

# **Causes of Low Educational Attainment and an Early Transition to Adulthood on Guatemala: Ethnicity, Gender, or Poverty?**

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## **Introduction**

While overall school attendance and educational attainment in Guatemala are low by Latin American standards, Mayan females are particularly vulnerable. Adult illiteracy is estimated to be 15% in the LAC region, 30% nationally in Guatemala, but an unacceptable 75% among Mayan women (UNDP 2003; USAID 1999). We examine the factors influencing low rates of educational achievement among young people in Guatemala aged 10-19, with special attention to the situation of Mayan females. We explore not only the influences of school supply and quality, but we also examine individual- and household-level factors that affect schooling decisions. Broadly defined these entail ethnicity, gender, and poverty, but will include related factors that may influence school attendance by increasing the work burdens of young people, such as household composition, birth order, and dominant local occupations that may involve job-related migration.

Detailed demographic, education, health, and lifestyle information about adolescents in Guatemala has traditionally been sparse and incomplete. Most studies focus on issues surrounding child-bearing or childhood, with few examining the period in between. We maintain that this period of life is when patterns that affect future gender dynamics and well-being—both within and outside the home—are established and, therefore, deserves more attention. This paper takes advantage of recently available nationally-representative data to examine schooling and work patterns of indigenous adolescent females and compare them with patterns for non-indigenous females and indigenous males.

Adolescent schooling and well-being, especially among Mayans, is becoming an increasingly prevalent concern of government, NGOs, and bilateral actors in Guatemala. This research, consequently, will help determine where funds can best be focused to alter the trend of low educational achievement among Mayan females.

## **Setting**

Forty percent of Guatemala's population is Mayan, primarily living in rural areas. The Mayan population, compared to the 60 percent largely urbanized, Spanish-speaking Ladino population, are politically and economically disadvantaged. Poverty statistics by residence show that three-quarters of the rural population lives in poverty, compared with 32 percent of the urban population. Broken down by ethnicity, data indicate that three-quarters of the Mayan population lives in poverty, compared with 40 percent of Ladinos (LSMS 2000). Both groups, however, suffered from thirty-six years of civil unrest, which left few resources for social programs including schooling.

Although conditions are slowly improving, enrollment is still low overall and unequal by sex and ethnicity. The average number of years of schooling is 1.3 years for

indigenous persons and 4.2 for non-indigenous persons. Indigenous women average 0.9 years of schooling compared with 4 years among Ladino women (USAID 1999).

While factors affecting low educational achievement among Mayan females have been described in the past, the relative contribution of each of these factors is not well-understood. Are parental attitudes toward education different between Ladino and Mayan families and would this lead them to place differential values on the education of their daughters? Or is poverty a greater explanatory factor? Lastly, educational supply may also be a critical determinant as supply presently lags behind demand, particularly in Mayan communities, further diminishing enrollments (USAID 1999). This analysis will shed light on this question, and hence help to better focus and target policies and programs intended to enhance the educational opportunities of young Mayan females in Guatemala.

## **Data and Methods**

We use the 2000 Guatemala Living Standards Measurement Survey to focus on causes of low educational attainment and early transition to adulthood among adolescents. These data provide a range of information regarding the well-being of individuals, households, and communities. The data was collected by the National Institute for Statistics (INE) between 1999 and 2000. The sample is nationally-representative and consists of 11170 households, 3544 urban and 7626 rural.

We examine differential patterns of schooling, including age of starting school, grade repetition, and age at drop out. In relation to drop-out, we will also model the possibly co-related outcomes of marriage and pregnancy using bivariate probit models. (Note that the 1999 Guatemala DHS indicates that very few pregnancies are out-of-wedlock, so marriage is probably more likely than pregnancy to potentially influence school dropout; however, we will examine both.) Independent variables include individual, household, and community characteristics. Amongst the individual characteristics, we examine age, gender, ethnicity, and birth order. Household characteristics include poverty status, household structure, and occupation of adult members. Lastly we examine the importance of community characteristics including the presence and quality of different levels of school (primary, secondary, etc.), overall poverty and labor force opportunities, and the influence of religion.

## **Preliminary Results**

We have found informative patterns concerning the relationships among adolescents' school enrollment, paid and unpaid work pressures, age at first pregnancy, and age at first marriage.

Mayan girls start school later and dropout earlier than their male Mayan and female non-Mayan counterparts. At age seven years, only 54% of Mayan girls are enrolled in school, compared with 70% of Mayan boys and 75% of non-Mayan girls. By age fifteen years, only one-third of Mayan girls are still enrolled in school, versus over one-half of both Mayan boys and Ladina girls.

Amongst those typically expected to be enrolled in secondary school, 15-19 year-olds, a greater proportion of girls than boys are not enrolled: 42 percent versus 35

percent. Mayan girls are the least likely to be enrolled with only 23 percent of 15-19 year-olds in school, compared with 44 percent of Ladina girls and 37 percent of Mayan boys. When further disaggregated by household poverty status, the differences among Mayan females are surprisingly large: among 15–19-year-old girls, 40 percent of the non-poor are attending school, compared with 20 percent of the poor, and less than 10 percent of the extremely poor.

Despite this early age of dropout, Mayan girls' age of marriage and first pregnancy tend to begin around age 16–18. Therefore, Mayan girls are unlikely to be dropping out of school because of marriage or pregnancy, as may be surmised. Although sexual and reproductive health programs are important, they are not obviously the answer to keeping girls in school. We must look more closely at the other factors that are driving adolescent girls to discontinue schooling early. For example, we find that 45 percent of 15-19 year-old indigenous females are neither enrolled in school nor working for pay, implying that they are spending the majority of their time in unpaid and/or domestic work.

Reflecting the low enrollments described above, educational attainment remains low in general and is worse for females and Mayans. While only 53 percent and 61 percent of Ladino girls and boys, respectively, aged 15–19 have completed primary school, a mere 27 percent of Mayan girls and 38 percent of Mayan boys have done so. By household poverty status, the differences are again very large even within the category of Mayan girls aged 15–19: Two-thirds of non-poor have completed primary school, compared with only one-fourth of poor, and *less than one-tenth* of extremely poor girls.

Our next step in investigating the relative contributions of ethnicity, gender, and poverty to low educational achievement and early transition to adulthood in Guatemala is to analyze these outcomes in a multivariate and multilevel framework.