Maximizing Child Development: Three Principles for Policymakers

Abstract: The policy note advances three inter-related principles to guide policy makers and agents in international development organizations to prioritize their actions. These principles are drawn from findings from two Early Childhood Development (ECD) reports recently completed by the World Bank Independent Evaluation Group- one on the World Bank support for ECD and the other a systematic review of the sustained effects of early childhood interventions. The principles are: Support the Early Development of Children, starting from Birth; Support Parents through Existing Services; Make Resources Available to Meet Needs of the Most Vulnerable. These principles imply a new emphasis on development beyond survival with effective, evidence-informed interventions. The policy implications also mean starting with what exists in services in health and protection for vulnerable families and augmenting these with parenting support and education components so that children’s risks are reduced and more poor children will be ready to enter primary school at the appropriate age and to persist through schooling and thrive in the labor market.

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This policy note proposes three inter-related principles as an input into decision-making by policy makers. They are drawn from messages from two Early Childhood Development (ECD) reports recently completed by the World Bank Independent Evaluation Group (IEG) - one on the World Bank support for ECD and the other a systematic review of the sustained effects of early childhood interventions.

With the increase in impact evaluations, studying the effect of early childhood development interventions in low and middle income countries (including Diazgrandos et al., 2016; and Dowd et al. 2016 in this special issue of the journal), it may be difficult for policy makers to synthesize this large body of evidence and determine which efforts to prioritize. The purpose of this brief is to give guidance to policy makers to improve the likelihood that early childhood investments benefit society and help break the intergenerational transmission of poverty (Young and Richardson 2007; Heckman and others 2013; Young 1996; Young 2002; Schweinhart 2007; Smith 2009; Duncan and others 2007), as well as the introduction to this special issue by Wodon (2016). The benefits in relation to schooling and earnings can persist into later life, but have not always been sustained (IEG 2015).

**Principle #1 Support the Early Development of Children, starting from Birth**

First, investing in early childhood is among the most efficient and equity enhancing of all possible public interventions (Carneiro and Heckman, 2003; World Bank 2006. ). It also makes economic sense for policy makers to prioritize attention to younger children - the very early period between conception and age three- is a unique window for making large, lasting changes. Interventions that are sustained throughout this entire period show large effects on important outcomes. Of the twelve existing impact evaluations on the long-term effects of early childhood nutrition, the Guatemala INCAP project consistently provided interventions throughout the first three years and was the only one to show a robust effect (improving cognition and female education attainment at age 24-42) (Masluccio and others 2009). Another argument for investing in children, especially from zero to age three, is that gains in development lost at this critical juncture cannot be recouped (Heckman 2008b) and by three years large socio-economic gradients in cognitive and language abilities are evident between poor and non-poor children (Naudeau and others 2011; Paxson and Schady 2007). Moreover, nearly half the early learning of children is complete by four years of age (National Research Council and Institute of Medicine (2000).

Therefore, the collective effort across Government Ministries in a given country should be focused on the development of children with a particular emphasis for those under three years old. In other words, Governments must create the early cognitive, linguistic, and socioemotional maturity in young children so they will be able to succeed in school and in the workforce. This goal moves beyond health and survival to be able to respond to the emerging labor market needs that are changing in the globalized world. Non-cognitive skills such as self-control and motivation are important for later success in the labor market and are molded during the early years of children’s lives (Heckman and Katz 2013; Heckman 2013). The early shaping of socio-emotional skills such

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1 The Independent Evaluation Group (IEG) is charged with evaluating the activities of the World Bank Group. IEG’s ECD reports can be found at [http://ieg.worldbankgroup.org/evaluations/wb-support-early-childhood-development](http://ieg.worldbankgroup.org/evaluations/wb-support-early-childhood-development)

as social competence, planning, and organization explained the long-term positive outcomes associated with the Perry Preschool program (Heckman, Pinto, and Savelyev 2013).

The health of children is a prerequisite condition for brain development, and strong correlations exist between anthropometrics and later cognition, schooling and labor market outcomes (Georgieff 2007; Grantham-McGregor and others 2007; Walker and others 2007; Glewwe, Jacoby, and King 2001). However, interventions such as stimulation, parent support, early education, and cash transfer programs in the near and longer term (IEG 2015; IEG 2015b) have more often resulted in positive changes in children language, cognitive, and socio-emotional growth. The evidence from systematic reviews suggests that health and nutrition interventions alone will be inadequate, thus, there is a need to also include interventions that have been shown to have lasting impacts to cognitive, language and socio-emotional development such as early stimulation (Gertler et al 2014).

In Jamaica, a program supported the parents of children who were six months old at the outset until they were three years of age, engaging with weekly visits by health workers who facilitated interactions between mother and child (Grantham-McGregor and others 1991). The program also reinforced positive messaging, provided toys, and promoted active play. Stimulation can also cause better socio-emotional outcomes such as reduction in attention deficit challenges or better externalizing behaviors (Walker and others 2005; Humphreys and others 2015). Programs such as the one in Jamaica, or the Nurse-Family Partnership (Olds 2002), affect the lives of the parents to create a permanent change in the home environment that supports the child (Heckman 2008). The Jamaican inter-generational study showed that the offspring of the children also had higher developmental quotients, suggesting that early interventions have beneficial effects beyond the immediate generation (Walker and others 2013).

Systematic reviews provide insights regarding characteristics of more effective stimulation programs (Grantham-McGregor, Fernald, Kagawa, Walker 2014). The effects from information-based, parent-only interventions were small (Engle et al 2011). Effective programs were those with systematic training methods for the workers, a structured and evidence-based curriculum, and opportunities for parental practice with children through active strategies to promote caregiver behavior change, such as feedback, coaching, role-play, and videotaped interactions. These findings were consistent with Walker and others (2011) assessment of why the benefits of the Jamaica program lasted; these authors also noted the importance of enhancing mother-child interaction and supporting the development of maternal self-esteem. The total number of contacts with parents in these studies varied from two to more than 100, but was not clearly related to the size of the effect. One review (Engle et al 2011) reported that higher frequency of contact (at least fortnightly) was related to effectiveness. Systematic reviews and impact evaluations do not answer practical questions that policy makers have. They do not yet tell us the most cost-effective way, the marginal impact of combining interventions, or the relative cost-effectiveness of programs. There is a need for researchers to study these critical aspects.

**Principle #2 Support Parents through Existing Services**

Supporting parents and reaching the youngest children requires utilizing existing opportunities with pregnant mothers and young children through health, nutrition, and social protection programs to monitor and improve child development. Leveraging existing services is an efficient way to reach families, while addressing the major risk factors to children’s development — poor quality of parenting, unstimulating environments, and lack of quality parent-child interactions.
(Chang and others 2013; Grantham-McGregor and others 2007; Heckman 2008). These early points of entry can be used to directly engage and equip parents as the primary agent in the development of their child to give parents the tools that they need for better parent-child interaction. Analysis of the time involved by pediatricians, nurses, or community health workers to deliver messages on child development to each parent was approximately five minutes (Yousafzai and Aboud 2014). However, health and nutrition workers often report that they are already overwhelmed (IEG 2015b), suggesting this barrier has to be addressed before existing services will be able to be utilized to maximize their impact. One promising example addressed the time constraint and also showed that child development messages can be effectively delivered via routine child health visits with no additional clinic staff time by using short films of child development messages shown in the waiting area followed by discussion and demonstration by community health workers, and by providing play materials and message cards (Chang and others 2015). This intervention was able to improve children’s cognition, language and hand-eye coordination, as well as improve caregiver knowledge and practices (Chang et al 2015).

In Nicaragua, cash transfers to vulnerable families were conditioned upon attendance at a parent education program that discussed early childhood development and the importance of reduction in family violence (IEG 2015b). The broader Government program in Nicaragua, Programa Amor para los más Chiquitos, provides a book that teaches mothers and fathers about developmental milestones and stimulation, as well as positive and nurturing caring practices to enhance all aspects of children’s development. Community volunteers reinforce the content with vulnerable families. Another example coming from Jamaica is the Child Health and Development Passport, a parent-held tool for monitoring their children’s development. The Passport provides information to parents; the learning about child development is further reinforced by health workers when they interact with families on routine visits to the clinics.

These examples illustrate how existing practices can be changed to explicitly design for this type of support within programs in health, nutrition, social protection, or other services that reach families with young children. “Bolting on” parent support would increase the development impact (Chang et al 2015), as this type of intervention impacts cognitive, language or socio-emotional development (Grantham-McGregor, Fernald, Kagawa, Walker 2014; Engle et al 2011). What is needed is a convergence of interventions to show parents how to stimulate and nourish their children and when and how to seek guidance if their child seems to have a delay in their development as adequate parental knowledge is the critical (and often missing) resource.

**Principle #3 Make Resources Available to Meet Needs of the Most Vulnerable**

If Government resources are constrained, the question for policy makers is where to begin and to prioritize. Attention must focus on poor families with young children for early childhood development interventions to be equity enhancing. Poor children are more vulnerable to inadequate development outcomes (Grantham-McGregor and others 2007). Poor children are vulnerable to violence, deprivation of essential stimulation, malnourishment, and inadequate nurturing; unmitigated, these factors can lead to poor cognitive development, language delays, and stunted socio-emotional development. Yet, comparatively greater impacts (as well as sustained effects) have been recorded for lower income children who receive early childhood interventions (Engle and others 2007, 2011; Hasan, Hyson, and Chang 2013; IEG 2015), and they can help overcome the disadvantages these children are born into because of poverty (Heckman and others 2013).

This may mean focusing on areas with high rates of stunting, as anthropometric measures are indicators of current nutrition deficiencies and associated with subsequent delays in children’s...
development (Georgieff 2007; Grantham-McGregor and others 2007; Walker and others 2007; Glewwe, Jacoby, and King 2001). However, in countries like Burundi, Timore-Leste, or Niger, where more than half the children are stunted (WDI), this suggests an overall need for development support.

Pressing needs can also be defined by areas without access to essential health and nutrition services. For example, the poorest children in Nepal receive on average fewer vaccines than the richest. A larger share of the poorest children is vaccinated through outreach clinics reflecting their difficulty in reaching health facilities because of distance and travel issues. This dynamic is repeated in many countries where strategies are needed to overcome access barriers.

The three principles of concentrating on the youngest, supporting parents, and focusing on needs are interconnected; collectively they imply a new emphasis on development beyond survival with effective, evidence-informed interventions. The policy implications also mean starting with what exists in services in health and protection for vulnerable families and augmenting these with parenting support and education components so that children’s risks are reduced and more poor children will be ready to enter primary school at the appropriate age and to persist through schooling, thrive in the labor market, and contribute to shared economic prosperity.

Reference List


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