

Section B

Policy Brief

Engaging Stakeholders in
Building Resilience Through
Play-based Strategies

Executive Summary

Children across the world endure adverse childhood experiences which impact their healthy development in varying and grave degrees. Poverty is an acute threat to children's wellbeing, with 385 million children living in extreme poverty across the world. The impact of living in poverty jeopardizes healthy development in multiple domains, and restricts the rights of a child to achieving their full potential in adulthood.

This policy brief addresses the relevance of Early Childhood Care and Education, the effects of exposure to multidimensional risk factors on children, and the pathways to developing Resilience. By looking at Resilience through the lens of Play-based strategies at home and school environments, this policy brief further discusses possible alternatives for improved children's developmental outcomes, and recommends the Play & Resilience Project by OMEP, UNESCO and the Victoria Charitable Trust as an evidence-based and reliable intervention.

Taking on a participatory approach, this policy brief urges for a collaboration of public sector bodies with civilian members and community organizations, and stresses on the relevance of stakeholder buy-in and participation.

The Relevance of the Early Years

Early childhood (ages 0 to 8) is a key developmental stage in humans, categorized by a series of processes that establishes the cognitive, socio-emotional, linguistic and physical competencies a child carries on to adulthood. It is the developmental period when children particularly need high quality and holistic personal care with complete reliance on caregivers, and the opportunities to access quality preschool (Olds, 2006) (Davies, 2010). A staggeringly high proportion of learning and crucial brain development takes place from the period of birth to age six, such as neural pruning and the formation and connections of synapses, that play a pivotal role in building children's future capacities into adulthood (Davies, 2010).



If the multiple processes of brain development are disturbed during this stage, it can prove to be disruptive of various domains in a child, and jeopardize a child's healthy development (Shonkoff et al., 2011) (Evans et al., 2013). Exposure to multiple risk factors has negative effects on children, and adversely affects all avenues of a child's life. Risk factors can range from exposure to political violence and forced migration from climate change, to unsafe cultural practices such as genital cutting (Belsky, 2012). The most prevalent risk in children's lives, however, with a global trend of half of the human population living under US \$2.50 per day, is poverty (UNICEF Report, 2016). Poverty is not just an indicator, but gives psychological meaning to economic hardship, and penetrates all avenues of a child's life (Chaudry & Wimer, 2016).

A Paradigm Shift - Understanding the Effects of Poverty

Poverty gives a psychological meaning to economic hardship and functions in a nonlinear, multidimensional manner. The family acts as a conduit for socioeconomic influences on the development of children and adolescents (Conger & Donnellan, 2007). Economic hardship increases family stress, disrupts the social networks that stabilize communities and families, and thereby leads to higher rates of home violence and school dropout (Shonkoff et al., 2011). Caregivers with increased stress from unemployment, low socioeconomic status, and rising financial burdens cannot fully provide the nurturing attention their children will require during their key developmental phases, and will have a tendency to adapt harsher parenting techniques (Conger & Donnellan, 2007). Parents living in poverty are more likely to use a harsher, more authoritarian parenting style as indicated by physical punishment and the absence of reasoning with children about the consequences of their behavior (Conger & Donnellan, 2007). These harsher discipline techniques are linked to less competent social and



emotional development for children. Parents living in poverty are also less likely to provide sufficient and consistent access to nutritious meals, which exposes children to food insecurity. Aside from the physical impacts such as stunting and malnourishment, children also suffer from trauma and neglect when subjected to food insecurity, and develop a range of risky coping mechanisms in the future (Chaudry & Wimer, 2016)

Strained home relations impact children’s abilities to socialize outside of the home environment as well, resulting in various internalizing and externalizing behaviors that adversely affect socio-emotional skills, prosocial behaviors and the development of empathy, which impact the mental wellbeing of a child (Conger & Donnellan, 2007). Dilapidated, crowded housing has long been cited as one of the factors responsible for the income related gradient in child health (Kaplan, 2006). House crowding and poor living conditions adds to child stress and disrupted cognitive and emotional functions, as cramped spaces increase the cortisol levels in the bloodstream, cause heart palpitations, and tension in both children and their parents (Evans & English, 2002). Extended exposure to poverty and the cumulative risk factors associated with it maladapts in children in the form of toxic stress, which is cataclysmic to the child’s lifelong wellbeing (Shonkoff et al., 2011).

The Impacts of Adversities in the Early Years on Adulthood

The environmentally-based pruning of neuronal systems in the early years support a range of early skills, including cognitive (early language, literacy, math), social (theory of mind, empathy, prosocial abilities), persistence, attention, self-regulation and executive function skills (the voluntary control of attention and behavior) (Yoshikawa et al., 2013) . Early adverse experiences and environmental influences can leave a lasting signature on the genetic predispositions that affect emerging brain architecture and long- term health.

The Disruptive Effects

Neurological Processes	Impact on Adult Lifestyle
Cognitive Development & Executive Functions	Risky Coping Mechanisms
Socio-Emotional Skills	Poor School Performance
Linguistic Abilities	Unemployment
Contextual Learning	Unhealthy Diet
Decision Making Skills	Violent Behaviors
Impaired Stress Response	Incarceration
Impulse Control	Single Parenthood

Source- Shonkoff et al., 2011; Yoshikawa et al., 2013

Why to Invest in the Early Years of Childhood?

Development and learning is every child's right, and the UN Sustainable Development Goal 4 for 2030 is Ensuring Inclusive and Equitable Quality Education for All. Goal 4.2 specifically targets Early Childhood Development, Care, and Universal Primary Education (UN SDG 2030). Multiple stakeholders are to benefit from an increased investment in Early Childhood Care and Education (ECCE). Investment in ECCE is proven to yield the following chain of results-

Improved health and physical outcomes: ECCE reduces the incidence of childhood neglect and abuse as caregivers are better informed on best practices and the wide needs of their children. Improved health also indicates to lower incidences of sickness, which means a child spends less time recovering from illnesses, and more time at school or at play.

Increased mental and cognitive abilities result in improved school performances and learning outcomes, which have long-term effects of higher earning capacity in the labor market.

Improved linguistic abilities alongside accelerated cognitive development aid children to have better communication skills and develop their abilities to express themselves.

Better communication skills also result in prosocial behaviors and the development of empathy, that taps into developed socio-emotional bonds, which is a key adaptive skill for socio-emotional wellbeing and mental health.

Stronger mental wellbeing results in stronger coping mechanisms, which is an essential protective factor. Weak coping mechanisms are linked to unhealthy diet, poor health, addictive behaviors, substance abuse, early puberty and early risky sexual activity in at-risk children.

The high social costs of lost economic opportunity, incarceration, health disorders (in particular heart related ailments), and jeopardized parent-child relations are immense. With a reduction in the risks to children, there is a significant drop in these high social costs.

©Anahita Kumar 2019

What is the Return on Investment on ECCE?

The causal sequences of risks that contribute to demographic differences in educational achievement and physical well-being threaten the African Union's ideals by undermining the democratic credo of equal opportunity. Poverty and low SES inhibits healthy development and prevents parents from caring for their children to the best of their ability, thus impacting learning outcomes. The effects of investment in ECCE on the economy are extensive.

Persuasive evidence from cost-benefit analyses reveal **the costs of incarceration and diminished economic productivity** are associated with educational failure (Shonkoff et al., 2011). Therefore, investing in the education of African children will likely reduce the cost of incarceration and diminished economic productivity.

The full return on investments that reduce toxic stress in early childhood is likely to be much higher, as **the costs of health issues** to a society are enormous and much greater than the costs of incarceration and diminished economic productivity. Heart related disorders alone cost more to the global economy than the costs of diminished economic productivity combined. Children with adverse early childhood experiences are most at-risk of developing **heart related ailments** as adults, and by reducing the

adversities children are exposed to, economies can benefit from **reduced heart-related ailments** (Shonkoff et al., 2011).

The potential savings in health care costs from even small, marginal reductions in the prevalence of cardiovascular disease, hypertension, diabetes, and depression are, therefore, likely to dwarf the **considerable economic productivity and criminal justice benefits** that have been well documented for effective early childhood interventions (Shonkoff et al., 2011).

Sound investments in interventions that reduce adversity are also likely to strengthen the foundations of physical and mental health, and help develop children who can effectively join **the future African workforce**, have active **civic engagement**, and **contribute positively to the economy and society**.

The Power of Play

Play is a powerful mechanism which targets multiple domains of healthy child development. A few of these are:

- Children acquire social skills through play and develop social competence. They build relationships when they are with others, they learn to resolve conflicts, control and regulate their behaviors.
- Play expands children's knowledge about the world. It helps them to space out cognitive demands beyond their age and maturity, and therefore serves as a tool for scaffolding. It targets our powerful intrinsic motivation system, which, if developed, help children to stay motivated in the face of adversities (Weisberg et al., 2013)
- Play supports language development and healthy communication skills, and develops brain power that has increased flexibility to improve potential for learning. This adapts into healthier bonds with others and aids in socioemotional learning, which is a powerful mechanism for long-term mental well-being (Durlak et al., 2011).
- Play fosters prosocial behaviors and develops empathy in children, especially children with minimal prior socialization. Play also helps children with impulse control and monitors motor reactions, which helps children build a long-term relationship with discipline (Belsky, 2012).
- Play fosters emotional security for children. It is a known stress release, which reduces the risk of children developing toxic stress. Children are exposed to healthy amounts of stress and competition, which helps them to regulate stress in the future and develop a healthy attitude towards coping with stressful events in the future, and avoid risky coping mechanisms (Shonkoff et al., 2011).
- Play-based strategies have been effective in buffering the effects of PTSD (Post-traumatic Stress Disorder) in refugee children, and building socioemotional skills in various interventions, according to evidence-based meta studies (Tol et al, 2010), (Masten, 2015).



How do we build Resilience in Children?

Resilience is the **positive adaptation in the context of adversity** (Wright, Masten & Narayan, 2013). Examples of Resilience could be when a child brought up in poverty excels at school and emerges with high earning capacity in the labor market, or when a child who was exposed to neglect and emotional harm builds strong bonds and relationships with peers in adulthood.

Children develop resilience mechanisms, or resiliency, when they have prolonged access to pathways to resilience. A pathway to resilience is a **mediating process**, that address a functional domain in a child's development and enhances it. A pathway to resilience can be described as a process that is supportive of a child's healthy holistic development, that if a child has access to a long term, can help the child to develop resilience in the face of adversity (Wright, Masten & Narayan, 2013).



Play-based learning is an evidence-based and universal pathway to building resilience in children, that functions as a supportive chain of developmental processes in a universal fashion for children across the globe.

The Nature of The Problem

Investments in alleviating poverty across the globe is an essential aspect of improving the lives of children globally. While investing in poverty will elevate children's standards of living and health and educational access and outcomes, policymakers, practitioners, community members and families (amongst other stakeholders), must also address avenues of improving children's living standards and opportunities at the current stage of economic and social progress they are at.

Uplifting families from poverty is a long-term process, and while efforts must be directed at eradicating poverty, stakeholders must explore avenues to help children living in poverty. Nearly 385 million children across the world live in extreme poverty (less than US \$1.90 per day) with the highest percentage of these children living in Sub-Saharan Africa (UNICEF Report, 2016). Sub-Saharan Africa has both the highest rates of children living in extreme poverty at just under 50 per cent, as well as the largest share of the world's extremely poor children, at just over 50 per cent (UNICEF, 2016).

While poverty is being addressed and eradicated globally, it is highly likely that a majority of these children will continue to live most of their childhood and early adulthood in poverty. Therefore, it is essential to provide children with the opportunity to build resilience to adverse experiences. While all children, not just those living in poverty, are at risk of traumatic and adverse early childhood experiences, those living in poverty are at elevated risks and face multidimensional and cumulative risk factors, which endanger their healthy development (Chaudry & Wimer, 2016). Building resilience is an essential mechanism and a burgeoning field of brain development sciences, and provides policy makers with an interdisciplinary and evidence-based approach to building the future workforce of their communities.

Policy Option:

Play-based Strategies for Building Resilience in Children

“Play is Learning, and Learning is Play” – Vygotsky, 1967

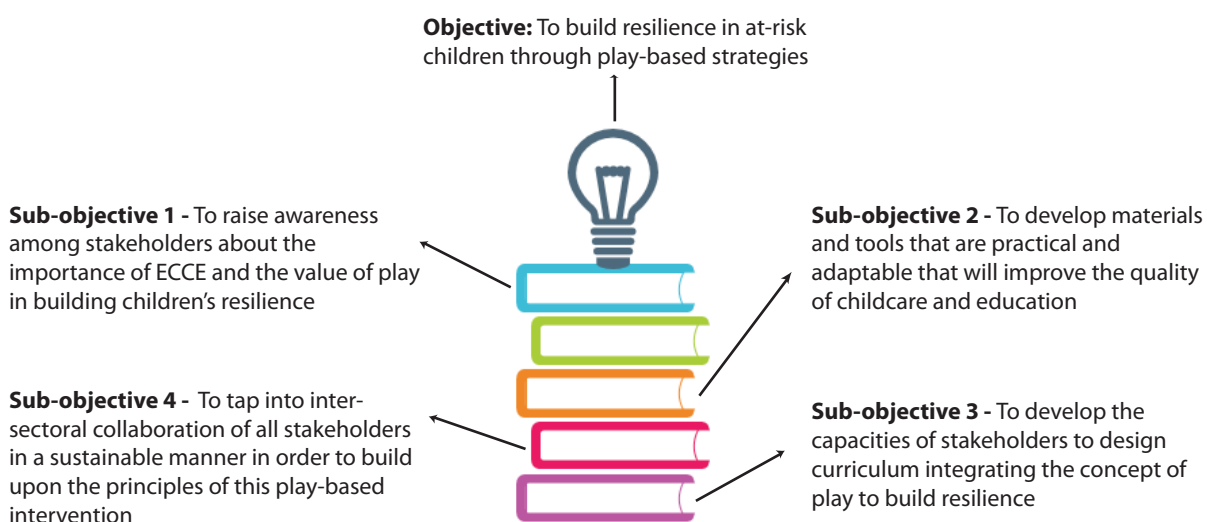
To buffer the negative risk factors from exposure to multidimensional adverse childhood experiences, a comprehensive intervention that addresses these multiple risk factors is needed. A play-based educational intervention model will be effective at addressing and buffering the cumulative risks the children have been exposed to. In drawing this hypothesis, this model relies on an ecological resilience model. Resilience can arise from multiple sources (Masten, 2015), and this intervention hopes to capture that interconnected nature of resilience, capacity building and empathy. Ecological resilience has been defined as those assets and processes on all social-ecological levels (individual, family, peer, neighborhood variables) that have been shown to be associated with positive developmental outcomes despite serious threats to adaptation and development (Tol et al, 2010).

Play draws upon this hypothesis for its conceptual framework. Evidence-based research points to a solid pathway to building resilience in at-risk children. This pathway targets multiple risk factors and empowers children through addressing their intrinsic motivation system, and their socio-emotional and linguistic problem-solving domains (Masten, 2015). Play is what mammals naturally do and love. Across the animal kingdom, play has a pivotal role in developmental and societal interactions. Evidence from research on mammals has indicated how play empowers growing mammals and develops powerful mechanisms such as decision-making, motivation, teamwork and peer support. Play is what children naturally do and love, and it comes to them naturally as a second nature. Play, therefore, is a useful pathway to be tapped into for building resilience in at-risk children (Elkind, 2007).

Policy Design:

The Play & Resilience Project

The Play and Resilience project was conceptualized in January 2016 during the OMEP’s launching of “Play and Resilience World Project” by OMEP China and UNESCO in collaboration with the Victoria Charitable Trust Fund. It is a **China-Africa collaboration project** for implementation in three countries in Africa- Nigeria, Zimbabwe and South Africa.



Phase 1 - A needs assessment baseline study

The purpose of this was to generate data about the areas of study by identifying stakeholders who will form the critical mass to implement the project along with risk and protective factors in the communities to guide the discourse of the project. This is an essential stage for all projects to deeply understand the needs of the community, and tailor the project according to the various factors that affect the process.

The identified stakeholders in the project include micro and macro influences in children's lives. Children are at the centre of the project, with stakeholders being micro scale, such as their caregivers, families, friends, teachers, and schoolmates, to macro scale- education sectors, policy makers, ministries and governmental bodies and school administration.

Research must also consider what are the moderating factors and the confounding variables that impact the mediating process of developing resilience in children. Researchers, therefore, require in depth expertise, evaluation, and would benefit from employing a meta-study.

Phase 2 - Sensitizing Stakeholders and Community buy-in

It is imperative to have wide acceptance and buy-in from all stakeholders to take any project forward. Without stakeholder buy-in, the desired output of the project would be diminished, and the project would fail to have a holistic and participatory approach. Phase was conducted with the collaboration of partners such as the UNESCO Team, a World Bank representative, the relevant Ministries of Primary and Secondary Education, the Universal Basic Education Commission, the College of Education Team and the International Non-Governmental Organisation (OMEP) amongst others. At this meeting, stakeholders finalize on the logistics and streamline the process of conducting the Play & Resilience Workshop

Phase 3 - Conducting the Play & Resilience Workshop

Toolkits must be developed by experts in the field of play-based strategies to build resilience. These toolkits must be constantly revised, and the curriculum design process must be an iterative and participatory process.

The Play & Resilience Project has a comprehensive curriculum with 6 modules:

- Module 1 - The importance of Early Childhood Care and Education
- Module 2 - Risk Factors and their Effects, and Protective Mechanisms
- Module 3 - The concept of Resilience, and Pathways to Resilience
- Module 4 - Play-based approach to building Resilience
- Module 5 - Healthy Play Environments (Indoor and Outdoor)
- Module 6 - Avenues for Schools and Community Collaboration

Policy Recommendations

Cost-effective measures- project planners must strategize in a functional manner to minimize the cost of implementations. This can range from sourcing local products and services, to implementing joint workshops for similar categories of stakeholders where possible.

Scaling up- Due to the universality of the play-based model, this project has a high potential of scaling up and yielding high impacts in various contexts. This project could be implemented in various African countries and contexts, and also in groups of children with varying needs.

Building on Community Knowledge- The program curriculum should be consistently reviewed and updated, and the curriculum design should be an iterative and participatory process. By building on local knowledge and incorporating the local best practices in child rearing, this project can propel forward in mobilizing grassroots communities, and can enjoy improved community buy-in and support.

Increased advocacy and awareness in the community- Raising public awareness about the relevance of the early years and the nuanced and immense needs of children is a key strategy to improving ECCE standards across the continent, as families and community members play an integral role in children's holistic development. Targeting the involvement of male figures in families to focus on ECCE and play-based child rearing approaches will address a gap ECCE standards across the continent.



References

- Al-Barri, Q. N., Al-qadi, H. M., Al-Wa'ely, S., Khodair, R. M. and Alshawashreh, O. (2014). "The effectiveness of dramatic role-playing on the linguistic and the development of verbal expressive performance among the basic 4th grade in Jordan", *Research on Humanities and Social Sciences*. 4.21:1-10.
- Belsky, J. (2012). The Development of Human Reproductive Strategies. *Current Directions in Psychological Science*, 21(5), 310-316. doi:10.1177/0963721412453588
- Bronfenbrenner, U. (n.d.). Ecological systems theory. *Encyclopedia of Psychology*, Vol. 3., 129-133. doi:10.1037/10518-046
- Children International. (n.d.). *Facts & Statistics About Africa | Children International | Help African Kids in Need*. [online] Available at: <https://www.children.org/global-poverty/global-poverty-facts/africa> [Accessed 29 Jan. 2019].
- Conger, R. D., & Donnellan, M. B. (2007). An Interactionist Perspective on the Socioeconomic Context of Human Development. *Annual Review of Psychology*, 58(1), 175-199. doi:10.1146/annurev.psych.58.110405.085551
- Durlak, Joseph & Weissberg, Roger & Dymnicki, Allison & Taylor, Rebecca & Schellinger, Kriston. (2011). The Impact of Enhancing Students' Social and Emotional Learning: A Meta-Analysis of School-Based Universal Interventions. *Child development*. 82. 405-32. 10.1111/j.1467-8624.2010.01564.x.
- Elkind, D. (2007). *The Power of Play: Learning What Comes Naturally*. De Capo Lifelong Books
- Frost, Joseph, & Jacobs, Peter (1995, Spring). "Play deprivation and juvenile violence", *Dimensions*, 23, 14-20, 39.
- Ginsburg, Kenneth R. "The importance of play promoting healthy child development and maintaining strong parent-child bonds", *Paediatrics*, 119, 1-15. t
- Gray, P. (2013). *Free to learn: why unleashing the instinct to play will make our children happier, more self-reliant and better prepared for life*. New York: Basic Books. [www.scholarpedia.org/article/Definitions of play](http://www.scholarpedia.org/article/Definitions_of_play).
- Iyeh, M.A. (2006). "Developing the child through children's theater", A paper presented at the 20th National Convention and Annual General Meeting of the society of the Nigerian Theatre Artists, 11-15.
- Kaplan, G. A. (2006). Social Determinants of Health, 2nd Edition. M Marmot and R Wilkinson (eds). Oxford:Oxford University Press, 2006, pp. 376, \$57.50. ISBN: 9780198565895. *International Journal of Epidemiology*, 35(4), 1111-1112. doi:10.1093/ije/dyl121
- Luthar, S. S., Cicchetti, D., & Becker, B. (2000). The Construct of Resilience: A Critical Evaluation and Guidelines for Future Work. *Child Development*, 71(3), 543-562. doi:10.1111/1467-8624.00164
- M. De Jong. (2010). Mediators and moderators of a psychosocial intervention for children affected by political violence. *Journal of Consulting and Clinical Psychology*, 78(6), 818-828. doi:10.1037/a0021348
- Maduewesi, E.J. (1999). *Curriculum and practices in early childhood education*. Owerri: Cape Publisher Int'l Limited.
- Masten, A. S. (2015). *Ordinary Magic: Resilience in development*. New York: Guilford Press.
- Meltzer, R & Schwartz, A. (2019). *Policy Analysis as Problem Solving*. NY: Routledge
- Meyers, M. L. (2011). *The theory and practice of community work: A Southern African Perspective*. Second Edition.
- Nworgu, B.G. (1991). *Educational research: Basic Issues and Methodology*. Ibadan: Wisdom Publishers.
- Okeworo S.N. (2017). *Assessment of early childhood education in Ebonyi State in the light of national policy on pre-primary education* (An unpublished Ph.D. Thesis, Department of Educational Foundations, School of Education, Ebonyi State University, Abakaliki).
- Olds, D. L. (2010). The Nurse-Family Partnership. *Nurturing Children and Families*, 192-203. doi:10.1002/9781444324617.ch17
- Omani, C.N. and Odo, F.A. (2006). *Research and statistics in education, management and social sciences*. Enugu: Mason publishers.
- Ross, E. and Deverell, A. (2004). *Psychosocial approaches to health, illness and disability: A reader for health care professionals*.
- Shonkoff, J. P., Garner, A. S., Siegel, B. S., Dobbins, M. I., Earls, M. F., Garner, A. S., . . . Wood, D. L. (2011). The Lifelong Effects of Early Childhood Adversity and Toxic Stress. *Pediatrics*, 129(1). doi:10.1542/peds.2011-2663
- Sutton-Smith, G. (1999). "Evolving a conscience of Play Definitions", *Playfully Play and Culture Studies*. 2, 239-256.
- Tassoni, P. (2000). *S/NVQ3 play worker*. London: Heinemann education Books.
- Tol, W. A., Komproe, I. H., Jordans, M. J., Gross, A. L., Susanty, D., Macy, R. D., & Joop T. V. UNICEF (2015). *Annual report 2014*. New York, UNICEF.
- UNICEF (2016). *Press Release 2016*. New York, UNICEF.
- Vygotsky, L. S. (1967). Play and Its Role in the Mental Development of the Child. *Soviet Psychology*, 5(3), 6-18. doi:10.2753/rpo1061-040505036
- Weisberg, D. S., Hirsh-Pasek, K., & Golinkoff, R. M. (2013). Guided Play: Where Curricular Goals Meet a Playful Pedagogy. *Mind, Brain, and Education*, 7(2), 104-112. doi:10.1111/mbe.12015
- Yoshikawa, Weiland, Brooks-Gunn, Burchinal, Espinosa, Gormley, Society for Research in Child Development. (2016, October 28).