School Dropout, Child Marriage, and Early Pregnancy among Adolescent Girls in Rural Honduras

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This article examines intersections between schooling, child marriage, and adolescent pregnancy in a longitudinal, mixed-methods study of Honduran girls. It explores (*a*) girls' enrollment and dropout of school patterns and how these relate to timing of marriage and/or childbirth, (*b*) the factors associated with dropout, early marriage, and/or early childbearing, and (*c*) reenrollment patterns after marriage/childbirth. We find that household income in early adolescence predicts school dropout, early union, and early childbearing. Most girls discontinued their studies due to lack of financial resources or no longer wanting to be a student rather than due to marriage or motherhood. Only a small percentage return to school. This study can inform the timing and nature of efforts to protect girls and increase their chances of successfully completing secondary school, delaying marriage, and preventing early pregnancy.

Introduction

Over one-third of girls in developing countries marry before the age of 18, and one-ninth marry before their fifteenth birthday (ICRW 2015). We define early marriage (or child marriage) as entering into a union by age 18 (Parsons et al. 2015). Child marriage violates human rights because it impedes girls from exercising their rights under the Convention of the Rights of the Child (United Nations 1989), including developing to their fullest potential, being protected from harmful practices, and participating fully in family, cultural, and social life. Many of these girls also quickly become mothers (Parsons et al. 2015).

For many reasons, researchers and practitioners are interested in reducing the prevalence of early marriage and early childbearing (defined as the event occurring before age 18). Early marriages are often less equitable relationships, where the woman has less agency (McCleary-Sills et al. 2015). Early childbearing can lead to maternal and child health complications (Dixon-Mueller 2008) and limit economic opportunities into adulthood (Arceo-Gómez, and Campos-Vázquez 2014). The global Sustainable Development Goals

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(SDGs), particularly goal 5, Gender Equality, include eliminating early and forced marriage and ensuring reproductive rights. Expanding girls' access to secondary education is its own SDG target (of goal 4, Quality Education) but also can support progress toward goal 5.

Much about the linkages between schooling, early marriage, and pregnancy remains unknown. The extent to which early pregnancy and/or unions lead to school discontinuation merits closer examination. While adolescent motherhood is associated with lower educational attainment in places like the United States (Hofferth et al. 2001) and Chile (Berthelon and Kruger 2017), few studies have examined whether pregnancy and unions are why girls drop out of school, or whether their dropout precedes their union and/or pregnancy. Findings from sub-Saharan Africa suggest that early marriage, rather than childbirth, is more likely to limit girls' participation in school, and that "schoolgirl" pregnancy accounts for a relatively small percentage of girls who leave school (Lloyd and Mensch 2008).

In Latin America, early pregnancy has been deemed an epidemic (Orenstein 2017), and it is the only region where child marriage is growing. If trends continue, the region is projected to have the second highest child marriage rate in the world by 2030 (UN Women et al. 2018). Education may be one potential intervention to prevent early pregnancy and early unions. An analysis of 25 years of Demographic Health Survey (DHS) data from 43 countries found that in all world regions other than Latin America, over time, age of first sexual intercourse, first marriage, and first birth increased as educational attainment increased (Bongaarts et al. 2017). But, in Latin America, the age at first sex decreased by almost a year, age at marriage increased by less than a year, and the age at first birth remained constant despite increased levels of education. Relatively little research has examined why child marriage and teen pregnancy rates are so high in Latin America (Siddiqi and Greene 2020). One hypothesis is that, while girls' access to education has increased, the conservative cultural norms and political priorities have prohibited the incorporation of comprehensive sexuality education (Darré et al. 2015). Additionally, the lack of substantially better employment opportunities for those with more education may disincentivize school continuation, particularly for girls.

Using data from a mixed-methods longitudinal study of adolescent girls, this paper explores the relationship between schooling, child marriage, and early childbearing in rural Honduras. We began to follow girls in their final year of primary school and collected data at three additional time points over the next 8 years. This longitudinal design offers the rare opportunity to explore (*a*) patterns of girls' enrollment and dropout of school, and how this relates to timing of marriage and/or childbirth; (*b*) what factors in early adolescence are associated with early marriage and/or early childbearing; (*c*) patterns of reenrollment in school after childbirth and/or marriage; and (*d*) what factors prevent reenrollment. This study provides one of the first opportunities to

gain key insights into the factors that shape early marriage and early childbearing in Central America.

Conceptual Framework: School Dropout and Adolescent Development

Providing access to safe, affordable, good-quality formal education is a key strategy to prevent child marriage globally (Girls Not Brides 2020). Yet, in Honduras, only 47.1 percent of girls attend lower secondary school and 32.1 percent attend upper secondary school (UNICEF 2019). Our conceptual framework posits that school discontinuation is not an event but, rather, the convergence of different complex interactions over time between the individual and the family, the school, the community, and larger national and international contexts (Rumberger 2011; Singh and Mukherjee 2018).

To understand these complex interactions that affect school dropout, we draw upon Singh and Mukherjee's (2018) conceptual model that builds upon the ecological theory of human development (Bronfenbrenner 1977). The framework is a nested hierarchy of environmental systems, including the microsystem, macrosystem, and chronosystem. The microsystem is an individual's immediate surroundings and includes family, school, religious institutions, clubs, and peer groups, as well as culture (conceptualized as an ever-changing system composed of the daily practices of social communities including families, schools, neighborhoods, etc.) (Vélez-Agosto et al. 2017). The macrosystem includes laws, policies, belief systems, socioeconomic status, economic patterns (e.g., poverty/prosperity), and social conditions (e.g., violence/peace, enjoyment of rights). Finally, the chronosystem emphasizes the interplay of various factors throughout an individual's life course, rather than as isolated events.

Captured in the model are a way to think about intersecting factors that shape school discontinuation commonly referred to as "push out," "pull out," and "opting out" (Jordan et al. 1994; Singh and Mukherjee 2018). Push factors are those located within the school system and that push students out, and include bullying, disengaged or abusive teachers, and costs. Pull factors include influences from outside the school such as needing to care for sick or young family members, the availability of paid work, or the lure of a romantic relationship. Opt out factors include personal characteristics, behaviors, and attitudes such as disinterest toward schooling, and low motivation. Figure 1 depicts Singh and Mukherjee's (2018) model of school dropout that informed our data analysis.

Additionally, understanding child marriage through the lens of adolescent development helps explain why girls may make decisions that result in union and/or pregnancy. We emphasize three key ideas from adolescent development research, including (*a*) the fundamental changes of adolescence (biological, social, and cognitive), (*b*) the contexts of adolescence, and (*c*) the

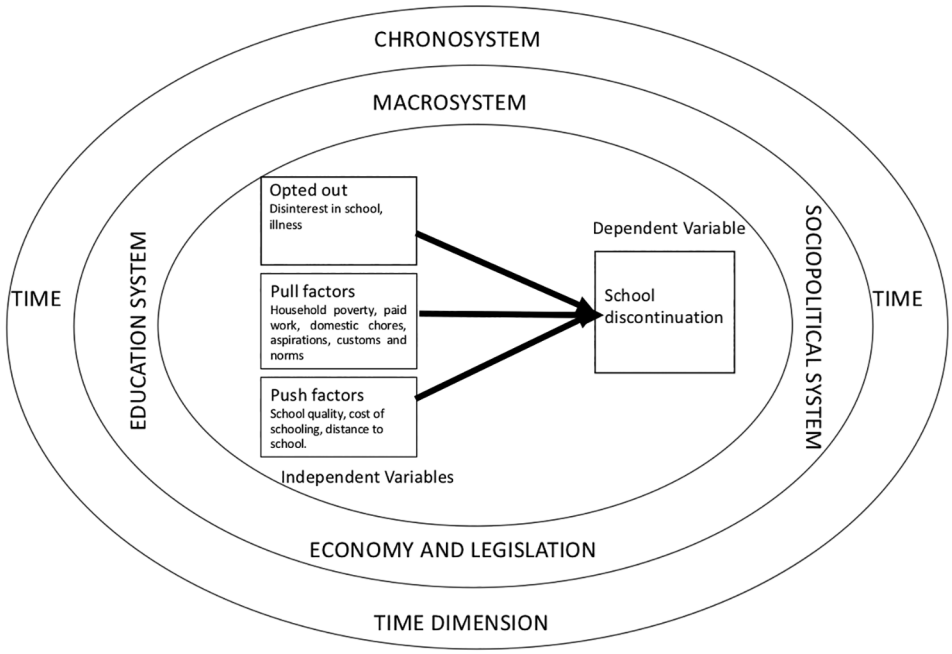

FIG. 1.—Theoretical framework for studying reasons that adolescents discontinue education (Singh and Mukherjee 2018).

psychosocial development of adolescence (Steinberg 2011). Most child marriage research focuses on the social aspects (e.g., social norms, poverty) that promote this phenomenon, but not on how they intersect with fundamental changes individuals experience during adolescence, including puberty, the emergence of more sophisticated thinking abilities (such as thinking in hypothetical and abstract terms such as love and friendship), and changes in relationships at home, school, and with peers. Although these transitions are universal, the ways in which the transitions affect adolescents are shaped by the context in which they live. Finally, the psychosocial development component refers to psychological and social events such as developing a sense of identity, autonomy, developing intimacy with others, developing sexual feelings and expressions, as well as the need for feelings of achievement and recognition.

A deeper examination of these changes clarifies the complex processes happening at girls' microsystem level that are simultaneously influenced by macrosystem conditions. Our conceptual framework posits that when a girl gets married or pregnant—whether before or after dropping out of school—it is the result of interrelated biological, cognitive, social, and psychosocial changes that adolescents experience, coupled with key features of their microsystem (including relationships with family and peers and how these relationships change during adolescence) and macrosystem (e.g., poverty and

sociopolitical context). This allows us both to examine why patterns exist in rural Honduras and also to identify ways that the school system can better respond to the needs and lived experiences of youth. While our findings are specific to Honduras, many of the themes and findings are applicable in other contexts characterized by high dropout from secondary school and a narrow range of options for girls in a patriarchal society.

Research Context and Methodology: A Mixed-Methods Approach

Honduras has the fourth highest prevalence of child marriage (34 percent) in Latin America, after Brazil (36 percent), Dominican Republic (41 percent), and Nicaragua (41 percent) (UNICEF 2016). Poor, rural Honduran girls are the most vulnerable to child marriage; approximately 8 percent of girls are married by the age of 15 (Honduras Secretaría de Salud et al. 2013). Almost half (48.3 percent) of Hondurans live in poverty, and high levels of crime and violence have stymied economic growth; the combination of poverty and violence sparks many Hondurans to emigrate.

Our mixed-methods longitudinal study began in 2008, when adolescents were completing sixth grade (see McEwan et al. [2015] for more detailed sample description). In 2009 (seventh grade), 2010 (eighth grade), and 2016 (postsecondary), we conducted additional rounds of surveys and interviews to explore outcomes related to schooling and demographics. Over that time period, we retained 91 percent of participants in the study.[1] Our quantitative analyses focus specifically on the 684 female youth who participated in the 2016 survey, when participants were approximately 20 years old (mean: 20.1; SD: 1.2), and 46.4 percent already had children.

We used a nested design to integrate qualitative methods: our qualitative sample is a subset of the overall sample (Lieber 2009). From the approximately 100 schools in our overall sample, we selected eight schools where we conducted in-depth qualitative interviews with a random sample of four focal female students per school. Out of the 32 female adolescents interviewed in the third round (in 2016), we focus on the 14 who had entered into a union and/or given birth by 2016. The interviews focused on the transition to adulthood, particularly their educational history, their relationships, and their participation in work and community life.

Quantitative Survey Variables

We merged data from earlier rounds of quantitative research (2008 and 2010) with data from the 2016 survey, which measured our main outcomes of interest (relationship, childbearing, and schooling).

[1] The most common reasons for nonresponse were no contact information (4.5 percent) and no contact due to migration to the United States or Europe (2.6 percent). Other reasons for nonresponse were declined to participate (1.1 percent) and death or incarceration (0.8 percent). Most retained participants (82.3 percent) completed their 2016 surveys in person; the rest completed an abridged version by telephone.

Transition to Adulthood Characteristics

Relationship status.—Participants reported their relationship status as single, married, consensual union (*unión libre*), divorced, widowed, or separated. For those who were partnered, they also reported their age when the union began. Participants also reported their relationship status with the other parent as part of the birth history; options included being together (as part of a marriage or consensual union), dating but not living together, a casual acquaintance, rape, or other. We define early union as entering into any union before age 18.

Childbearing.—In 2016, participants reported a full birth history, including the birth date of each child.

Schooling Characteristics: Educational Attainment

Participants reported a full educational history for each year 2008–16 inclusive, including their enrollment status and amount of education attained each year. Enrollment status at first marriage and/or first pregnancy was calculated by using the year of marriage and/or pregnancy and matching it to the enrollment status of the individual in that calendar year.

In the in-person survey, for those who did not enroll or left school that year, participants reported their most important reason for leaving school, using the following categories: not wanting to continue studying, not having adequate economic resources, entering into a union, becoming pregnant, achieving the desired level of education, moving elsewhere, being sick, parents not permitting them to continue schooling, needing to take care of siblings, one's partner not wanting them to continue schooling, not living in a place with a school that would allow them to continue schooling, or other. These categories were developed based on prior qualitative data collected from this cohort.

We also use baseline test scores from 2008 in both math and language (Spanish). We standardized the test scores, and then created binary variables of scoring above or below the twenty-fifth percentile for both math and language.

Sociodemographic Characteristics

Age.—We use age in 2016 as a proxy for relative age within the same grade.

Time allocation.—We asked participants in 2016 how they spent the majority of their time; responses were coded as working, studying, housework (including taking care of children), not doing anything, or other.

Region.—Participants were from multiple regions within Honduras. At the start of the study (2008), all participants lived in Atlántida, Colon, Intibucá, Lempira, or Santa Bárbara (we used region in 2008 as the primary region variable).

Household Characteristics

Family dynamics.—In the 2008 baseline survey, participants reported whether or not they lived with both parents in 2008.

Household wealth.—We used data from the 2008 baseline survey and 2010 survey to calculate household wealth in each year. Respondents reported whether or not they had a refrigerator, a radio, a sewing machine, a television, a VCR or DVD player, a computer, a bicycle, a motorcycle, a car, and/or a stove. We assigned one point for owning each of the items, to provide a range of 0–10 for wealth.

Mixed-Methods Analytic Approach

We followed an integrated methods conceptual model (Lieber 2009) at each period of data collection. Our qualitative findings helped inform the quantitative survey design and explain our quantitative findings. Particularly in our 2016 survey design and analytic strategy, earlier rounds of qualitative inquiry that focused on early marriage (Murphy-Graham and Leal 2015) informed our survey research.

For our quantitative data, we conducted descriptive statistics and multivariable linear and logistic regression analyses in Stata 14.0. The linear and logistic regression analyses were multivariable regressions to assess the associations between multiple independent variables and the dependent variable.

All interviews were conducted in Spanish, audio recorded, and transcribed. We used qualitative data analysis software and techniques to create inductive and deductive codes (Miles et al. 2014) based on earlier work and emergent themes we identified. Then, we created matrix displays to organize the patterns identified in our coding (Miles et al. 2014). Finally, we wrote analytic memos about each young woman to consolidate emergent patterns, themes, and concepts. All participants quoted were given pseudonyms.

Results: School Dropout and Early Marriage and Pregnancy for Honduran Females

In our survey sample of rural female youth (table 1), 36 percent of participants were in a consensual union and 5 percent were formally married. Slightly over half (56 percent) of participants were currently single. Just under half (46 percent) of participants were mothers. Over half (57 percent) spent the majority of their time "taking care of the household," suggesting most girls had assumed the role of *ama de casa* (housewife). Fewer girls were working (29.4 percent) or studying (11.7 percent). Secondary school completion was quite low, especially since all participants had access to a lower secondary school in the community where they attended primary school. Fifty percent of participants had only completed lower secondary education (through grade 9, known as *basica*or *ciclo común*).

Why Do Girls Drop Out of School?

Table 2 reports the percentage of participants each year who were enrolled in school or the primary reason for why they were not enrolled ($n = 563$).

TABLE 1
DESCRIPTIVE STATISTICS FOR STUDY SAMPLE OF RURAL FEMALE YOUTH (n = 684)

	Full Sample (n = 684) (Mean or %)	In-Person Sample (n = 563) (Mean or %)	Telephone Sample (n = 121) (Mean or %)
Demographic characteristics:			
Age:			
Mean	20.10 (SD: 1.20)	19.98 (SD: 1.17)	20.65 (SD: 1.18)
Median	20 (range: 17–25)	20 (range: 17–24)	20 (range: 18–26)
Family characteristics:			
Current relationship status:			
Single (%)	56.4	55.4	61.2
Formal marriage (%)	4.8	4.3	7.4
Consensual union (*unión libre*) (%)	35.7	37.1	28.9
Other (divorced, widowed, separated) (%)	3.1	3.2	2.5
Childbearing:			
Any children (%)	46.4	48.1	38.0
Number of children:			
Mean	.58 (SD: .71)	.60 (SD: .72)	.46 (SD: .65)
Median	0 (range: 0–4)	0 (range: 0–4)	0 (range: 0–2)
Education and time allocation:			
Highest educational attainment:			
Primary and/or lower secondary (6–9) (%)	50.0	51.2	44.6
Upper secondary (10–12) (%)	41.4	41.0	43.0
Higher education (%)	8.7	7.9	12.4
How respondent spends the majority of her time:			
Taking care of her household (%)	57.1	62.5	31.7
Working (%)	29.4	25.8	46.7
Studying (%)	11.7	10.5	17.5
Not doing anything (%)	1.2	.7	3.3
Other (%)	.6	.5	.8

Over time, fewer participants were enrolled in school, with relatively large declines between the end of primary and beginning of lower secondary school (in 2009) and between the lower and upper cycle of secondary (in 2012).

Until tenth grade (2012), the most common reason for not enrolling was no longer wanting to be a student. Lack of financial resources was the second most common reason until eleventh grade (2013), and it became an even more common reason thereafter, when students who completed secondary would be eligible to enroll in higher education (only 8.4 percent of the sample enrolled in higher education; see table 1). Our findings regarding school discontinuation support other studies in the region that point to "opting out" due to lack of interest and being "pushed out" for lack of financial resources as key areas for intervention (Adelman and Szekely 2016).

Becoming pregnant or becoming married were relatively uncommon as the primary rationale for dropping out of school, but they became more common reasons over time. Nevertheless, the "other" category, which included

TABLE 2
ENROLLMENT STATUS (AND REASON FOR NONENROLLMENT, IF APPLICABLE), AMONG RURAL FEMALE YOUTH WHO COMPLETED THE IN-PERSON SURVEY ($n = 563$)

Year	Grade	Was Enrolled in School (%)	Not Enrolled: No Longer Wanted to Be Student (%)	Not Enrolled: Economic Reasons (%)	Not Enrolled: Became Pregnant (%)	Not Enrolled: Became Married (%)	Not Enrolled: Other (e.g., Work Opportunity, Taking Care of Siblings) (%)
2008	6	99.5	.1	0	.1	0	.1
2009	7	67.5	12.3	12.3	.9	.9	6.2
2010	8	63.2	14.0	13.1	1.1	2.8	5.7
2011	9	59.9	16.3	13.9	1.1	3.4	5.5
2012	10	39.3	21.0	19.7	4.4	4.4	11.2
2013	11	37.3	20.6	23.1	3.6	6.0	9.4
2014	12	36.1	21.1	22.4	2.8	6.7	10.8
2015	NA	15.5	23.6	34.1	4.1	7.5	15.3
2016	NA	14.2	24.2	34.6	1.8	8.2	17.1

NOTE.—Percentages in each row may not add up to exactly 100% due to rounding.

work opportunities and taking care of siblings, was, in any given year, a more common reason to leave school than pregnancy or marriage. Given these high rates of school discontinuation, most girls were not enrolled at the time they first got pregnant and/or entered into a union: early marriage and early pregnancy are not significant "pull" or "push" factors. Out of those who got pregnant at some point in the study ($n = 316$), 87 percent were not enrolled in school at the time of their first pregnancy. Out of those who ever entered into a union (formal or consensual) ($n = 324$), 72 percent were not enrolled in school at the time of their first union. Even among the subset of girls who had at least one child ($n = 316$), only 24.7 percent said that pregnancy was the main reason for dropping out in the year of their first birth or previously, and a smaller percentage (16.5 percent) dropped out of school primarily due to marriage (but not pregnancy) in the year of their first birth or previously. (The rest dropped out for reasons unrelated to pregnancy or marriage [35.4 percent] or stayed enrolled through the year of their first birth [20.3 percent].) As such, dropout appears to precede early marriage and early childbearing rather than these leading to school discontinuation. We gain further insights into timing and expectations in our qualitative interviews, discussed below.

We also identified predictors of years of educational attainment in 2016 using linear regression (table 3). Being older for one's grade, early marriage, early childbearing, and being in the bottom quartile of the language test in 2008 were all statistically significantly associated with less educational attainment. Higher household wealth in 2010 was associated with higher educational attainment. If we restricted the predictors to just those from early adolescence (baseline) (i.e., removing early marriage and early childbearing), being older for one's grade remained statistically significantly associated with lower educational attainment, and higher household wealth in 2010 remained statistically significantly associated with higher educational attainment. These results

TABLE 3
LINEAR REGRESSION RESULTS FOR PREDICTORS OF YEARS OF EDUCATIONAL ATTAINMENT AMONG GIRLS ($n = 457$)

	Coefficient	95% CI
Demographics:		
Age in 2016 (in years)	−.32**	−.41, −.22
Lived with both parents in 2008	−.09	−.34, .16
Household wealth in 2008	.07	−.001, .14
Household wealth in 2010	.11**	.04, .19
Academics in 2008:		
In bottom quartile of language test scores	−.40**	−.70, −.10
In bottom quartile of math test scores	−.29	−.59, .02
Transitions to adulthood:		
Entered into union by age 18	−.45**	−.76, −.14
Had child by age 18	−.52**	9

NOTE.—CI = confidence interval.
* $P < .05$.
** $P < .01$.

confirm earlier findings that poverty, early marriage, and early childbearing are correlated with dropout.

In our in-depth interviews, girls mentioned a combination of factors contributing to their decisions to discontinue their studies, and there were several cases of girls who entered into a union and had a child after they dropped out of school. Their explanations align with the quantitative findings. The two most common responses, "no longer wanted to be a student" and "financial reasons," were quite salient in our interviews. Given the context of extremely scarce resources, students who did not feel motivated or sure of themselves academically were likely to stop attending. All interviewees described a lack of resources and the challenge of needing someone to financially support them in their schooling. For some, when their financial support ended, they had no choice but to drop out. For others, the decision was not simply due to financial constraints, but that they did not feel studying was a worthwhile investment.

Iris's experience is illustrative; she said, "I was in high school for a couple of months but then I stopped studying because my sister stopped supporting me." Her inability to pay for school acted as a "push factor," as she could no longer afford school supplies and fees. Her lack of money converged with other factors, including finding high school much more challenging than primary school. She described the process: "High school is more complicated, I barely understood my classes, and so I got low grades. . . . When I realized my grades were bad, I got disappointed." Iris's low academic achievement also "pushed" her out of school. Her sister offered to help her find other options so that she could continue her education. However, Iris weighed whether it was worth it to continue studying and decided that finishing high school was not so important. She reported not noticing a difference in the lives of persons who had finished high school from those who had not in her community. Once she was out of school, she entered a union with her boyfriend at the age of 16 and had a baby 1 year later.

In other cases, students described temporary interruptions in their schooling, due to family circumstances or health issues. This was the case of Gladys, who lived with relatives in San Pedro Sula (a large Honduran city) because her parents had emigrated in search of economic opportunities. However, due to family conflict, she decided to move in with another relative in a different community. After she moved, she did not want to deal with the administrative ordeals of transferring to another school and decided that she did not want to continue studying because she had lost interest in school:

> GLADYS: Since I had already made a transfer to San Pedro, it became difficult to do a transfer to come back here again, so, I did not want to continue studying.
>
> INTERVIEWER: But why did you not want to continue studying?
>
> GLADYS: I do not know, I stopped being interested in school.

Like the other girls, Gladys got married soon after dropping out of school at age 16 (she had her first child at 18).

The cases of Iris and Gladys are clear examples of the timing of events that our quantitative data show: in most cases, girls get married once they are out of school. Marriage is not a common pull factor, instead happening after school discontinuation. Additionally, we find that limited financial resources are frequently why students feel "pushed" out of school, and this is often compounded by other factors, like feeling academically behind or not seeing the value of schooling. These findings point to the need to better understand youths' decision-making process regarding dropout, and why so many report "no longer wanting to be a student" (see Murphy-Graham et al. 2020). These cases also illustrate the microsystem features (poverty, family support, and perception of the availability of future employment) that can shape decision making regarding schooling.

What Predicts and Explains Early Union and Early Childbearing?

Above we established that most girls have already left school when they enter a union or give birth. Here, we explore in greater depth the timing of these demographic events, to better understand if there are critical times to intervene. We also examine the predictors of early marriage and childbearing. Table 4 reports the percentage of participants who entered a union at each age.

Participants reported their current relationship status and if they had been in a prior relationship. We use data from their first relationship (either prior relationship, if applicable, or current relationship status). By age 20, 46 percent had ever entered into a union. Most of the entrance into first union occurred from age 15 through age 18. Consistent with national data, over 10 percent

TABLE 4
AGE AT ENTRANCE OF FIRST UNION, AMONG RURAL FEMALE YOUTH ($n = 684$)

Age	Percentage Who Entered a Union (*unión libre* or Formal Marriage) (%)	Cumulative Proportion in a Union at Each Age (%)
12	0	0
13	.6	.6
14	3.2	3.8
15	6.9	10.7
16	8.8	19.4
17	7.8	27.2
18	9.5	36.7
19	6.4	43.1
20	3.1	46.2

NOTE.—Cumulative proportion may differ from sum of percentages due to rounding.

of girls are in a union at age 15, and almost 20 percent at age 16. These two ages, 15 and 16, therefore seem particularly important windows for intervention.

We measured participants' status at the time of each pregnancy to determine if pregnancy drives early unions ($n = 396$ pregnancies). While this could be biased due to social desirability (i.e., it is culturally preferred for pregnancies to occur within a union), a sensitivity analysis of age at union and age at first birth to calculate the relationship status at birth found similar results (see the appendix). At the time of pregnancy, almost three-quarters (72 percent) reported being formally married or in a consensual union, and 25 percent were dating but not living together. The other 4 percent of relationships were casual acquaintances (*conocido casual*), other, and rape. This has important implications for policies that aim to address teen pregnancy, since most girls reported that their pregnancies occurred after entering into a union.

We also explored the overlap between early marriage and early childbearing in our sample ($n = 684$). The two outcomes are correlated: 67 percent had never entered into a union or had a child before age 18, and 18 percent had done both. Nine percent had entered into a union before age 18 but had not had a child before age 18, and 6 percent had had a child before age 18 but had never entered into a union. These findings suggest that a multifaceted approach is required, one that recognizes that (*a*) most, but not all, pregnancies happen within unions and (*b*) some couples in unions are able to prevent pregnancy (which suggests the availability of birth control, although this requires additional research).

We assessed the association between early adolescent characteristics (including demographic, education, and family characteristics) and our two primary outcomes of interest: early marriage (formal marriage or consensual union before age 18) and early childbearing (childbearing before age 18). Higher household wealth in 2010 was associated with statistically significantly lower odds of marriage by age 18 among girls, after adjusting for the other covariates in the model; all of the other covariates had null results (table 5).

TABLE 5
LOGISTIC REGRESSION RESULTS FOR PREDICTORS OF EARLY MARRIAGE (FORMAL MARRIAGE OR CONSENSUAL UNION BEFORE AGE 18) AMONG GIRLS (n = 457)

	Odds Ratio (OR)	95% CI
Demographics:		
Age	1.09	.91–1.30
Completed 2016 survey via telephone	1.18	.67–2.05
Education characteristics (2008 test scores):		
Bottom twenty-fifth percentile in math	.93	.52–1.66
Bottom twenty-fifth percentile in Spanish	.75	.42–1.33
Household characteristics:		
Lived with both parents in 2008	1.05	.64–1.70
Household wealth in 2008	1.04	.91–1.18
Household wealth in 2010	.85*	.74–.98

NOTE.—This was a complete case analysis. CI = confidence interval.
* $P < .05$.
** $P < .01$.

Similarly, higher household wealth in 2010 was associated with statistically significantly reduced odds of early childbearing by age 18, after adjusting for the other covariates in the model; the other covariates all had null results (table 6).

Once girls were in unions, motherhood often (but not always) followed, and sometimes also vice versa. For all pregnancies (both in and out of unions), one common finding is that they were rarely planned. Girls consistently described their lack of knowledge of and/or successful use of contraception. For example, Sara decided to live with her boyfriend when she was 17, despite parental objections. For Sara, marrying was the only way she could be with her partner without restrictions from her family. She became pregnant shortly thereafter. When asked if the pregnancy was planned, she explained, "No, I didn't plan it. At first, I was pretty upset because I wasn't ready to have a baby. . . . I wanted a baby, but not so early, no way." Another girl, Blanca, explained, "My problem was that I had a birth control method, but I still got pregnant with my son." Among the 14 girls we followed, two reported getting pregnant before

TABLE 6
EARLY ADOLESCENCE PREDICTORS OF EARLY CHILDBEARING (EVER BEING PREGNANT BEFORE AGE 18), AMONG FEMALE PARTICIPANTS (n = 434)

	Odds Ratio (OR)	95% CI
Demographics:		
Age	.96	.79–1.17
Completed 2016 survey via telephone	1.02	.56–1.87
Education characteristics (2008 test scores):		
Bottom twenty-fifth percentile in math	1.11	.59–2.06
Bottom twenty-fifth percentile in Spanish	.58	.31–1.10
Household characteristics:		
Lived with both parents in 2008	.78	.47–1.28
Household wealth in 2008	1.08	.93–1.24
Household wealth in 2010	.83*	.72–.96

NOTE.—This was a complete case analysis. CI = confidence interval.
* $P < .05$.
** $P < .01$.

they entered a union and the rest got pregnant after entering a union. However, only one girl (Cecilia) reported having planned her pregnancy. The rest, whether they gave birth before or after entering a union, stated that although their children were their greatest joy, they were unprepared to become mothers and wished they could have planned their pregnancies. These findings also suggest that it is unlikely that girls dropped out of school in anticipation of getting pregnant.

Like Sara, the desire to be in a romantic relationship was what motivated some girls to begin living with their partners. We found that social norms prevented many girls from having a romantic relationship without cohabitating. Parents' fear that girls will engage in romantic relationships or become pregnant out of wedlock made them forbid any friendship or romantic relationships with boys. In some cases, girls would "run off" in order to escape their parents' control. For instance, Norma had to stop studying at age 15 because her father found out she had a boyfriend: "When my dad found out I was dating a boy, he did not want me to continue studying." Although Norma's dad was successful in ending her relationship with her boyfriend, once out of school with no academic or economic prospects, Norma decided to enter a union with a different boy soon after leaving school: "I wanted to study, but he [her father] did not want me to, so I took that decision [to elope with her boyfriend]." Again, we see how cultural norms and family dynamics (features of the microsystem) influence the decision-making process of girls in rural Honduras. Norma's desire for intimacy is part of the changes that girls and boys experience during adolescence (Steinberg 2011). Yet, her desire for intimacy caused tension between her and her family and ultimately resulted in her school discontinuation and elopement.

What Are the Implications of Early Childbearing and Early Marriage on Girls' Future Schooling?

Cultural norms also shape the schooling patterns of girls after their initial dropout. A very small percentage returned to school. Only 8 percent of those who had entered into a union attained more education after their first union, and only 6 percent of those who had had a pregnancy attained more education after their first pregnancy. So, for most girls, entering into a union and/or becoming pregnant meant permanently ceasing schooling.

One of the most commonly cited constraints to further schooling was needing to care for children. We quantitatively assessed the childcare burden of girls who had their first child before age 18, compared with girls who had children later (after age 18) (see the appendix). We looked both at who cared for the child and who financially supported the child. There were more cases of a mother alone taking care of and being financially responsible for the child for girls who were early childbearers. Particularly noteworthy is that 27 percent of girls who had two children before age 18 took care of the children

alone. Some of these young mothers (14 percent) were also financially responsible for the children. The burden of childcare on girls, particularly those that have morethan one child, points to the need for cross-sectoral support for young mothers to ensure that they have access to family planning methods to prevent or delay a second childbirth, as well as access to childcare so that young mothers could more easily have the option of returning to school.

Our interviews regarding childcare underscored how difficult it is for mothers to return to school. In some instances, even if they had childcare, some men prohibited their wives from attending school to prevent them from socializing with other boys or girls. For example, Gladys, who married at 15 and had two children, explained that her husband would not allow her to go back to school, even though she would like to. "It is worse when you are married.... He says that he doesn't like me to have friends." She explained that he didn't want her to have female friends because they could give her "bad advice" and that having male friends was "even worse." Norma explained a similar dynamic, where she could not return to school after her marriage, "Once you are married it isn't the same. ... Men are jealous, they don't like you to have friends." Norma's and Gladys's comments here illustrate the ways in which girls who enter into a union at a young age are at risk of being unequal partners in their relationships. Norma and Gladys married boys who were older and who exerted power and control over their mobility and choice set. Early marriages tend to be unequal marriages, and this is one reason why they limit girls' ability to reach their full potential. They end girls' opportunities for schooling and work outside the home, due to rigid norms around what married women are and are not allowed to do that are a part of the rural Honduran macrosystem and that are reflected in the dynamics of different microsystems like families, churches, and schools. Addressing how culture and patriarchal gender norms operate in girls' lives to prevent them from their ability to reach their full potential should be incorporated in social policies and programs.

While inequitable gender norms limit a girls' choice sets once they enter a union, these norms can change. As Vélez-Agosto et al. (2017, 900) explain, "culture is an *ever-changing* system composed of the daily practices of social communities." We saw evidence of such change in our interviews. We focused on the small number of girls (three in our qualitative sample) who continued their studies after a pregnancy or union, to understand what factors enabled their education. Julieta, who had two babies, was able to return to school thanks to the support of her father, neighbors, and teachers:

> INTERVIEWER: Do other persons help you with the kids so that you can go to school?
>
> JULIETA: The only one that helps me is my father, he takes care of my son during the afternoons.

Julieta also noted how teachers and community members supported her to continue her schooling, challenging notions that once a girl gets married, parents and community members think that education is no longer important or possible: "When I got pregnant I thought I would not be able to study, I thought the school would not accept me. However, my teachers reached out to me and told me that I could keep studying. When I had the baby, it was difficult . . . so the mother of one of my female classmates took care of my baby. . . . She took care of my baby for over 6 months." Similarly, Miriam, who entered a union with her classmate while both were studying, shared that her father made sure that she continued studying even after entering a union and becoming pregnant:

> MIRIAM: People used to tell me, "now that you are pregnant, why do you go to school?" But I did not listen to them. Even when I was pregnant, I was not ashamed of attending school. Also, my dad told my husband that if we have decided to get together, then I had to continue with school.
>
> INTERVIEWER: Your dad called him?
>
> MIRIAM: Yes . . . my father asked me if I wanted to continue studying and I told him I did, so both my husband and I continued studying.

Parental and partner support were key in allowing these three girls to continue their studies. All three reported having partners who encouraged, motivated them, and provided for them financially so that they could continue studying. For example, Cecilia married at 16 and her husband paid for her to finish her last 2 years of school. Moreover, Cecilia explained that she had an equitable relationship, and this directly impacted her fertility: she did not have a child until she was 18 and finished with school. She explained that before having a child, "I wanted to graduate," and so she and her partner used contraception to prevent a pregnancy. She said that in her married life, things were going well, "we get along, we have not had any difficulties. I have no complaints." Her husband allows her to have friends and to socialize. Her friends visit her in her home. She described a fairly equitable distribution of labor in her home and, when pressed on the issue of "who is in charge in your house?" she explained, "We both are, we've come to an agreement, as a couple, we both are."

Cases like Cecilia illustrate that married girls can stay in school, but that, in order for this to happen, male attitudes need to change so that a girl's life choices do not narrow once she becomes a wife. Additionally, having access to sexual and reproductive health resources and education plays a crucial role in girls' ability to enroll in school even if they enter into a union. Likewise, the support that school staff provide girls is crucial in determining whether girls can stay in or return to school if pregnant and/or in a union. Julieta, for

example, mentioned how teachers, parents, and community members all united to support her, even in a context where it is common for married girls to abandon school. While these examples are exceptional cases (just 8 percent of married girls and 6 percent of teen mothers returned to school), they provide concrete evidence that changing the social norms that limit girls' educational attainment is possible.

Discussion

We find that school dropout typically preceded early childbearing and early marriage, and girls rarely reported dropping out of school because of pregnancy or marriage. A lack of interest in schooling, along with poverty, were the primary reasons why girls left school. While other studies identified marriage as a "pull" factor (Singh and Mukherjee 2018), we found that girls had already left school for various reasons when they entered a union and/or became pregnant—while it is possible that they dropped out in anticipation of becoming pregnant, our in-depth interviews suggest that, rather, girls see this as the logical next step in their lives once they are not in school.

Understanding these patterns through the lens of adolescent development theory illustrates that there are several key processes in adolescence that bump up against cultural norms in girls' families and communities and that often result in school dropout, early marriage, and early pregnancy. The biological, cognitive, social, and psychosocial changes that occur during adolescence happen in an environment where topics such as puberty, sexuality, and intimacy are taboo, and as a consequence, adolescents are often unprepared for these processes of change. Girls biologically experience puberty; psychosocially they crave autonomy and intimacy—and yet their parents try to restrict their mobility and interaction with boys. This attempt to protect girls can backfire, inadvertently nudging girls into early marriage. Parents and families are key to any strategy to prevent child marriage in the region. Better understanding the tension in adolescent/adult relationships will lay the groundwork for effective programming. Likewise, addressing the cultural norms and childcare constraints that prevent married girls and/or adolescent mothers from returning to school must also be incorporated into these strategies.

Additionally, and perhaps most salient, our findings illustrate a disconnect between adolescents' desire for romantic relationships and their sexual health knowledge. A clear implication of our findings is that schools must incorporate comprehensive sexuality education into their curriculum. As the international education community tackles the SDGs 5 of Gender Equality and 4 of Quality Education target of free, equitable, and high-quality secondary education for all youth, it is an opportune time to continue to advance what "quality" education entails. Because most youth will eventually enter into romantic relationships and will potentially become parents, relevant, high-quality secondary education must provide sexuality education that focuses on

issues of intimacy, gender, and power (Haberland 2015). Our findings regarding girls' dropout and marriage patterns suggest that efforts to incorporate sexuality education need to happen relatively early in schools (e.g., sixth grade) to still reach a large proportion of girls. Critical and feminist pedagogies can be instrumental in implementing content to develop critical thinking and decision-making skills related to child marriage and sexual and reproductive health (see Pacheco Montoya and Murphy-Graham, forthcoming). Donors, local organizations, feminist groups, and international agencies must continue to press for policies and practices that promote gender equality and equip adolescents with the skills and information they need to take charge of their reproductive health, complete secondary school, and be on a path toward reaching their full potential.

Conclusion

In summary, our findings indicate that (1) the majority of girls have already dropped out of school (often due to poverty) when they become pregnant or married; (2) conditions in communities (e.g., availability of paid work) constrain the choice set of girls, funneling them into the adult role of housewife; (3) a very small percentage of girls return to school once they become married or pregnant, due to cultural norms (specifically that married girls do not go to school) and childcare constraints; (4) a disconnect exists between girls' desire for romantic relationships and their sexual health knowledge; and (5) using an adolescent development lens helps illuminate the normal processes of adolescent development and how these may intersect with cultural norms in families, schools, and communities. These insights should inform the content and timing of strategies to keep girls in secondary school and prevent child marriage and early pregnancy. Dropout, union, and pregnancy often occur at similar time frames for adolescent girls—these all became more common for girls aged 15–17. We identified increases in school discontinuation between sixth and seventh grade (the transition from primary to secondary school).

Addressing child marriage in schools can help target the social norms and the biological, psychosocial, and cognitive changes involved in adolescent development to reduce child marriage prevalence in Latin America. Schools (as microsystems) can be strategic sites to address child marriage and gender inequality because they are powerful socialization settings where girls and boys can be exposed to learning opportunities that can influence their "knowledge, behavior, and attitudes toward gender, equity, and power" (Achyut et al. 2016, 1). Furthermore, school and community-based interventions should target the final year of primary school and continue with intensive focus during ages 13–14. These interventions must work with parents and school staff to emphasize that a desire for autonomy and intimacy are normal and healthy developmental tasks. They must simultaneously tackle the harmful gender

norms that limit girls' growth and development (e.g., that wives and mothers should not study).

This study explored the predictors and processes that result in school dropout, child marriage, and early pregnancy, but more research must be done about effective interventions, and funding opportunities for this research are scarce (particularly in Latin America). Global progress toward SDGs 4 (Quality Education) and 5 (Gender Equality) will require a greater investment in transformative programming for adolescents, accompanied by rigorous research that can determine the effectiveness of these efforts.

Appendix

We also looked at relationship status from two other questions on the survey (self-reported year of pregnancy and self-reported year of union) and find consistency with self-reported relationship status at time of birth (appendix table A1). Since data were not available about if/when a relationship ended, for anyone who had reported a previous union, we assume that they were still in that union at the time of pregnancy. For the full sample, 78 percent of pregnancies occurred in years that the mother was also in a union. Additionally, a greater proportion of pregnancies that occurred outside of a union happened at earlier ages. (For example, we note that there were only five pregnancies that occurred for participants when they were 13, all of which occurred outside of unions.) The difference between 78 percent (appendix table A1) and 72 percent (table 4) suggests that a relatively small proportion of pregnancies may have led to a union formation after the pregnancy, but that most pregnancies occurred within a union.

In appendix table A2, we examine the burden of childcare for girls who have one or more children. While in the majority of cases both parents care for and are financially responsible for their children, a particularly vulnerable group are girls who have had two children prior to the age of 18, as roughly 25 percent of those girls are the sole caretakers of the children.

TABLE A1
Early Pregnancy at Each Age, Stratified by Whether or Not They Had Already Entered into a Union (Formal Marriage or Consensual Union) at the Time (n = 392 Pregnancies)

Age	Percentage of Pregnancies That Occurred after Entering into a Union (n = 307 Pregnancies) (%)	Percentage of Pregnancies That Occurred While Not in a Union (n = 85 Pregnancies) (%)
12 (n = 0 pregnancies)	NA	NA
13 (n = 5 pregnancies)	0	100
14 (n = 7 pregnancies)	71.4	18.6
15 (n = 25 pregnancies)	72.0	28.0
16 (n = 60 pregnancies)	76.7	23.3
17 (n = 76 pregnancies)	75.0	25.0
18 (n = 83 pregnancies)	84.3	15.7
19 (n = 65 pregnancies)	78.5	21.5
20 (n = 45 pregnancies)	84.4	15.6
Over 20 (n = 28 pregnancies)	85.7	14.3
Total (n = 392 pregnancies)	78.3	21.7

TABLE A2
MOTHER- AND CHILD-LEVEL CHARACTERISTICS FOR GIRLS WHO HAD AT LEAST ONE CHILD BEFORE AGE 18 COMPARED TO GIRLS WHO HAD ANY CHILDREN

	Had at Least One Child before Age 18	Had First Child after 18
Mother-level characteristics	(n = 162 girls)	(n = 155 girls)
Relationship status in 2016:		
In a union (%)	70.3	71.0
Not in a union (%)	29.6	29.0
Number of children by 2016:		
Mean	1.4	1.1
Median	1 (range: 1–4)	1 (range: 1–3)
Child-level characteristics:		
First child	(n = 138 children)	(n = 129 children)
Who takes care of child:		
Both parents (%)	60.1	64.3
Mother only (%)	27.5	24.0
Grandparents of child (%)	8.7	6.2
Others (%)	3.6	5.4
Who contributes financially to the care of the child:		
Both parents (%)	47.1	48.1
Mother only (%)	13.0	10.1
Grandparents of child (%)	10.1	9.3
Others (%)	29.7	32.6
Second child	(n = 52 children)	(n = 9 children)
Who takes care of child:		
Both parents (%)	65.4	77.8
Mother only (%)	26.9	11.1
Grandparents of child (%)	1.9	0
Others (%)	5.8	11.1
Who contributes financially to the care of the child:		
Both parents (%)	48.1	55.6
Mother only (%)	13.5	11.1
Grandparents of child (%)	5.8	0
Others (%)	32.7	33.3

References

Achyut, P., N. Bhatla, H. Verma, G. Singh, S. Bhattacharya, and R. Verma. 2016. "Towards Gender Equality: The GEMS Journey Thus Far." Evaluation Report, International Center for Research on Women, New Delhi. https://www.icrw.org/wp-content/uploads/2016/12/GEMS-report-Jharkhand.pdf.

Adelman, M., and M. Szekely. 2016. "School Dropout in Central America: An Overview of Trends, Causes, Consequences, and Promising Interventions." Policy Research Working Paper no. WPS 7561, World Bank Group, Washington, DC. http://documents.worldbank.org/curated/en/308171468198232128/School-dropout-inCentral-America-an-overview-of-trends-causes-consequences-and-promising-interventions.

Arceo-Gómez, E. O., and R. M. Campos-Vázquez. 2014. "Teenage Pregnancy in Mexico: Evolution and Consequences." *Latin American Journal of Economics* 51 (1): 109–46. https://doi.org/10.7764/LAJE.51.1.109.

Berthelon, M., and D. I. Kruger. 2017. "Does Adolescent Motherhood Affect Education and Labor Market Outcomes of Mothers? A Study on Young Adult

Women in Chile during 1990–2013." *International Journal of Public Health* 62 (2): 293–303. https://doi.org/10.1007/s00038-016-0926-5.

Bongaarts, J., B. S. Mensch, and A. K. Blanc. 2017. "Trends in the Age at Reproductive Transitions in the Developing World: The Role of Education." *Population Studies* 71 (2): 139–54. https://doi.org/10.1080/00324728.2017.1291986.

Bronfenbrenner, U. 1977. "Toward an Experimental Ecology of Human Development." *American Psychologist* 32 (7): 513–31.

Darré, S., E. Jerves, J. Castillo, and P. Enzlin. 2015. "Sexuality Education in Latin America." In *Evidence-Based Approaches to Sexuality Education*, ed. J. Ponzetti Jr. New York: Routledge.

Dixon-Mueller, R. 2008. "How Young Is 'Too Young'? Comparative Perspectives on Adolescent Sexual, Marital, and Reproductive Transitions." *Studies in Family Planning* 39 (4): 247–62. https://doi.org/10.1111/j.1728-4465.2008.00173.x.

Girls Not Brides. 2020. "Child Marriage around the World." https://www.girlsnotbrides.org/where-does-it-happen/.

Haberland, N. A. 2015. "The Case for Addressing Gender and Power in Sexuality and HIV Education: A Comprehensive Review of Evaluation Studies." *International Perspectives on Sexual and Reproductive Health* 41 (1): 31–42. https://doi.org/10.1363/4103115.

Hofferth, S. L., L. Reid, and F. L. Mott. 2001. "The Effects of Early Childbearing on Schooling over Time." *Family Planning Perspectives* 33 (6): 259–67. https://doi.org/10.2307/3030193.

Honduras Secretaría de Salud, Instituto Nacional de Estadística, and ICF International. 2013. *Encuesta Nacional de Demografía y Salud 2011–2012* [National survey of demography and health, 2011–2012]. Tegucigalpa: SS, INE, and ICF International. http://dhsprogram.com/publications/publication-FR274-DHS-Final-Reports.cfm#sthash.ohl3qWVJ.dpuf.

ICRW (International Center for Research on Women). 2015. "Child Marriage Facts and Figures." http://www.icrw.org/child-marriage-facts-and-figures.

Jordan, W. J., J. Lara, and J. M. McPartland. 1994. "Exploring the Complexity of Early Dropout Causal Structures." Report no. CDS-R-48, Center for Research on Effective Schooling for Disadvantaged Students, Baltimore. https://files.eric.ed.gov/fulltext/ED375227.pdf.

Lieber, E. 2009. "Mixing Qualitative and Quantitative Methods: Insights into Design and Analysis Issues." *Journal of Ethnographic and Qualitative Research* 3 (4): 218–27.

Lloyd, C. B., and B. S. Mensch. 2008. "Marriage and Childbirth as Factors in Dropping Out from School: An Analysis of DHS Data from Sub-Saharan Africa." *Population Studies* 62 (1): 1–13. https://doi.org/10.1080/00324720701810840.

McCleary-Sills, J., L. Hanmer, J. Parsons, and J. Klugman. 2015. "Child Marriage: A Critical Barrier to Girls' Schooling and Gender Equality in Education." *Review of Faith and International Affairs* 13 (3): 69–80. https://doi.org/10.1080/15570274.2015.1075755.

McEwan, P. J., E. Murphy-Graham, D. Torres Irribarra, C. Aguilar, and R. Rápalo. 2015. "Improving Middle School Quality in Poor Countries: Evidence from the Honduran Sistema De Aprendizaje Tutorial." *Educational Evaluation and Policy Analysis* 37 (1): 113–37. https://doi.org/10.3102/0162373714527786.

Miles, M. B., M. Huberman, and J. Saldana. 2014. *Qualitative Data Analysis: A Methods Sourcebook*. 3rd ed. Thousand Oaks, CA: Sage.

Murphy-Graham, E., and G. Leal. 2015. "Child Marriage, Agency, and Schooling in Rural Honduras." *Comparative Education Review* 59 (1): 24–49. https://doi.org/10.1086/679013.

Murphy-Graham, E., D. Pacheco-Montoya, A. K. Cohen, and E. Valencia Lopez. 2020. "Examining Gender and School Dropout among Adolescents in Honduras: Evidence from a Mixed-Methods Longitudinal Study." Unpublished manuscript, University of California, Berkeley.

Orenstein, H. 2017. "These Portraits Shed Light on the Teen Pregnancy Epidemic in Latin America." https://blog.malala.org/these-stunning-portraits-shed-light-on-the-teen-pregnancy-epidemic-in-latin-america-3146196976a1.

Pacheco Montoya, D. P., and E. Murphy-Graham. Forthcoming. "Fostering Critical Thinking as a Life Skill to Prevent Child Marriage in Honduras: The Case of Addressing Child Marriage through Holistic Education (ACMHE)." In *Life Skills Education for Youth: Critical Perspectives*, ed. J. DeJaeghere and E. Murphy-Graham. Berlin: Springer.

Parsons, J., J. Edmeades, A. Kes, S. Petroni, M. Sexton, and Q. Wodon. 2015. "Economic Impacts of Child Marriage: A Review of the Literature." *Review of Faith and International Affairs* 13 (3): 12–22. https://doi.org/10.1080/15570274.2015.1075757.

Rumberger, R. W. 2011. *Dropping Out: Why Students Drop Out of High School and What Can Be Done about It.* Cambridge, MA: Harvard University Press.

Siddiqi, M., and M. E. Greene. 2020. "Mapping the Field: Systematic Scoping Study of Child Marriage Research, 2000–2019." GreeneWorks working paper, Washington, DC.

Singh, R., and P. Mukherjee. 2018. "Push Out, Pull Out, or Opting Out? Reasons Cited by Adolescents for Discontinuing Education in Four Low- and Middle-Income Countries." In *Handbook of Adolescent Development Research and Its Impact on Global Policy*, ed. J. E. Lansford and P. Banati. Oxford: Oxford University Press. https://doi.org/10.1093/oso/9780190847128.003.0012.

Steinberg, L. 2011. *Adolescence*. 9th ed. New York: McGraw-Hill.

UNICEF. 2016. "State of the World's Children 2016: A Chance for Every Child." https://www.unicef.org/publications/index_91711.html.

UNICEF. 2019. "Secondary Education." https://data.unicef.org/topic/education/secondary-education/.

United Nations. 1989. "Convention on the Rights of the Child." Treaty Series, 1577, 3.

UN Women, UNICEF, and UNFPA (United Nations Fund for Population Activities). 2018. "A Commitment to End Child Marriage and Early Unions." https://www.unicef.org/lac/en/reports/commitment-end-child-marriage-and-early-unions.

Vélez-Agosto, N. M., J. G. Soto-Crespo, M. Vizcarrondo-Oppenheimer, S. Vega-Molina, and C. García Coll. 2017. "Bronfenbrenner's Bioecological Theory Revision: Moving Culture from the Macro into the Micro." *Perspectives on Psychological Science* 12 (5): 900–910. https://doi.org/10.1177/1745691617704397.