Examining school dropout among rural youth in Honduras: Evidence from a mixed-methods longitudinal study

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\textbf{ABSTRACT}

This study uses longitudinal mixed methods data to examine patterns of dropout among a cohort of 1305 Honduran rural youth from the time they were in 6th grade to the age of 20. Based on our analysis of household and student surveys and in-depth interviews, we find that dropout is a major problem, particularly during transition years and during the first year of upper secondary education. Dropout results from the accumulation of push and pull factors that lead students to question whether it is worthwhile to stay enrolled, as they lack opportunities to convert their schooling into valued outcomes.

1. Introduction

Many countries have committed to providing more than universal primary education, consistent with Sustainable Development Goal 4, “to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.” This involves providing children and youth with access to free primary and secondary education. Despite significant progress in the 2000s in shrinking the percentage of children and youth out of the education system, the 2010s had much slower progress (UNICEF, 2019). A number of challenges, including poverty, distance to school and family pressure to work, make it difficult for youth to enrol in and eventually complete lower and upper secondary school.

Latin America and the Caribbean (LAC) is a world region with a comparatively small fraction of the secondary-school aged population out of school (estimates suggest 7–10% of youth in LAC are out of lower secondary school and 23% are out of upper secondary school), but these percentages hide striking socioeconomic and geographic disparities (UNESCO, 2020; UNICEF, 2020). Rural youth and low-socioeconomic position youth have significantly lower rates of secondary school enrolment and completion (UNICEF, 2019). School dropout prior to the completion of lower and upper secondary school in Honduras and other Central American countries is of growing concern because of its adverse consequences, including stalled economic growth and increasing youth risk for violence (Adelman and Szekely, 2016).

For the last two decades, males have had lower rates of enrolment and completion of secondary school in Latin America and the Caribbean (UNESCO, 2018). This gender gap that favours females also exists, to a lesser extent, in Europe and North America; the male disadvantage is greatest in Latin America and the Caribbean (UNESCO, 2018). In LAC, for every 100 females, 93 males completed lower secondary (approximately grades 7–9 depending on the country), 87 completed upper secondary (grades 10–12), and just 83 participated in some form of post-secondary education. Two factors are often cited as explaining male disadvantage: 1) poverty, which makes young men more likely to seek employment rather than complete schooling, and 2) school environments that “feminize” education and lead to male disengagement (UNESCO, 2018). Despite the consistent finding that males are at an educational disadvantage in LAC, previous studies have not closely examined if and how gender norms may relate to girls’ and boys’ school dropout; our study seeks to fill this gap.

Drawing upon a mixed methods study with data from 2008 through 2016, we address the following questions:

i What factors influence secondary school dropout among rural Honduran youth?

ii How do youth explain the decision to drop out of school, and what role, if any, does gender play in this process?

2. Research context and conceptual framework

Honduras is one of the poorest countries in the Americas: 59.3% of
households live under the poverty line (National Institute of Statistics, 2018). The 2012 Honduran Education Law stipulates that schooling is free and compulsory for ten years (kindergarten, elementary grades 1–6, and lower secondary grades 7–9). While 10 years of compulsory education are constitutionally mandated, nationally, Hondurasers over 25 years of age have an average of 6.3 years of schooling (females: 6.4 years; males: 6.2 years).

Upper secondary, or ciclo diversificado (grades 10–11 or 12), has a vocational or academic track for youth aged 15–18 years old, if the student follows a regular educational trajectory. Honduras’s upper secondary school completion rate of 38% is lower than the completion rate for LAC (60%) and the completion rate for other lower-middle-income countries (42%) (UNESCO, 2020). While the Honduran government has prioritized the expansion of secondary education by emphasizing universal completion of grades 7–9 and the expansion of enrollment in grades 10–12, the country’s upper secondary completion rate has stagnated for the past seven years (UIS, 2020). In addition to expanding access, efforts are underway to revise the secondary school curriculum to include content on the cognitive and “soft skills” that are needed in the workforce (Honduran National Board of Education, 2019).

Schooling disparities exist by sex, geographic location, and wealth in Honduras. In 2018, males had higher out of school rates for upper secondary school (46.7%) than females (41.8%). In rural areas, out of school rates are twice as high as those of urban areas: 25.2% of urban females are out of school, compared to 58.0% of rural females. This pattern is similar for males: men in rural areas also have a higher non-completion rate for upper secondary (62.3%) than their urban counterparts (31.6%). The probability of attending school is also related to wealth: ~70% of children from the least wealthy quintile households were out of upper secondary school in 2018, compared to only ~20% living in the wealthiest households (UIS, 2020).

Earlier research found that students report a lack of interest in school and poverty as the primary reasons they drop out (Adelman and Szekely, 2017). In Honduras, the lack of relevancy of the secondary school curriculum may be one reason why youth lose interest, particularly in rural areas. The Honduran Strategic Plan for the Education Sector acknowledges the deficiencies in teaching quality and curricular relevancy, and emphasizes the importance of forging better connections between education, life skills, and the labor market (Honduran National Board of Education, 2019). Better understanding the factors (including lack of relevancy and poor quality), that shape decision-making processes regarding secondary schooling is needed to inform policies and programs to support Sustainable Development Goal 4 (Quality Education), “to ensure the provision and completion of 12 years of schooling… (of which at least 9 years are compulsory).”

2.1. A framework for understanding secondary school dropout

Our study is informed by previous empirical research on school dropout as well as theoretical insights from the Capabilities Approach. Previous studies identify a number of factors that predict dropout in low- and middle-income country contexts: gender, age, household wealth and financial resources, rurality, parental education and other family factors, school quality, local job availability, and low academic performance (Alcaraz, 2020; Ananga, 2011; Gibbs and Heaton, 2014; Marphatia et al., 2018; Mughal et al., 2019; Nakajima et al., 2018; No et al., 2016; Simmons Zuilkowski et al., 2016). These and other studies have uncovered drivers of dropout in a number of countries around the globe. However, this problem remains understudied in rural areas of LAC, particularly why males are more likely to dropout and what interventions might be helpful in improving secondary school completion rates.

Previous research both within the LAC region and from studies elsewhere with similar economic characteristics suggests that the process of transition from primary to secondary education, rurality, low academic performance, and gender can all affect school dropout. The transition from primary to secondary school is a particularly difficult stage for some students. The transition to secondary school requires students to experience new environments, curricula, class organizations, and teachers - all while they are in a stage of transition in their own development as adolescents (McIntosh et al., 2008). For some who live in rural areas, they must travel greater distances to attend a high school and this travel might have hidden costs, even in locations where school fees have been abolished.

Rurality is associated with lower secondary school completion rates (Adelman and Szekely, 2017; Gibbs and Heaton, 2014) and fewer transitions to secondary school (Gibbs and Heaton, 2014). Children in rural areas may have multiple risk factors for school dropout, including less secondary school availability, lower SES, lower levels of parental education, and fewer job opportunities that require a high school diploma.

Low academic performance may also explain why students drop out of school. Quantitative and qualitative research has found that low achievement is linked to dropout (Nakajima et al., 2018; No et al., 2016; Simmons Zuilkowski et al., 2016). In a study exploring the typology of school dropout in Ghana, Ananga (2011) found that one student who had dropped out explained he did “not understand what is taught at school. I left school and I didn’t want to go back because I didn’t understand anything” (p.380). Parents may be unwilling to invest scarce resources in a child’s education if the student is not high-performing (No et al., 2016; Sabates et al., 2013). As students transition to upper secondary schooling, their enrollment decision may be strongly influenced by how well they are learning. As youth become capable of earning money, the “scale begins to tip away from attending school, particularly if a child is a poor performer attending a low quality school” (Simmons Zuilkowski et al., 2016, p.106).

In Honduras, males are more likely to drop out of secondary school. Again, whereas in Africa, the Middle East, and South Asia, girls are less likely to complete secondary school, in LAC’s 21 countries, males fare relatively poorly in achievement and completion rates (UNICEF, 2020; Jha et al., 2012). Gender norms regarding socially acceptable roles for men and women, as well as family and community expectations, shape family and student decision-making regarding school continuation. Low-skilled paid labor (for example, in agriculture) may be available to men, and their role as “breadwinner” may influence some boys to quit school and start working at a young age to help support their families.

Several recent studies emphasize that school dropout is not an event nor is it explained by a single factor, but rather it is the convergence of different complex interactions over time between the individual, the family, the school, the community and the larger national and international contexts (Mughal et al., 2019; Singh and Mukherjee, 2018; Rumberger, 2011; Simmons Zuilkowski et al., 2016). Likewise, when researchers try to understand why youth drop out, it is important to note that proximal reasons, such as poverty, may become the post-hoc rationale for a child’s dropout, thereby obscuring the underlying “trigger factors” (Simmons Zuilkowski et al., 2016, p. 101). To understand these complex interactions and potential “trigger factors” in our study, we utilized Singh and Mukherjee (2018) model to explain school dropout, which in turn draws upon Bronfenbrenner (1977) ecological theory of human development.

The model includes three categories that influence school dropout: “push out,” “pull out,” and “opting out” (Singh and Mukherjee, 2018; Jordan et al., 1994) factors. Push factors are those located within the school system and that drive students out. They can include bullying, disengaged or abusive teachers, and expenses. Pull factors include influences from outside the school, such as the need to take care of sick or young family members, or the availability of paid work. Opt-out factors include personal characteristics, behaviours, and attitudes such as disinterest toward schooling, motivation, and truancy.

Because earlier research on dropout in Central America reports that a main reason for dropout cited by youth is that they “no longer want to be a student” (Adelman and Szekely, 2017), we draw upon the idea of...
“conversion factors” from the Capabilities Approach (CA). The CA is a theoretical framework about freedom to achieve well-being (Nussbaum, 2011; Robeyns, 2017; Sen, 1999). The CA is concerned with aspects of people’s lives such as their education, health, and their political and religious freedoms. The CA approach asks “what individuals can do and be (capabilities) and what they are actually achieving in terms of beings and doings (functionings)” (Robeyns, 2017, p.9). Capabilities are real freedoms or opportunities to achieve functionings.

A central concept in the CA is that individuals have different abilities to convert resources into functionings: these are called “conversion factors” (Robeyns, 2017). Resources can be material (e.g., money) as well as non-material (e.g., knowledge/skills). Robeyns (2017) differentiates between three types of conversion factors: a) personal (internal) factors like sex, intelligence, physical condition, and disabilities; b) social factors like social norms, societal hierarchies, and power relations; and c) environmental factors like the environment in which a person lives, infrastructure, and resources available. Two adolescents who obtain a high school degree can have different conversion factors that allow them to convert their degree into a valuable functioning. For instance, an adolescent living in an urban area with a strong economy is more likely to be able to convert the resource into a functioning (such as being employed, attending college or starting a business). An adolescent living in an impoverished rural area with little or no employment opportunities may be less likely to “convert” their schooling into a particular functioning such as a job, additional studies, or entrepreneurship. If students do not believe they can convert their high school diploma into something worthwhile, they might choose not to pursue it. This becomes especially relevant for individuals who struggle academically due to learning disabilities, or in contexts where students have to walk long distances or must work while studying or experience other competing demands on their time and resources. If students do not believe that they can convert a resource like education into a valued functioning, they might instead see it as a waste of time (Ananga, 2011).

The idea of conversion factors allows for an expanded notion of learning and quality that focuses attention of how youth can transform the resource of education into opportunities that they have reason to value. In sum, the notion of “conversion factors” as well as Singh and Mukherjee (2018) model provided useful theoretical lenses through which we investigated why youth are dropping out of school in rural areas of Honduras. Combining these two frameworks allows for a more nuanced understanding of: a) the different environments in which youth grow and develop and how these influence their schooling experience; b) the various elements that push or pull students out of school and; c) a deeper understanding of how limitations on their conversion factors place serious constraints on the potential to convert education into a valued functioning. With insights from these theories, we examined the dropout patterns of youth that participated in a longitudinal study between 2008 and 2016 in rural areas of Honduras, with a particular emphasis on the experience of male research participants.

3. Methodology: a mixed-methods longitudinal approach

3.1. Sample

We1 began this mixed-methods longitudinal study in 2008. Our research budget limited our data collection to approximately 100 communities in two regions (five Departments in the North and Western regions) of Honduras and four years of data collection. We used the Honduran census to identify these rural communities. The sample was drawn from school and household administrative data to identify approximately 100 similar schools in which we sampled the entire 6th grade class (see McEwan et al., 2015 for more detailed sample description) at the end of the academic year in November 2008, when adolescents were completing 6th grade. Our sample consisted of 1305 rural youth. In 2009, 2010, and 2016 (when we were awarded funding to conduct a long-term follow-up study), we conducted additional rounds of survey and interview data collection to explore a range of outcomes related to schooling. Between 2008 and 2016, our research team retained 91% of participants in the study.2 The objective of the overall study was to better understand the impact of education on youth as they transitioned to adulthood – we explore other research findings elsewhere (see Murphy-Graham et al., 2020; Murphy-Graham, 2018; Murphy-Graham and Leal, 2015; Murphy-Graham and Lample, 2014). Here, our objective is to better understand the phenomenon of school dropout.

To analyse the educational trajectory (and reasons for dropout) of adolescents in rural Honduras, we conducted a survey in 2016 to obtain information on schooling outcomes, demographics, occupational status, marriage and, if applicable, their childbearing. We then linked these data to the survey data collected in 2008 and 2010. Each of these surveys collected retrospective information about the students’ educational trajectory and if, applicable, the main reason for dropping out of school.

Demographic characteristics of the sample (in 2016) are included in Table 1 and Online Appendix 1. In 2016, the mean age was 20.2 years old (mean age for girls: 20.1 years; mean age for boys: 20.4 years). A relatively small proportion of individuals had attained education beyond high school by 2016: 8.7% of girls and 6.1% of boys.

In our sample, in 2016, a majority of boys reported being single (78.9%) and a majority of girls reported to be in a union (56.4%). Over one-third (35.7%) of girls reported living in consensual unions (the most frequent type), compared to 18.8% of boys. In terms of childbearing, a larger proportion of girls (46.4%) reported having a child in 2016 than boys (16.1%). There were clear gender differences in the type of activities adolescents spent most of their time. Most girls (57.1%) and only a few boys (3.4%) reported primarily spending their time on household activities. In comparison, only 1 out 3 girls reported spending most of their time working—an activity that approximately 9 out of 10 boys were engaged in. Approximately half (52.4%) of the sample was female (Table 1; Online Appendix A1).

3.2. Measures

We derived measures from student and household surveys as well as the baseline standardized scores for curriculum-based language and mathematics assessments (see McEwan et al., 2015 for full description of assessments and measures). Our dependent variable is the level of educational attainment achieved by 2016, the last year of data collection. Gender is the self-reported gender of the student. Age corresponds to the age of the individual in 2016 in years. Region is the region in which the student lived in 2008—the reference region is Atlántida, which is the department that has consistently reported the highest dropout rate in the country (Secretary of Education of Honduras, 2017). Parents refers to whether the student lived with both parents in 2008. In terms of family characteristics, Union and Child refer to whether the individual entered into union by age 18 or had had a child by age 18. Since the student data is nested at the school level, we estimated

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1 The study was led by Dr. Erin Murphy-Graham (PI), Dr. Patrick McEwan (Co-PI) and supported by a dedicated team of Honduran research assistants at the National Pedagogical University (2008–2010) and ESA Consultores (2015–2016). Over the course of our study, many of the same research assistants visited communities to administer surveys and conduct in-depth qualitative interviews.

2 The most common reasons for non-response were no contact information (4.5% of the original participants) and no contact because the participant was en route to the US or Europe (2.6% of the original participants); the other reasons for non-response were declined to participate (1.1% of original participants) and non-viable due to death or being incarcerated (0.8% of original sample).
clustering standard errors adjusted for 88 schools.

Wealth was measured in both 2008 and 2010; it is a construct that indicates the total number of assets available in the household of residence. These assets included whether the household owned a refrigerator, radio, sewing machine, television, DVD or VCR, a computer, bicycle, motorcycle, car or stove. This measure was replicated from earlier Honduran household surveys conducted by others.

To measure academic achievement, we use the standardized scores of the sample. Our qualitative sample consists of a subset of the overall sample (Lieber, 2009). From the approximately 100 schools in our overall sample, we selected 8 schools where we conducted in-depth qualitative interviews with a randomly selected group of 8 focal students per school. To select these students, we randomly generated a list of students from the 2008 data collection. In each site, we went down the list until we were able to conduct interviews with six students still in school (attempting to interview an equal number of girls and boys at each site) and two that had dropped out (our sample of initial school dropouts included 10 boys and 3 girls). In total, we collected three rounds (2009, 2010, and 2016) of in-depth interviews with adolescents, detailed in Table 2.

In 2009 and 2010, teams of qualitative researchers (one UC Berkeley doctoral student paired with a Honduran research assistant) conducted two weeks of fieldwork in the eight qualitative sites. They lived in these sites and conducted interviews with the focal students and at least one of their family members, as well as classroom teachers. In 2016, we conducted qualitative interviews with these same youth (by then young adults) when we visited their communities to administer the quantitative surveys. If the individual did not live in the community any longer or was not at home during our visit, we made attempts to schedule interviews in person or over the phone at a different time. In total, we were able to conduct 42 qualitative interviews with young adults during our final round of data collection (roughly 65% of our original qualitative sample).

### 3.4. Data analysis

#### 3.4.1. Quantitative analyses

We conducted three types of quantitative analyses to provide a comprehensive view of dropout in our sample—dropout rates measures, ordinary least squares regression and educational trajectories of students. To describe the patterns of dropout among youth in the quantitative study, we calculated five dropout rate measures: 1) the grade dropout rate, 2) survival rate, 3) the percentages of those who finished a given grade successfully and 4) those that finished but failed to advance; and 5) the academic year dropout rate. (Table 3).

The dropout grade rate is the proportion of pupils from a cohort enrolled in a given grade during a particular academic year who are no longer enrolled in the following year. This rate allows us to identify the flow of students that move from grade to grade in a specific cycle. It is also considered a measure of internal efficiency of the educational system. The survival rate is the percentage of a cohort of students enrolled in sixth grade (at the beginning of the study) that have reached a given educational level in a specific year. For example, the survival rate in 2012 was 32.8% for males, which is the proportion of males in the cohort that reached 10th grade. The indicator is a measure of the retention capacity of the school system and internal efficiency (UNESCO, 2009). We also identified the percentage of students, among those enrolled in a given year, that finished the grade level successfully and those that finished the academic year but did not pass it. Finally, the dropout during the academic year identifies those students that left school during the academic year. It is calculated as the proportion of students that reported not attending the entire academic year independently of whether they passed it or not.

To identify personal factors associated to youth schooling, we estimate a multivariate linear regression focusing on individual characteristics:

### Table 2

<table>
<thead>
<tr>
<th>Year</th>
<th># of youth interviewed</th>
<th># out of school at time of interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>60</td>
<td>13</td>
</tr>
<tr>
<td>2010</td>
<td>57</td>
<td>12</td>
</tr>
<tr>
<td>2016</td>
<td>42</td>
<td>41</td>
</tr>
</tbody>
</table>

#### 3.3. Qualitative data collection

We began qualitative data collection in July 2009, when youth were eligible for 7th grade. We used a nested design to integrate qualitative methods: our qualitative sample consists of a subset of the overall sample (Lieber, 2009). From the approximately 100 schools in our overall sample, we selected 8 schools where we conducted in-depth interviews in person or over the phone at a different time. In total, we were able to conduct 42 qualitative interviews with young adults during our final round of data collection (roughly 65% of our original qualitative sample).
We also ran a random intercept model to identify how much variation in students’ educational attainment is at the school level and as a robustness check to our single-level multivariate OLS. A random intercept model is useful when analysing grouped data because it allows us to estimate how much variance is at each level, or how much each level contributes to explain the dependent variable. In our case, the first level is information about the students, who in turn are nested within centres. Technically, a random intercept model has two parts: a fixed part (the intercept and the coefficients of the explanatory variables) and a random part (defined by \( u_{ij} \)). We find that the proportion of the total variance attributed to school differences out of the overall variability seems to favour our use of single-level multivariate OLS.

We also present the educational trajectories of the students in the sample and categorize them into three groups who at one point dropped out of school: students who dropped out and did not re-enter, students who re-entered school after dropping out but were not enrolled in 2016 (the last year of data collection), and students who dropped out, re-entered school and remained enrolled in 2016. By examining these patterns, we obtained a more nuanced understanding of the general patterns of whether students who drop out re-enter the system or leave the system permanently during the time of the study.

### 3.4.2. Qualitative analyses

The qualitative data presented help explain and provide rich illustrations of our quantitative findings. All our interviews were conducted in Spanish, audio recorded, and transcribed verbatim. To analyse our qualitative data, we used AtlasTi and Dedoose, qualitative data analysis software programs. We created both inductive and deductive codes (Miles et al., 2014) based on our earlier work as well as emergent themes we identified in the interview transcripts. After coding, we created matrix displays to organize the patterns identified in our coding. Finally, we wrote analytic memos about each individual who had dropped out of school to consolidate emergent patterns, themes, and concepts. All participants quoted in this paper are identified with a pseudonym.

### 4. Results

#### 4.1. Quantitative findings

Table 3 describes the dropout patterns in the sample. Overall, we draw three main conclusions. First, 77.9% of boys and 75.0% of girls in our cohort did not enrol in 12th grade, the last year of upper secondary, in 2014 (which corresponded to on-time progression). An even smaller percentage enrolled in tertiary education: nine out of ten students in the cohort were not enrolled in that educational level on time (by 2015). The proportion of girls who persisted in school was always slightly higher than the proportion of boys. Second, in our sample, transition years have the highest dropout rates (between grades 6–7 and between grades 9–10). For example, in 2009, just under one-third of students who were enrolled in sixth grade of primary school did not then enrol in the first year of lower secondary (31.3% and 27.7% for male and female). Such high rates of dropout are unlikely the result of insufficient supply of schools, as all students had access to a lower secondary school. Instead, some students are not attempting to continue further studies after completing primary school. At the point of transition to entering upper secondary (grade 10), where supply is more constrained, a majority of male and female participants were not enrolled in school.

#### 4.1.1. Trajectory analysis

A trajectory analysis allows us to better understand the phenomenon of dropout because we can identify if dropping out of school occurs abruptly or if it is the result of repeated absences and re-entries. Overall, we find that 17.8% of the sample was enrolled continuously for the first seven years of follow-up (through upper secondary education). By 12th grade, over 75% of youth dropped out, and re-entry was uncommon (only 9.1% re-enrolled after dropout). Once study participants left school, they rarely returned to school or followed a trajectory beyond compulsory education. The most common dropout trajectories were dropping out after 6th grade (being enrolled for only the first year of data collection in 6th grade; 22.3%), and being enrolled for the first four years of follow-up (through lower secondary education; 13.1%). Among those that re-entered at least once and were enrolled in school in 2016 (\( n = 122 \)), 25.4% (\( n = 31 \)) dropped out in 2015 and re-enrolled in 2016 (this is the year they would have transitioned to 10th grade or upper secondary school). Fig. 1 presents the frequency of the most common educational trajectories, and Online Appendix 2 presents a table with more detailed information about the educational trajectories.

The data are consistent with earlier studies that point to a major dropout problem in rural Honduras, where re-entry is uncommon (Adelman and Székely, 2017). Understanding, more deeply, what drives
these alarming dropout rates is of paramount importance.

4.1.2. Reasons for school dropout

Table 4 summarizes our survey results regarding the main reasons why students stop studying; we find the reasons are much more complicated and nuanced in our qualitative interviews. In the survey, students were asked to report their main reason for dropping out. A similar proportion of male and female students did not enter and/or remain in lower secondary school (grade 7–9) for two key reasons—no longer wanting to be a student and not having financial resources (Table 4). These reasons became more prevalent throughout the course of adolescence, but as students get older, starting from upper secondary school, additional gender differences emerge. For females, being married and/or pregnant became increasingly common reasons for leaving school (see Murphy-Graham et al., 2020, for a study that looks more in-depth at how early marriage/pregnancy shape girls’ educational trajectories). For males, on the other hand, having a child was rarely the main reason for dropout. Instead, working was more common.

A large proportion of students said financial constraints were the main reason they stopped their studies. However, a significant proportion (close to 40% of girls and over 40% of boys) state the main reason is that they no longer wanted to be a student. We explore in the qualitative findings section how these reasons affect their decision to leave school.

A multivariate linear regression helps us identify risk factors associated with lower levels of educational attainment (Table 5).

Our findings suggest that entering a union by age 18 and having a child by age 18 were the highest risk factors in our sample—each was associated with approximately one-half year less of education. Older students were also more likely to have fewer years of education. In our sample the age range in 2016 was between 17 and 28 years old, many of the students were older than the average age of their peers and the expected age for grade 7. Additionally, higher household wealth in 2010

Table 4
Primary reason for dropping out by academic level by gender (2008-2014).

<table>
<thead>
<tr>
<th>Years</th>
<th>No longer want to be a student</th>
<th>Job opportunity</th>
<th>Marriage or pregnancy</th>
<th>Financial Hardship/ Other/ Non-response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008–2011</td>
<td>Lower secondary</td>
<td>42.8</td>
<td>9.6</td>
<td>0.9</td>
</tr>
<tr>
<td></td>
<td>Upper secondary</td>
<td>32.8</td>
<td>9.0</td>
<td>3.0</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008–2011</td>
<td>Lower secondary</td>
<td>37.5</td>
<td>4.0</td>
<td>11.2</td>
</tr>
<tr>
<td></td>
<td>Upper secondary</td>
<td>22.2</td>
<td>6.8</td>
<td>18.5</td>
</tr>
</tbody>
</table>

Note: Estimation of dropout rates excludes re-entrants and repeaters to a given educational level. Lower secondary includes those that dropped out during the academic year in 6th grade.
was associated with more years of education. Consistent with previous studies (Simmons et al., 2016; No et al., 2016), higher academic performance at baseline (in 2008) was associated with higher educational attainment. An increase of one standard deviation in the language assessment was associated with 0.29 more years of education. For mathematics, a one standard deviation increase in assessment score was associated with 0.14 more years of education. In summary, our quantitative findings are consistent with previous research – youth in rural Honduras have very low levels of secondary school completion. The likelihood of dropout is higher when families are poor, a student is older than his/her peers, has a child or enters a union, and has low academic achievement. Consistent with previous research, we also find that transition points (from 6th to 7th grade and from 9th to 10th grade) are times when many youth drop out (Biemans et al., 2013; Calvo Salvador and Manteca Cayon, 2016; Gibbs and Heaton, 2014). In addition to these quantitative findings, the longitudinal nature of our qualitative study, along with the opportunity to interview youth, parents, and teachers provided us with a deeper understanding of the reasons for dropping out, and of how it is not always possible to capture this complexity and interplay of different factors through surveys.

## 4.2. Qualitative Findings

Our data suggest that, particularly in the transition from sixth to seventh grade: 1) learning difficulties and low academic achievement were important underlying factors that influenced students’ decisions to leave school, and, in some cases, parents’ decisions to pull students out of school; 2) social norms around gender contributed to higher rates of male dropout; 3) some parents and youth believed that 6th grade completion was enough schooling. In the transition to upper secondary school, we find that: 1) lack of access to and costs associated with upper secondary push students out of the educational system; 2) gender roles become more distinct with girls dropping out of school due to pregnancy or entering a union and boys dropping out to work to earn money; 3) students report additional academic challenges and the sense that it is not worth it to continue their studies because they will not be able to convert schooling into anything of value. While very few students returned to school after dropping out (9.1%) we find that parental support and the opportunities for better jobs enable some students to go back to school.

### 4.2.1. Poverty masks underlying learning difficulties

One noteworthy finding from our qualitative interview data was that, when we asked students why they stopped going to school, they often said “there was no money.” However, we found times when their parents, grandparents or teachers cited a different reason. The data indicates that learning difficulties played an important role in why students’ decided to drop out. When students performed poorly in school, parents were reluctant to spend scarce resources on their child’s schooling.

For example, Andrés explained that he couldn’t remain enrolled in 7th grade because “there was no money.” However, his mother said that this decision was also influenced by the fact that school was very hard for Andrés, who repeated third grade twice, and had problems reading and understanding the meaning of words: “the problem with him is that the teacher used to tell me that he has great penmanship and he follows instructions and does what he is asked, the problem is that he does not know how to read.” Similarly, Walter stated that he left school because he had no financial resources. However, when we interviewed his grandmother and asked why Walter had dropped out of school, she said: “Because he doesn’t like school! He says he prefers to work in the fields.” She noted that when Walter was in school, “he suffered from dizziness, he felt sleepy, and he suffered from headaches.”

We also found that when students struggled academically or had learning disabilities, parents decided they should drop out. Yeimy reported that school “made her feel ill.” She explained that “when I read, I felt sick, I could not see the letters, and they appeared to be walking.” Because of how ill she felt when she read, her parents decided to pull her out of school. The case of José Carlos was similar - he enrolled but then dropped out of 7th grade. He stated that he wanted to go to school, but “my mom said no because she did not have money to send me to school.” He also described himself as not being “a talented student.” His mother said she did not have the means to continue paying for José Carlos’s studies, and she noted that José Carlos had a hard time recalling things that he studied: “he learns things and the next morning I ask him about the things he studied but he does not remember. I don’t know what kind of problem he must have. He learns in the moment, but he is incapable of remembering.” When asked again in 2010 why he was out of school, he shared that his mom had pulled him out of school because of his low grades:

**Interviewer:** Who took the decision to pull you out of school?

**José Carlos:** My mother.

**Interviewer:** Why did she pull you out of school?

**José Carlos:** Because I had two low grades...she said I should help her around the house. I told her I did not want to leave school, but she said she had no money.

**Interviewer:** So, why did you drop out, because it was too much money or because you had low grades?

**José Carlos:** The two low grades.

We interviewed José Carlos again in 2016 when he was 20 years old. When asked why he dropped out of school, he answered that he “just did not like school” and that it made him bored. As this case shows, there was an interplay of several factors that influenced José Carlos’s school dropout: limited financial resources, low academic performance, motivation, and his mother’s decision to pull him out of school.

We also found that poverty and low academic achievement intersected with gender norms that promoted an acceptance of male labor. For example, Pablo was a 16-year-old student who dropped out of 7th grade. When we asked Pablo’s mother why he dropped out, she explained that her husband did not have a job, she was ill, and she could not afford to send two kids to high school. Although Pablo had an older sister, he felt compelled to take on the responsibility of helping the family financially, presumably because of his gender. In addition to these challenging circumstances, Pablo was not doing well in school. When we spoke to his teacher, she commented that Pablo might have become discouraged after not doing well on his first exams. When she asked around about why Pablo stopped attending, his classmates said that “he did not understand anything.” The teacher shared that Pablo’s sister told her that he did not want to come back to school and that he did not want to take advantage of the opportunity to study. The illness of Pablo’s mother, the lack of financial resources in his household, his difficulties learning and lack of motivation intersected with his sense of responsibility to help his family. In 2009, Pablo stated that:

**Pablo:** “[I dropped out] because we were short on money, because my sister, my younger siblings and I were all in school, so my mom could not afford it.

**Interviewer:** Who decided you should leave school? Your parents or you?

**Pablo:** It is not that I chose to do so but that’s how it happened. You can’t do a lot of things at the same time.

When we interviewed Pablo again in 2016, he reported leaving school because he “was in charge of taking care of [his mother].” In cases where families struggled financially, it was acceptable and expected that males should step up to help their families. When needed, boys could enjoy labor and find work, particularly manual labor, in their communities, something not commonly available for girls. For instance, Santiago, who left school when he was in 8th grade, said he dropped out because he thought a trade (becoming a welder) would make more sense: “As I was explaining, I just got in my head that I wanted to pursue a trade and forgot my schooling.” For boys, work is a socially acceptable “way out” of school when they are unmotivated or face financial or personal adversity.
For some parents, especially for those whose children struggled in school, finishing the 6th grade might be seen as an acceptable end point. José Carlos’s mother, for example, explained that the purpose of sending her children to school was to “learn to read and write, that is important, so that in the future they know how to write their signature.” Parents might not encourage students to persist when students decide to opt out (or they might even pull them out as is the case of José Carlos’s mother) because they considered completing primary school as an acceptable minimum. Again, this was especially relevant for boys, who could find jobs in their communities starting at a young age. For instance, when we interviewed Denis, a student who dropped out in 8th grade and in 2016 worked at a palm plantation, and asked him if he thought there was any difference between someone who only finished 6th grade and someone who finished 9th grade, he responded: “knowing how to read and write is what has been helpful to me. You learn the same by only finishing 6th grade.”

4.2.2. Lack of access to and costs associated with upper secondary push students out of the educational system

During the transition between lower secondary (9th grade) and upper secondary (10th grade), over 50% of male and female students were not enrolled in school. This alarming rate of dropout can be partly explained by the fact that some schools did not offer upper secondary grades. For many of these students, transitioning to 10th grade implied travelling to or moving to a different town. Although funding limitations did not allow us to collect data during the year of their transition to upper secondary school, we were able to explore this theme during our 2016 round of data collection.

For example, Sonia, who dropped out after 9th grade, reported having to stop her education due to lack of financial resources. She explained that there was no upper secondary in her community, saying: “Oh no, there isn’t any nearby!” She wanted to become a nurse but explained that she would need resources to pay for transportation, food, and school supplies that her family could not afford. She expressed disappointment about her circumstances because accomplishing her goal was “out of reach” for her. In other instances, the availability of school depended on having a minimum number of students. Alejandro, who also finished the 9th grade, could not continue with his education because “there were only 8 students and they needed to be at least 15 to open 10th grade.” He could not afford to go to another community. As such, students like Sonia and Alejandro were pushed out of the educational system because of lack of access to upper secondary schooling. These two students reported that they would have continued with their education if they had access to it in their communities.

Other students reported simply being pushed out by school-related expenses. For example, Blanca, who finished 9th grade but did not enrol in 10th grade, reported enjoying school and valuing education, but the school-related expenses became too much for her:

**Interviewer:** Was there something you did not like about school?  
**Blanca:** There wasn’t anything I disliked about school. Maybe when my parents did not have money...lack of resources, but other than that everything was okay.

**Interviewer:** So, when you were in school and you lacked those resources, what happened?  
**Blanca:** I would always go. I just did not have money for the activities. Teachers would say that we needed to give money for a project, you had to have money. But people talk.

Again, while public school is theoretically free in Honduras, we observed and were told of teachers charging fees for photocopies, books, and other supplies for projects. Students have to wear uniforms (which they have to purchase), and they often buy snacks during recess. Students mentioned these out-of-pocket costs as an economic strain on them and, as Blanca explained, a negative stigma for poor families (“people talk”).

4.2.3. Gender differences in the transition to upper secondary: for boys, the scale tips away from school and girls engage in romantic relationships

As adolescents got older, they engaged in more distinct gender roles. For example, in upper secondary, 18.5% of girls reported dropping out due to marriage or pregnancy compared to 11% in lower secondary (again for a detailed description of the dynamics of schooling, marriage, and pregnancy based on this cohort see Murphy-Graham et al., 2020). Boys, on the other hand, engaged in paid work with greater frequency. It was common for boys to work and study at the same time:

**German:** I was in 11th grade but I had to drop out mid-year for financial reasons.

**Interviewer:** Why did you drop out?  
**German:** For financial reasons. It wasn’t sustainable, I worked, paid for my own studies. My mom couldn’t help me and I do not have a father to count on, so I dropped out.

**Interviewer:** What kind of work did you do?  
**German:** As a laborer, planting palms, cutting grass, anything really. Working and studying became overwhelming for some boys, especially doing the kinds of jobs available in rural areas which require intense physical effort:

**Interviewer:** So, you do not want to keep studying?  
**Fabián:** It’s not that I do not want to study. The thing is, sometimes I have so many things to do and I do not have time left for school.

**Interviewer:** So, you do not have time for school?  
**Fabián:** Yes, sometimes I can’t go because I have work to do and can’t go to school.

**Interviewer:** What kind of work do you do?  
**Fabián:** I work as a construction worker and I have a barber shop in my home.

**Interviewer:** So, if you have too much work you miss school.  
**Fabián:** Yes, because if I am late, they do not let me in, for that reason I don’t even try to go sometimes.

When burdened with work and school, “the scale begins to tip away from attending school” (Simmons Zuilkowski et al., 2016), especially if work helps address their immediate financial needs:

**Interviewer:** What is more valuable to you right now? Work or school?  
**Fabián:** I am not sure. Because after finishing school I would need to go to the university in order to make a difference in my life and doing what I do, I am getting some money.

4.2.4. Academic challenges and conversion factors

For those who did enrol and transitioned to upper secondary, 10th grade was a period of vulnerability, as this grade had the highest proportion of students who enrolled but failed to complete the academic year (15.4% males and 12.1% females, see Table 3). This high rate of dropout could be explained by the fact that upper secondary is academically more challenging for students. For example, Isabel was one of the few students who had the opportunity to go to a different town (Santa Bárbara) to continue her studies. She had a sister whom she lived with, and who paid for her expenses. However, she soon found out that 10th grade was too challenging:

**Interviewer:** And when you were studying in Santa Bárbara, how did it go? Was it easy or difficult?  
**Isabel:** It was hard...Because high school is harder, I could barely understand my classes, so I got low grades.

**Interviewer:** I imagine that it affected your motivation.  
**Isabel:** Yes, because when I realized that my grades were bad, I got disappointed.

Isabel’s sister then had to move to a different town and she invited Isabel to come with her and continue her education there. However, Isabel did not want to continue with her studies. There was an interplay of factors that influenced her decision to drop out which included being away from home, being reticent about yet another move and transition to a new school, and her academic struggles. When faced with the decision to continue or drop out of school, she concluded that it was not
worth all the effort. She did not believe that education would make a significant difference in her life.

Interviewer: Do you think it is worth it to keep studying?

Isabel: Well, at least here there are people who have graduated, and they are at home and do not have a job. There are other people who have not studied a lot and they have their own businesses or have good jobs.

Interviewer: So, you do not see the point or the value of studying because you say that there are people who just finished the 6th grade and they do well in life?

Isabel: Yes.

Isabel’s analysis of the implications of continuing in school can be understood through the earlier mentioned concept of conversion factors (Robeyns, 2017). That is, she did not have the ability to convert knowledge/schooling/high school diploma into a valuable functioning like being employed or going to college. In fact, several students considered the ability to get a job more dependent on luck than on finishing high school. Daniel was one of the few students who actually completed high school. Despite this, he did not believe finishing high school necessarily improved his chances of getting a job:

Interviewer: In what ways has education made your life better?

Daniel: In certain ways it has, like being responsible, being more educated. But that does not mean that you are going to find a job because of it. Finding a job is more a matter of luck.

4.2.5. What impedes and allows students to return to school?

Parental support was the most common reason for students to re-enter school. For example, Jennifer and Melissa both got married and pregnant while in upper secondary school. Once girls married, they rarely went back to school (see Murphy-Graham et al., 2020). However, Jennifer and Melissa’s parents, partners, and even neighbors helped them with child care and encouraged them to finish school. Fabián, for example, had dropped out of school and re-entered as a result of his mother’s encouragement: “my mom told me I needed to finish high school, so I came back.” Conversion factors also played a role in re-enrollment. German, for example, had also dropped out in upper secondary but he then realized that finishing high school could allow him to get a better job:

Interviewer: Why did you decide to come back to school?

German: I want to finish high school. I do not want to continue working as a laborer...I want to apply for a job at a factory. I want to get a job there, and you need a high school diploma.

When students were exposed to other environments, like working in big cities, they realized that a high school diploma was needed to access different kinds of jobs.

5. Conclusion

Our results highlight the multiple, intersecting factors that help explain secondary school dropout, and the reasons why males drop out of school with higher frequency. Our study has limitations: we did not have funding to collect data from 2011 to 2015, and therefore did not have data during the year of transition to upper secondary school. Additionally, we did not have measures of all possible confounding variables to include in our multivariate linear regression. For example, we were able to control for one measure of socioeconomic position (household wealth), but not others (like the educational attainment of the head of the household); recent research from Mexico found that increases in parental education decrease the likelihood of children dropping out in upper secondary school, even when controlling for financial resources and other family/household characteristics (Alcaraz, 2020).

Despite these limitations, there are several important insights from this study that can inform future efforts to ensure that all children complete secondary school. Consistent with previous studies, more dropout occurs, for both adolescent males and females, at the standard transition points (i.e., to lower secondary school, to upper secondary school) (Gibbs and Heaton, 2014). We also observe that for both genders, once students drop out, they rarely return to school. The two top self-reported reasons for dropout (for both males and females) were no longer wanting to be a student and financial constraints. When we assessed predictors of educational attainment, being female, household wealth in early adolescence, and higher academic achievement were associated with increased educational attainment. In qualitative interviews, we found that during the transition to upper secondary school, lack of access was cited as a reason for dropout, but that this was not the case during the transition from 6th to 7th grade.

Our analysis, consistent with earlier research regarding the role of poverty in school dropout (Adelman and Szekely, 2017), suggests that poverty was both a “push” and “pull” factor for girls and boys. This was the main category chosen as the reason for dropout in our survey data, and in the interview data, students described not being able to pay for the costs of uniforms, books, and occasional charges for school projects. Despite formal policies regarding fee-free schooling, costs ranging from the informal snacks to the formal charges for supplies and projects were the norm in study participants’ communities. The continued implementation of cash transfer programs to poor families, which has demonstrated a positive impact on upper secondary school enrolment in Honduras, will be a critical component of any effort to increase secondary school participation (see World Bank, 2019). Likewise, supplies of community or school-managed materials (glue, paper, photocopies, etc.) should be provided free of charge to students, following models for school feeding programs (Alderman and Bundy, 2012).

However, we also found that when youth described their decision to drop out of school, they often also mentioned low academic performance. This suggests that poverty, when cited as a reason for dropout, may mask underlying low academic performance. Students and their parents may believe that it is an unwise use of financial resources to pay for schooling and forgo potential earnings (particularly for males) of children who have low academic performance. This finding is consistent with earlier research that suggests that parental perception of child performance is strongly predictive of dropout (Sabates et al., 2013). In our interviews, youth mentioned “walking letters” and “headaches,” and parents mentioned that children did not understand or remember what they were studying. These students likely had undiagnosed learning disabilities, such as dyslexia or processing problems that would require support or interventions that rural Honduran schools do not have. Hiring regional specialists who can work with students and with teachers to better serve the needs of children with learning challenges must be a part of the government’s strategy to universalize participation in secondary education. In particular, our findings suggest that low-performing students should be targeted with extra support at the end of sixth grade and as they transition to upper secondary.

In addition to a better understanding of the “push” and “pull” forces related to school dropout, our findings also explain youth in Honduras are “opting out” of school. This is critical because a number of studies on dropout have found that among the most common reasons for school dropout are that youth “no longer want to go to school” (Adelman and Szekely, 2017; Ananga, 2011; Bhatti and Jeffery, 2012; Gibbs and Heaton, 2014; Singh and Mukherjee, 2018). Opting out of school can be conceptualized as the accumulation of push and pull factors that lead students to explicitly or implicitly begin to question whether the marginal costs of staying in school outweigh the benefits (Behrman et al., 2015). Students’ conversion factors are part of the analysis of whether it is worthwhile to stay in school (Robeyns 2015). For example, conversion factors push us to acknowledge that it is not sufficient to know the resources a person owns or can use in order to be able to assess the wellbeing that he or she has achieved or could achieve; rather we need to know much more about the person and the circumstances in which he or she is living” (p.46).

Our multi-year longitudinal mixed methods study allowed us to uncover that, what appeared on the surface as a student deciding they no longer wanted to study (opting out), had richer and more complicated
back story. Opting out for these Honduran youth was not a separate category, but one that involved the culmination of past experiences in school (both academic and social), opportunities and obligations that pulled and pushed the student away, and the conversion capacities they had as individuals as well as the characteristics of their social and economic environment.

As global education priorities shift towards the second decade of life and completion of secondary schooling, the experiences of young people in secondary schools and a deeper understanding of why they lose interest in school are needed (United Nations, 2020; UNICEF, 2018). The findings from our study illustrate that, in the context of rural Honduras, when youth had scarce opportunities to convert a high school diploma into a valuable functioning (including work), they questioned whether education would lead to any change in their life trajectories, particularly in a context where their future roles as wives and mothers (for girls) and breadwinners via agricultural or other manual labor (for boys) were basically certain (see Table 1). Our findings regarding male school dropout provide further evidence that boys are distrustful of schooling as a guarantee of future work and social mobility (Boyden et al., 2020). In summary, students perceived few opportunities to convert the resource of a high school diploma into a valuable functioning. Once they had dropped out of school, they described a lack of motivation to invest effort and time in going back to school. These findings raise serious questions about the value of secondary schooling for youth, and how to ensure that schooling genuinely improves well-being.

Programs and policies to improve access and improve the quality of secondary schooling must take into consideration the growing sense among Central American youth that they will not be able to “convert” a secondary school degree into a valued functioning. As countries strive to improve the quality of secondary education, the concept of “conversion factors” provides a helpful lens through which to design content and curricular goals such that they are not out of sync with the ecological context in which youth are embedded. There is great need to rethink the purpose of secondary education and its relationship to opportunities for youth (male and female) once they have completed their schooling (Wolff and Castro, 2000). A small percentage of rural youth may go on to tertiary education, but the vast majority will not have the financial resources to do so. Focusing on mastery of academic content is important, but not without careful consideration of how and why such content is relevant for youth and how they might convert the resource of education into a valued functioning.

In conclusion, the COVID crisis will undoubtedly exacerbate school dropout in the region with an estimated 3.1 million students in Latin America at risk for dropping out of school (Seusan and Maradiégue, 2019). Two key implications from this study to address the serious problem of secondary school dropout in rural areas of Honduras are: 1) poor families will need financial support for their children to stay in school, particularly as they get older and their opportunities for paid labor expand; 2) schools need to be spaces where youth see the value of what they are learning and want to spend time – they must represent a greater contribution to their livelihoods and sense of well-being. To address financial constraints, the expansion of cash transfer programs and provision of free materials (uniforms, school supplies, etc.) is essential for poor families.

As to making schools seem worth it to youth and their parents, the integration of “life skills” or “soft skills” into the curriculum of secondary schools is an important move in this direction, (and, again, is a goal of the Honduran government as expressed in the Strategic Plan (Honduran National Board of Education, 2019). This emphasis broadens the purpose of schools to prepare youth for their future social and productive roles as adults (see DeJaeghere and Murphy-Graham, forthcoming; Dupuy et al., 2018). Recent research from Latin America suggests that “there is consistent and compelling evidence of inadequate basic, technical, and socio-emotional skills development across the region” (Fiszbein et al., 2016:vi). Focusing efforts on the integration of life skills and improvements in the relevancy and quality of secondary education are of critical importance in Honduras and other LAC countries. We will only be able to ensure “inclusive and equitable quality education for all” (SDG 4) (United Nations, 2020) when our notion of quality reflects what people living in rural communities need to live well and that they have reason to value.

Declaration of Competing Interest

I do not have any financial/personal interest or belief that could affect my objectivity, or inappropriately influence my actions. I do not have any conflicts of interest.

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Appendix A. Supplementary data

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