

Children in Egypt and Colombia: Lack of Education, Child Labor and Malnutrition

Gregory Tenor

Abstract

This article focuses on three challenges children face in Colombia and Egypt: a lack of quality education, child labor, and malnutrition. Before discussing these challenges, the article provides first a brief literature review and some empirical background for Colombia and Egypt, reviewing the levels and evolution of GDP per capita, poverty rates and life expectancy. With regards to education, it reviews the educational opportunities and the pressures children face while attempting to complete school. It then analyzes the degree of child labor in both countries, which is mostly due to poverty of a child's family. Malnutrition typically translates into a lifetime of health problems. Finally, the article offers some solutions that have been suggested to be beneficial for going forward.

I. Introduction

Each year, millions of Egyptian children are born into poverty, suffering from malnutrition at a young age. The poor economic situation and low minimum wage in Egypt requires children to work in positions that may endanger their health even further. Many adolescent girls are forced to drop out of a school, inevitably causing a lifetime of illiteracy. Others who do graduate from school find that they do not have necessary skills for a job. Most woman marry young and many are victims of domestic abuse.

In Colombia, primary school is free and mandatory, but costs related to uniforms and transportation are often prohibitive for poor families. While basic healthcare is also free, medication is prohibitively expensive and results in people acquiring a multitude of illnesses. Many children are also malnourished. Poverty, an unemployment rate of about 10 percent, and decades of armed conflict take a toll on families with children.

This article examines the key factors that have been argued to influence the economic pressures and challenges that put children in situations in which they suffer from hunger, abuse and early labor. Following this introduction, the next two section will provide a brief review of the literature and some relevant empirical background. The fourth section will focus on the various challenges children experience, including inadequate education, forced labor, and malnutrition. It will

compare and contrast these factors in Egypt and Colombia. The last section will provide some conclusions and solutions.

II. Brief Literature Review

There is a relatively large literature examining the situation of children in Colombia and Egypt. Some of this literature goes back decades. The following paragraphs are illustrations for the variety of issues covered in mostly academic publications.

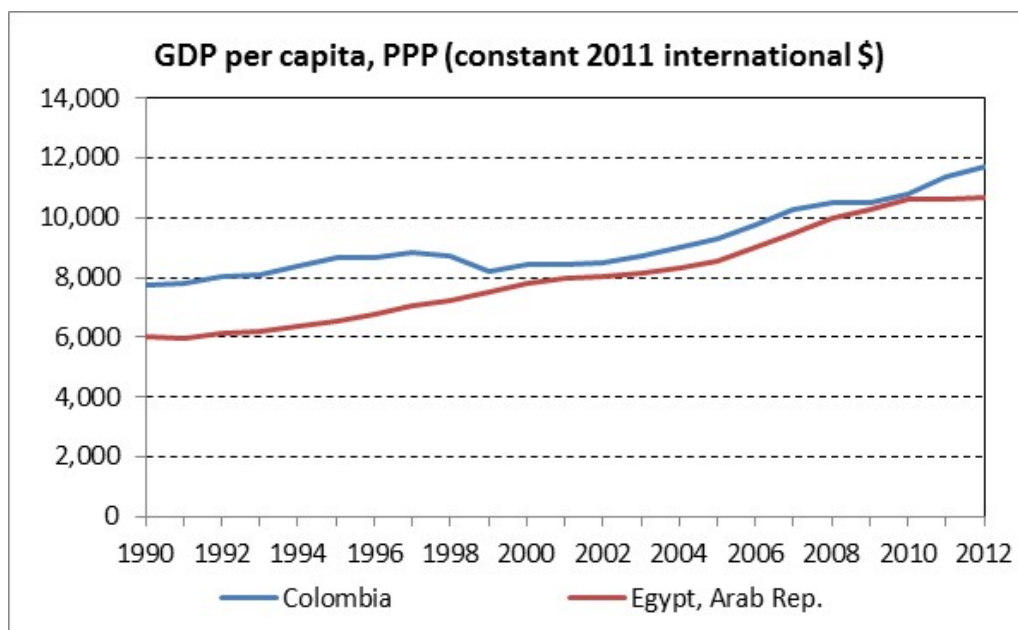
- Heller and Drake (1978) explain that child malnourishment and morbidity are two of the most serious issues with underdevelopment for a Country, and health programs have been evaluated to have a limited impact. This article discusses a study of 200 children over a seven year period in Candelaria, Colombia, focusing on how a children's medical status is influenced by a family's economic status. The study also examined how maternal-child health education and food supplementation can influence a child's nutritional status.
- Cochrane, Khan and Oseba (1990) suggest that Egypt's demographic and population changes have had a significant influence on the economic, political and social structure of the country. Egypt's population in 1976 was twice the amount it was in 1947. The article also explains that illiteracy has decreased from 76 percent to 42 percent for males and 94 percent to 71 percent for females. The article proposes that a wife's age at marriage influences family size, and a smaller family can be more conducive for more resources to the children. Cochrane, Khan and Oseba (1990) also find that contraception has a substantial effect on family size and the economic and physical well-being of children.
- Galal (2002) explains that the education system in Egypt is not aligning with the demands of the market. The report suggests that motivations should be made equal among students, teachers, parents, private education provider and bureaucrats. The report points out that idea that many graduating students cannot find jobs in the workforce and proposes that the demand for labor must expand through market reform.
- Perez and Dabis (2003) examine the impact of sex education programs, especially HIV/AIDS in urban areas of Colombia. Such education has been provided via peers as well as trained teachers in school classrooms. The study suggests that adolescents from the ages of 10-19 directly benefit from such sex education programs and that they are an essential approach to prevent HIV transmission among young people.
- Isanaka, Mora-Plazas, Lopez-Arana, Baylin and Villamor (2007) utilize statistics to conclude that children who suffer from food insecurity (i.e., a limited availability of adequate food) are three times more likely to be underweight than children who consume a nutritious diet. The study determines that food insecurity concerning children positively correlates to maternal age, family income, and single parent status. The article explains that food insecurity (which typically is connected to poverty) is very prevalent in Bogota, the capital of Colombia.
- Raouf, Aziz, Hassan and Samir (2011) report that the main factors of child labor in Egypt include the child's gender, age, place of residence and school attendance. Children living in rural areas are more likely to work than those living in urban areas. The report also explained that older children are more likely to engage in labor, but the authors proposed

that these results could be inaccurate as a result of young children being fearful to admit that they work, as they realize that child labor is illegal.

III. Empirical Background

Figure 1 illustrates the evolution of gross domestic product (GDP) per capita, adjusted by purchasing power parity (PPP) in Colombia and Egypt. It shows that Egypt's GDP per capita was about \$2,000 below that of Colombia in 1990, but has then grown at a more rapid pace than Colombia's GDP per capita, nearly catching up with Colombia in 2010. However, Egypt's GDP per capita has then stagnated during 2010-2012, while Colombia's shows solid growth. Anyway, for most of the years, especially since 1999, Egypt's GDP per capita has been only slightly below that of Colombia.

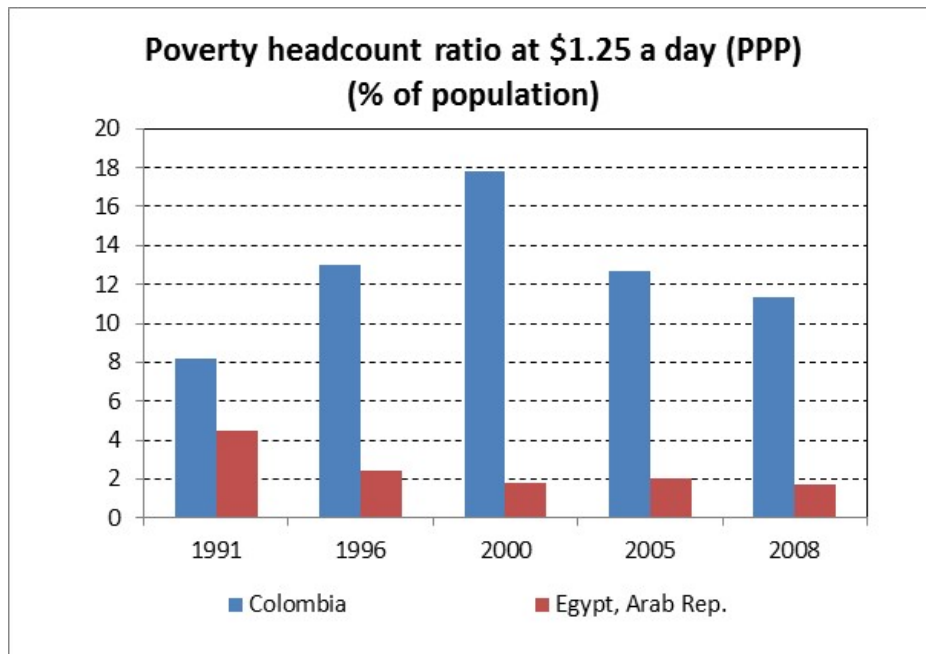
Figure 1: GDP per capita, PPP (constant 2011 international \$)



Source: Created by author based on World Bank (2014).

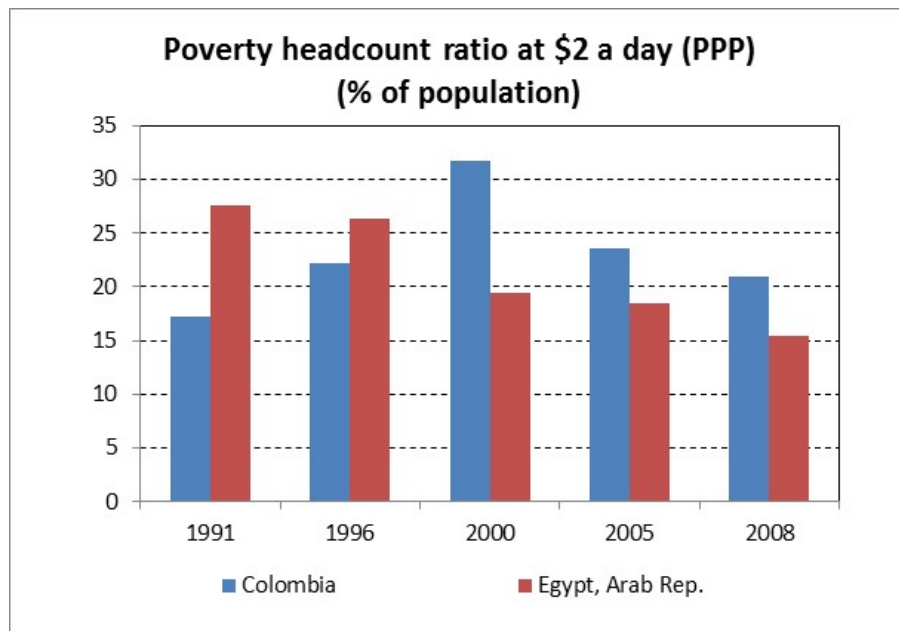
However, even though Colombia's GDP per capita was slightly above that of Egypt, according to the data provided by the World Bank (2014), the poverty incidence is considerably higher in Colombia than in Egypt. Figures 2 and 3 show the poverty headcount ratios at \$1.25-a-day and \$2-a-day, respectively, for all the years such data is available for both countries. Using the headcount ratio at \$1.25-a-day, Colombia's headcount ratio (which fluctuated between 8 and 18 percent) has always been considerably higher than that of Egypt (which decreased from 4.5 percent in 1991 to 1.7 percent in 2008). Using the poverty headcount ratio at \$2-a-day, Egypt had a slightly higher percentage of poor people than Colombia in 1991 and 1996, but a lower poverty incidence at least since 2000.

Figure 2: Poverty Headcount Ratio at \$1.25-a-day (PPP), 1991-2008



Source: Created by author based on World Bank (2014).

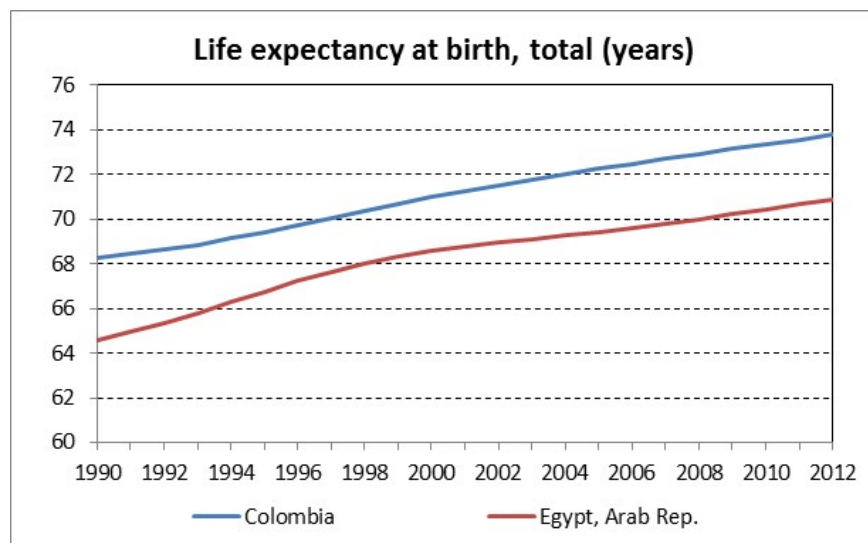
Figure 3: Poverty Headcount Ratio at \$2-a-day (PPP), 1991-2008



Source: Created by author based on World Bank (2014).

Comparing the two countries' life expectancies, Figure 4 shows that both countries have made similar progress. Colombia's life expectancy increased gradually from 68 years in 1990 to nearly 74 years in 2012, while Egypt's life expectancy increased from 64.5 years in 1990 to nearly 71 years in 2012. Egypt's lower life expectancy is consistent with Egypt's lower GDP per capita, but inconsistent with Egypt's lower poverty incidence.

Figure 4: Life Expectancy at Birth (in years), 1990-2012



Source: Created by author based on World Bank (2014).

IV. Discussion

There are several factors that contribute to a child's poor welfare situation in Egypt and Colombia. One of the most serious causes is connected to a poor education system or in many cases, a child's inability to attend school as a result of monetary prohibitions and/or forced child labor. Many children also suffer from malnutrition. The subsequent discussion reviews first some key indicators related to education, then some issues related to child labor, and finally the levels of malnutrition in both countries.

IV.1. Education

Education in Colombia is free and compulsory for children, but costs for school supplies, transportation and uniforms are often too expensive for poor families. As a result, many Colombian children cannot attend school. Additionally, internal armed conflict and impassable rural routes hinder Colombian children's access to education.¹

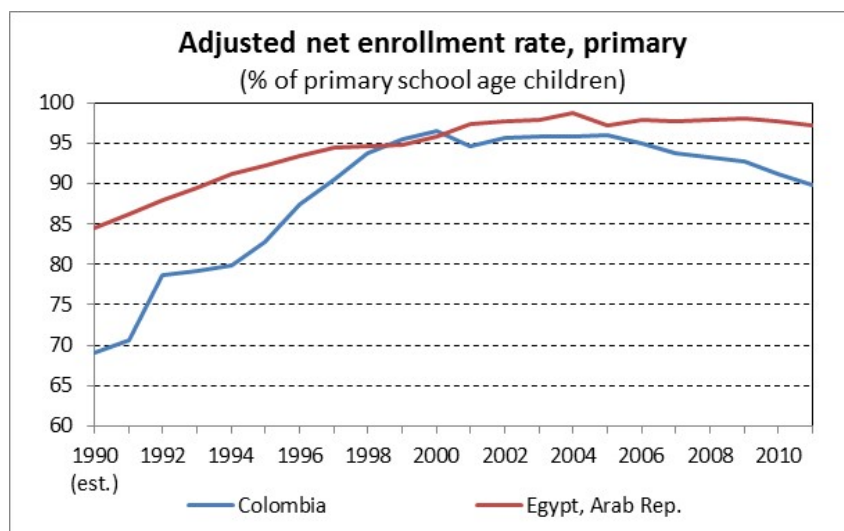
In Egypt, there is a tendency of students, especially female students, to drop out of school at a young age, which then contributes to low literacy rates and low life expectancy since illiterate people may potentially be unable to afford quality healthcare. The percentage of dropouts in

¹ United States Department of Labor (2014).

primary and secondary schools in Egypt exceeded 13 percent in the early 1990s.²

Figure 5 shows that Colombia's net school enrollment ratio at the primary level was with 69 percent in 1990 far below that of Egypt (84 percent). However, both countries increased their primary net enrollment ratios to about 94 percent in 1998. For the subsequent two years, Colombia's net enrollment ratio slightly surpassed that of Egypt's enrollment ratio, but then decreased gradually to about 90 percent in 2011, while Egypt's net enrollment ratio at the primary level stabilized at a considerable higher 97.5 percent during 2001-2011.

Figure 5: Adjusted Net Primary School Enrollment Rate, 1990-2012



Source: Created by author based on World Bank (2014).

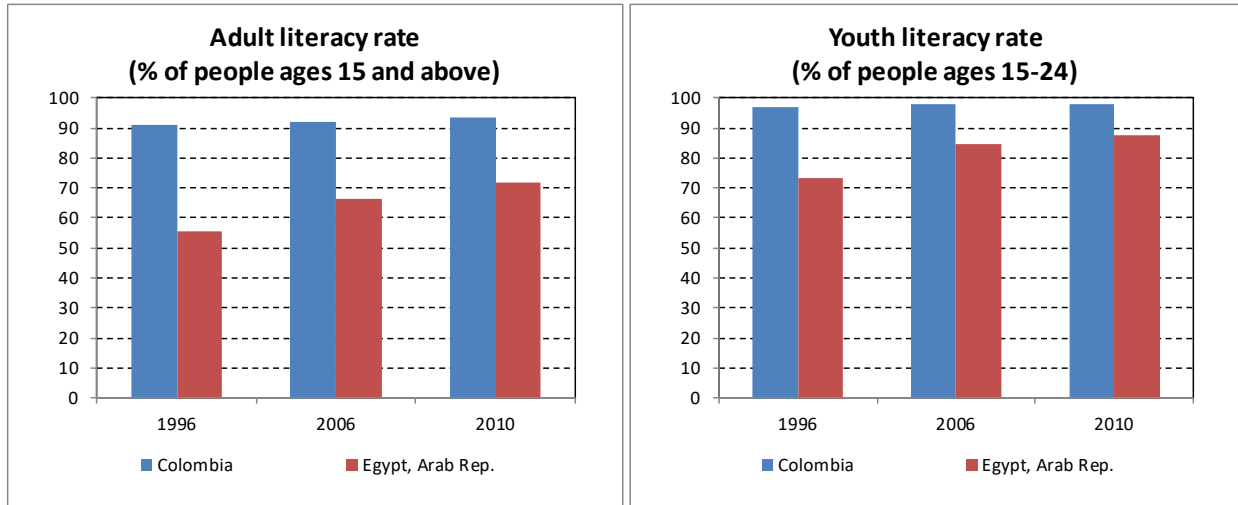
However, looking at either adult or youth literacy rates (Figures 6 and 7, respectively), literacy rates in Egypt are considerably below those of Colombia. This may be due to inaccurate net enrollment data and/or differences in the quality of primary education. Figure 6 shows that adult literacy has increased marginally in Colombia from 91 percent in 1996 to 93 percent in 2010, while Egypt's far lower rates have increased from 56 percent in 1996 to 72 percent in 2010. The same applies to youth literacy, which has (partly due to the already high initial level) increased marginally in Colombia (from 97.0 percent in 1996 to 98.1 percent in 2010), while Egypt's youth literacy rates have increased from 73.2 percent in 1996 to 87.5 percent in 2010.

Despite Egypt's progress in rising literacy rates, one important issue right now is that the demands in the labor market are not matching the education children are receiving in school. Currently in Egypt, there is a persistent increase in the number of graduates who simply enter the unemployment pool. According to surveys concerning the constraints the private sector faces while conducting their business in Egypt, a lack of skilled labor is prevalent in several businesses.³

² Galal (2002).

³ Galal (2002).

Figures 6 and 7: Adult and Youth Literacy Rates, 1996, 2006, and 2010



Source: Created by author based on World Bank (2014).

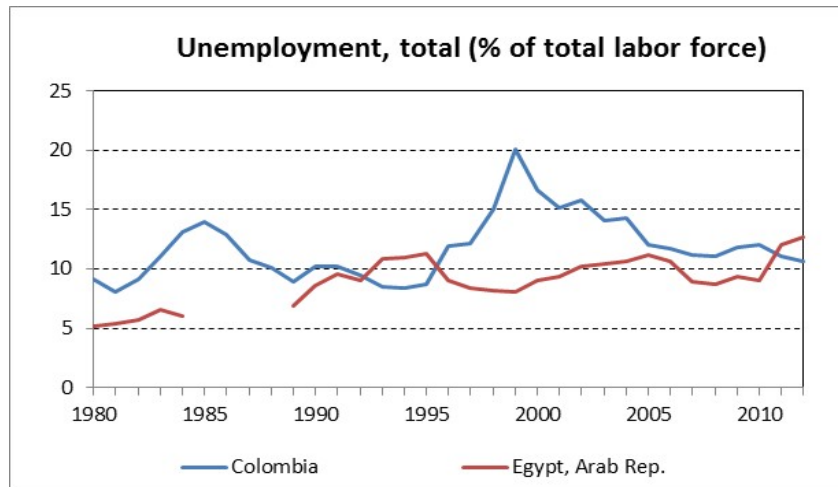
Although Egypt has invested in expanding higher education and this has resulted in greater enrollment across both genders, specific curricula have failed to provide graduates with the requisite skills to obtain a job. This demonstrates that education, beginning in the elementary years, must be reformed. A fundamental explanation concerning this discrepancy between relatively high school enrollment ratios and a lack of skilled labor is that the current approach to education focuses extensively on quantity but only minimally on quality. This is also evident from the fact that a decade of nearly universal primary education in Egypt has not eliminated youth illiteracy.

According to the Egyptian Center for Economic Studies, education can no longer be viewed as an engineering process, but instead it must be viewed as an economic phenomenon. Economic growth correlates positively with a quality education system. Without educational reforms, the mismatch between the skills of recent graduates and the expectations of businesses will persist in Egypt.⁴

Although Egypt is being forced to reform their education system in order to meet the standards of their businesses, Colombia's unemployment has (despite higher literacy rates) been higher than Egypt's unemployment rates. As Figure 8 shows a significant part of Colombia's unemployment seems to be cyclical, that is, related to economic recession, though Colombia's unemployment remains high even in periods of economic booms. Hence, there are some structural issues, which are likely also related to a mismatch between what children and youth learn in school and what skills businesses are looking for in Colombia.

⁴ Galal (2002).

Figure 8: National Estimate of Total Unemployment (% of total labor force), 1980-2012



Source: Created by author based on World Bank (2014).

Based on the aforementioned data and discussion, we can conclude that there is room for education reform in both Egypt and Colombia. Colombia, for instance, should perhaps provide more funding for poor families in order for students to acquire the basic necessities to attend school, such as supplies and transportation. Meanwhile, Egypt should reform their curricula in order to align with the necessities of the business sector. Only through this reform is there any hope of higher employment upon graduation. Egypt must also equalize the enrollment among male and female students, because today's society is generally going away from gender roles in which an education is requisite for men but not women. Furthermore, women receiving an education will mean that they will be more likely to receive a job, signaling a lower risk of early pregnancy. An education for women will also indicate empowerment, a key element to reduce the rate of domestic violence. For both male and female students, early dropout rates indicate they are being forced into early labor.

IV.2. Child Labor

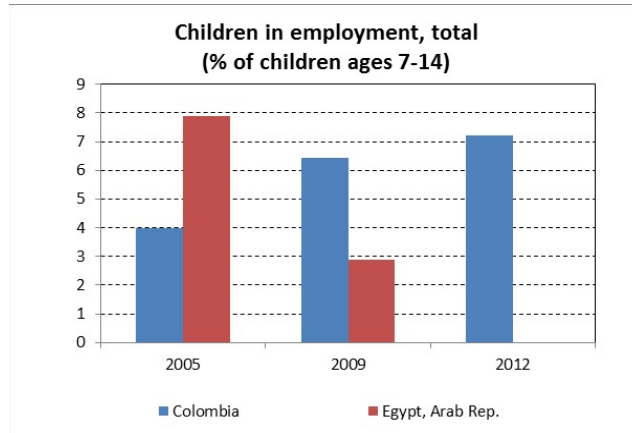
According to the United Nations International Children's Emergency Fund (UNICEF), child labor is defined as "work that exceeds a minimum number of hours, depending on the age of a child and on the type of work."⁵ Globally, documented child labor is increasing at a rapid pace. United Nations Children's Fund (UNICEF) estimates based on Demographic Health Surveys (DHSs) and Multiple Indicator Cluster Surveys (MICSs) from 98 countries indicate that 158 million children from five to fourteen years of age participated in child labor across the world in 2006.⁶

Figure 9 shows the degree of child labor in Colombia and Egypt based on official numbers. However, most experts agree that the official numbers are incorrect as child labor is an extremely prevalent phenomenon in both Colombia and Egypt. It is so prevalent that it has a substantial effect on the country's economy.

⁵ Raouf et al. (2011).

⁶ UNICEF website: http://www.unicef.org/progressforchildren/2007n6/index_41846.htm.

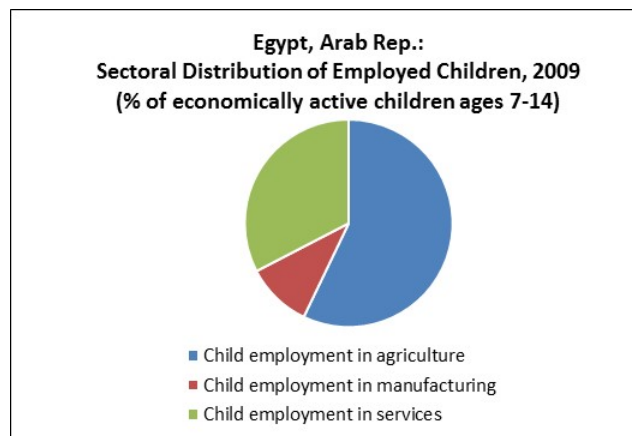
Figure 9: Child Labor (official data), all available data



Source: Created by author based on World Bank (2014).

A 1996 child labor law in Egypt prohibits children to work if they are under the age of 14. However, the law allows Egypt's Minister of Education to permit children to be employed from the ages of 12 to 14 in seasonal work, conditional that the work is not harmful to their health or is not deemed to impact school attendance. In any case, it is important to note the weak enforcement of such child labor laws. Additionally, the 1996 law does not protect children against domestic service, particularly family undertakings and labor in the agricultural fields.⁷ Hence, Egypt's rural children are more likely to work than those living in urban areas, since agricultural activities are undertaken mostly in rural areas and agriculture is the business that primarily demands child labor. Older children are more likely to be engaged in other labor, and this aligns with the logic that older children are more capable of accomplishing greater levels of work. As Figure 10 shows, in 2009, 53 percent of Egypt's economically active children were in agriculture.

Figure 10: Sectoral Distribution of Child Labor in Egypt, 2009

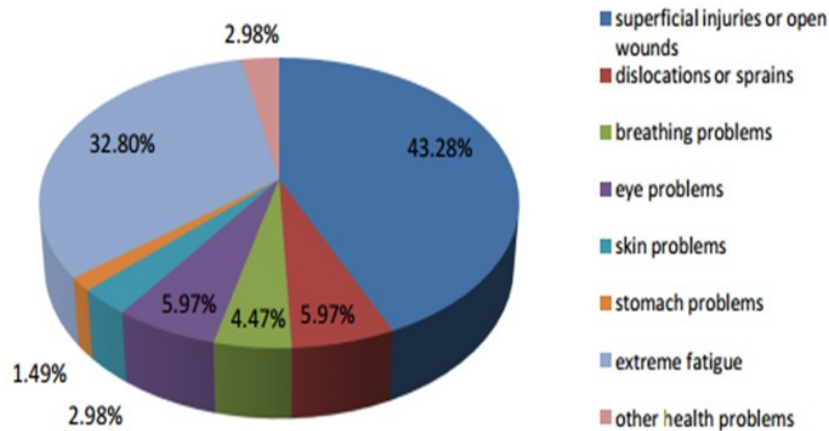


Source: Created by author based on World Bank (2014).

⁷ Raouf et al. (2011).

In a survey done at Cairo University, evidence was found that many children are in fear of their parents, indicating the extent of coercion that goes into child labor. For example, the majority of children interviewed in the presence of an adult respond that they do not engage in labor, while children interviewed without the presence of an adult indicated that they work in order to supplement the family's low income. This aforementioned secrecy is an example of the way in which Egypt is in denial of childhood labor's dangerous ramifications. Not only does child labor diminish the amount of education he or she receives, but it also leads to various health problems. Among the most prevalent health issues include superficial injuries and extreme fatigue. The low, albeit rising GDP indicates that healthcare is difficult for many families to afford. Thus, child labor has the potential to lower life expectancy. Figure 11 shows the distribution of illnesses that were attributed to child labor for sampled working children in the primary and secondary school aged range, ages five to seventeen.

Figure 11: Illnesses Resulting from Child Labor



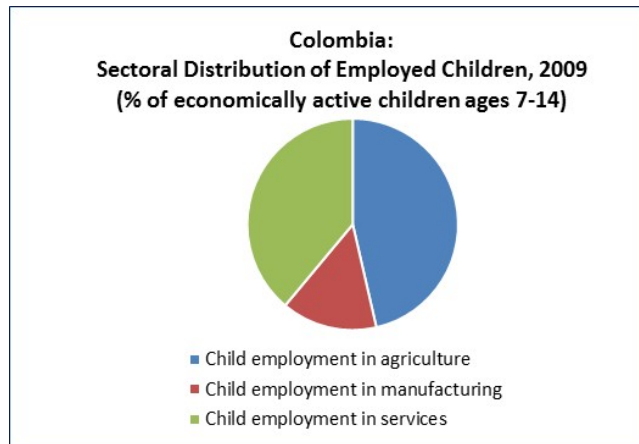
Source: Raouf et al. (2011).

While Egypt has yet to undertake reforms with respect to child labor, Colombia has made significant advancements in 2013 in its efforts to curb child labor. According to the United States Department of Labor (2014), the Colombian Government investigated 1,543 inspections to verify labor conditions for adolescents who actually have permits to work. Additionally, the Government enacted an inspection unit within the Ministry of Labor to combat child labor and enacted a nine million dollar project to improve workplace health and safety conditions, particularly concerning the business of mining.⁸

The context in which child labor takes place in Colombia differs from that of Egypt. In Colombia, some children are forcibly recruited by non-state armed groups. However, as Figure 12 shows, similar to Egypt, most of Colombia's child labor is agricultural, followed by the service sector which has nearly the same amount of child labor in Colombia. Despite the aforementioned improvements, Colombia currently lacks resources necessary in order to curb child labor and child trafficking.

⁸ United States Department of Labor (2014).

Figure 12: Sectoral Distribution of Child Labor in Colombia, 2009

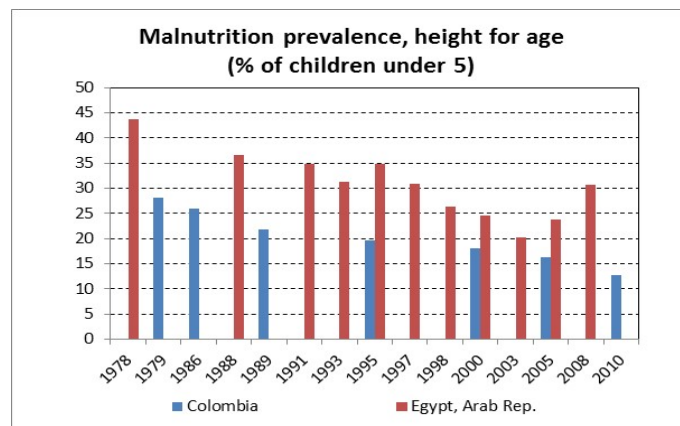


Source: Created by author based on World Bank (2014).

IV.3. Malnourishment

Children in Egypt and Colombia face malnourishment, and as an effect, morbidity, too often as a result of a poor economy stemming from the aforementioned issue of high unemployment, poor education and a detrimental economy. While many countries, including Egypt and Colombia, have implemented health programs, its impact is minimal at most.⁹ As Figure 13 shows, Colombia has made steady progress in reducing malnutrition in children under 5 from 27 percent in 1979 to 13 percent in 2010, while Egypt's progress has been mixed, still leaving slightly more than 30 percent of its children in 2008 in malnutrition.¹⁰

Figure 13: Prevalence of Malnutrition, all available years



Source: Created by author based on World Bank (2014).

⁹ Heller and Drake (1978).

¹⁰ The Egyptian Demographic Health Survey 2008 (see El-Zanaty and Way, 2009, p. xxvii) discovered that 29 percent of Egyptian children age 0-4 years showed evidence of chronic malnutrition or stunting, and 7 percent are acutely malnourished. Furthermore, the survey found that despite economic growth, chronic malnutrition of toddlers increased by 26 percent during 2000 and 2008.

One factor in Egypt and Colombia that contributes to malnourishment in children is nutrient intake, beginning from their birth. For example, inadequate breastfeeding in the first year can be destructive to a child's overall health. Furthermore, studies have proven a positive correlation between poor nutritional status and poor health. Malnourishment can cause lasting effects, ranging from diarrhea to other illnesses.¹¹ In a study of 200 children over a seven year period in Candelaria, Colombia, it was concluded that a child's medical status is influenced by a family's economic status. The study also examined how maternal-child health education and food supplementation can influence a child's nutritional status.

In Colombia, food insecurity (which refers to limited or uncertain availability of nutritionally adequate and safe foods or limited or uncertain ability to acquire acceptable foods in socially acceptable ways) has impacted 15 percent of children or 500,000 children under six years of age.¹² Child food insecurity consists of shortages of the least expensive, energy-dense foods. Children who face food insecurity have a tremendously low energy intake, resulting in underweight individuals. Specifically in Colombia, food insecurity among low and middle income families is associated with poor living conditions. This high prevalence for food insecurity provides the necessity for improving food security and implementing programs aimed at developing nutrition standards in schools.¹³

V. Conclusion and Suggestions

This article examined three major constraints children face in Egypt and Colombia: a marginal education, childhood labor, and malnourishment. While primary school enrollment ratios are relatively high, the quality of education children get is low and even secondary and tertiary education does many times not provide the needed skills business are looking for, especially in Egypt. Despite officially low numbers, child labor also continues to be widespread in Colombia and Egypt, with most of the children economically active in agriculture. While Colombia has made some progress in reducing malnutrition, Egypt's malnutrition rates of above 30 percent are alarming.

Concerning ways to reform education for children in Egypt and Colombia, reforming education must be seen as a national project in both countries. Specifically looking at Egypt, resistance to education reform partly originates from beliefs that the Government is more committed to free education than they are in reality.¹⁴ Furthermore, a quality education is crucial to sustain economic development and to ultimately lower unemployment. Furthermore, better education, especially for girls, will provide knowledge about contraceptive methods, which will help reducing population growth, and it will also empower girls in Egypt and Colombia to find employment. In Colombia specifically, the U.S. Department of Labor suggests that the Government ensures that children are protected from the internal armed conflict while in school.

Suggestions to eradicate child labor include the proposition to provide updated information about child labor laws to the general public and specific groups such as civil society organizations and enforcement officials. Other propositions include incentives to combat child labor and to increase the number of labor inspectors to allow for productive investigations of child labor violations. An

¹¹ Heller and Drake (1978).

¹² Isanaka et al. (2007).

¹³ Isanaka et al. (2007).

¹⁴ Galal (2002).

additional suggestion includes the public availability of information on each complaint concerning children exploited in child labor. In Egypt, there is a Child Help Hotline in which one can express complaints and violations.¹⁵

Regarding malnourishment, studies conclude that the utilization and funding of health services can potentially reduce the risk of illness and undernourishment. In Egypt, government-run food programs are being implemented, and the government is subsidizing flour and cooking oil, important ingredients in Egyptian foods such as baladi bread (an Egyptian pita).¹⁶

Finally, increased transparency and higher accountability can work to expand the quality of education, eradicate child labor, and significantly reduce health problems and undernourishment. The data and facts above should be utilized to implement reforms in order to provide a better quality of life among children in Colombia and Egypt.

References

- Cochrane, Susan Hill; M. Ali Khan; and Ibrahim Khodair T. Osheba (1990). Education, Income, and Desired Fertility in Egypt: A Revised Perspective. *Economic Development and Cultural Change*, Vol. 38, No. 2 (January), pp. 313-339.
- El-Zanaty, Fatma and Ann Way (2009). Egypt: Demographic and Health Survey 2008. Cairo, Egypt: Ministry of Health, El-Zanaty and Associates, and Macro International; available at: <http://dhsprogram.com/pubs/pdf/FR220/FR220.pdf>.
- Galal, Ahmed (2002). The Paradox of Education and Unemployment in Egypt. Cairo, Egypt: Egyptian Center for Economic Studies (ECES), *Working Paper*, No. 67 (March).
- Heller, Peter S. and William D. Drake (1978). Malnutrition, Child Morbidity and the Family Decision Process. *Journal of Developmental Economics*, Vol. 6, pp. 203-233.
- IRIN (2009). Egypt: Nearly a Third of Children Malnourished. *IRIN: humanitarian news and analysis* (November 5, 2009), available at: <http://www.irinnews.org/report/86893/egypt-nearly-a-third-of-children-malnourished-report>.
- Raouf, Nadine Mohamed Abdel; Noha Ahmed Abdel Aziz; Nouran Essam Hassan; and Rana Sameh Samir (2011). Child Labor in Egypt. Cairo, Egypt: Cairo University, Faculty of Economics and Political Science, Department of Statistics (English Section), Research Project submitted in fulfillment of the requirement of B.Sc. in Statistics; available at: <http://www.feps.edu.eg/ar/departments/statistics/graduation/2011/13.pdf>.
- Isanaka, Sheila; Mercedes Mora-Plazas; Sandra Lopez-Arana; Ana Baylin; and Eduardo Villamor (2007). Food Insecurity Is Highly Prevalent and Predicts Underweight but Not Overweight in Adults and School Children from Bogota, Colombia. *The Journal of Nutrition*, Vol. 137, No. 12, pp. 2747-2754.
- Perez, Freddy and François Dabis (2003). HIV Prevention in Latin America: Reaching Youth in Colombia. *AIDS Care: Psychological and Socio-medical Aspects of AIDS/HIV*, Vol. 15, No. 1 (February), pp. 77-87.

¹⁵ IRIN (2009).

¹⁶ IRIN (2009).

United States Department of Labor (2014). Colombia. *2013 Findings on the Worst Forms of Child Labor*. Washington, DC: United States Department of Labor, Bureau of International Labor Affairs (ILAB); available at: <http://www.dol.gov/ilab/reports/child-labor/findings/2013TDA/colombia.pdf>.

World Bank (2014). *World Development Indicators / Global Development Finance database* (Washington, DC: The World Bank); as posted on the World Bank website: <http://data.worldbank.org/data-catalog/> (downloaded on May 10, 2014).