

Pre-K Program as Panacea to Academic Performance and Achievement Gaps between High and Low Socio-Economic Status (SES) Students in Nigeria

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Abstract— The fact that socio-economic status (SES) impacts on academic performance and achievement is universally established. Abundant researches have shown that students from high socio-economic background academically perform better than their peers from low socio-economic background. The fact is beyond contention. Interest and energy of educationists should be focused on solving the problem. Therefore, this paper prescribed the Pre-K Program as a veritable and effective solution to academic performance and achievement gaps existing between students due to SES of their parents. It is opined that the implementation of the Pre-K Program as recommended by this paper will eliminate the problem of existence of academic performance and achievement gaps between students of low and high SES background and parentage. The government of Nigeria and all stake holders in the educational sector are called upon to rise to the situation in eliminating the effects of SES on academic performance and achievement gap of students.

Keywords: Academic performance; Achievement gaps; Pre-K Program; Socio-Economic Status.

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BACKGROUND TO THE STUDY

Researches have shown that parental values and experience, education, vocation/profession, religion and socio-economic background, status and intelligence have either facilitating or inhibitory effects on the child (Mpughe, 2017). The socio-economic status of a parent goes a long way to shape a child's personality both morally, academically, economically, socially, spiritually or otherwise (Jacquelyn & Pamela, 2005).

In education, children's socio-economic status (of which income is a key component) is one of the most significant predictors—if not the strongest predictor—of educational success, whether that success is measured by test scores, high school graduation rates, or college attendance and completion rates. As a result of the close connections between poverty, inequality, and educational performance, achievement gaps by social class grew markedly from the 1970s to 2000 as inequality grew, especially between children in families at the top of the income distribution and all other children (Emma & Elaine, 2017).

STATEMENT OF THE PROBLEM

Researches and data have shown that students from advantaged and high socio-economic status background and parentage academically perform better than their peers from disadvantaged and low socio-economic status background and parentage. This shows an established correlation between the socio-economic status parentage and background of students and their academic performance and achievement gap. The problem of the gap between the academic performance and achievement of students from low and high SES has been observed to remain throughout the academic endeavor of the students. This paper then is a prescription of a solution to the problem.

PURPOSE OF THE STUDY

It has been demonstrated that the later high academic performance and achievement of students from high SES is due to the early investment of the high SES parents on their wards. Therefore, the purpose of this paper is to recommend the Pre-K Program as a veritable solution to the problem of academic performance and achievement gap that exists between students from low and high SES. The Pre-K Program has been tried and tested in several developed nations of the world like the United States of America. It is thus the position of this paper that the Program would work if implemented in Nigeria.

LITERATURE REVIEW:

Socio-economic status (SES)

The concept of socio-economic status based on socio-economic factors represents one of the major systems of stratification. Social stratification arises out of the

recognition in all societies that people are ranked or evaluated at a number of levels of social class. In fact almost every community has within it, groups which think of themselves being somewhat alike (Mpughe, 2017). The members of these groups may exhibit similarities in choice of food, housing, dressing, language, occupation, income values, social behaviour and even colour or race.

Socio-economic status (SES) encompasses not just income but also educational attainment, financial security, and subjective perceptions of social status and social class. Socio-economic status can encompass quality of life attributes as well as the opportunities and privileges afforded to people within society. Poverty, specifically, is not a single factor but rather is characterized by multiple physical and psychosocial stressors. Further, SES is a consistent and reliable predictor of a vast array of outcomes across the life span, including physical and psychological health. SES affects overall human functioning, including our physical and mental health. Low SES and its correlates, such as lower educational achievement, poverty and poor health, ultimately affect our society.

Azhar, Nadeem, Naz, Perveen & Sameen (2015) postulated that the economic and occupational level of the home affect performance of students. Farooq (2011) emphasized that the social class of parent is a dominant factor in the academic performance. The academic abilities and the socio-economic background of parents impose considerable constraints upon the performance of students.

High and low socio-economic status

A family could be classified as either of high or low socio-economic status. Parents who are professional senior civil servants, graduates and non-graduates teachers, clerks, traders and businessmen and women of appreciable income parent who have post primary and higher education are referred to as being of high socio-economic status while parent who are craftsman artisans and farmer and parents who have no schooling or have elementary education are referred to as being of low socio-economic status. Differential access to education theory is apparently true in Nigeria. The children of low socio-economic families do not have much access to good education as children of high socio-economic family background.

SES and Educational Issues

Research indicates that children from low-SES households and communities develop academic skills slower than children from higher SES groups (Morgan, Farkas, Hillemeier, & Maczuga, 2009). For instance, low SES in childhood is related to poor cognitive development, language, memory, socio-emotional processing, and consequently poor income and health in adulthood. The school systems in low-SES

communities are often under-resourced, negatively affecting students' academic progress and outcomes (Aikens & Barbarin, 2008). Inadequate education and increased dropout rates affect children's academic achievement, perpetuating the low-SES status of the community.

SES and Family Resources

Literacy gaps in children from different socio-economic backgrounds exist before formal schooling begins. Azhar, Nadeem, Naz, Perveen & Sameen (2015) testifies to the fact that much of the child's educational development starts at home, before he actually starts the formal education. Children from low-SES families are less likely to have experiences that encourage the development of fundamental skills of reading acquisition, such as phonological awareness, vocabulary, and oral language (Buckingham, Wheldall, & Beaman-Wheldall, 2013). Children's initial reading competency is correlated with the home literacy environment, number of books owned, and parent distress (Aikens & Barbarin, 2008; Bergen, Zuijen, Bishop, & Jong, 2016). However, poor households have less access to learning materials and experiences, including books, computers, stimulating toys, skill-building lessons, or tutors to create a positive literacy environment (Bradley, Corwyn, McAdoo, & García Coll, 2001; Orr, 2003). Prospective college students from low-SES backgrounds are less likely to have access to informational resources about college (Brown, Wohn, & Ellison, 2016).

SES and Academic Achievement

Research continues to link lower SES to lower academic achievement and slower rates of academic progress as compared with higher SES communities. Children from low-SES families enter high school with average literacy skills five years behind those of high-income students (Reardon, Valentino, Kalogrides, Shores, & Greenberg, 2013). In 2014, the high school dropout rate among persons 16–24 years old was highest in low-income families (11.6 percent) as compared to high-income families (2.8 percent; National Center for Education Statistics, 2014). The success rate of low-income students in science, technology, engineering, and mathematics disciplines is much lower than that of students who do not come from under-represented backgrounds (Doerschuk et al., 2016). According to the U.S. Census Bureau (2014), individuals within the top family income quartile are 8 times more likely to obtain a bachelor's degree by age 24 as compared to individuals from the lowest family income quartile.

SES and Psychological Health

Increasing evidence supports the link between lower SES and learning disabilities or other negative psychological outcomes that affect academic achievement. Low SES

and exposure to adversity are linked to decreased educational success (McLaughlin & Sheridan, 2016). Such toxic stress in early childhood leads to lasting impacts on learning, behavior, and health (Committee on Psychosocial Aspects of Child and Family Health et al., 2012). Children from lower SES households are about twice as likely as those from high-SES households to display learning-related behavior problems. A mother's SES is also related to her child's inattention, disinterest, and lack of cooperation in school (Morgan et al., 2009). Perception of family economic stress and personal financial constraints affected emotional distress/depression in students and their academic outcomes (Mistry, Benner, Tan, & Kim, 2009).

When do academic performance and achievement gaps begin?

Researches have shown that academic performance and achievement gaps begin early and often persist throughout students' educational years. Studies have also shed some light on how challenges related to low-income status contribute to these gaps (Emma & Elaine, 2017). It has been discovered that children's skill levels at school entry play a critical role in determining how they fare not just in kindergarten, but throughout their school years and their lives. Consequently, the most important intervention must be applied before kindergarten. It is the Pre-K Program.

The Pre-K Program

Pre-K stands for Pre-Kindergarten. The Pre-K Program is an educational strategy to ensure that more children, especially those who are most disadvantaged from Low-SES, have strong early academic and life foundations. It is an early childhood education that offers supports for parents to begin engagement with their children earlier than kindergarten. The Pre-K Program is an interventions to close performance gaps by starting early in children's lives because skill and performance gaps take root before children enter kindergarten and do not go away.

It is an initiative that successfully closed the academic performance and achievement gap between the low and high socio-economic background students in the United States of America based on research by Emma & Elaine (2017) who analyzed data of children that started kindergarten in the fall of 2010 and children who started in 1998. These data are from the Early Childhood Longitudinal Studies (ECLS) of the Kindergarten Classes of 1998–1999 and 2010–2011 (from the National Center for Education Statistics, USA). The research described the type and size of early achievement gaps—and trends in them over time—and points to effective and comprehensive educational policies to avert and close them.

One of the major reasons for the academic performance and achievement gaps advantage of children from higher-income families is the much greater investments that

high-income parents are able to make in their children, including the time these parents are able to spend with their children for leisure and for academically enriching activities. Thus, the Pre-K Program empowers low-SES parents for personal investments in their children's early education through play, reading, and more.

The Pre-K Program strategies that begin addressing children's needs before kindergarten show promise in narrowing academic performance and achievement gaps. These comprehensive interventions narrowed early achievement gaps and boost test scores, increase measures of student well-being, and led to higher rates of advanced course placement and high school graduation among low-income and minority students.

Because parents are their children's first and most important teachers, earlier efforts tend to focus on engaging parents and working with parents and children together. In Minneapolis's Northside Achievement Zone, parents have access to "College Bound Babies," a parenting class that teaches early literacy, numeracy, and positive discipline skills, and the zone's "Foundations" program helps empower parents to be strong advocates for their children and their children's schools. In Joplin and Vancouver, kits for new parents are delivered to hospitals with information on child development, activities to try at home, and links to community resources. Other investments in young children and their families include outdoor play-and-learn opportunities for parents and their children such as Clay County, Kentucky's Community Storywalk and Joplin's Born Learning Trail. Through these different Pre-K Programs, it was discovered that there was improvement in children's early reading and mathematics skills by about a tenth of a standard deviation relative to children who were not exposed to Pre-K Program; having more books at home also continues to have a positive influence on early skills; and irrespective of SES, a composite of reading/literacy activities has a strong, positive relationship with virtually all skills. This relationship is stable over time for reading and mathematics skills and for non-cognitive skills.

CONCLUSION AND RECOMMENDATION

Persistently large academic performance and achievement gaps between high-social-class and low-social-class children and the disparities in opportunity that drive these achievement gaps are factual. The Pre-K Program which is an early intervention program is a sure panacea. The Program has reportedly helped in bridging the academic performance and achievement gaps of low-SES and high-SES students in the United States and other countries where it has been utilized. Studies show that Pre-K Program closes and eliminates achievement gaps at kindergarten entry and delivers long-term benefits to children, their families, and society.

Through the Pre-K Program, parents across all social class groups became more involved in their young children's early education, with the increase in engagement

being especially pronounced among low-SES parents. They read regularly to their infants, toddlers, and preschoolers and to have sung to them and played games with them. The parents also had significantly higher expectations for their children's educational attainment, and mothers themselves were better educated. All of these factors are associated with higher achievement for children irrespective of their SES background.

The influence of socio-economic status, family background and the home learning environment persists from one generation to the next. A strong inter-generational effect on educational attainment can be seen as a failure of the education and training system to effectively maximize student opportunities for all. In this context, family learning is a way to reverse this long-standing association.

The Pre-K Program is an effective strategy to tackle the prevalence of academic performance and achievement gaps by extending learning opportunities beyond the school and supporting parental involvement from the earliest stages of education onwards.

To ensure the effectiveness of the Pre-K Program, the government should provide parents and operators of the Program with material and/or financial supports. Education and scholarships opportunities should be made available especially for mothers in empowering them for the Pre-K Program.

Free meals for the Pre-K Program children outside the present administration's ongoing National regular school meal programmes will provide the right support for children from a low socio-economic background. This is the fundamental premise of Maslow's hierarchy of needs: that until basic or foundational needs—for food, clothing, shelter, health care, and nurturing—are met, higher-order needs, such as the need for education or academics, remain out of reach.

Health and nutrition programs that support the Pre-K Program kids' physical and mental health, as well as their nutrition will boost and sustain early gains by helping keep mothers focused to help the low-SES kids' academic performance like their high-SES peers.

Nigerian Government and stake-holders in the education sector should work towards integrating the Pre-K Program into the National Policy on Education by making it mandatory. Government should provide incentives and empower parents, especially mothers, to be properly equipped with necessary materials to carry out the Program. Pregnant and awaiting mothers should be equipped with the materials for the Program as part of their ante-natal preparation in hospitals, clinics, and health centers and facilities.

REFERENCES

- Aikens, N. L., & Barbarin, O. (2008). Socioeconomic differences in reading trajectories: The contribution of family, neighborhood, and school contexts. *Journal of Educational Psychology*. 100. <http://dx.doi.org/10.1037/0022-0663.100.2.235>
- Ali, S. R., McWhirter, E. H., & Chronister, K. M. (2005). Self-efficacy and vocational outcome expectations for adolescents of lower socioeconomic status: a pilot study. *Journal of Career Assessment*. 13(40). doi:10.1177/1069072704270273
- Art, R., & Rob, G. (2003). Early childhood development: economic development with a high public return. *The Region*. 17 (4).
- Azhar, M, Nadeem, S, Naz, F. & Sameen F, (2013). Impact of parental education and socio-economic on academic achievement of students. *International Journal of Academic Research and Reflection*. 1 (3).
- Bergen, E., Zuijen, T., Bishop, D., & Jong, P. F. (2016). Why are home literacy environment and children's reading skills associated? What parental skills reveal. *Reading Research Quarterly*, 52, 147-160. doi:10.1002/rrq.160
- Bradley, R. H., Corwyn, R. F., McAdoo, H. P., & García Coll, C. (2001). The home environments of children in the United States. *Child Development*. 72. doi:10.1111/1467-8624.t01-1-00382
- Brown, M. G., Wohn, D. Y., & Ellison, N. (2016). Without a map: College access and the online practices of youth from low-income communities. *Computers & Education*. 92. doi:10.1016/j.compedu.2015.10.001
- Buckingham, J., Wheldall, K., & Beaman-Wheldall, R. (2013). Why poor children are more likely to become poor readers: the school years. *Australian Journal of Education*. 57. doi:10.1177/0004944113495500
- Chetty, R., Friedman, J. N., Hilger, N., Saez, E., Schanzenbach, D. W., & Yagan, D. (2011). How does your kindergarten classroom affect your earnings? Evidence from Project STAR. *The Quarterly Journal of Economics*. 126. <https://doi.org/10.1093/qje/qjr041>
- Clotfelter, C. T., Ladd, H. F., & Vigdor, J. L. (2006). Teacher-student matching and the assessment of teacher effectiveness. *Journal of Human Resources*. 41. doi:10.3368/jhr.XLI.4.778
- Doerschuk, P., Bahrim, C., Daniel, J., Kruger, J., Mann, J., & Martin, C. (2016). Closing the gaps and filling the STEM pipeline: a multidisciplinary approach. *Journal of Science Education and Technology*. 25. doi:10.1007/s10956-016-9622-8
- Duncan, G.J., Morris, P.A. & Rodrigues, C. (2015). Does money really matter?: estimating impacts of family income on young children's achievement with data from random-assignment experiments. *Developmental Psychology*. 47 (5).

- Eccles J.S. & Daviskean P. (2013). Impact of parental education and socio-economic status on academic achievement of university students. *International Journal of Academic Research and Reflection*. 3.
- Emma, G & Elaine, W. (2015). Early education gaps by social class and race start U.S. children out on unequal footing: a summary of the major findings in inequalities at the starting gate. *Economic Policy Institute*. USA.
- Emma, G. & Elaine, W. (2016). Making whole-child education the norm: how research and policy initiatives can make social and emotional skills a focal point of children's education. *Economic Policy Institute*. USA.
- Emma, G. (2015). Inequalities at the starting gate: cognitive and non-cognitive skills gaps between 2010–2011 kindergarten classmates. *Economic Policy Institute*. USA.
- Femi O. & Adewale, A. M. (2014). The effects of parental Socio-Economic status on Academic Performance of Students in selected schools in Edu Local Government Area of Kwara State Nigeria. *International Journal of Academic Research in Business and Social Sciences*. 7. ISSN:2222-6990
- Gimbert, B., Bol, L., & Wallace, D. (2007). The influence of teacher preparation on student achievement and the application of national standards by teachers of mathematics in urban secondary schools. *Education and Urban Society*. 40. doi:10.1177/0013124507303993
- Gregory, J.D. & Richard M, (2011). Introduction: the american dream, then and now. *Whither Opportunity: Rising Inequality, Schools, and Children's Life Chances*. New York: Russell Sage Foundation.
- Hill N. E, Castelino, O. R; Lansford J.E; Nowlin, E; Dodge, P; Bates, K.A, & Pettit, G.S (2004). Parents' academic involvement as related school behavior achievement and aspirations. *Demographic variation across adolescence child development*. 75.
- Houle, J. N. (2014). Disparities in debt: Parents' socioeconomic resources and young adult student loan debt. *Sociology of Education*. 87(1). doi:10.1177/0038040713512213
- McLaughlin, K. A., & Sheridan, M. A. (2016). Beyond cumulative risk: a dimensional approach to childhood adversity. *Current Directions in Psychological Science*. 25. doi:10.1177/0963721416655883
- Memon, G.R, Joubis, M.F, Khurram M.A. (2015). Impact of parental Socio-Economic status on students Educational Achievements at secondary schools of District Maller, Karachi. Middle-East. *Journal of scientific Research*. 6 (6). ISSN 1990-9233.
- Mistry, R. S., Benner, A. D., Tan, C. S., & Kim, S. Y. (2009). Family economic stress and academic well-being among Chinese-American youth: the influence of adolescents' perceptions of economic strain. *Journal of Family Psychology*. 23. <http://dx.doi.org/10.1037/a0015403>

- Morgan, P. L., Farkas, G., Hillemeier, M. M., & Maczuga, S. (2009). Risk factors for learning-related behavior problems at 24 months of age: population-based estimates. *Journal of Abnormal Child Psychology*. 37.
- Muijs, D., Harris, A., Chapman, C., Stoll, L., & Russ, J. (2009). Improving schools in socioeconomically disadvantaged areas: A review of research evidence. *School Effectiveness and School Improvement*. 15.
- National Center for Education Statistics. (2008). Percentage of high school dropouts among persons 16 through 24 years old (status dropout rate), by income level, and percentage distribution of status dropouts, by labor force status and educational attainment: 1970 through 2007. http://nces.ed.gov/programs/digest/d08/tables/dt08_110.asp
- Orr, A. J. (2003). Black–White differences in achievement: the importance of wealth. *Sociology of Education*. 76. <http://dx.doi.org/10.2307/1519867>
- Pribesh, S., Gavigan, K., & Dickinson, G. (2011). The access gap: Poverty and characteristics of school library media centers. *The Library Quarterly*, 81(2).
- Ramsey, S.L. & Ramsey, C.T. (1994). The transition to school: why the first few years matter for a life time. *Phi Delta Kappan*. 76 (30).
- Reardon, S. F., Valentino, R. A., Kalogrides, D., Shores, K. A., & Greenberg, E. H. (2013). Patterns and trends in racial academic achievement gaps among states, 1999-2011. <https://cepa.stanford.edu/content/patterns-and-trends-racial-academic-achievement-gaps-among-states-1999-2011>.
- Richard, R. (2004). *Class and Schools: Using Social, Economic, and Educational Reform to Close the Black-White Achievement Gap*. New York: Columbia Univ. Teachers College.
- Sean, F.R. (2011). The widening academic achievement gap between the rich and the poor: new evidence and possible explanations. *Whither Opportunity? Rising Inequality, Schools, and Children's Life Chances*. New York: Russell Sage Foundation.
- Smith, L., Fagan, J.F. & Ulvund S.C. (2002). The relation of cognition memory in infancy and parental socio-economic status to letter intellectual competence. <http://journals.indexcopernicus.com/International+Journal+of+Research,p24780943,3.html>
- Steven, B., et al. (2017). The state of preschool 2016. *National Institute for Early Education Research at Rutgers University*. Newark: N.J.