

Overview

A significant portion of adults and children in the United States exhibit low literacy levels. This problem has broad social implications impacting every facet of an individual's life, particularly that of socioeconomic status. Literacy (or illiteracy) can be directly linked to socioeconomic status (SES), and due to the correlation between SES and ethnic demographics, minorities are severely overrepresented. Low literacy levels persist despite significant investment, and illiteracy has become an intergenerational problem due to the relationship of parent-to-child literacy transference. It is possible to resolve this issue and improve overall (both adult and child) literacy in the U.S. by reversing the cycle of illiteracy at the home level with the positive downstream effect of improving SES.

Significance of the Problem (Scope)

The United States is in the midst of an illiteracy epidemic. Current data demonstrate that literacy among adults and children in the United States is markedly low, and, despite significant strategic efforts and financial investment, reading scores are not in any tangible way improving over time.^{1,2} A major contributing factor to the illiteracy epidemic is a pronounced deficiency in the early development of child literacy skills in the home environment, and this is, in part, due to caregivers' overall literacy skills.³

Fourth-grade testing shows that 65% of all U.S. children score below “proficient” as outlined by NAEP.^{4,5} Of the tested 4th graders, 35% (roughly 21 million) read at the “basic”⁶ or lowest level. Further, 34% scored below “basic”, which is defined as “performance that falls below our lowest performance level”,⁷ constituting what is fundamentally widespread illiteracy. This data shows that effectively, a third of children cannot in any substantive way read, and another third of all US children score in the lowest reading category.

This issue is particularly concerning because children who score low on literacy assessments

¹ <https://nces.ed.gov/pubs2020/2020306.pdf>

² <https://nces.ed.gov/programs/coe/indicator/cnb>

³ <https://eric.ed.gov/?id=ED363441>

⁴ <https://www.nationsreportcard.gov/reading/nation/achievement?grade=4>

⁵ <https://nces.ed.gov/programs/coe/indicator/cnb>

⁶ <https://www.nationsreportcard.gov/itemmaps/?subj=RED&grade=12&year=2019>

⁷ <https://www.nagb.gov/content/dam/nagb/en/documents/naep/ward-naep-achievement-levels.pdf>

continue to score low throughout their first 12 years of formal education.⁸ Research shows that children who experience early literacy deficits face persistent challenges throughout their academic careers.⁹ This is borne out not just in the research but through the raw data, which shows a staggering 30% of graduating children score below “basic”,¹⁰ or, in other words, are *functionally illiterate*. By 12th grade, 63% of children in the United States are classified as non-proficient readers. These numbers reflect the fourth-grade data and exemplify the lack of development over time. While the lack of development through primary education is of great concern, this issue is compounded by the fact that children who graduate with low literacy levels rarely develop their ability into adulthood.¹¹

We see that, in general, adult literacy in the United States is comparatively very poor when measured against other developed countries.¹² Adult literacy data shows that, in the United States, 14 percent (30 million) of adults demonstrated skills in the lowest level of prose, document, and quantitative proficiencies, with 11 million deemed “nonliterate”. Further, 29% or 63 million Americans can only “perform simple and everyday literacy activities”. This data shows that collectively, 43% (nearly half) of adult U.S. citizens face significant challenges when engaging with literary text.¹³ It is evident that the illiteracy epidemic is widespread and is made up of both children and adults.

Negative Implications (Justification)

While recognizing the scope of the literacy epidemic in the U.S. is important, it is of equal importance to consider the societal impact. A broad range of significant issues, both individual and communal, is associated with low literacy levels. These include but are not limited to, social-emotional, health, and economic impacts.

Socially, individuals with low levels of literacy tend to have substandard employment opportunities, which result in lower income, invariably leading to a host of downstream issues such as low self-esteem and increases in crime.¹⁴ Compounding this, individuals with low literacy often struggle with a range of daily reading-associated tasks, both complex and noncomplex, like filling out applications, reading medicine bottles, or, of critical importance, identifying real and fake news/information.¹⁵

Besides psychological impacts like low self-esteem, low literacy can lead to other health-related issues. Research shows that individuals who struggle with literacy are more prone to high-risk sexual behavior.¹⁶ The partially literate or illiterate have higher rates of hospitalization, lower engagement rates with preventative health services, and a diminished understanding and adherence to medical advice.¹⁷

In terms of impact, the literacy rate for adults and children is not simply representative of potential quality of life outcomes for partially literate or illiterate individuals but comes with an additional

⁸ <https://files.eric.ed.gov/fulltext/ED542022.pdf>

⁹ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4610292/>

¹⁰ <https://www.nationsreportcard.gov/reading/nation/achievement/?grade=12>

¹¹ <https://eric.ed.gov/?id=ED542022>

¹² <https://www.oecd.org/skills/piaac/Country%20note%20-%20United%20States.pdf>

¹³ https://nces.ed.gov/naal/kf_demographics.asp

¹⁴ <https://www.ojp.gov/ncjrs/virtual-library/abstracts/prison-literacy-connection>

¹⁵ <https://worldliteracyfoundation.org/wp-content/uploads/2021/07/TheEconomicSocialCostofIlliteracy-2.pdf>

¹⁶ *Ibid*

¹⁷ <https://www.ncbi.nlm.nih.gov/books/NBK11942/>

economic cost.¹⁸ Effectively, this epidemic has a recurring cost of 2.2 trillion dollars to the U.S. economy each year.¹⁹ While it is certainly important to consider the broader national economic impact of illiteracy, it is critical to recognize the negative impacts on an individual level, both economically and in terms of quality of life.

We see that adult illiteracy on the individual level is directly correlated to personal income. Simply stated, decreases in a person's literacy produce decreases in yearly income. The range of this impact on individual yearly wages is roughly 7 to 28 thousand dollars, depending on initial literacy level and other demographic variables, such as education, age, gender, and race.²⁰ Low literacy is directly correlated to lower socioeconomic status.

Socioeconomic Status and Minority Groups

A plethora of research has shown that demographics and socioeconomic status (SES) present significant implications for literacy development and general academic achievement.^{21 22} Again, the data bears this out. Children from lower-income households, as well as homes in which the caregivers have lower educational backgrounds, have lower literacy development when compared to higher SES households or homes in which the caregivers have a higher education.²³ Children from low SES households are statistically less likely to show academic gains over time, have higher rates of absenteeism, experience lower exposure to reading materials and spoken conversations, and enter school with lower baseline vocabulary.²⁴

Children from low socioeconomic households suffer from what has been deemed the “30 million word gap” and, as the name suggests, by age three, have been exposed to 30 million fewer words from both oral engagement and shared book readings.²⁵ This is catastrophic in terms of literacy development. Compared to other developed countries, these children exhibit significantly less growth over time as correlates to other nations.²⁶ This issue, though not endemic to the United States, is drastically more pronounced.

Minorities are categorically over-represented (as communities and individuals) concerning low socioeconomic status.²⁷ Because they experience disproportionately low SES, Blacks and Hispanics suffer higher dropout rates, are more likely to attend high-poverty schools, be deprived of critical educational resources, and are up to four times more likely to have poor literacy skills.²⁸ Hispanics compose over half of those within the lowest level of literacy, and one in five are Black. Therefore, it is not surprising that minorities who have a higher probability of being faced with low socioeconomic status underperform academically.^{29 30} While it is necessary to understand that general academic

¹⁸ <https://worldliteracyfoundation.org/wp-content/uploads/2021/07/TheEconomicSocialCostofIlliteracy-2.pdf>

¹⁹ https://www.barbarabush.org/wp-content/uploads/2020/09/BBFoundation_GainsFromEradicatingIlliteracy_9_8.pdf

²⁰ Ibid

²¹ <https://www.sciencedirect.com/science/article/pii/S0959475218308703#:~:>

²² <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3085132/>

²³ <https://nces.ed.gov/pubs2021/2021009.pdf> (table 220.40)

²⁴ <https://users.manchester.edu/student/lehouser/profweb/houserle340rdgresearch.pdf>

²⁵ <https://www.aft.org/sites/default/files/periodicals/TheEarlyCatastrophe.pdf>

²⁶ <https://www.oecd.org/skills/piaac/Country%20note%20-%20United%20States.pdf>

²⁷ <https://www.apa.org/pi/ses/resources/publications/minorities>

²⁸ <https://www.oecd.org/skills/piaac/Country%20note%20-%20United%20States.pdf>

²⁹ <https://www.apa.org/pi/ses/resources/publications/minorities>

³⁰ <https://www.oecd.org/skills/piaac/Country%20note%20-%20United%20States.pdf>

achievement, and subsequently literacy development is multidimensional and embedded within interconnected systems, it is similarly important to recognize that a primary determinant for academic achievement is socioeconomic status and, therefore, ethnic demographics.³¹

Transgenerational Academics (Perpetuation)

Substandard literacy development is a self-perpetuating phenomenon.³² Deficiencies in literacy are a *transgenerational* issue, disproportionately impacting minorities and families of lower socioeconomic status.³³ Parents or caregivers who score lower on literacy evaluations are less likely to expose their children to learning opportunities that foster robust literacy development.³⁴ Children entering school who lag in development have a significantly more difficult time becoming proficient readers.³⁵ These children eventually leave school as poor readers, experiencing a reduced probability of rising through the socioeconomic ranks. Especially those who leave by dropping out, which poor readers do at a rate of five to one.³⁶ Indisputably, children become adults, and statistically, achievements or deficiencies in academic endeavors tend to persist through this transition.

Understanding the implications of intergenerational educational achievement is vital in both the identification of the problem and properly understanding the solution to the illiteracy epidemic. Research shows the reality that family education is perpetual in nature and that literacy as a component of this has significant and measurable long-term effects. These effects can either be positive or negative depending on the home environment. Families that engage in meaningful literacy activities that promote the development of the fundamental literacy building blocks (i.e., phonics, phonemic awareness, letter-sound correspondence) consistently show evidence of greater overall literacy development of the children, even outperforming children who are recipients of in-school reading intervention.³⁷

The most influential variable in providing primary education to children has been parental educational levels, and it has been discovered that, as a general trend, the more highly educated the parents or caregivers, the greater the success in providing primary education to children.³⁸ Children born into richly nourishing cultures of home literacy tend to grow literate, to a large extent, even before they enter environments designed specifically for cultivating literacy.

Children who enter primary school with foundational literacy knowledge outperform their contemporaries that have not received this initial instruction.³⁹ Having pre-developed schemas relating to literacy directly impacts a child's overall performance in not just literacy-based education but in every measurable academic area.⁴⁰ This, therefore, raises the probability of upward mobility within the socioeconomic structures as the child develops into adulthood, leading to improved quality of life. These improvements subsequently lead to higher literacy rates for the next generation.

³¹ <https://psycnet.apa.org/record/2008-05694-001>

³² <https://eric.ed.gov/?id=ED363441>

³³ <https://www.nationsreportcard.gov/reading/nation/groups/?grade=4>

³⁴ https://www.aft.org/ae/spring2003/hart_risley

³⁵ Ibid

³⁶ <https://eric.ed.gov/?id=ED518818>

³⁷ <https://bpspsychub.onlinelibrary.wiley.com/doi/10.1111/j.2044-8279.1982.tb02498.x>

³⁸ <https://files.eric.ed.gov/fulltext/ED321063.pdf>

³⁹ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4610292/>

⁴⁰ <https://pubmed.ncbi.nlm.nih.gov/18473206/>

Reversing the Trend (Solution)

This literacy deficiency in both adults and children provides an opportunity for new formats of literacy instruction to accommodate these gaps. Year after year, the rates of literacy in children vary little. That is not to say that individuals, companies, and government agencies are not trying, because they are. The Federal government alone spent 739 billion dollars on public education in 2018, and it is estimated that philanthropic efforts reached hundreds of millions.⁴¹ Considering the lack of literacy improvement over time, it is clear that without fundamentally changing how literacy is taught, no amount of money or good intentions will change the literacy dilemma.

While the compounding negative effects of family literacy education are evident, a reversal of this effect is possible by specifically investing in family home literacy. This can be achieved by providing books to families for free and teaching parents and caregivers the most effective way to read to their children. Tangible impacts in child and adult literacy will be derived from engagement with Lili's educational framework and will have long-lasting impacts. This is an investment that pays dividends on an intergenerational scale.

⁴¹ <https://nces.ed.gov/fastfacts/display.asp?id=66>