INTRODUCTION

You may have heard the slang expression “hangry”, referring to the concept that when we are hungry, we are angry. This expression is used when a person is being generally grumpy, and not productive, due to their hunger. It describes the feeling of being hungry to the point that it is irritating or even infuriating.\(^1\) Arguably, most would agree that when one is hungry, they are not functioning to their full capacity. This feeling of anger and irritability when one is hungry is caused by a drop in the body’s blood-glucose level. If this level decreases enough, “your brain will perceive it as a life-threatening situation.”\(^2\)

A shocking number of children in the United States live in poverty: more than 16 million, or 22%.\(^3\) Those living in poverty frequently suffer from hunger, although unemployment may be a better indicator of food insecurity. “48.1 million Americans lived in food-insecure households,

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including more than 15 million children.⁴ A child should never have to live wondering where their next meal is going to come from. Another consideration is the oft-poor quality of food available to those in poverty. Food available from food shelters or school lunches may not be as nutritious or satisfying as those afforded by individuals who do not live in poverty. The focus of this article is how poverty-caused hunger can affect a child’s chance at a successful education and their ability to learn, and how in turn, this negatively affects them well into adulthood. These children are essentially set up for failure at a young age. This piece also touches briefly on the programs that are aimed at combating these issues for children, which are not enough given the amount of children who go hungry in the United States today.

I. POVERTY-CAUSED HUNGER AND CHILDREN

Twenty-two percent of all children in the United States today live below the federal poverty level. This number does not account for the amount of lower-income families who subsist just above the federal poverty level, which is just under $24,000 for a family of four.⁵ Almost forty percent of American children will live at least one year of their life in poverty. Persistent childhood poverty is also a problem. 1 in 10 children live below the federal poverty line for at least half of their childhood. Not surprisingly, statistics support the contention that children who have a long, persistent history of living in poverty will often be disadvantaged, both educationally and in employment.⁶

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In Buffalo, a majority of children live in poverty. This is unacceptable. For children under 18, the poverty rate “increased from 45 percent in 2012 to 50.6 percent in 2013.” Out of the 75 biggest cities in the United States, Buffalo is third on the list for highest poverty rate among children. “Children living in poverty are less likely to have access to quality health care, early childhood education, consistent housing and a stable family environment, all things that research consistently shows can affect their learning.”

It is not hard to imagine the negative impact poverty has on a child’s well being. Chronic and psychological stress and consistent childhood poverty can cause a child to have difficulty learning and ultimately lead a child to be less successful in school. A 2007 study discussed the concept that childhood poverty actually decreases one’s life expectancy in adulthood and most interestingly enough was that this occurred regardless of the adult’s socioeconomic status. “Something in the early life experiences of low-income individuals sets them on a life trajectory of impaired health.”

When compared to their financially-stable counterparts, poor children in the United States are more likely to exhibit diminished health and developmental problems. This was determined by an analysis of various areas, including physical health, cognitive outcomes, school

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achievement outcomes, emotional or behavioral outcomes, or other outcomes such as experiencing hunger.\textsuperscript{10} Child poverty sets individuals up for a litany of problems later in life.

II. HUNGER AND THE EFFECT ON A CHILD’S EDUCATIONAL GROWTH AND DEVELOPMENT

It is a shame that in a first world country such as the United States so many children go hungry on a regular basis. Even more embarrassing is the outcry we often hear against social welfare programs aimed at combating the pervasive problem of child hunger among other issues. A family’s economic condition and economic environment during a child’s early years has the most effect on a child’s achievement, and more so when families are classified as low-income. Studies have analyzed the extent to which “poverty adversely affect[s] cognitive and behavioral development and thereby reduce[s] opportunities for success and happiness in adulthood”.\textsuperscript{11} One way in which poverty affects children is in the decrease of the quality of the home environment. These qualities include learning, the warmth of mother-child interactions, and the physical condition of the home – all of which can be negatively affected by poverty.\textsuperscript{12}

A child needs adequate nutrition in order to develop and thrive. Without nutritious food, children will have health problems that other children who are not hungry or impoverished would not face. Often, poor families will buy the cheapest food available in order to keep their household fed, even if they knew that the cheap food was not a healthy option.\textsuperscript{13} “15.9 million

\textsuperscript{12} Duncan, Greg J., et al., 409.
children under 18 in the United States live in households where they are unable to consistently access enough nutritious food necessary for a healthy life.”\textsuperscript{14} This is particularly harmful for children because of the long-term consequences of hunger and inadequate nutrition. Children who grow up hungry will face “poor health and stunted development from the earliest stages of life.”\textsuperscript{15} In the 2016 Hunger Report commissioned by Bread for the World Institute, “hunger and food insecurity increased health expenditures in the United States by $160 billion.”\textsuperscript{16} Not only does hunger have negative affects on child development, but upon the cost of healthcare and the prevalence of chronic diseases as well.

A study done by Cornell researchers on the income-achievement gap determined there is an inverse relationship between childhood poverty and a child’s working memory. This effect on a child’s memory is further exacerbated by the elevated chronic stress a child will often experience by living in poverty. A child’s cognitive development can be influenced by the family’s income, particularly when considering the harmful effect economic hardship has. The longer a child lives in poverty, the greater the negative impact upon a child’s achievement.

Evidence has been presented that a family’s income can predict with relative accuracy how a child will fare in various area of scholastic achievement, such as grades, scores on standardized


\textsuperscript{15} “Child Development.” \textit{Feeding America}. 2016.

tests, and educational attainment. “The longer the duration of childhood exposure to poverty, the worse achievement levels become”.  

Childhood poverty has a negative effect on working memory in young adults and is exacerbated by the impact chronic stress has on this relationship. “Working memory is essential to language comprehension, reading, and problem solving, and it is a critical prerequisite for long-term storage of information.” This study determined that chronic childhood stress can bring upon negative effects in working memory later in life, having found “deficits in working memory between low- and middle-socioeconomic status (SES) kindergarten children” and between “low- and middle-SES 11-year-olds”. This supports the idea that a child living in poverty with inadequate access to nutrition will have more problems succeeding in school than a child who does not have the stress and malnourishment of living in poverty, and thus perhaps may not have the same opportunities present in their lives.

A lack of adequate nutrition can cause a multitude of health problems in children, and is particularly devastating during the first years of a child’s life when they need nourishment the most. Such problems include stunted growth, weakened immunity, and cognition. It is well-grounded that undernutrition in a person’s early life can affect them throughout the rest of it, and effectively stunt intellectual development. Malnutrition alone, however, is not always a predictor of poor academic performance. Other factors such as income, education, and the environment in which one was raised also play into intellectual development as well. In

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18 Evans, Gary W. and Michelle A. Schamberg, 6545.
19 Evans, Gary W. and Michelle A. Schamberg, 6545.
addition to considering malnutrition’s potential effects on the brain itself, a child lacking adequate nutrition will have a decreased focus and will have more difficulty concentrating and decreased mental ability when compared to their nourished peers. This is because malnourishment causes a lack of energy, and this lack of energy can lead a child to interact less with people and its surroundings. This would imply that decreases in cognitive ability are caused not necessarily by malnourishment itself, but rather, the impact of hunger upon the body and the mind. “Malnutrition affects intellectual development in part by compromising many different aspects of a child’s development”. Poor diet coupled with economic adversity can hinder a child’s intellectual ability later in life.\(^{21}\) “[W]hen the social and economic aspects of a child’s environment cannot be easily changed, providing adequate nutrition during infancy and later will at least lessen the cognitive deficits engendered by poverty”.\(^{22}\)

III. SOCIAL WELFARE PROGRAMS AIMED AT COMBATING POVERTY-INDUCED CHILD HUNGER

There are various social welfare programs instituted to help combat childhood hunger and malnutrition. Programs include Women, Infants, and Children (WIC), Supplemental Nutrition Assistance Program (SNAP), and free or reduced school breakfasts and lunches through the National School Lunch Act. These programs aim to provide children and families in poverty with adequate nutrition.

Pregnant mothers that do not have adequate nutrition will be “more likely to experience birth complications than women who are food secure.”\(^{23}\) Evidence supports the contention

\(^{21}\) Brown, J. Larry and Ernesto Pollitt, 39-40.
\(^{22}\) Brown, J. Larry and Ernesto Pollitt, 42.
that “maternal diet and lifestyle choices influence the long-term health of the mother’s children.” Nutrition such as folic acid, iron, choline, calcium, and iodine are important for the health of mother and child during pregnancy. “[T]he prenatal period constitutes a critical convergence of short- and long-term factors affecting the lifelong health of mother and child.”

WIC was implemented in 1972 to health and social services to low-income pregnant women, children up to age five, and infants whom are deemed to be at risk, nutritionally. The services that are provided include supplemental nutrition, nutrition education, and health care referrals. To qualify for WIC in New York State, one must live here, meet income limits or qualify for other benefits such as SNAP, TANF, or Medicaid, and have a dietary need. Studies have determined prenatal WIC participation correlated with higher birthweights, while those children receiving inadequate prenatal care had lower birthweights. Birthweight can be an accurate predictor of both short- and long-term health problems for newborn children, such as respiratory problems or developmental disabilities.

“Inadequate access to sufficient food, or food insecurity, occurs in more than 10 percent of households in the United States and can be as high as 80 percent among high-risk populations.” The populations most vulnerable and at-risk are elderly and children, either because they are unaware of the nutrition or other benefits they could qualify for or are too proud to use them

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or too embarrassed to admit they do not have adequate food. Three fourths of homes that qualified for SNAP benefits house a child, an elderly person, or a disabled person. “One-in-five or more American children in forty states and the District of Columbia lived in food-insecure households in 2009.”

Another program that helps to address hunger in children is the National School Lunch Act. The National School Lunch Act was passed by Congress in 1946. Among other things, the Act set guidelines for the minimum nutrition standards that must be satisfied by the participating schools. Two other programs also aim to provide nutrition to impoverished children, the School Breakfast Program and the Summer Food Service Program, serve children free or reduced cost meals at school. Of the three, the National School Lunch Program serves the most school lunches to eligible children.

CONCLUSION:

It is hard to pinpoint exactly how poverty can negatively affect children because there are so many different factors are negatively affected by poverty, such as nutrition, mental and physical well-being, and cognitive development. Studies often analyze some, but not all, of these various outcomes. The effect poverty has on children can be different depending on the child and the situation. It seems as though poverty can be said to negatively affect a child’s access to adequate nutrition, and this malnourishment can impact a child’s likelihood of success for the rest of its life. It is clear that childhood hunger is a problem that is not going to be

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29 Brodie, Juliet M., et al., 261.
alleviated on its own. It is also evident that the social welfare programs the United States currently has available are not enough to combat this problem. It remains to be seen what will be done to address this pervasive issue.