

Enriching the Poor – The Effects of Poverty on Early Childhood Development

Abstract

Over 21 percent of America’s children under the age of 18 live in poverty.¹ This number is too large to ignore. And when the effects of poverty are so detrimental to early childhood development and society as a whole, the need for reform becomes more urgent. A child’s development is not so much impacted by what tax bracket the household falls into or the racial demographics of the parents,² but instead by the residual effects of poverty, which is a lack of parental interaction, a lack of access to quality resources, poor physical health, and crime. It is by recognizing and addressing these individual factors of poverty that we can recognize the needs of our adolescents and cater to those individual needs in an effort to make for a better tomorrow.

The Link Between Poverty and Intelligence

In his 2013 State of the Union, President Obama announced a proposal to implement state-funded preschool and early childhood education programs as an integral part of the current school system. A White House press release detailing the President’s plan opined that “[t]he beginning years of a child’s life are critical for building

¹ United States Census Bureau. *Poverty*. September 17, 2013. <https://www.census.gov/hhes/www/poverty/about/overview/>

² See Ohio State University article highlighting a study of Columbus, OH neighborhoods, which revealed that the violent crime rate in highly disadvantaged black areas were not much different from the rate in similar white communities. Grabmeier, Jeff. “Poverty, Not Race, Tied to High Crime in Urban Communities.” *Ohio State University Press*. <http://researchnews.osu.edu/archive/badcomm.htm>

the early foundation needed for success later in school and in life.”³ The plan focuses on providing access to quality early childhood education programs to those below the poverty line. The implication here is that poverty directly correlates to child development. Nobel Prize winning University of Chicago Economist Professor James Heckman, has presented findings from studies that show that American students from prosperous backgrounds scored on average 110 points higher on reading tests than disadvantaged students.⁴ But how can this be true? What does money have to do with intelligence? Does the contents of a parent’s bank account determine a child’s level of reading comprehension? Some experts say yes! In 2013, *Time Magazine* featured an article titled, “Poverty Produces Smaller Brains.”⁵ The study, originally published in the *Journal of Neuroscience*, connected lower maternal education, a common symptom of poverty, to poor processing of sound in the brains of children raised in lower-resource environments.⁶ Scientists conducting the research suspected that the lower brain activity of the impoverished child, and its resulting smaller size, stemmed from a lack of verbal interaction between the child and the uneducated mother during crucial early childhood developmental years. In contrast, other data showed that children in higher-

³ Fact Sheet President Obama’s Plan for Early Education for all Americans. February 13, 2013. <http://www.whitehouse.gov/the-press-office/2013/02/13/fact-sheet-president-obama-s-plan-early-education-all-americans>

⁴ Porter, Eduardo. “Investments in Education May be Misdirected.” *New York Times*, April 2, 2013. <http://www.nytimes.com/2013/04/03/business/studies-highlight-benefits-of-early-education.html?pagewanted=all&r=0>

⁵ Sifferlin, Alexandra. “Poverty Produces Smaller Brains.” *Time*. October 29, 2013. <http://healthland.time.com/2013/10/29/poverty-produces-smaller-brains/>

⁶ *Id.*

income families are exposed to 30 million more words than those in lower-income families where parents have less education.⁷ Additionally, poverty affected growth in parts of the brain involved in stress regulation, emotion processing, and memory. If these findings are correct, then it is a disheartening reality for these underprivileged youth. This would mean that children born of uneducated parents were automatically at a learning disadvantage. Then, as the *Time* article suggested, this child would have a significant probability of being raised in poverty, which would further harm this child's developmental potential.

I'm sure many readers of the *Time* article would reply, "well I grew up poor and I am successful." We can also see contrary evidence in the host of celebrities, such as Oprah Winfrey and J.K. Rowling, who grew up poor but eventually became business and literary scholars, respectively.⁸ Are these success stories the exceptions instead of the norm? I do not believe so. The *Time* article may identify obstacles faced by the less fortunate, but by no means does it identify complete barriers. The *Time* article underestimates the power and potential of the child. Children are remarkably resourceful and adaptive, and need only support and guidance to turn adversity into prosperity. In many cases, it is the poverty that acts as the catalyst that propels the child toward success. According to clinical psychologist James Houran, "growing up

⁷ *Id.*

⁸ Huffington Post. "9 Celebrities Who Were Born Poor" July 27, 2013.
http://www.huffingtonpost.com/2013/07/25/celebrities-born-poor_n_3654737.html

with limited means not only motivates but actually fosters the imagination and ultimately fuels one's drive for fame."⁹

The Economic Obstacles

Even the most nurtured and supported child can be developmentally stifled when a lack of money is the issue. Hunger, disease, and malnourishment often plague the poor child. A 1990 analysis indicated that poverty-related health factors such as low birth weight, elevated blood lead levels, anemia, and recurrent ear infections and hearing loss contributed to differentials in IQ scores between poor and non-poor four-year-olds.¹⁰ Furthermore, parents reported that poor children were only two-thirds as likely to be in excellent health and almost twice as likely to be in fair or poor health as non-poor children.¹¹ The brain, like all other organs, cannot function without the proper nutrients. Physical underdevelopment of a child can significantly strain that child's cognitive abilities.

There is also a level of psychological trauma inflicted on an indigent child. Children who can't afford decent, weather-appropriate clothing, the proper school supplies, or who can't afford to go on the class trip, etc., may also feel inadequate or somehow inferior to their wealthier classmates. The self-esteem of these children may also be jeopardized if these children are subject to bullying, which negative effects have

⁹ Rose, Lacey. "Rags-to-Riches Celebrities." *Forbes*. May 24, 2007.
http://www.forbes.com/2007/05/24/celebrity-winfrey-dion-biz-media-cx_lr_0524rags.html

¹⁰ Brooks-Gunn, Jeanne; Duncan, Greg J. "The Effects of Poverty on Children, The Future of Children, Children and Poverty." Vol 7, No. 2, 1997.
https://www.princeton.edu/futureofchildren/publications/docs/07_02_03.pdf

¹¹ *Id.* at 57

been proven to last well beyond the childhood years into adulthood.¹²

As President Obama's push for early childhood programs emphasized, affordability is a major concern for most parents. The fact is that many of the best early childhood educational programs and institutions are costly, and therefore predominantly serve the privileged. Not only are many of these programs expensive, they are typically located in niche areas of the city, often not economically or practically feasible for those living in poorer, remote neighborhoods. Parents may not have the time nor the ability to transport their children back and forth to these quality education centers, thus forcing the child to attend a school that may be convenient but may not be best suited for the child's aptitude or learning style. It is shameful that at the most crucial developmental stage of a child's life, economic status could prevent that child from being cultivated to the best of their potential.

Another important factor in early childhood education is the environment in which that child develops. Unfortunately, when parents cannot afford quality housing, low income may lead to residence in extremely poor neighborhoods characterized by social disorganization and few resources for child development.¹³ The result is a child who has not been developed to their full potential, and embarks on a lifelong struggle to supplement the essential elements of development that was missing from their childhood due to poverty. As this child journeys into adulthood, these missing

¹² See the Harvard Mental Health Letter stating that victims of chronic childhood bullying are more likely to develop depression or think about suicide as adults compared with those who weren't bullied. Miller, Michael. "School Bullying Has Long-Lasting Effects." *Harvard Mental Health Letter*. November 2009. http://www.health.harvard.edu/press_releases/school-bullying-has-long-lasting-effects

¹³ Supra note 9 at 67

developmental elements may translate into reduced earning potential, a higher likelihood of engaging in criminal activity, or remaining below the poverty level. This vicious cycle of poverty is the lifelong work of Economist James Heckman. Heckman's decades of research has led to the conclusion that the quality of early childhood development heavily influences health, economic and social outcomes for individuals and society at large. Heckman has proven that there are great economic gains to be had by investing in early childhood development.¹⁴

The Warchild

The effects of poverty transcend the cerebral and the economic; there are physical dangers as well. Though the subject of some debate, there is significant evidence to indicate that poverty and crime are synonymous. This relationship can best be observed by a statistical review of various communities within the city of Chicago. In Riverdale, for example, where 61.4 percent of the population is below the poverty line, homicides accounted for 33 percent of violent crimes, while another 32.8 percent were firearm-related incidents.¹⁵ Contrast these figures with the Edison Park neighborhood of Chicago, where only 5.1 percent of the population is below poverty, and a mere 7.1 percent of violent crimes involved a firearm, with zero homicides.¹⁶ It stands to reason

¹⁴ The Heckman Equation. "About Professor Heckman." Retrieved August 14, 2014 from <http://heckmanequation.org/about-professor-heckman>

¹⁵ Chicago Poverty and Crime Index, Department of Health and Human Services, City of Chicago. May 30, 2013. <https://data.cityofchicago.org/Health-Human-Services/Chicago-poverty-and-crime/fwns-pcmk>

¹⁶ *Id.*

that children living in poverty have a much higher chance at witnessing or being involved in violence and crime than those living outside of poverty.

As the third largest city in the United States, Chicago has been plagued with high levels of violence. In fact, in 2012, the Federal Bureau of Investigation (FBI) dubbed Chicago “Murder Capital of the U.S.,” recording over 500 murders in a year.¹⁷ With shootings and violence so rampant in the city, mirroring a war zone, a new term has been coined for the city – “CHIRAQ.”¹⁸ While comparing the city of Chicago to Iraq may seem like a hyperbole, the numbers don’t lie. In 2012, more Chicago residents (228) have been killed in the city than the number of U.S. troops killed in Afghanistan (144) over the same period. While some 2,000 U.S. troops have been killed in Afghanistan since 2001, more than 5,000 people have been killed by gunfire in Chicago during that time, based on Department of Defense and FBI data.¹⁹ If violence is more prevalent in poorer neighborhoods, and Chicago’s level of violence is comparable to a war zone, then residents of Chicago’s most violent communities are essentially living on a battlefield. The concern then centers on the youngest of these residents, and how they are affected by the violence and chaos that surrounds them.

¹⁷ Wilson, Reid. “FBI: Chicago Passes New York as Murder Capital of U.S.” *Washington Post*. September 18, 2013. <http://www.washingtonpost.com/blogs/govbeat/wp/2013/09/18/fbi-chicago-passes-new-york-as-murder-capital-of-u-s/>>

¹⁸ Huston, Warner Todd. “‘CHIRAQ’: Chicago Becoming More Dangerous Than Terror-Torn Iraq.” *Breitbart.com*. April 23, 2014. <http://www.breitbart.com/Big-Government/2014/04/22/Chicago-Becomes-Chirag-More-Dangerous-than-Terror-Torn-Iraq>

¹⁹ Huffington Post. “Chicago Homicides Outnumber U.S. Troops Killings in Afghanistan.” August 16, 2012. http://www.huffingtonpost.com/2012/06/16/chicago-homicide-rate-wor_n_1602692.html

The effects of violence on children are well documented. A 2009 survey from the U.S. Department of Justice revealed that children who are exposed to violence undergo lasting physical, mental, and emotional harm. They suffer from difficulties with attachment, regressive behavior, anxiety and depression, and aggression and conduct problems. They may be more prone to dating violence, delinquency, further victimization, and involvement with the child welfare and juvenile justice systems. Moreover, being exposed to violence may impair a child's capacity for partnering and parenting later in life, continuing the cycle of violence into the next generation.²⁰ Unfortunately, more than 60 percent of children in the United States have been exposed to some level of violence in the past year.²¹ This staggering figure indicates that it is not a lack of intelligence, funding, or access to quality early education programs that stunts child development the most, but being exposed to violence within the community and within the home.

Keeping the focus on Chicago, in 2010 a study was conducted to evaluate the effects of violence on children's cognitive performance.²² The study measured children who lived within a block radius of a homicide, whether they witnessed the incident or not, through vocabulary and reading assessments and interviews. The evidence from

²⁰ Finkelhor, David; Turner, Heather; Ormond, Richard; Hamby, Sherry; Kracke, Kristen. "Children's Exposure to Violence: A Comprehensive National Survey." *U.S. Department of Justice, Office of Juvenile Justice and Delinquency Prevention*. October 2009. <https://www.ncjrs.gov/pdffiles1/ojjdp/227744.pdf>

²¹ *Id.* at 4

²² Sharkey, Patrick. "The Acute Effect of Local Homicides on Children's Cognitive Performance." May 17, 2010. <http://www.pnas.org/content/early/2010/06/02/1000690107.full.pdf>

two independent samples of children in Chicago showed that exposure to a local homicide within a short period preceding a cognitive assessment reduces performance substantially.²³ This research doesn't expose anything we don't already know as a society. It is the same reason why soldiers returning from the battlefield must undergo psychological assessments. War, chaos, and violence causes psychological trauma. If the most violent neighborhoods of Chicago are analogous to war-torn Iraq, then children living in those Chicago neighborhoods are prone to the same traumas as soldiers returning from war. According to Howard Spivak M.D., director of the U.S. Centers for Disease Control and Prevention's Division of Violence Prevention, "youth living in inner cities show a higher prevalence of post-traumatic stress disorder (PTSD) than soldiers."²⁴ Spivak presented research at a congressional briefing in April 2012 showing that children are essentially living in combat zones. Unlike soldiers, children in the inner city never leave the combat zone and often experience trauma repeatedly.²⁵ While it is not uncommon to hear of a soldier returning from the field of battle having developed PTSD, it is less common to make that same correlation to a child who has to walk the same streets where the night before multiple people were gunned down, and there is an ever-present threat of violence. Though medical experts agree that PTSD manifests itself in different ways, our society is still slow to recognize that PTSD may be the reason why that poor child from a distressed community won't sit still in class, has a

²³ *Id.* at 4

²⁴ Spivak, Howard. "Inner City Kids Have Higher Rates of PTSD than Combat Veterans." *California's Children*. May 8, 2012. <http://californiaschildren.typepad.com/californias-children/2012/05/may-8-2012-youth-living-in-inner-cities-show-a-higher-prevalence-of-post-traumatic-stress-syndrome-ptsd-than-us-soldiers.html#.U--PV0tU31r>

²⁵ *Id.*

hard time following simple directions, or struggles with reading or math skills. Instead, a child's poor scholastic performance is often blamed on bad parenting or simply a lack of motivation on the child's part.

The Solution

The great news is that despite all the adversities that are the byproducts of poverty, children are resilient! Thankfully, a child's outcome is not determined by a single factor, but instead by a conglomerate of factors. The child that is a resident of a violent neighborhood may still have a warm and nurturing family support system that will help that child succeed beyond their troubled streets. The child who did not receive the appropriate attention and communication from her parents and guardians at home may find that friends, neighbors, or teachers make up for that element of development missing from home. The child who cannot afford clothing and supplies, and who is bullied may be psychologically strong enough to rise above that negativity and prosper academically. A December 2005 report from The Urban Institute in Washington D.C. showed that some children who faced environmental stresses such as substandard housing in high-poverty urban communities with high levels of crime and drug trafficking appeared to be thriving despite the many risks they faced, while others were already having serious problems with behavior and academic achievement.²⁶

The best way to ensure that children are provided with the proper tools and environment for development at the earliest stage is to eliminate poverty. Of course, that is a gross understatement and will probably never happen. Thank goodness that is

²⁶ Cover, Elizabeth; Eiseman, Michael; Popkin, Susan. "Resilient Children: Literature Review and Evidence from the HOPE VI Panel Study." *The Urban Institute*. December 2005. http://www.urban.org/uploadedPDF/411255_resilient_children.pdf

the best way, but not the only way. The best alternative I can offer is a two-fold approach to fighting the effects of poverty on early childhood education: The first is based on the research and findings of Professor Heckman. We as a society must realize the long-term economic benefits in investing in quality early childhood education. Poverty often begets poverty, and only by breaking that cycle will we have hope for a better tomorrow. The United States has been lagging behind the rest of the world in realizing the importance of early childhood intervention on the fabric of a society. While we may be decades away from implementing the Reggio Emilia school system of Italy, our educators are realizing that our current system of education is failing, and we must re-evaluate the way we approach learning. In order to successfully change the way we look at early childhood education, federal and state governments must be onboard and willing to fund and support such initiatives. By allocating more funds to enriching our children today, I believe we will begin to experience lower levels of poverty in the future. The drawback of Heckman's theory is that we may have to wait decades to begin seeing the effects of our investment today.

The second approach to combating the effects of poverty deals with the present. We can make an immediate impact on the development of impoverished children by reinforcing their systems of support, i.e., the parents and guardians. Poor parents are often so concerned with trying to keep a roof over their heads that their child's early educational needs gets put on the back burner. Furthermore, in this technologically advanced age, parents do not spend enough time conversing with their children, which would help to greatly increase a child's vocabulary as outlined in the Time article. Parents need to be educated on the benefits of early childhood intervention, as well as

given enough opportunities to access these quality programs within their budget. That is why I feel that the White House's plan for early childhood education is so important. I do not believe that families in poorer neighborhoods are collectively refusing to enter their children into preschool programs, but simply cannot afford to do so. If the system provided for these children, then our society would greatly benefit from it.

Conclusion

Few, if any, would argue against the importance of early childhood education. But if everyone is in agreement that providing quality education to children at their earliest stages of development is important, then why aren't we doing more as a society to ensure those needs are met? A child's development does not begin at kindergarten or even at prekindergarten, but begins as soon as soon as the child leaves the womb.²⁷ While our society may not be able to control when and where children come into the world, we can control the environment into which the child is born. Investments in ensuring the child begins their journey of learning and exploration in a safe, nurturing environment at the outset will lead to brighter futures for the next generations.

²⁷ Some studies suggest that learning actually begins in the womb, where babies first learn to recognize words. See Skwarecki, Beth. "Babies Learn to Recognize Words in the Womb." August 26, 2013. <http://news.sciencemag.org/brain-behavior/2013/08/babies-learn-recognize-words-womb>