sense of worthlessness, and have low self-efficacy.<sup>199</sup> Very low self-efficacy can have a number of consequences for children, including an increased likelihood of depression, difficulties with creating and maintaining friendships and romantic relationships, impaired academic and job performance, and increased vulnerability to drug and alcohol use.

## **Social behaviors**

From birth, humans are social animals. We need others not only for survival, but also, research finds, for optimal mental and physical health. We seek to engage others in play, dialogue, and for emotional and instrumental support. We look to others as partners in learning everything from social roles to specific knowledge, skills, and attitudes.

### **Social competence and skills**

Social skills, which include making friends, taking turns, sharing, resolving conflicts, and participating in groups, among others, are important throughout childhood. Additionally, most children develop empathy and perspective-taking, particularly if those are modelled by adults or older peers. Children's abilities to share, take turns, be helpful to others, and work in teams are essential for success in school, as they will be in their adult life. Cooperation (as opposed to competition) can be fostered through children's early relationships with parents, siblings, and peers.

Young children need to be able to use peers or adults in developmentally appropriate ways, to ensure their own safety and that of others, to solve conflicts, get information or accomplish tasks, and to receive emotional support. Children

who fail to seek support when needed, or who rely excessively on it, are at risk for developmental problems. Children who fail to seek support risk social isolation, as well as inadequate care and protection. Children who rely excessively on others risk developing overly dependent relationships that inhibit age-appropriate autonomy.

### **Behavior problems, including aggression, oppositional/defiant disorder and bullying**

In the case of children, psychological/emotional well-being is often defined, unsatisfyingly, as the absence of internalizing or externalizing behaviors. Internalizing behaviors (if one may speak of internal behaviors) include depression and anxiety. Externalizing behavior refers to aggression, hyperactivity, impulsiveness, bullying, active defiance, or other anti-social destructiveness.<sup>39</sup>

Anger management, defined as “the process of learning to recognize signs that you're becoming angry, and taking action to calm down and deal with the situation in a positive way”<sup>139</sup> is commonly considered an important skill for children to develop, and is may be especially significant for children who have experienced maltreatment. Children who are abused by adults may feel powerless, and compensate by seeking their own victims in order to gain a sense of power and control.<sup>10</sup> Maltreated children can exhibit patterns of anger, irritability, argumentativeness, defiance or vindictiveness toward parents and other authority figures. These symptoms are characteristic of oppositional-defiant disorder (ODD).<sup>5</sup>

Most children begin to exhibit physical aggression during infancy, and most will learn to use alternatives in the following years. However, if anger management skills are not learned, children are at a higher risk of exhibiting serious violent behavior during adolescence and adulthood.<sup>203</sup>

Bullying, or the repeated use of aggressive behavior characterized by an imbalance of power, is common among children. Bullying can take many forms, and the lines between bullying, teasing, or even overt violence are not always clear. Social media have created additional opportunities for—and raised the social stakes of—bullying. Bullying is a serious issue, because children who are bullied are at greater risk for a number of health and emotional problems. Children who bully are also a group who are at risk for other behavioral problems.<sup>86</sup>

### **Physical health and safety**

The physical integrity of the child's body is fundamental to his or her survival. Infants are entirely dependent on the protection and physical care provided by adults. From an evolutionary perspective, infants are primed to signal their basic needs through crude vocalizing (fussing, crying), and adults are primed to find these aversive, and, ideally, are thereby motivated to respond appropriately.

## **Overall health status**

A child's health status can affect multiple domains of well-being. Good health supports success in school, broad participation in family and community-based activities, and an overall sense of well-being. Ratings (typically by parents) of a child's global health status are considered reasonably valid and efficient, if overly positive, measures.

Physical health is an essential element of well-being in early childhood, and yet many children are exposed to environments that impede their health. For example, poverty may not allow families to meet their children's basic needs for food, clothing, housing, or medical care, leading to poor health outcomes.<sup>221</sup> Furthermore, child abuse and neglect can negatively affect children's physical health, sometimes directly, and children in this group suffer from higher rates of both injury and illness. The health needs (both acute and chronic) of many maltreated children often go unmet as well.<sup>22,111</sup>

In addition, untreated oral diseases can lead to problems with eating, speaking, and sleeping. Poor oral health among children has been tied to poor performance in school and poor social relationships. For example, children with chronic dental pain may have poor self-image, difficulty concentrating, and problems completing schoolwork. Children with early childhood dental problems also often weigh less than their peers. The American Academy of Pediatric Dentistry recommends that all children visit the dentist within six months of the eruption of their first primary tooth, or no later than their first birthday.<sup>55</sup>

## **Special health care needs/ chronic conditions**

The term, "children with special health care needs," includes those with a broad range of chronic health conditions, from major physical or developmental disabilities, such as insulin dependent diabetes, cerebral palsy, and epilepsy, to often less limiting conditions such as attention deficit disorder or asthma. The coordination of care, involving doctors, teachers, and community resources, can be challenging for parents of children with special health care needs.<sup>48</sup>

## **Growth and weight**

Early childhood is an important time for developing healthy habits around exercise and diet. Children who are overweight or obese are at increased risk for physical and socio-emotional problems. Overweight children are more likely than their peers to develop cardiovascular disease, type-2 diabetes, hepatic steatosis (a fatty liver), sleep apnea, high cholesterol, and asthma. Childhood obesity has also been linked to the premature onset of puberty. Being overweight is related to poorer mental

health status and decreased physical activity. Additionally, being overweight may also be associated with being bullied, which can exacerbate these difficulties.<sup>51</sup>

In the U.S., the number of underweight young children is generally less a concern than the number of overweight young children,<sup>84</sup> although there are subgroups, particularly of children living in deep poverty, with disturbingly high rates of underweight. In addition to its relationship with malnutrition, underweight can be an indication of underlying disease. Low weight at birth is a well-established risk factor for a number of developmental problems, extending into adulthood.<sup>53</sup>

Both poverty<sup>128</sup> and child maltreatment have been linked with an increased body mass index and higher rates of obesity. In their most extreme forms, abuse and neglect are associated with arrested growth.

“Failure to thrive” means that the child receives inadequate nutrition in order to grow properly. This condition is rare in the general population, but is more frequently identified among maltreated children. It can occur for multiple reasons, including unforeseen problems with breastfeeding, improper use of formula, or underlying disease, but neglectful parenting can also be a cause.

### **Physical safety**

Safe, secure environments promote healthy development in early childhood<sup>40,155</sup> and set the stage for lifelong well-being. On the other hand, dangerous environments can adversely affect growth and development. Unintended injuries are the leading cause of death and disability for children and adolescents in the U.S. Among people ages 1-19 years, they account for more than a third (36 percent) of all deaths; for newborns and infants under the age of one year, they are the fifth leading cause. Although child injuries occur under diverse circumstances, motor vehicle crashes are the leading cause of fatal injuries, while falls account for the greatest proportion of non-fatal injuries. It is estimated that for every child death resulting from injuries, more than 1,000 children receive medical treatment or consultation for non-fatal injuries.<sup>52</sup>

### **Sleep**

Sleep problems can be indicative of multiple issues, including acute and chronic stress. A history of child maltreatment, even if infrequent, is associated with various sleep problems, lasting even into adulthood.<sup>92</sup>

### **Self-care**

In the early years, it is expected that children will increasingly take responsibility for basic personal hygiene (toileting, tooth-brushing, bathing, and so on). Family turmoil can disrupt routines that support the learning and maintenance of personal

hygiene. For the youngest children, failure of a caregiver to maintain a child's personal hygiene can indicate neglect.<sup>159</sup> Older children who are neglected may also appear to have poor hygiene. At the extreme, abused children (particularly victims of sexual abuse) may have not have appropriate control over bladder or bowel functioning.

## Relationships

Research has found that relationships, particularly with parents, are important to flourishing across all domains of child development. Through these relationships, children learn and develop "schemas"<sup>224</sup> about interpersonal relationships in general. Thus, the parent-child relationship sets the stage for later relationships with peers and non-parent adults, such as teachers.

### **Safe, stable, and nurturing relationships (SSNRs) with caregivers**

Recently, a number of researchers have endorsed the concept of "safe, stable, and nurturing relationships" (SSNRs), or "nurturing environments."<sup>23,181</sup> In fact, promoting SSNRs with caregivers has been identified by the Centers for Disease Control and Prevention as a strategy for preventing child maltreatment.<sup>42</sup> Likewise, a frequent challenge for children in foster care is ensuring that they have enduring, permanent relationships with important adults.

*Safety* encompasses the child's social and physical environments, and includes safety from fear and psychological harm as well as direct physical injury. *Stability* refers to predictability and consistency in the child's environment. *Nurture* has to do with the extent to which a parent or caregiver is available, responsive, and sensitive to their child's needs. Nurturing environments are conceptualized as those that reduce developmentally toxic conditions; support executive functions such as self-regulation and prosociality; limit opportunities for risky development; and promote pro-social values.<sup>42</sup>

Safety, stability, and nurturance continue to be essential to children's well-being, even as they grow and acquire language, independent locomotion, distinct individual preferences, and skills in self-care, and explore the wider environment and multiple settings of home, child care, neighborhood, and so on.

Most children find SSNRs in their parents. However, for children who have suffered maltreatment or neglect at the hand of their parents, or other primary caregivers, these are roles that others may fill. For example, grandparents and other kin, such as aunts and uncles, can play a vital role in that child's life by providing a sustained positive relationship. Siblings can also serve in this role, as well as foster parents or other adults in the child's life such as teachers or neighbors.

## Caregiver-child attachment

Within the context of safe, stable, and nurturing relationships, infants can form secure attachments with their caregivers. Secure attachment, or a strong bond between caregiver and child, provides the infant the foundation for subsequent positive social-emotional skills.<sup>23,147</sup> In a secure caregiver-child attachment, the child develops the expectation that his/her needs will be met and feels secure with the parent.<sup>30,210</sup> Children with secure caregiver relationships are comfortable exploring their surroundings because they trust that their caregivers will be there, if they need support.<sup>30,98,147</sup> In the context of adversity, the child trusts that the parent will be protective and help the child overcome these situations.

Children develop secure attachments to parents who are responsive to them when they are distressed. When parents are frightening or unavailable, children often fail to develop a secure attachment. Because a maltreated child, for instance, cannot consistently rely on his or her parent, he or she may attempt to be prematurely self-reliant. Such children may have strong needs for autonomy and control. Alternatively, since there has been no consistent caregiver who has provided for the child's needs, he or she may rely on others indiscriminately, not maintaining appropriate boundaries.<sup>5</sup> Children with a depressed parent also have been found to exhibit difficulties with attachment,<sup>64,201</sup> in some cases leading to additional developmental problems later in life such as negative self-perceptions.<sup>201</sup>

## Positive relationships with trustworthy non-parent adults

Non-parent adults, including teachers and other caregivers, can be vital in supporting children's healthy development. Grandparents and other relatives, neighbors, and child care providers may also serve as caring non-parent adults for young children. In particular, research suggests that positive relationships with teachers provide social support that contributes to children's motivation to learn, achieve and be connected to school.<sup>11,147,189,218</sup> As in parent-child relationships, sensitive and responsive teachers develop high-quality relationships with their students, and this, in turn, fosters good academic outcomes. In fact, affectionate ties with alternative caregivers have been found to be one of the most critical determinants of resilience in childhood among high-risk families.<sup>217</sup>

## Positive peer relationships

Having a secure caregiver-child attachment is related to a child's peer relations later in life.<sup>160</sup> At the same time, peer relationships influence child well-being in their own right. Establishing reciprocal friendships has been identified as one component of social competence with peers, and these relationships can present children with companionship as well as support.<sup>114</sup> Additionally, positive peer relationships can promote positive adaptation among those who have experienced

toxic stress,<sup>73</sup> and protect against a hostile attribution bias.<sup>9</sup> Positive peer relationships may be protective against bullying perpetration and victimization, as well.<sup>147</sup>

Included here are sibling relationships, which influence development in the behavioral, cognitive, and emotional domains, and can also serve as protective factors for children facing stressful situations.<sup>186,213</sup> Patterns of sibling behavior, such as constructive conflict resolution strategies or aggressive fighting, may reappear in their subsequent interactions with others.<sup>213</sup>

### **Bonding/bridging social connections**

Bonding social connections, or social capital, refers to the number and quality of ties that link people with others sharing one or more characteristics. Foster care placements can inhibit the forming of bonding social capital, because it removes children from the surroundings most familiar to them (parents, neighborhood). In contrast, placement with kin can promote bonding social capital. Bridging social capital refers to the ties linking people who differ across social dimensions (races, education levels, household income levels, etc.). A child in foster care may reap social capital advantages through his or her foster parents, particularly if they have resources or relationships advantageous to the child's success—for example, in school or employment.<sup>197</sup>

## **II. Summary**

We have described important child well-being goals across five major domains.

*Children need to develop cognitive skills* and to be ready for school and to thrive in school settings. Language is one of the most fundamental of these skills, providing the basis for many other types of learning. Other important cognitive skills include numeracy, understanding of cause and effect, and metacognition. In addition, young children need to have sufficient knowledge of people, places, and things to understand the content they will encounter in formal learning experiences.

In addition, children will do best when they also acquire predispositions and habits that may be termed “soft” skills (including paying attention, following directions, and curiosity, among others) that facilitate engagement in learning. Executive functioning—a specialized set of skills drawing on memory and self-regulation—is also required for successful achievement in this domain and others.

Learning difficulties and developmental delays reflect less-than-optimal conditions for cognitive development, but young children with these characteristics may, with the proper supports, thrive in spite of these challenges.

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<sup>9</sup> This refers to a pattern of assuming that slights or injuries to one's person are intentional.

*Social-emotional skills and psychological health* are also a vital component of children's well-being. As young children come to understand, and grow comfortable with, their own emotions and those of others, they more accurately identify social cues and become capable of responding, for example, with empathy. Part of coping positively with difficult situations, and the strong feelings they may engender, depends upon self-regulation—or the monitoring and modulation of one's emotions and behaviors so as to maintain a healthy intra- and inter-personal equilibrium. Positive coping also relies on characteristics that may be relatively "hard-wired"—temperamental traits such as reactivity and optimism. Well-being also draws upon feelings of self-efficacy (mattering), as well as satisfaction with accomplishments (mastery). Depression, anxiety, and low self-efficacy reflect, in part, an inability to adopt or sustain positive coping.

Young children need to master the social skills that underlie successful relationships with both peers and adults. They must navigate the boundaries, which shift with age and situation, between dependence and autonomy. They need to manage anger in socially acceptable ways and refrain from most interpersonal aggression.

*Of course, to thrive, children must be safe and healthy.* Their basic needs for food, clothing, shelter, and proper care must be met. In early childhood, growth and weight are both important markers of the quality of their start in life. However, toxic stress (which can result from any number of exposures) can also negatively affect multiple body systems.

*To flourish, children require safe, stable, and nurturing relationships,* particularly with their parents. Non-parental adults, if they can provide those characteristics in their relationship, can substitute for (or augment) parents. A healthy attachment relationship (which begins in infancy) lays the foundation for positive social-emotional development, as well as age-appropriate independence. Positive peer relationships are also important to young children's optimal development. The indirect influence of social capital—at this age, typically accessed through the child's parents—can also promote overall well-being by enlarging the child's network of support as well as his or her material resources.

One of the themes we reiterate in this paper is that vulnerable and maltreated children and their families (and their counterparts who have not come to the attention of the child welfare system) don't differ categorically, but in terms of degree. For example, the dimensions of safe, stable, and nurturing environments, and the well-being they help to promote, occur on a continuum that applies to all children and families.<sup>42</sup> Many families maintain a delicate balance of risk, promotive, and protective factors that can be tipped in a negative direction by a single additional significant adversity.

For the purpose of measurement, one implication of this perspective is that scales originally developed for a high- or low-risk population may need to be extended to reflect a broader range of responses. In some cases, they may also need to be expanded to reflect a wider age range.

The dimensions of safe, stable, and nurturing environments, and the well-being they help to promote, occur on a continuum that applies to all children and families.<sup>42</sup>

At the same time, there are particular well-being constructs that are under-represented in existing measures, regardless of the child population for which they were designed. These include many of the

protective/resilience factors we have mentioned (self-efficacy, the ability to plan, flexibility, empathy, positive coping, etc.), as well as positive relationships with non-parental adults and other forms of social capital.

Third, there is a need for measures of individual differences in responsiveness to routine as well as acute stressful experiences.

## Chapter 3: Risk and Protective Factors

In the previous chapter, we identified child well-being constructs within five main domains. However, the development of well-being is never assured nor finished; instead, it is always changing, and it is influenced by a variety of factors from the sub-cellular level of the individual to the cultural and environmental level, interacting in complex ways. Although this is undoubtedly an over-simplification, well-being can be seen as the result of the current balance of risk factors on the one hand, and protective or promotive factors on the other. Young children, because their biological systems (including their brains) are immature, are uniquely vulnerable to a number of “insults,” which include environmental toxins, as well as toxic stress, which can result from either active exposure to overwhelming threats, or the absence of nurturing care. However, early childhood is also a time of relative plasticity in development, so many deficits, with the proper interventions, can be overcome.<sup>200</sup>

Early childhood is also a time of relative plasticity in development, so many deficits, with the proper interventions, can be overcome.

Risk and protective factors can interact in complicated ways. For example, a child’s temperament is related to self-regulation and can be a risk as well as a protective factor, depending on how it influences the way the child interacts

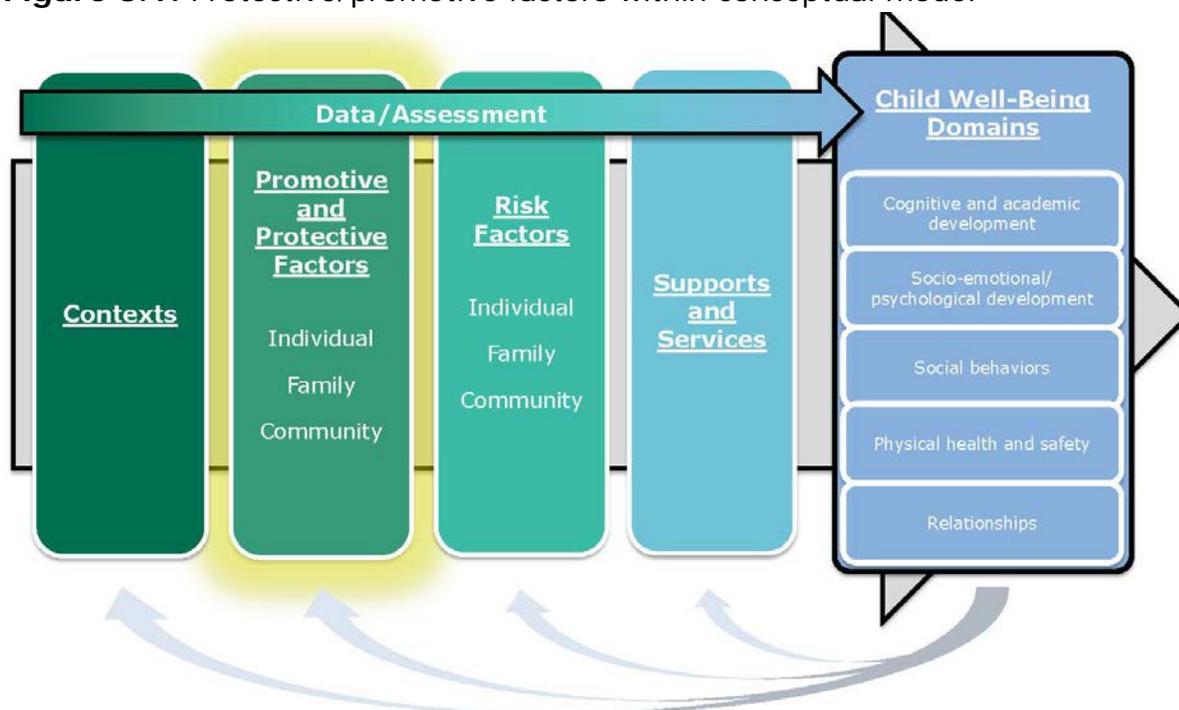
with those around him or her.<sup>22</sup> In addition to occurring simultaneously, as described in the example of temperament, risk and protective factors often occur in complementary pairs. In other words, the lack of a protective factor can act as a risk factor, and vice versa.

Risk and protective factors are often discussed in terms of three different levels: individual/child factors, relational/family factors, and contextual/community factors, often referred to as “environmental factors.” (See Figures 3.1 and 3.2.) In this chapter, we will address the relational/family and contextual/community levels, because risk and protective factors for individual children at the child level (i.e., traits such as temperament, physical attractiveness, etc.) can be considered “effectively non-malleable.” That is, practitioners and policymakers would not reasonably be expected to influence them through interventions. (Other more malleable aspects of child well-being are addressed in Chapter 2, on child well-being outcomes.)

For the same reason, we do not consider here larger social forces such as the contexts of poverty and racism. Such contextual factors are important, but they cannot generally be resolved by an intervention program. These factors are, however, still important to consider in measurement and intervention because of

the ways in which they interact with other factors (See the discussion of key themes and concepts in Chapter 1 for more information.)

**Figure 3.1:** Protective/promotive factors within conceptual model



## I. Environmental promotive/protective factors

Like the public health field, a number of child and youth development models use a framework that emphasizes risk and protective factors. Risk factors have received considerable emphasis; however, in recent years, more attention has been given to protective factors, and to the related concepts of promotive factors that build well-being, and resilience which signifies the achievement of well-being in the face of challenges. Reflecting a relative dearth of research, the list of evidence-based *protective* factors is considerably shorter than that for risk factors, though. Most protective factors revolve around positive family relationships and interactions and community supports.

Promotive/protective factors include not only those that protect against negative outcomes in the face of adversity, but also factors that promote healthy child development and positive outcomes.

The Institute of Medicine and National Research Council<sup>109</sup> define protective factors as “characteristics at the individual, family, or community level that are associated with a lower likelihood of problem outcomes” (p. 82) and point out that this term sometimes refers to “interactive factors that reduce the negative impact of a risk

factor on a problem outcome, or resilience.” In this section, we take a broad view of promotive/protective factors that includes those that protect against negative outcomes in the face of adversity, as well as those that promote healthy child development and positive outcomes. The protective factors discussed in this chapter are depicted in Table 3.1.

**Table 3.1:** Promotive/protective factors across relational/family, and contextual/community levels

Protective factor level	Constructs
Relational/family	<ul style="list-style-type: none"> <li>• Family support for children’s executive functioning</li> <li>• Caregiver/adult responsiveness</li> <li>• Caregiver/adult warmth</li> <li>• Shared family activities</li> <li>• Control over the number and timing of children in the family</li> <li>• Parent/caregiver engagement with school and community</li> <li>• Safe and supportive home environment</li> <li>• Family routines</li> <li>• Stimulating home environment</li> <li>• Parenting skills and attributes</li> <li>• Religious involvement</li> <li>• Enduring presence and positive support of caring adults and kin</li> </ul>
Contextual/community	<ul style="list-style-type: none"> <li>• Relevant, high-quality, culturally appropriate available local services</li> <li>• Safe and healthy school environment</li> <li>• Safe and cohesive neighborhoods, safe housing</li> </ul>

## Family/relational promotive and protective factors

Caregivers foster secure attachments when they are sensitive and responsive to the child’s needs.<sup>98,147,184,210</sup> In addition to fostering positive caregiver-child relationships, these parental practices are associated with a number of positive outcomes for children, and they are addressed in more detail below in the section on promotive/protective factors.

In Chapter 2, we described the characteristics of positive parent-child relationships and explained how they establish the foundation for relationships with others. Children create relationship schemas based on the relationships with their parents, which help them establish expectations about how others will interact with them.<sup>224</sup> Inevitably, when children apply these schemas to the new relationships they develop, not all will fit them. Fortunately, research suggests that children’s thinking is dynamic and malleable,<sup>120,123</sup> and contextual factors can further shape it; thus, even when early parent-child relationships are not optimal and children may have developed negative ideas about relationships, there still can be positive outcomes. That is to say, the child will learn that positive relationships exist if he or she is exposed to warm, caring, and responsive adults, even when the parent did not

provide such positive care. By the same token, positive relationships can help a child to thrive, even when faced with adverse circumstances in other well-being domains.

In this section, we discuss how other positive and caring adults may promote child well-being and/or protect against negative outcomes that may arise from negative parent-child relationships.

### **Family support for children's executive functioning**

Although some biological differences, including aspects of temperament, affect executive functioning, adults play an important role in the development of these skills by providing an appropriate "scaffolding"<sup>222</sup> for children's experiences and helping them practice emerging skills before children are expected to perform them independently.<sup>41</sup>

### **Caregiver/adult responsiveness**

Children's relationships with others are transactional and often reciprocal.<sup>177,178</sup> Reflecting this, researchers have learned that the "serve and return" process that occurs during responsive communication is critical for healthy brain development.<sup>156</sup> Positive effects extend to the child's language development and executive functioning.<sup>26,131</sup>

Responsive caregiving also includes the ability to interpret a child's distress and respond in a soothing way.<sup>98</sup> During the earliest years, this responsiveness can promote a child's ability to manage their distress, including by asking for help.<sup>186</sup>

### **Caregiver/adult warmth**

Warmth is indicated by behaviors such as caressing and praising the child, as well as by using a positive tone of voice.<sup>131</sup> Along with responsiveness, warmth can provide a buffer against stress in infancy.<sup>186</sup> Warm relationships also provide the context for early moral development, where a caregiver sets clear expectations for a child's behavior without being coercive or threatening.<sup>186</sup> Parental warmth may also have ongoing effects on the parent-child relationship, reducing negativity and antisocial and externalizing behaviors<sup>147</sup>.

Warmth, along a continuum, is also a defining characteristic of various parenting "styles" typologies. Positive and negative child behaviors cross-sectionally and over time tend to vary based on exposure to one or more of these parenting styles. For instance, a parent may be considered high on warmth, and low on control, or low on both, and so on. Parenting that conveys both firmness and warmth is associated with social competence and self-control.<sup>138</sup> In the most well-known categorization,

the “authoritative” parenting style—in which parents exhibit a high degree of warmth and exert at least moderate control—is considered optimal for most children.<sup>15</sup>

### **Control over the number and timing of children in the family**

Unintended pregnancy rates in the United States have stayed remarkably constant over the last 30 years with approximately 50 percent of all pregnancies being reported as unintended until 2011. This means that every year approximately 5 percent of American women will have an unintended pregnancy. These rates are generally higher for certain subsets of the population. In 2008, 82 percent of younger women aged 15-19 and 64 percent of 20-24 year olds, 65 percent of lower income women (whose incomes were less than 100 percent of the federal poverty level), and 69 percent of Black women reported their pregnancies as unintended. Unintended pregnancy is associated with a variety of negative outcomes both financially and in terms of health for the mother and the infant (if she carries the pregnancy to term). Helping families reduce unintended pregnancy by providing accurate information, accessible services, and effective methods of contraception could have long-term inter-generational effects on poverty, and health.

### **Shared family activities**

The importance of spending time with family has been established, even though more research needs to be done to explore the nature and diversity of family time and activities.<sup>130</sup> Participating in activities together creates an opportunity for parents and children to bond and build relationships that may be protective when challenges and hardships inevitably arise. Sharing activities between parents and their preschool children has been identified as protective against behavior problems, and promotive of children’s cognitive development.<sup>80</sup>

Such activities also present parents with opportunities for teaching and cognitive stimulation, and for modeling positive behaviors. Similarly, time spent together can give parents the opportunity to support children’s emotional development. Parental modeling and expressing of positive emotions, for example, helps children become aware of different emotions, emotional triggers, and socially appropriate responses.<sup>96</sup>

It is important that the parents identify activities that the child enjoys, not simply those the parent likes. Also, research indicates that the amount of shared time is less important than the quality of that time. For instance, watching television all day with a depressed mother would not be a positive activity for a child, while a trip to the local park after the mother returns from work would likely be a positive experience for both.

## Parent/caregiver engagement with school and community

Positive connections with family and, later, school, are important protective factors for children and adolescents.<sup>28</sup> School-age children spend long hours in school, and even young children generally spend time in day care, early childhood education,

Parents who are engaged in early education programs are better able to support their child's education.

and/or preschool. Parents who are engaged in early education programs are better able to support their child's education. For example, schools often send important messages about reading to young children or engaging in counting activities and craft projects that are age-appropriate. Such

communication helps school and family align their expectations and instructional approaches, and the connected parent can get feedback from teachers on areas where a child is excelling and areas where additional time and attention are needed.

A critical element of being connected with school is the relationships that the parent forms with other parents, who can provide each other with social support. In addition, contact with educators and other parents can build the parent's sense of efficacy. Parents, particularly those who are poor or have received little education, often have negative perceptions of school stemming from their own experience; being connected to caring teachers and staff can help offset negative attitudes and expectations, which in turn can help foster school success for the child.

## Safe and supportive home environment

An optimal home environment is physically safe as well as nurturing and supportive of the child's development. Environments that provide safety and security, as well as responsiveness and consistent reinforcement, can best foster emotional support for children.<sup>37</sup> Among at-risk families in particular, these kinds of environments promote development and protect against child maltreatment.<sup>37</sup>

Environments that foster emotional support for children provide safety and security, as well as responsiveness and consistent reinforcement, are protective.

A number of widely known parenting practices have been found to foster physical safety in the home environment,,: use of car seats and bicycle helmets; "child-proofing" measures, such as putting medicines, dangerous chemicals, sharp objects or heavy objects out of reach; restricting access to stairs or other dangerous areas; and eliminating second-hand tobacco smoke.

## Family routines

Routines are characterized by repetition, regularity, and the involvement of multiple family members.<sup>81</sup> Families that enact regular routines contribute to a child's sense of safety and support. Routines can help buffer against stress<sup>42</sup> and the development of behavior problems.<sup>186</sup> Studies have found positive associations between family routines and a wide range of child outcomes, such as academic achievement, cognitive ability, cooperative behavior, and social skills, as well as

Routines are characterized by repetition, regularity, and the involvement of multiple family members.

negative associations with internalizing and externalizing behavior problems.<sup>80,122</sup> Routines also contribute to good nutrition and good sleep patterns.<sup>80</sup> Having a regular bedtime, plus familiar bedtime routines, for example, are protective factors from infancy forward.

The specific content of these routines may vary. For example, some families say prayers, others read book before bedtimes, and some may do both. Routines can help to develop various skills. For example, parents can encourage learning through routines that involve regular literacy activities.<sup>186</sup> Moreover, the predictability of family routines can help children learn moral and behavioral expectations in a way that does not involve discipline and confrontation.<sup>186</sup>

Research suggests that routines are protective for young and/or at-risk children in particular,<sup>80,220</sup> and may buffer against stressful and chaotic conditions. Thus, routines may be especially important for families that face challenging life circumstances.<sup>80</sup> Routines provide structure and stability, but adaptability in routines is also important, to account for changes in circumstances as well as maturation.<sup>80</sup>

## Stimulating home environment

The cognitive development of young children has been the focus of extensive research, and there is general agreement that the family is the primary educator of young children. An enriched environment provides age-appropriate materials such as books and crayons, but also includes supportive interactions with parents and other caretakers. Research consistently identifies positive academic outcomes for children who enjoy an enriching environment when they are young. An enriched environment may also moderate the association between socioeconomic status and cognitive performance.<sup>58</sup>

This knowledge is fostered by having opportunities, within and outside the child's home, for exposure to a variety of activities, cultural events, and community institutions (libraries, museums, and so on).

An environment that includes frequent exposure to multiple forms of spoken, written, and rhymed/sung language is important for children's language development. Children's language development is promoted by being read to, told stories, and exposed to rhyming games and songs. Exposure to experiences within the child's community that provide background knowledge are also essential for reading comprehension.<sup>95</sup> This might include an ethnic festival or musical event.

Supportive interactions are an important aspect of enriching environments, over and above the provision of appropriate play and print materials. Indeed, it is difficult to separate the two, because an enriching activity, such as reading a book to a child, is often simultaneously a warm and loving interaction. Indeed, research has found that, without these interactions, the effects of enriching materials on child outcomes may be weakened or absent. For example, a longitudinal study identified a positive association between time the mother spent reading to the child and the child's reading achievement and motivation, but simply having printed materials in the home was not found to be as effective.<sup>90</sup>

### Parenting skills and attributes

A number of parenting skills, as well as parental attributes such as self-control and problem-solving, can serve as protective factors for children. Parenting competencies, including skills and positive parent-child interactions, have regularly been found to be associated with child outcomes such as improved social skills and psychological adjustment. They are also related to a lower likelihood of behavior problems, internalizing behaviors, and relational aggression.<sup>68,119</sup>

Parenting skills and attributes:

- Self-control
- Problem-solving
- Knowledge of child development
- Self-efficacy
- Adaptability/flexibility

For example, parents can enhance their children's competence, emotion regulation, and cognitive development<sup>138,186</sup> by guiding them through tasks that are slightly above their individual capabilities,<sup>214</sup> and by "scaffolding" their learning.<sup>222</sup> These strategies involve the intentional

management (usually by primary caregivers) of the child's experience and, in particular, his or her emerging developmental capacities. Effective scaffolding prepares the child to succeed at tasks independently by first establishing his or her success within a supportive relationship. Sensitive caregivers and teachers scaffold the child's experience so that it presents manageable, rather than overwhelming, challenges at any given developmental stage.<sup>178,186</sup> Preliminary evidence suggests that maternal scaffolding helps to predict children's executive functioning.<sup>26</sup>

*Self-control.* In order to respond consistently to children—a practice that fosters secure attachment and socio-emotional development in children—a caregiver

requires self-control.<sup>150</sup> However, stress in parents' lives can prevent them from engaging in parenting behaviors that are most optimal for children's well-being. Individual, family, and environmental stressors must be addressed in combination with supporting these behaviors/skills in parents.

*Problem-solving.* Parents' lives are often busy and full of conflicting demands. Environmental stressors can also outweigh a parents' capacity for problem-solving. Some parents find these challenges overwhelming, while others are able to plan and organize life to minimize and solve problems. The capacity to problem-solve should reduce parental frustration. This has implications for child maltreatment: Researchers have found that that parents with better problem-solving skills are less likely to physically abuse their children.<sup>194</sup>

*Knowledge of child development.* An accurate knowledge of child development implies an understanding of the developmental milestones in the various well-being domains, as well as an appreciation of differences in children's individual trajectories.<sup>186</sup> Parenting knowledge, while not sufficient, has been found to be important. For example, the belief that environment plays a large role in child development, in contrast with the belief that development is determined mainly by biological and physical factors, is associated with the use of more positive, and less neglectful and coercive, parenting practices.<sup>37</sup> Additionally, greater knowledge of child development and child rearing have been found to be positively associated with more effective and developmentally-appropriate parenting.<sup>29</sup> For example, if a parent knows when in development behaviors like walking and becoming toilet-trained are generally expected, it can reduce the frustration they might experience otherwise. They will also be less likely to overlook important signals, such as a child's failure, by the time they are six or eight months of age, to smile or respond to a caregiver.

*Self-efficacy.* Parental self-efficacy has been identified as a strong predictor of positive parenting practices.<sup>63</sup> Teti and Gelfand defined it as "the degree to which parents perceive themselves as capable and effective in the parenting role."<sup>198</sup> It is difficult to separate cause from effect, of course. Parents may feel efficacious because things are going well. Alternatively, parents who experience a sense of efficacy may be more likely to feel confident enough to step up and take charge of parenting challenges.

*Adaptability/flexibility.* A study with three-year-olds and their parents found that the combined presence of positive and flexible interactions between the child and the parent predicted lower levels of behavior problems when the children were five.<sup>132</sup> This contrasts with rigid approaches to childrearing that undermine children's development.

## Religious involvement

Numerous studies have documented the importance of religious involvement and outcomes for older children and adults. For example, adolescents who regularly engage in religious services or activities are less likely to engage in risky activities such as substance use, delinquency, and early sexual activity. One study found that more frequent engagement in religious activities by parents and families was associated with later sexual initiation among teens.<sup>135</sup>

There is good reason to anticipate similarly positive influences for younger children, since religious precepts generally support the concept of strong families, and they provide values and norms for behavior. In addition, religious communities often provide a social network for members and help out in times of need. Involvement in a religious community is among a set of "developmental assets" that have been identified as contributing to healthy development among children ages five through nine.<sup>182</sup> This source of social support can also be important for parents. For example, one study found that religious involvement among adults was positively associated with status-bridging social capital. In other words, members of a religious congregation reported having more connections with people of wealth or political influence than non-members.<sup>223</sup> Religious involvement can also provide social connections that can help to buffer against stress, and parents can also draw from their spiritual beliefs for guidance when parenting.<sup>98</sup>

Meaning-based coping, which religious or spiritual beliefs can inspire, can enable individuals to give meaning to a stressful event, thereby fostering a positive response.<sup>87</sup> This strategy may also decrease the likelihood of engagement in risky behaviors.<sup>87</sup> Spiritual connectedness can support children and youth in finding a positive purpose and maintaining optimism.<sup>99</sup>

## Enduring presence and positive support of caring adults and kin

The enduring presence in a child's life of one or more caring adults (who need not be his or her parent) has been identified as a powerful protective factor.<sup>180</sup> As discussed earlier, positive adult relationships can buffer children against stress and support recovery after they have been maltreated,<sup>22</sup> particularly when caregivers can help the child regulate his or her emotions. Such relationships can compensate for the child's lack of a healthy attachment with one or both parents. Children who are maltreated or at risk of maltreatment may require more than one such relationship, as might be provided by a grandparent. For many families facing illness or material hardship, grandparents and other extended kin can also provide economic supports, another way of helping children and their parents deal with stress.<sup>93,200</sup>

Kinship care provides an excellent example of the importance of caring adults to young children's well-being. Approximately one-fourth of children in out-of-home foster care live with relatives.<sup>57</sup> Children in kinship care generally experience greater stability, report more positive perceptions of their placements, and have fewer behavioral problems than those living with non-family. A number of factors may contribute to this. Children in kinship foster care have fewer placement changes than children placed with non-kin foster parents do. Similarly, fewer children in kinship care report having changed schools (63 percent) than do children in non-relative foster care (80 percent), or those in group care (93 percent). Research finds that placing siblings together, when safe and appropriate, is best for the children, and children placed with kin are more likely to remain with their siblings. Furthermore, children who reunite with their birth parent(s) after kinship care are less likely to re-enter care. Kin can also be an important source of support for parents, as can friends and neighbors.<sup>65</sup>

## **Contextual/community promotive and protective factors**

Children and families exist within larger contexts, one of which is the community. This community context can affect a child's individual outcomes, as well as relational factors that in turn can influence a child's well-being. For example, routine preventive health services and screenings can identify potential health problems and help to keep them from resulting in poor outcomes. Additionally, a parent's access to social support can provide the family with important emotional, and sometimes practical, resources. This section will describe some of the community-level factors associated with favorable well-being outcomes for children.

### **Relevant, high-quality, culturally appropriate available local services**

Parents are more likely to be successful—in pursuit of higher education or on the job—when they know that their children's needs (for example, for good-quality child care, and health services) are met.<sup>43</sup> In many other developed nations, new parents in particular can take advantage of guaranteed paid leave following the birth of a child. Additionally, many countries offer home visiting services to new parents, where such visits provide not only practical health and safety information, and information regarding typical child development, but also information on community resources. Community services include neighborhood playgroups, adult learning centers, businesses offering family-friendly accommodations, as well as public assistance programs such as SNAP (food stamps), food pantries, and public health clinics providing no-cost developmental screenings and child vaccinations. Such community services, when functioning well, not only help families meet basic needs, but create positive social bonds that can promote well-being.

Additionally, routine, preventive health care, as well as timely acute care for illness and injuries, are important for maintaining physical well-being; immunizations and well-child pediatric visits are examples.

### **Safe and healthy school environment**

A positive school environment is a strong protective factor, and may be especially so for children who have been, or may be, maltreated. Supportive teachers and staff, as well as specialized school-based programming specifically designed for at-risk populations, are associated with reduced symptoms of traumatic stress disorder, depression, psychosocial dysfunction and dating violence. They have also been found to improve school performance and resilience among students.<sup>68</sup>

### **Safe and cohesive neighborhoods, safe housing**

Community- or neighborhood-level effects on children's development encompass a number of features of the natural, built, and socio-economic environment. Exposures to air- or water-borne environmental toxins can adversely affect development, while, conversely, proximity to natural areas has been associated with positive physical and mental health. Access to walkable streets and to recreational opportunities and facilities of various kinds is associated with improved fitness and quality of life.

Social capital is a term used to refer to the sense of trust, cohesiveness and shared values within a community, as well as to various forms of informal emotional and instrumental support available from neighbors. Access to social capital (generally assessed as parents' access) is associated with improved outcomes for children.<sup>79</sup>

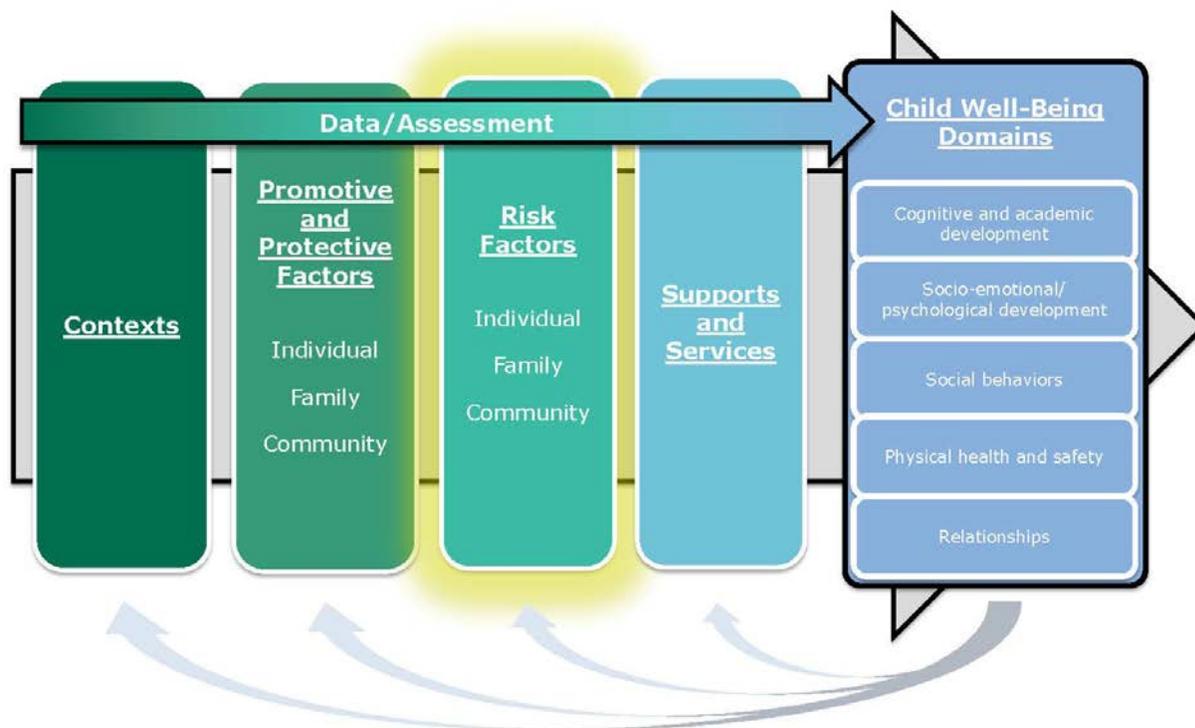
There is mounting evidence that residing in neighborhoods that are diverse with respect to race/ethnicity and income is associated with better outcomes for children, both in the short-term, and into adulthood.<sup>44,168</sup>

## **II. Risk factors**

Unfortunately, there are also many risk factors that undermine thriving to which young children may be exposed in the family and neighborhood setting, and a child who experiences one is likely to experience others. All children face risks; what varies is the *degree* of risk (that is, the likelihood of adverse outcomes), and the *accumulation* of risk factors. The science is clear that exposure to multiple risks exponentially increases the likelihood of bad outcomes. Many young children can withstand single risk factors, particularly if they have supportive adults to act in a "buffering" role.<sup>31,178</sup>

Risk factors for child abuse and neglect and poor child outcomes appear at the level of the family and also in the contexts of neighborhood, society, and culture.<sup>109</sup> (See Figure 3.2.) An important data set, the Longitudinal Studies of Child Abuse and Neglect (LONGSCAN), has followed, since 1991, children who have been maltreated, or who are at high risk for maltreatment, from early childhood to adulthood.

**Figure 3.2:** Risk factors within conceptual model



A combination of risk factors for maltreatment can be identified, starting at birth. These include parental mental health, parent drug use, parent involvement in the criminal justice system, family homelessness, and other kinds of family breakdown. There is no single type of risk, including exposure to violence, that has been definitively linked to worse outcomes for children, nor is there a single cause of child maltreatment. (See Table 3.2 for a listing of risk factors.)

**Table 3.2:** Risk factors across relational/family, and contextual/community levels

Risk factor level	Constructs
Relational/family	<ul style="list-style-type: none"> <li>• Economic downturns and material hardship</li> <li>• Parental depression/mental health problems</li> <li>• Parental substance abuse</li> <li>• Parental unemployment</li> <li>• Parental social isolation</li> <li>• Parenting rigidity, harshness, or inconsistent discipline</li> <li>• Conflict/domestic violence</li> <li>• Parental history of maltreatment</li> <li>• Family stress</li> <li>• Family instability/turbulence</li> <li>• Toxic trauma and accumulation of stress</li> <li>• Removal from caregivers, placement with kin, placement stability</li> <li>• Inconsistent medical care</li> </ul>
Contextual/community	<ul style="list-style-type: none"> <li>• Exposure to violence/unsafe environment</li> <li>• Unavailable, inconsistent, poor-quality child care and other services</li> <li>• Difficulty with peers</li> <li>• Unsupportive service agencies</li> </ul>

## Family/relational risk factors

Early parent-child relationships play a critical role in later relationship outcomes, and in promoting child well-being in general. Positive parent-child relationships can support healthy child development. Moreover, positive family relationships and environments can promote good outcomes for children, even in adverse circumstances.

In this section, we address the other side of that coin, outlining a selection of factors that can negatively affect the quality of the parent-child relationship and/or exacerbate existing stresses in a child's life. Because the importance of the parent-child relationship during the early years has been established, it is important to assess the range of factors that can affect the quality of that relationship in negative ways.

### Economic downturns and material hardship

Compared with children from more affluent families, poor children are more likely to have low academic achievement, to drop out of school, and to have health, behavioral, and emotional problems. These linkages are particularly strong for children whose families experience deep poverty, who are poor during early childhood, and who are trapped in poverty for many years. Recent research underscores that poverty increases the risk for neurological impairment, and shrinks the amount of brain "gray matter" responsible for higher-order thinking.<sup>146</sup>

A well-known study identified large discrepancies among the early language experiences of children of varying socioeconomic status, finding that, on average, the cumulative word experience of a child in a professional family was almost 45 million words, compared with 26 million words for children in working-class families and 13 million words for children in families on welfare.<sup>100</sup>

There is wide consensus that *material hardship* is a highly important risk factor facing young children, both in terms of the numbers of children affected and the depth and breadth of its effects. Material hardship works through multiple mechanisms, such as lack of adequate nutrition, insufficient environmental stimulation, and diminished parenting capacity, to impair development.<sup>25,77,140,167</sup> We now understand that material hardship can actually alter brain and other physical response systems.<sup>94</sup>

The specific mechanisms by which poverty increases the risk for problematic parenting, including child maltreatment, are not well understood. Most poor families do not maltreat their children (while some affluent families do), and thus we need to understand the reasons why some do. One fundamental part of that task is distinguishing between risk indicators and risk mechanisms. Hardship is related to other conditions that are likely more closely linked to the risk mechanisms of maltreatment, such as family disorganization.<sup>173</sup> Along these lines, research has suggested that children do not always benefit from higher family income per se, but from the positive effects of income on the child's home environment, the parents' mental health, and parenting.<sup>186</sup>

### **Parental depression/mental health problems**

Parental depression affects a large number of families. An estimated 15 million children in the U.S. live in households in which one or more parents is depressed.<sup>64</sup> A parent's mental health status influences his or her ability to parent,<sup>170</sup> and parental mental health problems are risk factors for numerous negative child outcomes, such as learning difficulties and malnutrition.<sup>9</sup> Research has also found an association between maternal depression and child internalizing and externalizing behaviors, an effect that is greater for younger children.<sup>89</sup> Additionally, maternal depression is associated with negative parenting practices.<sup>147</sup> In general, emotional instability has been identified as an important difference between mothers who maltreat their children and those who do not.<sup>22,107</sup> Parental mental health problems also predict maltreatment recidivism.<sup>111</sup> Moreover, approximately 75% of parents with recent or lifetime depression suffer from co-occurring mental health or substance abuse disorders.<sup>121</sup>

## Parental substance abuse

Parental substance abuse is also fairly common—approximately 8.3 million children live with a parent who is addicted to alcohol or drugs, the majority of whom are young children<sup>208</sup>—and it influences the way adults function, relate to others, and parent their children. It is also a strong predictor of poor development in young children.<sup>22,111</sup> For example, parental substance abuse is associated with child behavior problems, increased likelihood of family violence, and heightened risk for child maltreatment in particular.<sup>147</sup> Young children who are exposed to both parental substance abuse and child maltreatment fare especially poorly: they are more likely to be removed from their homes and placed in foster care, and they remain in out-of-home care longer than maltreated children whose parents do not abuse substances.<sup>108</sup> In general, parental substance abuse tends to take precedence over caregiving, creating chaotic and unpredictable home environments, and preventing parents from meeting their children's basic physical and emotional needs.

Parental substance use can affect children prenatally and postnatally, as well as physically and emotionally. Fetal alcohol syndrome or prenatal cocaine exposure are associated with a number of negative child physical health and behavior outcomes, including mental retardation, problems with central nervous system functioning, and growth deficiencies.<sup>54</sup> During early childhood, parental substance abuse can interfere with forming healthy attachments with caregivers, symptoms of depression and anxiety, and difficulties learning.

## Parental unemployment

Family income is reduced when parents lose jobs, and the resulting stress can negatively affect children's health and the quality of family relationships.<sup>104,186</sup> Parent unemployment can inhibit a parent's ability to parent,<sup>205</sup> and is associated with child neglect, in particular.<sup>194</sup> Studies have found drops in family income, and fluctuating incomes, to be associated with a greater risk of behavioral problems, and lower reading and mathematics achievement, compared with children in families who had not been poor. More recent research links parental (particularly fathers') permanent job loss to increased likelihood of parental divorce, family relocation, and children's repeating a grade; and to decreased earnings when children enter the labor force.<sup>50</sup>

## Parental social isolation

Social isolation, or poor integration into social networks, is associated with numerous risk factors for poor development among young children, including child maltreatment. However, determining direct causation is complicated by related factors, such as neighborhood characteristics and psychological characteristics that may underlie social isolation.<sup>107</sup> Both the quality and the quantity of parents'

relationships are important to parenting and thus to child outcomes.<sup>107</sup> Parents who do not have other adults to provide emotional support and assistance with caring for a child in times of need may be at risk for maltreating a child. Having support from kin, neighbors, or friends can alleviate some of the stresses during challenging times.<sup>56,24</sup>

### **Parenting rigidity, harshness, or inconsistent discipline**

A rigid parenting style can indicate a lack of warmth,<sup>202</sup> and has been found to be related to a range of negative child outcomes, including low-self-esteem, hostility, antisocial behavior, and depression.<sup>15,21,195</sup> Moreover, rigid and unrealistic expectations are more common among parents who abuse their children.<sup>142</sup> However, there is an important distinction between *rigid* parenting and *firm* parenting, the latter of which is associated with positive developmental outcomes for children.<sup>15</sup> Moreover, research suggests that outcomes of harsh discipline for children vary considerably by the extent and severity of physical discipline, as well as family and social context.<sup>85,124,126</sup>

### **Conflict/domestic violence**

Research indicates that exposure to domestic violence is associated with social and emotional problems in children, including internalizing and externalizing behavior problems, particularly for younger children.<sup>147,122</sup> Violence in the home is also associated with increased risk for physical harm to children. Additionally, conflict between parents can negatively affect parenting and the quality of parent-child attachments.<sup>186</sup> Short-term symptoms of exposure to domestic violence in young children may include anxiety, sleeplessness, nightmares, hyperactivity, aggression, and intense worry about a parent's safety. Longer-term effects may include juvenile delinquency, bullying, substance abuse, depression, anxiety, and posttraumatic stress symptoms in adolescence and adulthood.<sup>152</sup>

### **Parental history of maltreatment**

A family history of maltreatment puts a child as it did his or her parent at risk for negative outcomes.<sup>9,205</sup> Parenting behavior is determined in large part by a parent's developmental history and "personal psychological resources."<sup>107</sup> Maltreating

While past research has indicated that a majority of parents who maltreat their children were themselves maltreated, most parents who were maltreated do not maltreat their own children.<sup>107</sup>

parents have often faced traumas themselves, or have a history of involvement with the child welfare system.<sup>14</sup> Moreover, researchers have suggested that unresolved, negative experiences in parents' histories, such as experiencing abuse or neglect, can result in disorganized interpersonal relationships and impair the parent's relationship with his or her

own child.<sup>188</sup>

While past research has indicated that a majority of parents who maltreat their children were themselves maltreated, most parents who were maltreated do not maltreat their own children.<sup>107</sup> At least three-quarters of parents who were maltreated as children do not repeat the cycle when they become parents.<sup>75,118</sup> In particular, the risk for neglectful behavior can often be moderated when parents can develop other positive and caring relationships.<sup>14,107</sup> The ability to effectively address childhood traumas also reduces the likelihood that a parent will maltreat his or her own child.<sup>107</sup>

### **Family stress**

Most families experience stress from time to time, yet high levels of stress can interfere with a parent's capacity to respond sensitively and responsively to their young children. For example, parenting stress is related to an increased likelihood of child abuse and neglect. Stress can be chronic or acute. Family stress theory<sup>76,101</sup> suggests three causes for family stress: a stressful event, a family's perception of the stressor, and a family's existing resources. If the family has strategies and resources, such as the support from friends, kin, and neighbors, to cope with the stress, then negative effects may be minimal. However, if families experience a "pile-up" of stress, their resources may be overwhelmed. Their children experience reduced parental support as a consequence, which can lead to social and academic difficulties.

### **Family instability/turbulence**

Family instability and/or turbulence is understood as a risk factor in a number of circumstances. First, it is linked to problem behaviors and some academic outcomes, even at early ages, and can further increase with multiple changes in family structure. Family transitions appear to have the strongest negative effects when they occur during children's adolescence or early childhood.<sup>179</sup> Specifically, studies find that frequent moves<sup>215</sup> increase the risk of academic, behavioral, and emotional problems for children living in single-parent households. This is particularly relevant to children who have had numerous placement changes within the child welfare system.<sup>4</sup> A review of research on this topic found that children whose families have experienced a separation more commonly experience negative outcomes, including lower socioeconomic status, lower academic achievement, and higher risk of behavioral problems. Additionally, it appears that multiple transitions in family structure tend to have more negative implications for children's outcomes. The authors note, however, that the specific causes of these outcomes likely cannot be explained by the occurrence of a single separation "event" and that family separation involves complex processes and additional factors such as socioeconomic circumstances and family conflict.<sup>169</sup>

## **Toxic trauma and accumulation of stress**

Trauma can result from many kinds of negative experiences, but it results in an emotional response of fear and helplessness. It is related to adverse childhood experiences (ACEs), discussed earlier, which encompass varied challenges such as living with a substance user or having a family member incarcerated or experiencing family breakup. Trauma can alter brain structure and function so that an adaptive, short-term response to a threat becomes literally toxic to multiple body systems (neurological, endocrine, immune) if it is engaged excessively.<sup>187,200</sup> Young children's positive adaptation to stress can be maintained when there are competent, caring adults who can act to buffer their experience of adversity. This literature has identified a number of "adverse experiences of childhood" that are empirically associated with disability or disease, either in adulthood or later childhood.<sup>6</sup> Experiences that evoke earlier traumatic events are referred to as "triggers." The evidence also supports the notion of cumulative risk: the more adverse experiences one has had, the greater the likelihood of negative outcomes.<sup>178,185</sup>

There is a voluminous literature indicating that these experiences can result in toxic stress and have negative consequences for children. For example, being abused as a child or experiencing violence in the home has been found to endanger well-being.<sup>59,145,165</sup>

Safety and stability are often absent for children who have been maltreated. This can have immediate and longer-term consequences. Trauma can leave a child with the sense that he or she is not safe, even when no real threat is present, and this can lead to anxiety and/or reactive aggression.<sup>111</sup> For example, many maltreated children perceive discipline from adults as a threat, as these practices may have preceded maltreatment in the past.<sup>193</sup> This can make parenting the child very challenging.

## **Removal from caregivers, placement with kin, placement stability**

Changes in caregiver relationships can be associated with an elevated risk of poor outcomes; for example, these relationships are disrupted whenever a placement change occurs, and this has negative implications for the child.<sup>22</sup> The magnitude of this effect varies, depending on the timing of placement changes, how quickly placement stability is achieved, and with whom the child is placed.<sup>71,112,171</sup> For example, research has found that group care can be especially harmful for young children.<sup>71</sup>

## **Inconsistent medical care**

Changes in caregivers, for example during foster care placement changes, can bring about changes in medical providers.<sup>111</sup> This can result in inconsistent care, increasing the possibility for chronic conditions to go undiagnosed, or treatment plans to undergo frequent changes.

## **Contextual/community risk factors**

In an earlier section, we explained that promotive/protective factors present in the larger context of the community can directly influence the well-being of an individual child, and they can also have indirect effects as well, if they alter the relational factors that affect well-being. In the same way, risk factors at the contextual/community level can have important direct and indirect effects on child well-being. For example, the presence of toxins such as lead in a child's physical environment can result directly in illnesses, cognitive decrements, or other medical conditions. An example of an indirect effect is an economic downturn in the community that leads to parental unemployment, which then leads to poorer parenting and poorer child outcomes. (See "Parental unemployment," addressed above.) This section will address some of the community-level factors that can present challenges to accomplishing the well-being goals outlined in Chapter 2.

### **Exposure to violence/unsafe environment**

Physical well-being at all ages is affected by the natural and built environment. This includes the presence of toxins (such as lead or polluted air), noise, crowding, accessibility of safe green spaces, and actual and perceived safety. Perceived safety is important for physical well-being because a perceived threat to personal safety underlies the human stress-response.

As discussed above, the research on toxic stress points to the strong connection between an individual's response to very high levels of stress (which can arise from any of a number of traumatic experiences, and, especially, from an accumulation of such experiences), and damage to multiple body-systems (neurologic, endocrine, immune, metabolic). Toxic stress is also associated with an increased likelihood of serious disease and early death.

Some environments are made unsafe by violence. Children are more likely to be exposed to violence and crime than adults are. An experience of violence can lead to lasting physical, mental, and emotional harm, whether the child is a direct victim or a witness. Children who are exposed to violence are more likely to suffer from attachment problems, regressive behavior, anxiety, and depression, and to have aggression and conduct problems. Other health-related problems, as well as academic and cognitive problems, delinquency, and involvement in the child welfare and juvenile justice systems, are also associated with experiences of violence. Even

community violence that children do not directly witness is related to poorer attentional abilities and cognitive performance.<sup>49</sup>

Early, chronic exposure to violence affects children by disrupting the developing brain. As noted previously, specific parts of the brain (amygdala, hippocampus, prefrontal cortex) are adversely affected by stress. Executive functions (such as planning, memory, focusing attention, impulse control, and using new information to make decisions) can become impaired. Moreover, children who have had chronic exposure to real or perceived threats may become conditioned to react with fear and anxiety to a broad range of circumstances. Their diminished capacity to differentiate between genuine threats and objectively safe or neutral situations can impair their ability to learn and interact with others, and may lead to serious anxiety disorders. While fear-conditioning happens early in life, with emotional memories that are powerful and persistent, *unlearning* fears depends upon brain maturation that requires active work and evidence-based treatment.<sup>49</sup>

Children exposed to violence are more likely to become victims or perpetrators of further violence. Victims of dating violence, for example, are considerably more likely to engage in risky behaviors (including sexual activity, binge drinking, suicide attempts, and physical fights) than non-victims. Unfortunately, multiple types of direct victimization within a single year are not uncommon.<sup>49</sup>

Exposure to violence negatively affects children's mental health as well as their ability to manage their own conflicts.<sup>22</sup> Exposure to violent acts is linked to child chronic stress, depression, anxiety. However, this is more strongly correlated for children of uneducated mothers than it is for children with better-educated mothers.<sup>60</sup>

### **Unavailable, inconsistent, poor-quality child care and other services**

High-quality child care is not readily available in many areas around the country. And where it is available, it is often expensive, excluding many low-income families from these services. Not only does high-quality child care provide a safe and nurturing place for a child, but it is also support for parents. Children also have the opportunity form positive relationships in child care. For children who are not yet school-aged, this can be their first exposure to relationships outside of immediate family, as they learn to interact with other children their age. For all of these reasons, poor quality and inconsistent care are common and pose a risk to positive child well-being.<sup>186</sup>

### **Difficulty with peers**

Relationships with other children constitute an important aspect of child well-being, as discussed earlier; and they also represent an important correlate of future

development; and these associations work in both directions. For instance, the establishment and maintenance of higher numbers of friendships has been linked to positive school adjustment among kindergarteners. On the other hand, poor peer relationships have been linked to poor social skills and child aggression.<sup>114</sup> Similarly, peer acceptance has been associated with higher achievement among school-aged children, while peer rejection has been associated with poor achievement, hostile attribution bias, and behavior problems.<sup>138,147</sup> Moreover, antisocial behavioral tendencies can be exacerbated by friendships with antisocial peers.<sup>138,147</sup> Thus, establishing friendships with *negative* peers has important implications for numerous other facets of child well-being.

### **Unsupportive service agencies**

The degree of supportiveness, cultural sensitivity, and agency morale is likely related to the work environment and job satisfaction of the caseworkers.<sup>22</sup> In addition, a lack of foster parent families may undermine the morale of workers and also contribute to poorer child outcomes, if available homes are crowded or agencies are forced to lower their standards for accepting foster parents. Similarly, a lack of emergency housing may mean that arrangements are less satisfactory for the child. Such contextual risk factors may result in more turbulence in placements for children and less supportive placements as well.

## **III. Discussion**

Individual child well-being is embedded in a system made up of increasingly broad levels of influence, including the family level, the community level, and the societal level.<sup>33</sup> This chapter has reviewed two levels that we consider to have potential for malleability by programs and community initiatives: the relational/family level and the contextual/community level.

At the relational level, we reviewed some of the key relationship factors that positively or negatively affect children's well-being outcomes. Most of these constructs are centered on the quality of the parent-child relationship and parent-child interaction, which is particularly critical during the early years. This relationship can be affected by risk and protective characteristics such as warmth, family dynamics such as domestic violence, socio-economic factors such as parental unemployment, and parental well-being factors such as mental health and self-efficacy.

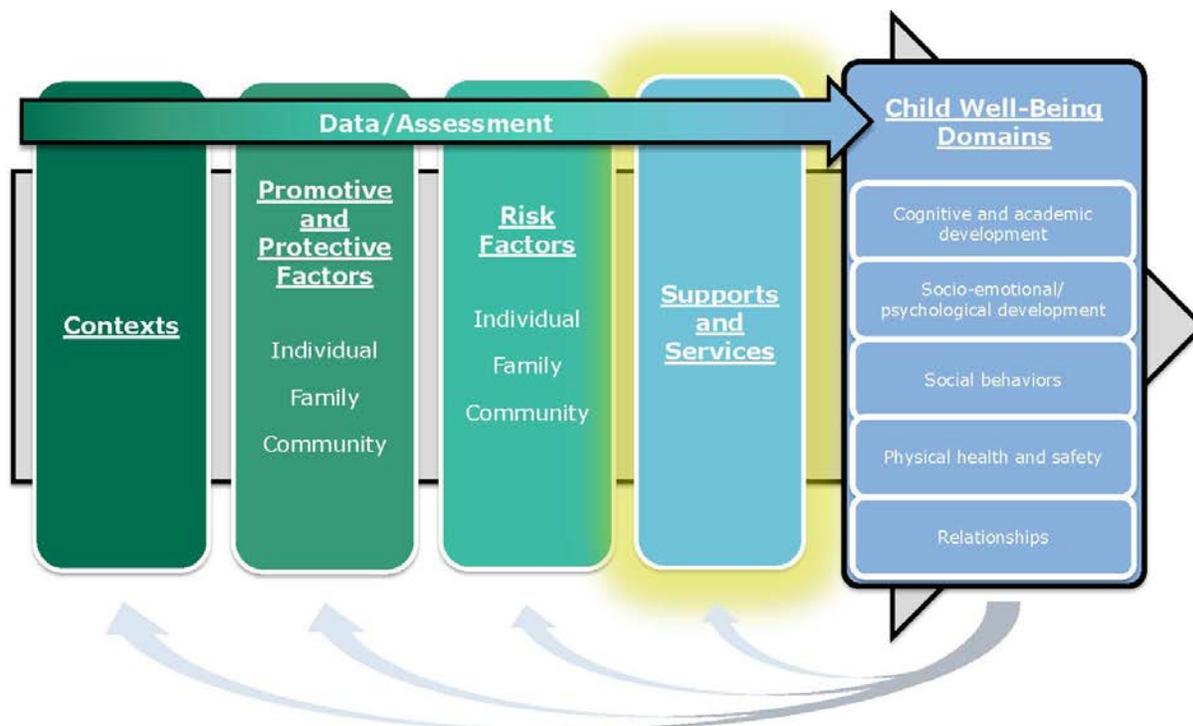
At the community level, we described some of the ways a family's social context can directly influence child well-being outcomes. We note that they can also indirectly affect the close family relationships that are so important for young children's development. The presence or lack of social support and accessible,

relevant services is an important consideration for practitioners and policymakers working toward achieving the child well-being goals outlined in Chapter 2.

In reviewing these constructs, we have offered examples that demonstrate how risk and protective factors are interrelated both within and across levels of influence. Measuring these constructs with age-appropriate items that capture the full continuum of possible outcomes will enable researchers and practitioners to identify key factors and indicators for child well-being at various stages in children's development.

## Chapter 4: Supports and Services

**Figure 4:** Supports and services within conceptual model



Supports and services that are delivered early in a child's life often have the most powerful effects on child and family outcomes.<sup>35</sup> In Chapter 2, we described five domains of child well-being and the constructs that fall under those domains. We considered cognitive and academic development, socio-emotional/psychological development, social behaviors, physical health and safety, and relationship outcomes. These can be considered the goals of child well-being, toward which interventions and policies should strive.

Many interventions, either explicitly or implicitly, target multiple well-being domains.

In Chapter 3, we discussed relational- and community-level risk and protective factors that influence the achievement of those goals.

Interventions may target one or more domains of child well-being (for example, cognitive/ educational); to do so, they may address one or more specific risk, protective, or promotive factors. Because well-being domains are not sharply delineated, especially in young children, many interventions, either explicitly or implicitly, target multiple well-being domains. High-quality early care and education programs, as well as many parenting interventions, typify this approach.

However, there are also many interventions that have a more circumscribed focus: for instance, young children's health, their social-emotional skills,<sup>72</sup> early literacy, and so on. Others are designed for particular populations: for example, children who have experienced trauma,<sup>82,83</sup> children with socio-economic disadvantages,<sup>134</sup> children with aggressive or other problem behaviors,<sup>39,113,147,219</sup> or children who are dual-language learners.<sup>3</sup> Other interventions focus on caregiver or family characteristics, such as adolescent parents,<sup>110</sup> low-income families,<sup>91,206,212</sup> depressed parents).<sup>16,17</sup>

These are often referred to as parenting interventions, which aim to positively influence parenting behaviors in the service of positive outcomes for children.<sup>151</sup>

We encourage readers to consider several points. First, approaches that reinforce strengths have been found to be most effective. Research suggests that building and drawing upon an individual's strengths is more effective at changing behavior than negative reinforcement, such as punishment.<sup>141</sup>

Second, it is important to consider the characteristics of individual children, as well as larger social contexts in which an intervention operates, even if these factors cannot be changed through a given intervention. For example, an intervention designed for a child with a learning disability may not meet the needs of a child who is not similarly challenged. Also, an intervention designed for a child who does not face racial discrimination may not meet the needs of a child who does face racial discrimination.

The timing of interventions is also important to consider, as addressing challenges and risk factors early on can mitigate the need for future interventions. For example, to improve academic success for a child who has difficulty seeing, an early intervention to provide glasses may be more effective than tutoring at a later date.

It is important to evaluate programs to determine their effectiveness with different populations, and/or to determine if an intervention that has been adapted for a specific population is equally or more effective than the original intervention. Generally speaking, interventions that address child well-being should be "evidence-based," meaning that they have been studied and found to produce their intended results. These points provide an important context for this chapter, in which we give a brief overview of various existing intervention strategies.

Interventions, particularly those promoting health, often seek to modify features of children's physical environment. From this perspective, a child's environment begins in the womb, or even pre-conception, with the prevention of unintended and unwanted pregnancies. Well-child visits, including developmental screening, can include discussions of the child's environment, alerting parents to potential threats

(second-hand smoke, unsecured household chemicals), as well as health-promoting opportunities (proper infant sleeping position, a cognitively stimulating home environment).

Public policy initiatives also acknowledge the role of positive environments in promoting well-being by supporting safe housing, or even encouraging families to move to another (presumably healthier) neighborhood.<sup>116</sup> Unfortunately, programs to serve young children tend to have separate funding streams and they are frequently provided in siloed settings with minimal interaction across the providers. For example, teachers and child care providers do not generally interact with medical providers. Moreover, most providers have outcome goals that are narrowly defined by their agency and funder. Thus, educators have academic goals and health care providers have health goals. Somewhat surprisingly, child well-being is one of three goals established for child welfare policy, along with safety and permanency. Of the three, child well-being is the most difficult to define. Nevertheless, it bears noting that it is unusual and positive that well-being is clearly and specifically defined as a goal.

### **I. Background on the child welfare system as it struggles to conceptualize child well-being**

If we better understand what promotes positive development for children, we can help all families ensure their children are healthy, happy, and destined to continue thriving. This goal is widely recognized among communities and families, and fortunately, is increasingly widespread in the child welfare system as well.

The child welfare system, which provides protective services for abused or neglected children, as well as foster care and adoption services, is responsible for responding to the situations of abuse and neglect that rise to their attention. However, recent knowledge compels taking a new, broader, perspective on childhood adversity, and our responses to it. Family functioning and child experience occur along continua where the line between “maltreatment” and milder threats to healthy development can be hard to see. In addition, there is interest from practitioners, policy makers, community members, and researchers in understanding how some children may thrive despite experiencing adversity, not simply their problems and failings. And there is interest among these groups in understanding the protective factors that can support the development of vulnerable children, helping them to follow pathways of resilience in the face of risk.

It is important to acknowledge, of course, that traumatic experiences can result in toxic levels of stress for children and cause lasting physiological damage, whether extreme and infrequent or routine and chronic.<sup>158</sup> By age 6-11, nearly half of all U.S. children are reported to have at least one “adverse family experience,” and nearly a quarter have two or more.<sup>2</sup> From the standpoint of prevention, it is

important improve our ability to recognize the signs which, if unaddressed, may lead to serious physical or emotional trauma.

Unfortunately, many of the programs and policies designed to support young children and their families often lack the necessary structures to assess and promote their well-being. For example, in 1997,<sup>1</sup> U.S. federal (USDHHS) policy dictated that the child welfare system have three overarching goals: 1. Safety, 2. Permanency, and 3. Child well-being.

Seven outcomes related to the first two goals were established through the Adoption and Safe Families Act (ASFA) in 1997. However, progress on the third goal—specifying what aspects of child well-being are most important and how they are best measured—has lagged far behind the specification provided for the first two, safety and permanency. In fact, no outcomes were established for the third goal, well-being. An opportunity therefore exists to augment current measures in varied community studies, evaluation research, and national surveys, such as NSCAW, the National Survey of Child and Adolescent Well-Being.

Safety and permanency are of course strongly related to children's well-being. However, according to the LONGSCAN studies, safety and permanency outcomes also may require re-thinking. First, permanency for the population of maltreated children is a relative concept; most children who entered foster care prior to age four experience at least one placement change before they turned 18. Second, even permanent placements are no guarantee of child safety. Third, placement instability is one of many forms of turmoil experienced by children in the foster care system.<sup>207</sup>

Thus, there is an opportunity to lay out a more comprehensive framework for assessing child well-being—one that is applicable for those children already in the custody of a state's child welfare system as well as any who are at risk for adverse exposures.

Children's social and emotional competence draws on early attachment relationships with parents, and also on relationships with other caregivers. Thus, even children who come from highly dysfunctional families can benefit from classroom-based interventions led by specially trained teachers or assisted by mental health consultants.<sup>67,106</sup>

Some interventions consider the intergenerational transmission of risk factors such as poverty. For example, two-generation models reflect the close interplay between young children's well-being and that of their parents. The premise of these approaches is that, to succeed in altering developmental outcomes for children, interventions must explicitly and simultaneously address the needs of their parents. Because parents are children's first and most important caregivers, the well-being

of both generations is interdependent.<sup>43,93,149</sup> Dual-generation approaches typically focus on issues of family economic success, parental employment and education, child care, and physical and emotional health.<sup>43,93,149</sup>

Interventions to address parents' mental health, particularly depression, were early examples of a two-generation approach.<sup>88</sup> The Head Start program is another example of an early dual-generation strategy with strong health, as well as education components.<sup>43</sup>

New findings related to the biology of stress and resilience can inform the development of interventions. Children can be exposed to toxic stress (through violence, parental death, incarceration, or mental illness) in their family context, but positive family relationships can also help them withstand stressful experiences or recover from past trauma.

To highlight an example, one widely-used model is the Strengthening Families approach, associated with the Center for the Study of Social Policy.<sup>98</sup> This approach focuses on supporting children's positive development by strengthening the capacities of parents (and other caregivers). It also focuses on the prevention of child abuse and neglect, and on using early care and education (ECE) programs as important settings in which to strengthen vulnerable families. Strengthening Families recommends that ECE programs support five protective factors:

- Parental resilience;
- Parents' social connections;
- Knowledge of parenting and child development;
- Concrete supports in times of need; and
- Supporting the social and emotional competence of children.

Some interventions have a focus on building or improving specific skills (self-regulation skills, social-skills), or on developing healthy habits that will have enduring influence on well-being (diet, physical activity, screen time, etc.). In the case of young children, these interventions often involve parents as well as children. Two interventions that are relatively widespread—high-quality early care and education,<sup>211</sup> and home visiting<sup>115</sup>—generally touch all three bases of environments, relationships, and skills-/habits- building.

Home visiting is not a single, uniform intervention but rather an approach to service delivery that offers a combination of supports and services. There is a variety of home visiting programs operating across the United States, many of which target infants and young children. Home visiting programs can vary in their overall goals and intensity and duration of services; however, many programs share common elements, such as providing parents with social supports education about parenting and child development.<sup>115</sup> Similarly, Head Start and Early Head Start are designed

to help children in low-income families prepare for school. However, in addition to education, Head Start provides health and social services to the families, and encourages parental involvement in all aspects of the program.

Home-visiting programs and high-quality early care and education touch all three bases of environments, relationships, and parenting skills and behaviors.

Interventions with parents need to address their past personal traumas and offer advice for how to parent a traumatized child. With children younger than school age, these programs often teach caregivers to therapeutic techniques to help children develop regulatory skills.<sup>70</sup> Such programs include Attachment and Biobehavioral Catch-up (ABC), Multidimensional Treatment Foster Care for Preschoolers (MTFC-P)<sup>70</sup>, Trauma-Focused Cognitive Behavioral Therapy,<sup>62</sup> Child-Parent Psychotherapy,<sup>129</sup> and Parent-Child Interaction Therapy.<sup>18</sup>

Interventions that focus on parenting skills and knowledge hold promise for improving child outcomes. Improved parenting competence has been associated with family reunification in cases where children have been placed in out-of-home care.<sup>68</sup> Information about parenting and child development is also important for the court system, as well as for parents. Courts can help parents at risk for maltreating their children by offering or requiring play therapy and parent education as a part of their services.<sup>117</sup> However, while parenting knowledge is believed to play an important role in the prevention of child maltreatment, programs that are designed to deliver this education must be tailored for specific populations, and they need to incorporate features (such as structure, staffing, and a strength-based approach) that are associated with effectiveness. The most vulnerable families may require intensive therapeutic support in addition to information, for example.

Widespread promotion—with parents and other caregivers—of safe, stable, and nurturing environments (SSNRs) has the potential to prevent a number of child psychological, behavioral, and health problems.<sup>42</sup>

Concrete supports are particularly critical for families struggling with poverty or low income, since research finds that family poverty is the greatest single risk factor for child maltreatment<sup>h</sup> (though only a small minority, even of poor children, are abused).<sup>38</sup> Supports include not only financial and material resources, but also access to services, particularly those for behavioral health needs.

To some extent, the selection of appropriate indicators will vary according to the age of the child, but the following represent an initial list of topics for screeners, surveys, and evaluations:

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<sup>h</sup> However, see also Wulczyn, F., & Hall, C. (2011). Research is action: Disparity, poverty, and the need for new knowledge. Chicago, IL: Chapin Hall at the University of Chicago. Retrieved from [https://www.chapinhall.org/sites/default/files/Research\\_Is%20Action\\_07\\_14\\_11.pdf](https://www.chapinhall.org/sites/default/files/Research_Is%20Action_07_14_11.pdf)

- Percent of children screened/assessed and, if necessary, referred and treated for concerns regarding development
- Percent of mothers screened/assessed and, if necessary, referred and treated for concerns regarding maternal depression or other mental health issues
- Percent of children with positive social-emotional development
- Percent of families with positive parent-child interactions
- Percent of families with positive resources

The resources required to flourish are similar for children in low-income families and communities. The reality, however, is that such services are more abundant and of higher quality in affluent families and communities. These inputs need to be made available to all children, so that all children can flourish.

## **Chapter 5: Conclusions and Implications**

This review of child development research makes it clear that researchers know a great deal about the factors that affect healthy development among young children. In fact, as depicted in previous chapters, researchers have identified what may seem to be an overwhelming number of constructs related to early childhood well-being. This review is unique because we draw on child development theories and research to identify conceptual and measurement issues for research, monitoring, and program design and evaluation.

We propose a number of recommendations based on this review, which we will discuss further in this conclusions section. Many of these recommendations are relevant for the general population, as well as the child welfare population. These recommendations are as follows:

- The research and measurement toolkit, for example, needs to be expanded to include the child outcome constructs that are missing from available research. In particular, measures of positive outcomes are needed. This would enhance our ability to understand, set goals, monitor, and improve the development of young children.
- Studies of vulnerable children, particularly those who are in or at risk of entering the child welfare system, need to encompass not only negative (risk) factors, but also the protective and promotive factors that can reduce children's risk or support their recovery, or, better yet, contribute to flourishing. And they need to include measures of well-being and, indeed, flourishing.
- A broader range of risk and protective factors needs to be considered in research, measurement, and program and policy work.
- Response categories need to be more fine-grained to detect extreme levels of risk and poor outcomes, and to assess small program effects.
- Community members and families need to be able to contribute to the selection of constructs and the development of measures.

### **A broad perspective on child well-being**

This review is predicated on several widely accepted perspectives. *Ecological* theory, for example, recognizes the importance of the family and community, along with child characteristics, in children's development. Thus, the "macro" social context can powerfully shape the experiences of children and their families. The *whole child* perspective posits that the importance of all domains of child outcomes, including cognitive, socio-emotional, social behaviors, physical health, and relationships. We also incorporate the critical recognition that *positive as well as*

*negative outcomes* need to be conceptualized and measured. Similarly, we highlight the evidence that *positive reinforcement* is a more effective strategy than negative reinforcement and punishment. In addition, we draw on models of *risk and promotive/protective factors* to highlight the important reality that virtually all children, even those facing multiple challenges, also benefit from promotive and protective factors in their family, their community, and in themselves. At the same time, we recognize that *cumulative disadvantages* increase challenges.

A number of additional themes deserve mention. One is that well-being is not an either/or concept but occurs along a continuum. Also, outcomes are *dynamic* and “in progress.” That is, an outcome at one age contributes to outcomes at the next stage. In addition, individual well-being is a product of interactions between one’s genetic “program” and a particular environment. Relatedly, children’s outcomes differ from their less malleable traits.

Although available research on early childhood development is very relevant to understanding development among vulnerable children, gaps remain...

Many individual and social factors are effectively non-malleable, yet their importance needs to be recognized in conceptual models and measurement strategies, as well as in policy and program initiatives.

These theories and themes represent a critical platform for understanding the developmental process for vulnerable young children. For the purposes of this review, they help identify the constructs that need to be measured in studies of young children who face adversity. Nevertheless, if we are to better understand outcomes among vulnerable children and children involved or at risk for involvement in the child welfare system, we must also be alert to gaps in current conceptual models and outcomes. In other words, although the available research on early childhood development is applicable to vulnerable children, there are still gaps in our understanding of this population, even in the constructs assessed here.

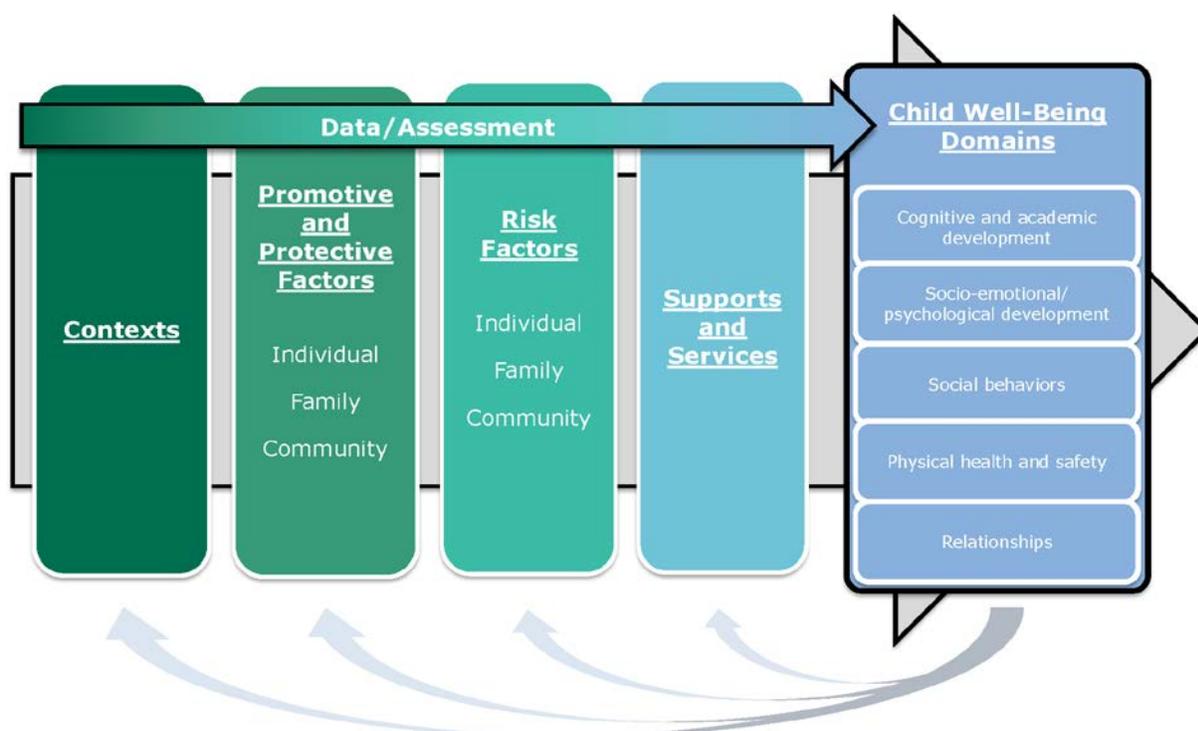
Once identified, constructs should be sorted into appropriate sub-domains. For example, in the domain of Health and Safety, in previous work, Child Trends has identified four sub-domains: Health status, Healthy lifestyle and behaviors; Health care maintenance; and Perceived safety. Researchers should assess whether these are really the appropriate sub-domains for early childhood.

We have also intentionally sought out both positive and negative correlates of children’s developmental trajectories. The value of including both types of constructs is, we believe, an important implication for future work.

As noted above, most service systems, such as child welfare, cover well-being only in broad strokes. In particular, the measurement of child well-being is rudimentary and rarely extends to encompass thriving or flourishing. The more inclusive set of

constructs identified in this review is not reflected in practice, to our knowledge. Moreover, some of the critical risk, promotive, and protective factors for highly vulnerable young children are simply not included in the general child development literature.

The framework below has guided our work. As noted in earlier chapters, it identifies child well-being as the goal, and highlights the five domains that comprise well-being. It identifies the supports and services that can affect child well-being, and it then identifies the risk and protective factors that affect achievement of the well-being goal. It also recognizes the contextual factors that interact with risk and protective factors to affect child well-being, and it identifies some intervention approaches to highlight the possibility of improving developmental trajectories for young children.



Drawing on this framework, we have identified a number of constructs that have not appeared in our review of general child development research. Accordingly, these constructs are not typically included in national surveys, evaluations, or in community studies.

## Measurement issues that need to be addressed

For those constructs that have been included in available research, methods of measurement warrant consideration. Specifically, inclusion of items that fully assess each sub-domain fully is needed. In addition, response categories should be

examined to ensure that they provide sufficient variation to capture variations in well-being. For example, they may not capture the nuances of risk and protective factors that are relevant to development of vulnerable young children. Measures of constructs that are appropriate to particular age groups also need attention. In addition, some constructs need to be approached differently. For example, the frequency with which a particular behavior occurs may be more critical than attitudes about that behavior.

Where constructs are measured (and when new measures are found), it is important to carefully consider the breadth of the response categories used. For example, measures often do not include enough highly negative or high-frequency categories. We may know that a child is “often” “mean to others, teases, or cheats,” but we cannot distinguish between the child for whom this reflects “sometimes” and the child for whom this means “constantly.” In other words, we need greater variability in response categories to distinguish both risks and poor outcomes.

The same may be true for promotive and protective factors if high levels of positive supports are needed to counteract negative circumstances. More detailed categories also enable evaluators to detect what might be small improvements, changes that might be missed when outcomes are measured with just three response categories.

We note that it would be helpful, in national surveys, evaluation studies, and community data collection efforts, to have consistent constructs represented, and, to the extent possible, consistent measurement tools. This would enable the field to build a knowledge base more readily, because we could compare knowledge-building activities across different levels. National surveys are important for basic research and tracking trends. Evaluation studies can examine how services/supports practices affect children’s outcomes. And population-level studies can identify the risks in a community, and the factors that should be monitored to assess process.

Efforts to improve measurement pose a number of challenges:

- There are substantial developmental differences between infants and eight-year-olds. Therefore, while the constructs may be constant across ages, the measures need to differ.
- The best reporter will also vary by age of child. A parent or other caregiver is of necessity the most knowledgeable reporter for infants and toddlers. For school-age children, the child and a parent or caregiver can each provide different kinds of information, and teachers and medical personnel represent other possible reporters. The choice of reporter is more complex when children are removed from their home, however.

- With that said, accurate reporting is still a concern. Parents whose children have been removed or who are at risk of removal from home, for example, have a serious incentive to report good outcomes and positive environments. Social desirability is another concern. Few people want to report their own negative parenting behaviors or the poor home conditions in which they may be raising their children. It requires care, thought, and time to design questions and procedures that increase the odds of accurate reporting. It also requires particular sensitivity to cultural variations in childrearing and sharing information with non-family members; to highlighting family strengths along with challenges; and to using neutral, descriptive language about behaviors or conditions in order to avoid blaming families or eliciting shame.
- In addition, it is critical to give attention to social and cultural differences. These include the language that people use and their view of what constitutes a high or low level of risk, which can vary across social groups.

It is also not possible to ask every potentially important question. But since many constructs have not been explored or they have been poorly measured, we currently lack the necessary research base to distinguish the most useful constructs from those that are least useful.

## Potential next steps

A recent report funded by the Hewlett Foundation<sup>191</sup> identified five broad tasks for developing new measures. These include:

- Defining and selecting constructs;
- Identifying uses of the measures;
- Developing practical measures;
- Assessing the technical quality of the measures; and
- Documenting the consequences of using the new measures for practice, policy, or research.

This report has focused on the first part of the initial stage, as well as the second stage. It will be important to obtain input from varied expert groups and other constituencies about the actual selection of sub-domains and constructs, in order to reach closure on the first stage. The authors look forward to receiving input on these tasks, so that work on developing practical measures can move forward. Joining in discussion with community members would be one important way to advance the selection process.

The first step is to the constructs that characterize child well-being and the risk and protective factors that affect the development of child well-being and selecting

critical constructs. Building on this work, it will be useful to execute a comparison between these constructs and the constructs that are measured in national surveys, evaluation studies, and community initiatives. These data collection resources should include population-based surveys such as those fielded by the Department of Education, as well as surveys conducted for the child welfare field and screenings developed for clinical settings. The work done by the Child and Adolescent Health Initiative on measures used in maternal and child health settings represents an important start on the second task.

One aspect of this work is to identify scales and/or items or other approaches to assessing the constructs that are relevant to development among vulnerable children, including those at risk of, or who are in, the child welfare system. This effort might begin with Federal surveys such as the National Survey of Child and Adolescent Wellbeing or the Early Childhood Longitudinal Study – Birth and Kindergarten Cohorts. However, it will be critical go beyond Federal surveys. Thus, this search should examine smaller-scale studies conducted by researchers who focus on early childhood, parenting, resilience, child welfare, poverty, and related literatures. This search should place special effort on identifying data collection projects by minority scholars and poverty researchers, since minority families experience greater risk and because available measures may be more culturally appropriate. Moreover, we suspect that many studies by minority scholars will focus on strengths and flourishing, as well as promotive and protective factors, and should therefore be a rich source for positive measures. This search should also consider sources beyond research studies, including practitioner records, screeners, and checklists.

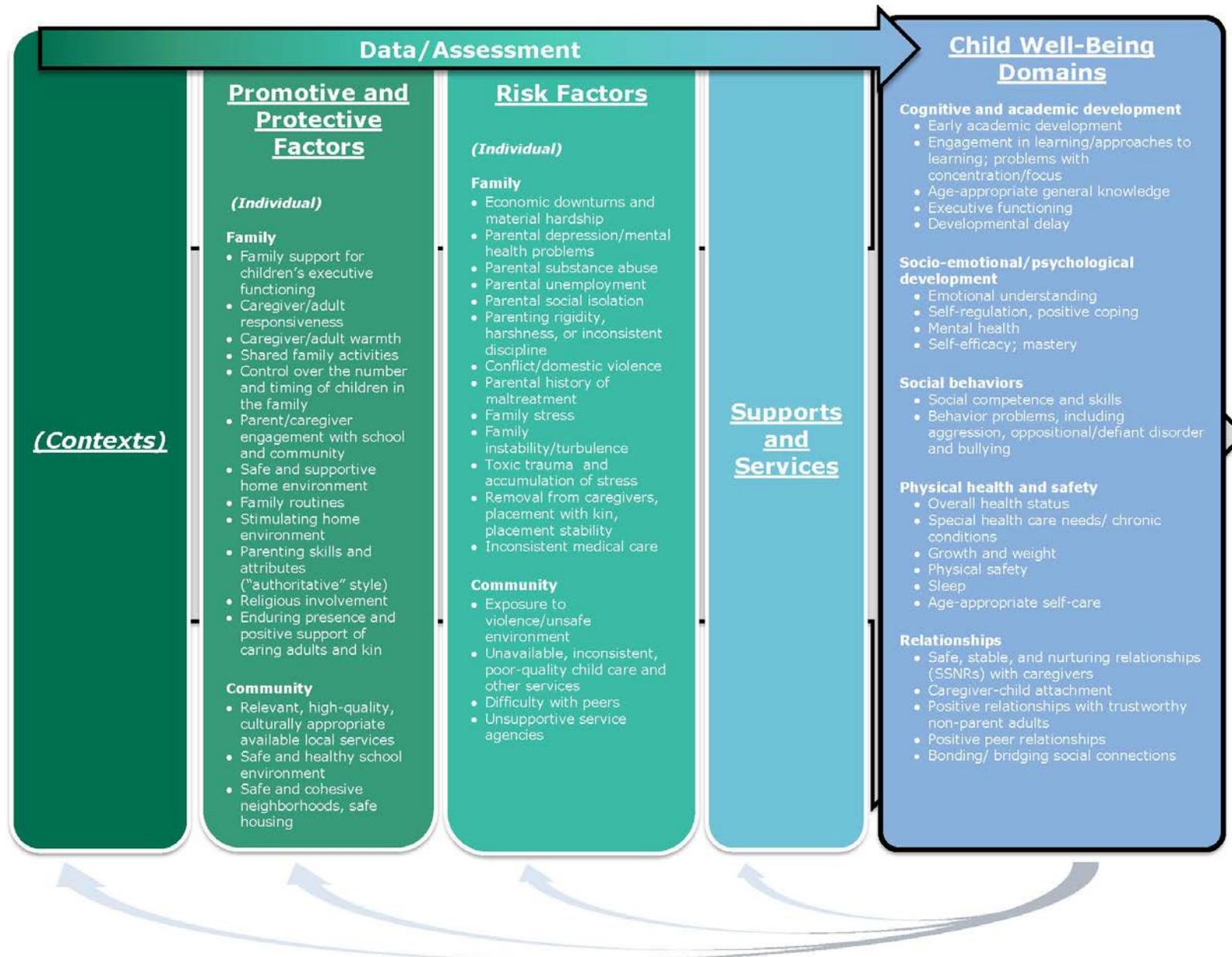
The appropriateness of the measures available should be examined for varied contexts, including low-income and immigrant populations. The response categories also need to be assessed, to ascertain whether they have enough variation at the high end and at the low end.

In some cases, appropriate measures of early childhood well-being are not yet available for particular constructs or populations. As noted, a critical component of this work will be to identify constructs for which measures are lacking. These gaps can be addressed by the development and testing of new items and measures, with sensitive response categories. Again, the appropriateness of these new measures for varied population groups needs to be a driving consideration in the process of crafting new measures.

## Conclusion

We can better serve children and families if we understand and build on the available theory and research in early childhood development. While researchers

have identified a number of important constructs that lead to improved child outcomes, these are just a starting point. Our measurement of promotive, protective, and risk factors must be more nuanced; and surveys and evaluation efforts must better reflect the communities we study. If they do, we stand to better foster flourishing among children. This white paper has identified critical constructs for child outcomes and for risk, promotive, and protective factors. This is an important first step that will inform selection of constructs and support the development of a broader and stronger set of measures for surveys, evaluation studies, and community monitoring efforts.



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