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Cultural Meanings and the Aggregation of Actions: The Case of Sex and Schooling in Malawi

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This article examines the relationship between cultural and aggregate behavioral patterns in social life. Sociological investigations of this relationship have largely proceeded in two distinct directions, which appear incongruous with one another. On one hand, shared cultural understandings guide people's everyday actions and decisions (DiMaggio 1997; Ewick and Silbey 2003; Polletta 2009; Strauss and Quinn 1997; Zerubavel 2009), and the accumulation of these actions and decisions constitutes the aggregate behavioral patterns that sociologists seek to understand (Johnson-Hanks et al. 2011; Bachrach 2013; Thornton 2005). Demographers have recently pointed to the need to examine the extent to which population dynamics are "shaped and sustained" by cultural beliefs (Johnson-Hanks et al. 2011:2; see also: Johnson-Hanks 2002; Morgan 2011). On the other hand, people's behavior often contradicts these shared cultural understandings, and cultural patterns conform to distinct causal logics than do aggregated behavioral patterns (Bruner 2004; Cerulo 2001; D'Andrade 1995; Tilly 2002). A separate line of research has focused on the discrepancies between cultural beliefs and statistical phenomena (Martin 2010; Zerubavel 2009; Tilly 2002; White 2009). How can cultural meanings simultaneously diverge from and contribute to aggregate patterns of action?

I address this theoretical question by considering the empirical case of sexual relationships and schooling exits in Malawi. This case is ideal for speaking to questions of culture and behavior, because sexual relationships and school dropout are linked both culturally and statistically in this context. The cultural link takes the form of a pervasive cultural schema that separates education from sexuality. This schema dates back to the missionary origins of formal schooling in the region, and is fundamental to local systems of meaning surrounding education (Banda 1982). Many people in Malawi believe that sexual relationships lead to dropout because they trigger reduced ambition and competing allegiances, rendering women unfit for school (Grant 2012; Wight et al. 2006). My interviews with teachers and students show that these beliefs center on three collective narratives that specify causal pathways through which sexual relationships cause women to leave school: they grow distracted and cannot learn, they miss school to be with their partners, and they fall pregnant.

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The statistical link takes the form of survey analyses from multiple countries in sub-Saharan Africa that find that sexual relationships indeed predict subsequent female dropout (Biddlecom et al. 2008; Clark and Mathur 2012; Eloundou-Enyegue 2004). The present study confirms this finding: relationships are associated with school-leaving for female students in Malawi. However, the cultural understandings and statistical patterns diverge when we examine the causal processes underlying this association. The narratives that Malawians use to understand *why* sexual relationships lead to dropout, all of which involve women becoming incapable of succeeding in school, do not account for this statistical association.

Nonetheless, I show that these shared beliefs have real effects: teachers, parents, and students act as if the narratives were true, and thus help sustain the broader antinomy between sex and schooling. Teachers harshly punished female students who they suspected of being in a relationship, and these harsh punishments made it more difficult for girls to advance in school. Parents disinvested financially from female students who they believed were sexually active, and these disinvestments led girls to leave school. Students, facing dim prospects of completing their educational goals, entered into sexual relationships as a socially codified way to exit school and pursue an alternative pathway to stable adulthood.

Despite clear evidence that the dominant cultural beliefs about sexual relationships and dropout are not borne out in the statistical data, I show that these cultural beliefs play a crucial role in linking these two life events for women in Malawi. It is because people so firmly believe in the collective narratives that they act based on these beliefs without looking for confirmatory evidence. And these actions, in turn, are perceived by others not as causal but rather as unremarkable corollaries to what they perceive, based on the narratives, to be an inevitable cascade of events leading from sexual relationships to school dropout.

My analysis of this case reveals three general insights into the relationship between cultural meanings and aggregate-level social phenomena. First, *cultural understandings influence how we intervene in the lives of others.* I find that the primary mechanism through which cultural beliefs influence aggregate patterns of action is through shaping how people anticipate future events in social situations and respond according to these shared expectations, rather than shaping personal identities, moral frameworks, or motivations of individuals. Acting within a normative environment that conjoins sexual relationships and school failure, teachers and parents create new capabilities and constraints for female students and—without realizing their role in the process— render girls' schooling trajectories conditional on their sexual comportment. This insight presents an empirical challenge to researchers investigating the ways that cultural beliefs influence statistical patterns, as these relational processes are often invisible in surveys, which aggregate the experiences and perspectives of individuals.

Second, cultural schemas lead people to act *preemptively* before contradictions can be observed, as these understandings often involve an *axiomatic association between cause and outcome*. Because people believe that sexual relationships inevitably lead to school dropout, they act based on this belief, even without evidence of decreased school fitness. These preemptive actions, in turn, mask even widespread inconsistencies between narratives and

behavioral patterns. This insight helps to explain how cultural beliefs can persist and retain their resonance, despite being empirically inaccurate.

Third, narrative accounts often hinge on a *moral model of causality,* which *obscures the consequences of these preemptive actions*. Narratives emphasize the "tragic faults" of stock characters: their poor choices or inadequate efforts lead them to "get what they deserve" (Ewick and Silbey 2003; Polletta et al. 2013; White 2009). By emphasizing the causal power of Malawian students' individual transgressions in driving school dropout, these collective narratives divert attention away from how teachers and parents actually curtail students' educational trajectories. This insight reveals how our moral frameworks—grounded in the strength of shared cultural understandings—can conceal our culpability in constraining the lives of others.

THEORIZING CULTURAL UNDERSTANDINGS OF POPULATION PROCESSES

Layers of Culture: Distinguishing Schemas and Narratives

This section introduces two concepts used throughout this article: schemas and collective narratives. For each term, I first define the concept and describe the processes through which some cases come to be widely shared. I then describe how each type of cultural understanding is said to both influence and diverge from empirical patterns of behavior.

Cultural Schemas—Schemas are abstract mental representations that "provide default assumptions… under conditions of incomplete information" (DiMaggio 1997:267). Schemas influence cognition primarily through non-conscious channels; at their most basic level, they associate related concepts in our minds, such as coffee with warm or snake with danger (Strauss and Quinn 1997). But schemas are more than just pictures in our mind; we rely on them to recognize and organize new pieces of information and to "create complex interpretations from minimal inputs" (D'Andrade 1995:136). While cognitive scientists treat schemas primarily as individual-level phenomena, sociologists emphasize that schemas are often cultural— shared among groups and buttressed by organizations and conventions (Cerulo 2001; Zerubavel 2009).

What leads some schemas to become widely shared? The literature points to several factors: when they are incorporated into broadly disseminated cultural products, such as books or advertisements (D'Andrade 1995); when they relate to the care and socialization of youth (Strauss and Quinn 1997); and when they provide solutions to complex but frequently recurring tasks (Hutchins 1995; Patterson 2014).

Cultural schemas are important for sociologists and demographers because they *influence behavioral patterns.* Many of the behavioral generalities that social scientists observe, which scholars previously assumed were the result of individuals following explicit rules or norms, are actually the result of people making decisions based on overlapping cultural schemas (D'Andrade 1995; Patterson 2014). Demographers have recently focused attention on the role of cultural schemas in changing patterns of marriage and childbearing, among other

population phenomena (Bachrach 2013:18; see also Johnson-Hanks et al. 2011; Thornton 2005).

On the other hand, scholarship on cultural schemas frequently highlights their *distance from empirical patterns of behavior*. By definition, schemas are abstract and simplified. The social world contains innumerable bits of information, but our minds process only a few at a time —as Martin (2010) evocatively writes, "life's a beach, but you're an ant." Schemas simplify this complexity in two ways. First, they filter our perceptions, allowing us to ignore information that is irrelevant to or inconsistent with our understandings (Zerubavel 2009). Second, they provide cognitive shortcuts; we grasp new concepts by mentally relating them to familiar concepts (Strauss and Quinn 1997). These processes inevitably lead to inaccuracies: "the brain tends to match incoming particulars to the most likely scenario—even if this 'best fit' is ultimately not the true fit" (Cerulo 2001:117).

Paradoxically, the characteristics of schemas that distinguish them from actual behavioral patterns also render them influential in shaping behavior. Schemas allow us to generalize our perceptions and ignore irrelevant details about a particular situation. As Strauss and Quinn (1997:90) write, "Once a network of strongly interconnected units has formed, it fills in ambiguous and missing information… Subjectively, we may experience all the features of the typical event when only some of it features are present, reinforcing our original expectations." In other words, when encountering situations that activate cultural schemas, people overlook inconsistencies and enact habitual responses based on the schematic associations. It is often not the most pertinent schemas that become activated by a situation and influence people's response patterns; rather, it is those that have more "motivational force" (D'Andrade 1995). Schemas gain motivational force when they are cultivated through repeated experiences and become habitual, when they are associated with rewards or positive emotions, and when they relate to moral evaluations of oneself or others (Shore 1998; Strauss and Quinn 1997).

Collective Narratives—People also make sense of the social world by consciously deploying collective narratives (Bruner 2004; Ewick and Silbey 2003; Polletta et al. 2011; Somers 1994; Tilly 2002). Collective narratives put flesh around the bones of cultural schemas, specifying symbolic events or character traits that elucidate schematic associations between attributes and outcomes (Alexander and Smith 1993; Franzosi 1998; Polletta 2009). Narratives are persuasive, in part, because they "reiterate and elaborate already existing and dominant interpretive frameworks," otherwise known as schemas (Ewick and Silbey 2003:213). Three elements distinguish collective narratives from other types of cultural understandings: they involve selective appropriation of a small number of "stock" characters and events, events are temporally ordered in a consistent sequence, and the characters and events are connected by coherent plot structures (Ewick and Silbey 2003; Somers 1994; Tilly 2002). To constitute a plot structure, events must be connected not just sequentially but also consequentially— involving "an inversion of situation, a change of fortunes" (Franzosi 1998:521) and conveying a moral implication (Ewick and Silbey 2003).

What leads some narratives to become widely shared? Narratives become collective when they are frequently recounted, but not in duplicate form. Each time a collective narrative is

invoked, it is etched with particular details, and over time these retellings assemble in people's minds such that new cases are integrated into familiar narrative frameworks. As Polletta (2009:171) writes, "canonical stories gain force from their resonance with other canonical stories, each lending the others the kind of complexity and variation that seem to approximate real life." (see also Alexander and Smith 1993:158). In this way, collective narratives "efface the connections between the particular and the general," and the normative statements and causal claims they convey are generalized to other cases without being acknowledged or challenged (Ewick and Silbey 2003:214).

Collective narratives also *influence behavioral patterns*. As Somers (1994:614) writes, "people are guided to act in certain ways, and not others, on the basis of the projections, expectations, and memories derived from… available social, public, and cultural narratives" (see also Bruner 2004:694). Tilly (2002:27) argues that narratives influence not only individual lives but also larger patterns of action, "cementing people's commitments to common projects, helping people make sense of what is going on, channeling collective decisions and judgments, [and] spurring people to action."

Scholars point to three attributes of collective narratives that lead them to influence behavior. First, narratives suppress questioning and assuage critique. Rather than invoking explicit truth claims, narratives communicate maxims indirectly through plot structures (Polletta et al. 2011; White 2009). Psychological research reveals that people suspend doubts and counterarguments when exposed to narratives (Green et al. 2003). Appearing as coherent configurations of events and characters, narratives preempt alternatives from being considered (Ewick and Silbey 2003). Second, narratives activate emotional reactions towards characters— empathetic (for heroes) or repugnant (for villains) (Polletta et al. 2013). By stimulating shared emotional responses, narratives connect us to characters' fates, strengthen collective identities and call people to action (Franzosi 1998; Polletta 2009). And third, narratives construct normative boundaries around sets of actions. Sequencing events in ways that align with familiar schematic oppositions, collective narratives make some actions seem reasonable, moral, and natural and others unreasonable, unscrupulous, and inconceivable (Polletta 2009). Rather than explicit obligations or prohibitions, narratives invoke impressions of deservingness versus ignominy, mobilizing collectivities to support some practices and preclude others (Olick and Levy 1997).

On the other hand, scholars often draw *distinctions between collective narratives and empirical reality*. Narratives are said to diverge from empirical patterns of behavior because they follow a distinct logic: "the actual causal structure of social processes… usually contradicts the logical and causal structure of standard stories" (Tilly 2002:39; see also White 2009:24). This narrative logic emphasizes plot coherence (events lead to consistent consequences and storylines are resolved) and moral closure (the connections between actions and outcomes convey a pattern of deservingness). People also require a different type of affirmation in order to accept a narrative than they do for empirical claims, one based on appearing to be true and conforming to narrative conventions rather than verification or replication (Bruner 2004; Ewick and Silbey 2003).

Narratives are most persuasive when they resonate with the listener. An important contributor to narratives' resonance is the extent to which characters match dominant expectations for how people of that status generally behave (Polletta 2009; White 2009). Characters are often more important than the sequence of events that make up the plot in shaping audience expectations of a story's ending; "it is easier to insert the same events into different storylines than it is to insert different characters into the same storyline" (Polletta et al. 2013:315).

Interrelationships Between Cultural and Empirical Patterns

This study also requires a conceptual apparatus with which to investigate the interrelationships between cultural beliefs and statistical patterns. One such apparatus is Merton's (1948) theory of *self-fulfilling prophecies*. Merton defined a self-fulfilling prophecy as "a *false* definition of the situation evoking a new behavior which makes the originally false conception come *true*" (1948:195). This classic theory has recently been revived by proponents of analytical sociology, who view it as a useful framework for considering social or cultural influences on people's behavior (Biggs 2009; Demeulenaere 2011). As Biggs writes, self-fulfilling prophecy theory "underlines the importance of 'folk sociology,' how social actors themselves understand the causal processes which lead to their action and which flow from it" (2009:311).

Yet two issues limit the usefulness of this concept for empirical research. The first involves the formal definition of self-fulfilling prophecies as false beliefs that *become* true because of the reactions they provoke. While it is more straightforward to decide whether a belief is false or true when it pertains to a singular event (e.g., a bank failure), beliefs about aggregate outcomes (e.g., student performance, employment outcomes) are never entirely false or true; instead, they fall along a spectrum from inconsistent to consistent with population-level patterns. At the same time, the "definitions of situations" that supposedly shift from false to true are typically bundles of beliefs about both causal processes and outcomes.

In Merton's original article, this distinction between causal processes and outcomes is particularly evident in his account of black workers' union activities. The narrative account that white workers believe connects black race with strikebreaking is that black workers are undisciplined and "incorrigibly at odds with principles of unionism" (1948:197). Merton himself admits that this false narrative did not become true, writing, "The Negroes were strikebreakers because they were excluded from unions (and from a large range of jobs) rather than excluded because they were strikebreakers" (1948:197). Rather, white people's belief in this false narrative led them to constrain the opportunities of black workers, resulting in an association between the attribute (black race) and the outcome (strikebreaking). The narrative accounts underlying people's "definitions of a situation" often remain untrue, even as the aggregate pattern of outcomes becomes more consistent with the narratives' predictions.

The second issue is that empirical applications of self-fulfilling prophecies typically focus on individual-level perceptions, and few studies have examined intersections between shared understandings and aggregate behavioral patterns, as in Merton's strikebreaking case (exceptions: Christakis 2001; Cowan 2014). Since self-fulfilling prophecies are difficult to

analyze empirically (Biggs 2009), most studies have been designed as individual-level experiments (Salganik and Watts 2008; Shiv et al. 2005; Stewart-Williams and Podd 2004). But experimental settings offer scant insight into the interactive processes that undergird both shared narratives and behavioral patterns. In addition to investigating how individual-level actions are influenced by cultural beliefs, we must also consider how people, acting on these beliefs, engage in practices that shape the behavior of others. Cultural narratives circulate within *communities* and are deployed in diverse ways by those within them. In Merton's original formulation, for example, beliefs about black workers being strikebreakers affected both bosses' hiring decisions and coworkers' exclusionary union polices (1948:196–97).

The theory of performativity, as understood in economic sociology, provides additional clarity on both issues (Callon 1998; MacKenzie 2006). First, while self-fulfilling prophecy theory focuses on establishing a transformation from falsity to truth, performativity theory shifts that focus toward a more nuanced examination of how beliefs transform social worlds. According to performativity theory, shared beliefs in economic models lead people to focus on aspects of their social world that are consistent with these models and ignore those that are not. These filtered perceptions motivate behavioral responses that, over time, create real-world empirical support for the economic models (MacKenzie 2006). Economic models lead actors to perceive the world as calculable, enabling decisions based on heuristics of utility maximization which result in economic data appearing more rule-based and predictable (Callon 1998). This process unfolds independent of the models' accuracy— even fundamentally flawed models will produce consistent empirical regularities if actors base their decisions on them, "believing in the future reality promised by the formula and, thereby, making it real in the present" (Esposito 2013:106). Unlike self-fulfilling prophecy theory, which focuses on how false beliefs "become true," this theoretical perspective retains a conceptual distinction between beliefs about causal processes underlying a given empirical pattern (which remain false) and the beliefs about the empirical regularities themselves, which are often reinforced and validated by people's behavioral responses to their belief in the models. This distinction is similar to the one that I am making here between beliefs in the over-all opposition between sexual relationships and scholastic success and the shared narratives about *why* students in relationships so often leave school.

Second, insights from performativity theory allow us to move beyond the individual-level investigations that are the focus of most empirical studies on self-fulfilling prophecies and examine how shared beliefs, and the filtered perceptions they produce, ripple across networks of actors with different roles and relationships. In MacKenzie's (2006) account, a single economic formula leads to constellations of actions by individuals situated across the economic field, from professors who teach and promote the model to futures traders whose base their transactions on its predictions. These different types of responses to the same set of beliefs are interactive in nature—the traders generate data that confirms the professors' scholarship, while the professors teach the traders (or their supervisors) and produce recommendations that shape their marketplace practices. This interactive perspective is more germane to this study's focus on how the same cultural beliefs can motivate different responses among teachers, parents, and students, which in turn influence other people's capacities for action.

THE EMPIRICAL CASE: SEX AND SCHOOLING IN MALAWI

I explore the connection between cultural beliefs and patterns of action through an empirical examination of how cultural models concerning sex and scholastic achievement influence broader patterns of school dropout. Compared to other countries in sub-Saharan Africa, Malawi witnessed an unusually early and rapid expansion in educational opportunities: in 1994, it became the first country in the region to abolish primary-school fees (Al-Samarrai and Zaman 2007). As a result, between 1992 and 2010, school enrollment rose from 66% to 90% for youth aged 10–15 and from 36% to 51% for those aged 16–20 (NSO-Macro 2017). Despite this expansion of enrollment, however, attrition remains high: of 1000 children entering school in 2007, 309 are expected to enter secondary school, 40 to complete secondary school, and 8 to attend university (Frye 2012).

How can over half of those aged 16–20 be enrolled in school while so few advance to secondary school? The answer is that most Malawian students are years behind their age-grade level: despite an age range of 15–25, over half of my survey sample was in primary school when the survey began—at least two years behind where they should have been (see Table 1). This pattern of delayed age-for- grade is partly attributable to starting late, but widespread grade repetition plays a larger role in this process—due to factors like lacking school fees, poor infrastructure and instruction, many students repeat the same level for several years before advancing to the next (Sunny et al. 2017). In short, rather than being an aberration as it is in many parts of the United States, premature dropout and failure to progress in school are normative experiences for adolescents in this context. Nonetheless, these common events still trigger emotional and social repercussions--adolescents in Malawi face enormous cultural pressure to defy the odds and succeed in school, and maintaining optimism about educational goals in the face of adversity is a salient indicator of moral selfhood (Frye 2012).

As youth stay in school for longer periods, other milestones of the transition to adulthood increasingly coincide with the period in which students are struggling to complete their schooling-- in particular, sexual debut and relationship formation. Malawi is characterized by early and near-universal marriage, and first sexual experiences are increasingly occurring before marriage: as of 2016, on average, women have sex around age 17 and get married by 18 (NSO-Macro 2017). Despite being the norm for youth in this context, however, adolescent sexual experiences are fraught with tension due to the AIDS epidemic and the resulting widespread promotion of abstinence by religious leaders, news media, non-governmental organizations (Esacove 2010; Grant 2012). Malawian youth face moral pressure not just to avoid sex, but to avoid relationships. In contrast to the US context, in Malawi, “abstinence” refers to avoiding relationships altogether rather than avoiding sex within relationships. Relationships between men and women are culturally construed in Malawi (Watkins and Swidler 2013) and elsewhere in Africa (Wight et al. 2006) as inevitably involving sex, and non-sexual relationships are often the subject of ridicule (Ankomah 1999).[i]

[i]The data used here confirm these previous findings: among 2056 respondents surveyed, 1,219 were currently in a relationship when the study began, and only 32 described their relationship as non-sexual. (The question asked about “*any relationship where you felt*

To summarize, adolescent sexual relationships and school dropout, the two major variables of interest in this study, are sites of considerable cultural anxiety for adolescents. They are also entangled. Qualitative research has consistently documented a pervasive cultural belief that sexual relationships endanger schooling outcomes, particularly for female students (Frye 2012; Stambach 2000). Student abstinence is one of the most "fundamental sexual norms" and is particularly salient for girls (Wight et al. 2006:990). Pregnancy looms particularly large in the cultural imagination of students and their parents in rural Malawi (Grant 2012). Many female students in Malawi forswear dating altogether, citing concerns that boyfriends will "disturb their education" (Poulin 2007:2391).

The opposition between sexual relationships and schooling for female students in Malawi is supported by quantitative research. Survey research in sub-Saharan Africa has consistently found that sexual relationships are associated with school dropout for female students, but not for male students (Biddlecom et al. 2008; Clark and Mathur 2012; Eloundou-Enyegue 2004; Meekers and Ahmed 1999; Mensch et al. 2001). In Malawi, girls in sexual relationships are almost twice as likely to leave before completing secondary school (Biddlecom et al. 2008). Evidence is mixed on whether pregnancy mediates this association: some studies find that pregnancies account for most of the gender gap in dropout (Clark and Mathur 2012; Eloundou-Enyegue 2004), others find they explain only a small proportion of female school departures (Lloyd and Mensch 2008; Mensch et al. 2001).

I build on this work in several ways. While prior research relied on retrospective accounts, I use longitudinal data to examine how changes in relationship status affect dropout risk. I also advance our understanding of the cultural opposition between sex and schooling through examining both the mechanisms through which relationships are believed to lead to dropout as well as the ways people structure their behavior in reference to these beliefs. More broadly, this study is the first to examine these statistical patterns and cultural models in tandem.

ANALYTIC APPROACH

Mixed methods research encompasses various analytic strategies. Some scholars, taking what Small (2011) describes as a *confirmatory* approach, apply multiple methods to the same research question to confirm results and triangulate findings. Others take a *complementary* approach, using one method to test hypotheses derived from another (Small 2011; Spillman 2014). To examine how narratives and aggregate behavior inform and condition each other, I adopt what I call a *recursive mixed-methods approach,* moving repeatedly back and forth between longitudinal survey data and in-depth interviews and using insights gleaned from each type of data to inform my subsequent analysis of the other.

The recursive approach proceeds as follows: I begin by establishing that female students in sexual relationships are more likely to leave school using survey data. Next, I use interview data to introduce the schemas and narratives that Malawian teachers and students draw upon

affectionate towards someone even if it was not a sexual relationship"). For these reasons, non-sexual relationships are not examined in this study.

to make sense of the association between sex and school dropout. I then return to the survey data to examine whether the mechanisms advanced in these collective narratives help explain the statistical relationship between sexual relationships and later school leaving. I conclude by highlighting the various ways that interviewees use the collective narratives as a reference for their actions, finding that these behavioral responses sustain the aggregate association of sex and school dropout.

The study was designed to enable this type of recursive analysis. The longitudinal survey spanned the period during which the interviews occurred, I used survey data to sample students to interview, and I interviewed teachers who worked at the schools that survey respondents attended. To avoid confusion, I refer to survey participants as "respondents" and interview participants as "interviewees."

Statistical Analysis

Data for this study were collected in Balaka, a rapidly growing town in the Southern region of Malawi. The survey data come from Tsogolo la Thanzi (TLT, Chichewa for "Healthy Futures"), a longitudinal study fielded in Balaka between 2009 and 2012. TLT followed a random sample of 1,504 women and 552 men aged 15–25. Respondents completed surveys every four months during this period (for information on timing and attrition, see Appendix Table A1). I restricted my analysis to respondents who were attending school when they survey began (N=843), therefore excluding all students who left school before age 15. School enrollment in Malawi peaks at age 9 at above 90% for both girls and boys, falling to 70% at age 15 (NSO-Macro 2017). Gender gaps increase during later adolescence: by age 17, about 25% of girls remain enrolled, compared to over half of boys. Thus, the ages represented in my data include those with the highest dropout rates, particularly for female students. I relied on slightly different subsamples when examining absenteeism, school performance, and pregnancy (see Appendix Table A2 for exclusion criteria and subsample characteristics).

I demonstrate the statistical patterns in the survey data using bivariate analyses. I also used a combination of fixed-effects and propensity-score models to explore whether my findings remained consistent after controlling for selection on both observable covariates of interest and unobservable variation between individuals that remain stable over time. Because the multivariate models uniformly confirm the results of the simpler bivariate analysis, I discuss these additional analyses only briefly in the main text of this article and provide a detailed description of them (including an overview of both methodological approaches) in the Appendix.

Descriptive statistics for the survey sample are presented in Table 1. I used the question *"Are you currently enrolled in school?"* to assess dropout at each survey wave. To measure sexual relationship status, I used a question asking respondents whether they had any sexual partners during the preceding four months.[ii] While this question refers to one-off sexual partners as well as ongoing relationships, the former were rarely reported in the survey data:

[ii]I also conducted the same set of analyses using two alternative specifications: *committed* sexual partners and all partners (sexual or non-sexual). The basic findings are the same (available upon request).

of the 514 sexual partners reported in the first wave, only 21 were described as one-night stands rather than relationships, and 9 of these 21 were still ongoing four months later. I therefore refer to these partners as "sexual relationships" throughout the paper.

To measure absenteeism, the survey asked, "*Were you absent from school any days last week*?" at each wave.[iii] To examine school performance, I use two measures: self-reported end-of-year examination scores for mathematics and English, collected during wave four, and a more general question, asked in all waves: "*In the last four months, did you have trouble in school?*"[iv] I identified new pregnancies using the results of pregnancy tests administered at every survey wave.[v] Additional variables included in the multivariate analyses are described in the Appendix.

Interview Analysis

In 2009, I conducted (in English) 38 in-depth interviews with teachers and administrators from seven secondary schools that survey respondents attended. To select schools, I first obtained a list of all secondary schools in Balaka through the local Ministry of Education office. I then compared this list to the TLT survey data to select my sample based on two criteria: diversity in institutional settings and schools that were currently attended by TLT respondents. All schools that I approached agreed to participate in my study. I achieved variation along four dimensions of institutional setting. First, I visited three single-sex (one girls-only and two boys-only) and four co-educational schools. Second, I visited three religious and four non-denominational schools. Third, I visited three boarding and four day schools. And finally, I visited two government-owned and operated schools, three privately-owned and operated schools, and two "grant-aided" schools, which are owned and receive funding from a church but are managed and staffed by the Ministry of Education.

At each school, I interviewed the headmaster, deputy headmaster, life skills teacher, and up to three other teachers. I interviewed 28 teachers (9 female and 19 male) and conducted follow-up interviews with 10 of them. These interviews included questions about teachers' background, past teaching experiences, and the major issues they face in their classrooms. More than 80 percent of the time, these questions generated extensive discussions about students' sexual relationships posing a threat to their schooling. Otherwise, I asked teachers about their views on student sexual relationships, stories about specific cases, and advice they had given students and discussions with other teachers about this issue. I asked similar questions about other academic and disciplinary scenarios.

In 2011, I supervised in-depth interviews with 57 TLT respondents who were either in school or had recently left school. I selected survey respondents for these interviews based on their responses to questions about educational experiences, aiming for equal gender representation. I randomly sampled 26 respondents who were still in school (with 2

[iii] 11 percent of person-waves occurred during school holidays; these students were asked to report their absence for the last full week of classes. Robustness checks, including rerunning all analyses excluding these observations and identifying these cases with a binary variable in multivariate models revealed no significant differences.

[iv] Conversations with interviewers suggest that this question was interpreted as relating to academic problems, though it could also refer to other school-related problems, including disciplinary issues.

[v] Refusal rates among respondents who did not already know they were pregnant were 3–4%.

nonresponses) and 36 who had left school during the preceding year (with 3 nonresponses), yielding a total of 30 females and 27 males. A team of four Malawian interviewers conducted the youth interviews in Chichewa. Before beginning the study, I led three weeks of training for all interviewers, which included two pilot interviews each with young adults who were not enrolled in the TLT study. I stayed in Balaka throughout the data collection period, and we met daily as a team to discuss issues that arose and reflections about the interviews. I also read and discussed each transcript with the interviewer within a week of each interview being conducted.

The youth interviews began with questions about interviewees' schooling experiences, difficulties they faced in continuing their education, and their future aspirations and expectations. 76% of the time, interviewees introduced the topic of sexual relationships leading to dropout when answering these questions. Otherwise, they were asked about their relationship experiences and their attitudes about having sexual relationships while in school.

I read all interviews in full and coded sections in which interviewees discussed either sexual relationships or schooling experiences, generating a preliminary list of themes. After this initial pass, I pursued three distinct types of analysis. To explore the *schematic associations* that shape respondents' understandings of relationships and dropout, I looked for statements about "the nature of" adolescence, gender differences between students, sexual relationships, or school dropout. These statements were often expressed at the beginning of a longer passage, before referencing a specific incident or personal anecdote. I paid particular attention to metaphors, tropes, and phrases that were expressed in a similar manner across interviews.

To identify *collective narratives*, I searched for stories about specific individuals or descriptions of sequences of events related to the question: Why do relationships lead students to dropout? Passages coded as related to narratives typically included causal statements that generalized beyond a specific case. As the results show, these narratives are highly moralized, characterized by a sense of inevitability, and focus on the flawed actions of students themselves—how students' weakness in the face of romantic attraction leads their behavior to change in ways that directly threaten their schooling. In coding these passages, I identified sequences of events and behaviors that respondents described as causing dropout, the characters in the stories, and whether the narratives described specific incidents, typical experiences, or both.

Finally, to examine *behavioral responses*, I focused on descriptions of individuals engaging with or responding to the schemas and narratives that connect sexual relationships with school dropout. I was particularly interested in passages where individuals justify their actions by invoking the causal sequences conveyed by the collective narratives or the fundamental associations identified as schemas. I coded all descriptions of relevant actions by teachers, parents, and students, paying attention to whether they were describing their own actions, actions that directly affected them, or actions that they witnessed or heard about.

While representing distinct sets of codes, these three types of analysis informed one another. Often, a single interview passage was coded as including a schematic reference and a narrative, or a narrative and a behavioral response. And while I often revisited a transcript with one specific type of analysis in mind, I coded any relevant passage I came across, rather than conducting each type of analysis separately.

RESULTS

1: The Statistical Association Between Sexual Relationships and Leaving School

Figure 1 presents respondents' schooling trajectories over time; it shows the proportion who remained in school at each survey wave for students who did versus did not report being in a sexual relationship at wave 1. For female students, 66% of those who began the study in a sexual relationship had left school two years later, compared with only 35% who started out single. For male students, these numbers were 39% and 30%, respectively.

I assessed the significance of this association using rates of school dropout, with the data aggregated into person-waves (Table 2). This measure represents the proportion of in-school person-waves (observations at time *t)* for which respondents reported leaving school in the subsequent wave (*t+1).* I estimated these rates separately by respondents' relationship status at time *t.* Only 6% of person-waves when female students were single were followed by a school exit, compared with over 20% when female students were in sexual relationships (difference significant, $p<.001$). For male students, these numbers were 6% and 8% (difference not significant, $p>0.1$). In the Appendix, I show using fixed- effects and propensity-score models that this association for female students remained highly significant after controlling for selection on observed variables including sociodemographic characteristics, attitudes toward schooling, household economic status, and current employment, as well as for unobserved time-invariant characteristics in the fixed-effects models (Table A4). Together, these results show that female students (but not male students) who reported sexual relationships faced an elevated risk of subsequently leaving school.

2: The Cultural Association Between Sexual Relationships and Leaving School

This section introduces the cultural schemas and narratives connecting sexual relationships and school dropout (see Figure 2 for a visual depiction). Interviews reveal two salient cultural schemas— an oppositional relationship between sexual and scholastic pursuits and a complementary relationship between femininity and vulnerability to sexual temptation. These abstract cognitive associations serve as general frameworks that structure how people receive new information about these topics. Teachers and students also draw upon three collective narratives to explain *why* these schemas are true, or why the patterns they codify persist. These narratives share a common plot structure— relationships render female students incapable of educational success—that unfolds through three distinct causal sequences involving absenteeism, being distracted in class, and pregnancy. They also share a stock character: a fainthearted adolescent girl, blinded by romance. When people encounter retellings of these narratives, their expectations of this character cause them to fill in the gaps in ways that conform to the storyline of unbridled sexual desire leading to dropout.

Table 3 describes patterns in how the two schemas were discussed across types of interviews, and Table 4 does so for the narratives.

Schemas—The antinomy of sex and schooling was mentioned by all but two teachers and by 74% of students. In describing this opposition, interviewees often invoked the phrase "You can't feed the heart and the brain at the same time" (this metaphor was mentioned by 11 teachers and 7 students). As mentioned above, most interviewees introduced this topic when responding to general questions, such as "What are the most important issues that you face in trying to teach students in your classroom?" (Table 3).

The consistency with which interviewees described sexual relationships as a threat to further schooling, the fact that they often relied on similar metaphors and language to do so, and the primacy that this issue holds in their broader understandings about education suggest that this is an important cultural schema in this context (Cerulo 2001; DiMaggio 1997). This schema entails an oppositional relationship between these two domains, which contributes to essential understandings of adolescence in this context: if a person in a relationship, she cannot be a student, at least not for long.

The antinomy of sex and schooling is also consistent with criteria that scholars have identified as contributing to schemas becoming widely shared: it relates to the care and socialization of young people (Strauss and Quinn 1997) and is incorporated into widely disseminated cultural products (D'Andrade 1995). The threat of sexual relationships is documented in school curricula, discussed during morning assemblies and radio drama programs, and depicted in posters hanging in schools and around town. Figure 3 shows an example of such visual media: a poster displayed in the main office of a government school, showing students at secretarial college with the caption: "A real woman puts her future ahead of sexual relationships" (see also Frye 2012:1596). Contrasting "her future" with "sexual relationships", this poster draws a bright line between scholastic and sexual pursuits.

The second schema that shapes perceptions of the association between sexual relationships and school dropout is girls' perceived vulnerability to sexual temptation. Sexual relationships were said to pose a threat to all students, and more than half of the teachers noted that the rules applied to boys as well as girls (Table 3). Nonetheless, in about three quarters of my interviews with teachers, interviewees' statements about the antinomy of sex and schooling particularly referenced female students' vulnerability to temptations, with declarations such as "you know girls, they are weak" (Mr. Banda, English teacher at a private school).[vi] Among teachers who discussed female vulnerability to sexual temptation, about two-thirds of the time, this idea came up during general discussion about school discipline and issues students face at school; the remaining 33% mentioned this idea only when responding to questions about gender differences in disciplinary issues (Table 3). Often drawing direct comparisons with boys, teacher interviewees portrayed adolescent girls as particularly susceptible to the mal-effects of sexual relationships because they crave attention and positive affirmation, demand money to spend on clothes and beauty products,

[vi]I refer to all interviewees using pseudonyms from a list of common Malawian names.

and are consumed with dreams of marriage and motherhood (see also Mojola 2014). Mrs. Mwanza, a deputy headmistress at a girls' school, illustrates this emphasis:

> Mrs. Mwanza: Girls are naïve. They can be told something, then they just follow what the friend is doing which is not good… Now, this girl, if she is not helped, at this age there is a tendency to seek that love that she needs… So where does she get it? She can get it either from the friends, but oftentimes these days she can get it from the boy… In that case you find that the girl is weak in her studies.

The idea that girls are particularly vulnerable to sexual temptation was also mentioned in student interviews, though less frequently than among teachers: 44% of student interviewees discussed girls being particularly susceptible to forces such as peer pressure.

With statements like Mr. Banda's "you know girls," this idea is often expressed as relating to the fundamental nature of schoolgirls—an inevitable weakness in all female students that teachers must actively monitor. This association of female adolescence with vulnerability to temptation is also represented in media such as the poster depicted in Figure 3, which declares, "A real woman waits." Other scholarship on sexual culture in Malawi has noted similar stereotypes of "vulnerable women" (Grant 2012; Poulin et al. 2016; Watkins and Swidler 2013).

In comparing how frequently each theme was discussed in the teacher versus student interviews, I found that student interviewees were significantly less likely to mention female vulnerability than were teachers (Table 3). When this schema was mentioned in the adolescent interviews, it was also more likely to be in response to a direct question about relationships rather than brought up through general discussion. The schema of female vulnerability may be more salient for teachers as it provides an impetus to focus on female students in their enforcement of the rules prohibiting student relationships. This difference could also be due to generational differences—perhaps adolescents are more exposed to global messages of gender empowerment.

I also looked for gender differences within each interview subsample (Table 3), and found that female students were more likely than were male students to describe a specific person starting a sexual relationship and subsequently dropping out, while male students were more likely than their female peers to acknowledge that relationships pose a threat to all students. These findings suggest that female students are more likely to witness and experience a relationship leading to subsequent school exit, which is consistent with the gender differences described above in the survey data.

Collective Narratives—When explaining *why* sexual relationships lead students (particularly girls) to leave school, teachers and students drew from a stock of three narratives, displayed in Figure 2. The first type of behavior change, absenteeism, was discussed by 61% of the teachers and 42% of the students (Table 4). Both types of interviewees said that since parents often forbid relationships, class time affords the best opportunity to spend time with partners. Students in relationships therefore fall into a pattern of frequent absence. Mr. Munyoni, an English teacher at a private school, describes one such case:

> **Mr. Munyoni:** Last year we had a problem with a girl falling into a love affair… She was in love, to the extent of being out from school while her parents were saying that she was at school. So we realized that she was going out with her boyfriend during school hours, when her parents could not notice.

Teachers also mentioned trying to observe when two students were absent on the same day; for example, Mr. Banda described, "sometimes we notice that this girl is always absent from class on the same days as this boy, and then we suspect that something is happening" (this type of surveillance of attendance patterns was described by nine teachers in my sample).

Students also told stories about relationship-related absence leading to dropout. Simon, a 20-year- old in his final year of secondary school, explains that he once briefly had a girlfriend but ended the relationship after receiving advice from friends. When explaining to his partner why he was breaking up with her, he mentions absence as the primary means through which his performance would falter. This excerpt shows how the narratives were often discussed by current students— hypothetical tales about their own imagined demise if they were to fall into relationships.

> **Simon:** My friends were warning me, and I realized that their advice is true and this will mess me up. And I just ended the relationship.
>
> **I:** So what did you say when you went to tell her it was over?
>
> **Simon:** I told her that, "If I do this with you, I will end up not going to school and learning the lessons. So it is better for us to separate so that you can work hard in school and I can also work hard in school." […] Because if I have a relationship, it means that most of the time I will be seeing her and I will not do other things. And also, she may entice me with different romantic cunnings [flirtations] and then I will not go to school.

Interviewees identified distracting thoughts inhibiting academic performance as a second plot sequence linking sexual relationships with dropout. 75% of the interviews with teachers and 54% of the interviews with youth included discussions of this storyline. Seven teachers introduced this narrative by describing a biological incompatibility between lust and learning. Mr. Chomba, an English teacher at a public school, said, "The girls definitely have a problem with love relationships… We know that when you mix the two, one thing will definitely suffer, especially their studies. At this age, with their bodies and brains still developing, they don't have control over their sexual impulses." Mr. Chomba then described a student who was formerly the head prefect, who fell into a relationship, began failing her exams and failed her end-of-term exams. He recounted, "It was a total change, her mind switched off after she started going with that boy."

School-aged youth also described how sexual relationships would muddy concentration and lower academic performance. Charity, 16 years old and in the seventh grade, explains in language typical of many other interviewees how a sexual relationship would cause her to perform poorly in school by "disturbing her thoughts":

> **I:** Would you like to be in a relationship right now?

Charity: No

I: Why?

Charity: Those things will distract my education. I cannot be thinking about school because I am thinking about him, so it can disturb my thoughts. I might be working on school-related matters while he is telling me about things that are not related to school, so my focus cannot be achieved.

Interviewees identified pregnancy as a third pathway through which sexual relationships lead to dropout; this plotline was mentioned in 71% of the teacher interviews and 54% of the youth interviews. Tiwonge, an 18-year-old who became pregnant during her first year of secondary school, describes:

Tiwonge: It did not take much time for the relationship to reach its maximum point, the point of no return, when we started having sex together, and that is when I got pregnant. And now I can see that the advice [my sister] gave me was true. I have disturbed my education, and even though my mother agreed to watch the baby, my brother has refused to pay for my school fees, saying that he can't trust me and maybe it will happen again.

When teachers suspect a student is pregnant, they take her to the hospital to be tested. If the test is positive, she must leave school immediately. Although a nationwide policy requires schools to allow students to return a year after giving birth, teachers and students both reported that few students do, and no interviewee could recall a specific case of this happening.

As shown in Table 4, I found no significant differences in how frequently each narrative was discussed by teachers versus students, or by male versus female interviewees within each interview sample. Nonetheless, the fact that all three narratives were more frequently invoked by teachers than students is worth noting, and indeed when all three are considered together, this difference is significant ($p<0.01$). Stories may be more salient for teachers because they lend legitimacy to the schema opposing sex and schooling. Because narratives activate emotional responses in audience members and construct normative boundaries around acceptable behavior, they may be useful for teachers in providing a moral justification for institutional policies prohibiting relationships, which teachers are tasked with enforcing (Polletta et al. 2013).

There were significant gender differences in the *characters* portrayed in two of the three most salient narratives (Table 4). For the narratives involving distracting thoughts and pregnancy, both teachers and students were significantly more likely to tell stories involving female characters only, relative to stories involving both male and female or male characters only. While this finding did not reach statistical significance when the sample was constrained to only male students, female teachers, or (for distracting thoughts) male teachers, there were more stories told involving only female characters for all groups, suggesting that these narratives were indeed viewed through the lens of female vulnerability to sexual temptation. On the other hand, no significant gender differences were detected for absenteeism, and both teachers and students told more stories about absenteeism involving

both genders than they did for the other two narratives. This could reflect the fact that teachers tried to use absenteeism of male-female pairs as a way to catch students engaged in relationships with each other, as captured by Mr. Banda above. Alternatively, it could reflect an awareness that, as I show below, absenteeism is more strongly associated with relationship status for male students than it is for female students.

3: Quantitative Analysis of the Three Collective Narratives

Sexual Relationships Tempt Students to Skip School—Do the survey data confirm that students who are in sexual relationships are more likely to be absent? The first panel of Figure 4 shows that 40% of the time, male students who reported being in a sexual relationship had missed school in the previous week, while this was true 30% of the time for single male students (difference significant, $p<0.001$). Among female students, these numbers were 31% and 30%, respectively ($p>0.1$).

I used fixed-effects models to test whether this association for male students remained after adjusting for selection (Appendix, Table A5). The results showed that sexual relationships were positively associated with absenteeism for boys (odds ratio = 1.59, $p<0.05$) and confirmed that no such association is evident for girls (odds ratio = 1.03, $p>0.1$). I also examined whether the association between relationship status and leaving school is robust to the inclusion of school absence (Appendix, Table A6), and found that the results of the fixed-effects models predicting school dropout are virtually identical with and without the absence variable.

These results suggest that absence was not a major causal pathway linking relationship status and leaving school. Rather than being a pathway through which sexual relationships lead girls to leave school, school absence appears to be a parallel process whereby sexual relationships alter the educational behavior of *male* students, albeit with less severe consequences.

Why might boys be more likely to be absent? One potential explanation is that given the norm of boys providing material gifts to their female partners (Poulin 2007), male students may feel more motivated to work when they are in sexual relationships. Indeed, about one in five partners of female students are formally employed, compared with only about 1% of partners of male students. In other words, men may not only face a lower hazard of punishment for skipping school; they may also have more incentives to do so. In making sense of this gender discrepant finding, it is also important to note that male and female students are not typically dating each other: only a minority of students in relationships report partners who are currently in school.

Sexual Relationships Distract Students and Inhibit Their Learning—Do the survey data confirm that students who are in sexual relationships perform worse academically? The second and third panels of Figure 4 show no significant differences in school performance (examination scores in math and English and whether a respondent reported “trouble in school”) between those who reported a sexual relationship during the previous four months and those who did not.

To ensure that other factors were not masking the effect of being in a sexual relationship, I also conducted multivariate analyses for both measures of school performance (Appendix, Table A7). There were no significant associations between relationship status and academic performance in any of these models. To examine whether adjusting for school performance attenuated the association between relationship status and leaving school for female students, I added the "trouble in school" variable to the fixed-effects models predicting school dropout, and found that this association is robust to the inclusion of this variable (Appendix, Table A6). Taken together, these results suggest that the association between relationship status and dropout does not operate through changes in academic performance.

Sexual Relationships Lead to Pregnancies and Subsequent Removal from School—Do the survey data confirm that female students who are in sexual relationships leave school due to pregnancy? To answer this question, I first examined the reasons students provided for leaving school between waves two and six. Almost one third of female respondents (29%) who left school during the observation period attributed their departure to pregnancy, and an additional 7% cited marriage as their primary reason for leaving.[vii] For respondents who dropped out before the survey began, these proportions were 21% and 7%, respectively. Unlike absenteeism and lowered school performance, these results suggest that pregnancy is a significant pathway through which sexual relationships interrupt schooling trajectories for female students.

Yet what about students who *don't* get pregnant: are they still more likely to drop out if they are in a sexual relationship? To address this question, I restricted the sample to female respondents who did not experience a pregnancy, and examined enrollment trajectories for respondents who started out single versus in a sexual relationship (fourth panel of Figure 4). A significant difference in dropout rates remains when women who became pregnant are excluded; specifically, 50% who began the study in a sexual relationship left school by wave six, compared with only 22% of those who started out single. To examine whether the association between relationship status and dropout remains significant in the multivariate framework for this "non-pregnant" sample, I repeated the fixed-effects and propensity score models predicting school dropout and found that relationship status remained a significant predictor of leaving school (Appendix, Table A6).

To summarize, these results show that the elevated risk of dropout that female students with sexual partners face does not operate through increased absenteeism or lowered school performance, and pregnancies do not fully explain the observed pattern either. The results also reveal gender dissimilarities in the effects of sexual relationships on educational outcomes: girls (but not boys) are more likely to leave school, while boys (but not girls) are more likely to miss school.

4: Behavioral Responses to the Cultural Antinomy of Sex and Schooling

I now return to the interviews to make sense of these findings. Rather than sexual relationships diminishing students' capacity to learn or attend school, interviews show that

[vii]Other answer choices included lack of interest in school, financial constraints, illness, and an "other" category.

the cultural antinomy between sex and schooling is itself a key element in the causal story linking these domains in students' lives. As with any survey, the TLT data reveal patterns produced by people behaving in reference to shared meanings and moral standards, which support some actions and controvert others. This section presents some of the specific ways that Malawian teachers, parents, and students attended to the cultural opposition between sex and schooling. Table 5 provides additional information about how frequently these different types of behavioral responses were discussed within each interview sample (teachers versus students) and by gender of interviewee.

Teachers—When discussing the perils of students' sexual relationships, teachers often invoked three symbolic events: absence, poor academic performance, and pregnancy. But school policies prohibited *all* "romantic pairings," regardless of whether they observed any deleterious effects. When asked how they would respond if a high-performing student were caught having a sexual relationship and her classroom behavior did not change, 75% of teachers said they would punish her anyway (Table 5), as with Mr. Banda here:

> **I:** If a relationship is happening, but it is not affecting students' performance in class, is it a problem?
>
> **Mr. Banda:** We have rules and regulations that clearly state no relationships in school. So being a student, even if we can't say with certainty the relationship is affecting their performance, of course it is still against these rules and regulations.

Some teachers, like Mr. Mkandawire, a biology teacher at a public school, were unable to fathom that a student could maintain a sexual relationship without it altering her performance:

> **I:** Does it make a difference if a student is getting very good marks, and shows good behavior, would you still punish them [for being in a relationship]?
>
> **Mr. Mkandawire:** But that just wouldn't happen. If a girl is in school and you find that she has involved herself in a romantic pairing, definitely her behavior starts to suffer… her mind wandering towards this boy, and she will stop performing well.

This unwavering belief in the ill-effects of sexual relationships led teachers to act swiftly to punish students, with 79% of teachers describing themselves or their peers intervening before detecting any academic or behavioral changes (Table 5). Teachers described such preemptive punishments in all schools I visited. For example, Mr. Kumbuyo, a math teacher at a public school, described teachers initiating disciplinary procedures immediately upon seeing students walking with someone of the opposite sex:

> **Mr. Kumbuyo:** Sometimes we see that something is happening that is not academic. Like maybe outside of this school we can meet them, walking with their boyfriend or girlfriend… We tell them that tomorrow you come to the office. And we ask them to write what happened, and that teacher will be a witness. And if it is true, this is sufficient cause for suspension.

While general statements such as Mr. Kumbuyo's often reference both boys and girls, when teachers described disciplining particular students for being in sexual relationships, almost all of their examples concerned female students. And 54% of the time, teachers referenced

female vulnerability when describing these punitive actions, expressing their attempts to regulate girls' behavior as efforts to "empower girls" or protect them from "cultural factors" (Table 5). Mrs. Ngosa, headmistress of a girls' school, said, "Most of the time, when they enter into a sexual relationship, they run to sex. This is how it becomes more dangerous. Their culture tells them you are a weaker sex, the boy has power over you. So you have to stamp it out immediately, when you notice anything." Mrs. Ngosa then described strictly monitoring girls' behavior for signs of sexual desire and then punishing them harshly.

Teachers like Mr. Kumbuyo and Mrs. Ngosa were acting in accordance with their belief that students in sexual relationships could not succeed in school. Their punitive actions in turn reinforced this schema by creating real obstacles for students' continued education. 42% of student interviewees reported having been punished for sexual relationships (real or suspected). Female students were almost twice as likely to report personal experience with this type of punishment (Table 5; difference significant).

These punishments were consequential for students' educational trajectories. Even a short suspension could cause students to repeat a year of school if the suspension overlapped with compulsory exams. Taziona, a 19-year old woman who had left eighth grade one year before her interview, described one such experience:

> **I:** What obstacles did you encounter at school as you were trying to continue?
>
> **Taziona:** A boy proposed to me and it became very famous, until even the teachers had heard about it. They called me to the office… It was not agreed upon by me and the boy. I refused [and said], "I am being falsely accused. The boy proposed but I did not accept him." But they called the boy, and he said that, "She is really my girlfriend." So you can see that his thoughts and mine differ… And I had to go home for a month, so that caused me to repeat the year.

Caroline, a 17-year old who previously attended an elite government school, described how her suspension led her to transfer to a lower quality school:

> **Caroline:** In form one[viii], I started having relationships. The teacher discovered us and suspected something, and they suspended me. So after that I ended the relationship but I still changed to [my current school] and repeated form one because I missed the [end of year] examinations at [previous school].

Suspensions and other disciplinary actions that remove students from the classroom place hurdles in students' educational pathways. These preemptive punishments, in turn, contribute to the pattern of girls leaving school after entering sexual relationships.

Parents—Parents also acted in reference to this schema. About two thirds of the teachers described parents as allies in regulating students' sexual behavior, when asked to describe how they typically interact with parents (Table 5). For example, Mrs. Mwanza said,

[viii]Education in Malawi is based on the British system, with three distinct levels representing 12 years: primary school (standards one through eight), junior secondary school (forms one and two), and senior secondary school (forms three and four). In the statistical analyses, schooling is represented as a numeric variable representing year in school.

Mrs. Mwanza: In most cases, you find that the parents are siding with you. Whatever you are trying to discourage in the students, the parents are also strictly discouraging that.

I: Have you ever spoken to a parent about this issue of sexual relationships and had the parent be okay with knowing that her daughter was in a relationship?

Mrs. Mwanza: No, they are so much against that, even slapping the girl.

Teachers described this support as vital to their efforts to monitor students. Indeed, in three separate cases, teachers mentioned parents visiting school to report evidence of a student's sexual relationship.

A majority of both teachers and students described parents refusing to pay school fees if their children were in relationships (Table 5). Although the 1994 policy eliminated primary school fees, education still requires significant financial investments, including secondary school fees, uniforms and supplies, and foregone wages. Parents are hesitant to make these investments if they don't expect their children to graduate, and they often base these expectations on their perceptions of children's (particularly their daughters') sexual behavior (Grant 2012:79).

Four teachers, including Mrs. Lungu, a life-skills teacher at a private school, described this threat of parental sanctions as motivating students to avoid sexual relationships: "They are afraid of suspension, because parents do not want to see them at home—they can stop paying the school fees. So they are more careful." On the other hand, Mr. Chirwa, a headmaster at a Catholic school who was unusually sympathetic toward students, said that he hesitated to involve parents because of this tendency to withdraw financial support:

Mr. Chirwa: First we call the girl and talk to her alone. But sometimes a student will claim that she will stop, but you see it continuing. So then, you invite the parents.

I: And how do parents normally respond?

Mr. Chirwa: Normally it is really a joint venture. Most of the parents say, "Thanks for your concern." Some parents, when you call them, they say, "I will not give you school fees anymore, because you are squandering my money." So we avoid telling parents for that reason.

Parents seem to be particularly concerned with the sexual morality of female students. All descriptions of parents punishing students involved female students. In the following passage, Mr. Chirwa specifically mentions parents' heightened concern for girls:

I: So you invite the parents of the boy and the girl together?

Mr. Chirwa: Usually it is just the girl, the girls they have more of these relationships than boy students do. And parents become very serious when it is a girl.

The tendency of parents to withdraw financial support when suspecting relationships was also mentioned in 67% of the adolescent interviews (Table 5). These interviews provide

additional evidence of parents' heightened concern for girls: 38% of female interviewees and none of the male interviewees described personal experiences of relatives withdrawing support due to relationships (Table 5; difference significant).

Chisomo, a 19-year-old who recently left school, described her brother's response when he saw her with a man:

> **Chisomo**: [My brother] was insisting that I have done something while I haven't done that thing. One day I went to visit a friend, and when I was coming back from there I met a certain boy who greeted me…I stopped and greeted him and then I went home and there wasn't anything else that happened. So reaching home in the evening, my brother was asking me, "You stood with that boy on the road, who is he to you?" I said that there isn't anything, but he beat me with an electrical pipe. He was shouting that I was just trashing his money, and he kept on beating me.

Chisomo later stated that she left school because the brother refused to pay her fees due to his doubts about her abstinence.

Other students reported about the experiences of others. Agness, a 17-year-old in her final year of primary school, described how her cousin's parents stopped paying fees after hearing rumors, which Agness insisted were false:

> **I:** What circumstances lead a person to fail to achieve her educational goals?
>
> **Agness:** People sometimes gossip, like they may go to your parents and say, "Don't pay fees for that one—she is just wasting your money." And they stop paying for you.
>
> **I:** Does this really happen, just from gossip?
>
> **Agness:** Yes, it happens, I'm telling you it happened to my cousin… Others were suspecting that she was having a sexual relationship. And they were saying, "Don't pay for her." But she wasn't even having one.

In this passage, Agness mentioned gossip about relationships in response to a general question about what leads people to fall short of their goals. Interviewees mentioned relationships in this context more frequently than poverty, which reveals the depth of concern about this issue.

My data includes only second-hand reports about parents, yet these glimpses consistently depicted parents as highly attuned to the sexual leanings of their children, particularly their daughters. Because they interpreted any sexual activity or interest as inevitably leading to school failure, their financial support hinged on faith in their children's abstinence. These responses suggest another way that the deeply embedded *belief* in the antinomy between sex and schooling helps *sustain* this antinomy for youth in Malawi.

These reports of preemptively administering harsh punishments and withdrawing financial support forge a causal link between sexual relationships and school dropout that bypasses the behavioral and performance-based pathways emphasized in the narratives. If these preemptive and punitive responses are typical behavior for teachers and parents, then the

aggregation of these actions could explain why sexual relationships are associated with dropout, independent of observable change in students' behavior or fitness for school.

Three of these examples involved students whose relationship status was contested: Chisomo, Taziona, and Agness's cousin all claimed to have been falsely accused. Yet in all three cases, others' perception that they were in sexual relationships had detrimental consequences for their educational trajectories. While I am unable to assess the prevalence of false accusations among women in the survey sample, these excerpts suggest that some of the effects of the stringent policing of sexual relationships may spill over into the population of female students who are single. These false accusations likely elevated the dropout rate among this population, and may help to explain the higher dropout rates (relative to men) for female students who do not report being in a sexual relationship.

The gendered schema of girls' heightened vulnerability may also explain the gender differences in the statistical findings. Boys are not as carefully watched, so they may be able to miss school temporarily without incurring harsh punishments. Adults assume that girls are at a heightened risk of falling prey to sexual temptations, and that the consequence of these risks will be more severe for girls, so they monitor their behavior more closely. Any indication of sexual activity or interest by a girl triggers a cascade of punitive reactions.

Students—Malawian youth fervently desire educational credentials, not only for their economic benefits but also their social correlates: they speak to a person's honor and virtue (Johnson-Hanks 2006). Educational aspirations are also morality-laden, and students are expected to maintain optimism despite trying circumstances (Frye 2012). Yet continued investment in school is costly, both financially and for women's marriage prospects, particularly as they advance in age. When it becomes clear that graduation will remain elusive, students often move on and pursue other avenues to secure adulthood. Because of the taken-for-granted antinomy between sex and schooling, many interviewees described starting a sexual relationship as a socially codified means to abandon school. This idea was discussed by 58% of female student interviewees and 22% of male student interviewees (Table 5, difference significant). Among female interviewees who discussed this idea, about a third were reporting on their own experience, while the remainder were describing the experiences of others; no male students were reporting on their own experience when discussing this idea (Table 5).

Interviewees who reported pursuing sexual relationships as a way to leave school described prolonged struggles to remain in the classroom. They described enduring financial hardship for several years, coming to class when they could afford to and missing long periods of instruction when money was scarce. This pattern is sustainable in the short term, but not in the long run. Students who report this type of uneven attendance often fail the national-level examinations necessary to graduate or advance to the next level; others are unable to pay to take these mandatory tests. In these periods of frustration and reevaluation, facing the prospect of repeating the same grade, students begin to waver in their commitment to remain in school, and some view sexual relationships as a way out:

> **Jennipher**: I was feeling like there wasn't anything good that would come of school. I was lacking so many things, and when it came time for examinations, I did not have money. And I was in [8th grade]— next would be [secondary school] fees, and there was no money for that. So I thought, let me just find a man. I wasn't feeling hope about school; that is why I saw that I should better be having relationships.

When describing their decision to leave school, students like Jennipher referenced the cultural schema opposing sexual relationships and education. Because the narrative logic underlying this schema implies that one cannot succeed in school after entering a sexual relationship, pursuing a partner is akin to stepping away from education and toward another future. Yet these students were not weak and unable to control their desires; rather, they described strategically deploying these collective narratives as an "off-ramp" that allowed them to embark on another road to adulthood. No longer able to imagine themselves as career women, these students worked towards becoming wives and mothers.

These women described being temporarily shamed by teachers, parents, and peers, but such sanctions typically faded once they married, a role which garners respect in rural Malawi. Chimwemwe described how her parents acquiesced after discovering that she had a partner:

> **I:** What about your relatives? What did they do when they heard that you had a boyfriend?
>
> **Chimwemwe:** They came and said, "Okay, now you have started a relationship, you can't be just staying. It is better that you should get married." At first, they were disappointed… But then they said, "All right, so you are with this man, you should get married. Better to quit school now and go with him."

Because they viewed sexual relationships as necessarily causing school failure, Chimwemwe's parents quickly moved from expressing disappointment to ensuring that their daughter got married, to avoid her "just staying"— no longer in school but not married either. Indeed, as Tiwonge described, "just staying" is a fate worse than marriage, lacking both the hopeful luster of studenthood and the respectability of marriage:

> **I:** So what do you think being married will mean in your life?
>
> **Tiwonge:** Being married will help me, because when a person is married, you are honored rather than if you are not married but you are just staying at home not schooling, it is shameful.

These students' accounts provide additional evidence that the taken-for-granted nature of the schema opposing sexual relationships and schooling creates alternative causal pathways that bypass those articulated in the collective narratives. Sexual relationships are consequential for these women not because of their mal-effects on learning or classroom behavior, but rather because of the system of values and assumptions that such relationships evoke. Students expect those around them to share these values and assumptions and to react to news of a sexual relationship by presuming that any possibility of further schooling is now foreclosed. Rather than relationships causing disengagement with school, students' own

perception of adversity and hopelessness lead some to pursue relationships as a pathway away from school and towards other future pursuits.

DISCUSSION AND CONCLUSIONS

Teachers and parents in Malawi understand sexual relationships and scholastic success to be fundamentally opposed to each other and perceive female students as particularly vulnerable to the threat posed by sexual relationships. This schematic opposition between sex and schooling is buttressed by a set of collective narratives that portray sexual relationships as making women unfit for educational pursuits. While the quantitative analysis confirms the cultural belief that sexual relationships are associated with female school dropout, it provides scant evidence that this association is driven by students changing their academic behavior or becoming less suitable for school after entering into sexual relationships. Instead, it is these cultural beliefs themselves, and the actions they inspire from teachers, parents, and students, that sustains the antinomy of sex and schooling for youth in Balaka. Through motivating preemptive behavioral responses, the cultural narratives reinforce this schematic opposition, even as they remain empirically inaccurate.

These findings support the three theoretical claims I advanced above. First, *cultural understandings structure how we intervene in the lives of others.* Classic accounts of beliefs shaping reality describe an accumulation of discrete actions, such as the "long lines of anxious depositors, each frantically seeking to salvage his own" in Merton's depiction of bank customers on Black Wednesday. These accounts envisage an arithmetic sum of individuals structuring their own lives in accordance with their shared beliefs. My findings suggest that actions aggregate out as well as adding up: cultural understandings lead to behavioral responses that constrain and transform the capacities of others. In the present case, these behavioral responses are rooted in a codified system of regulating schoolgirls' sexual morality— a set of rules, rituals, and structures that reinforce the fundamental opposition between sex and schooling.

Second, *cultural understandings lead people to act preemptively in ways that sustain their shared beliefs.* When a schema involves moral evaluations of others, as do those investigated here, it gains motivational force and is more likely to become activated in people's minds, even if it is only tangentially relevant to a given situation (D'Andrade 1995; Shore 1998). Once activated, cultural schemas filter our perceptions and lead us to fill in the gaps and overlook disconfirming evidence (Cerulo 2001; Strauss and Quinn 1997). Schemas are also axiomatic in nature: when a teacher encounters a student he suspects to be sexually active, he is unlikely to see her educational trajectory as contingent on her effort or behavior; instead he will view her academic demise as inevitable. People tend to act in ways that conform to these shared schemas without looking for evidence of their validity. In the aggregate, these reflexive actions uphold the schematic antinomy of sex and schooling.

Narratives also contribute to these preemptive behavioral responses. They provide cogent and socially recognized explanations for unconscious schematic associations (Ewick and Silbey 2003). Because information is conveyed through storylines involving people and salient events, narratives activate emotional reactions in the listener and deflect questioning

or critique (Polletta et al. 2011). And because each telling of a narrative involves slightly different combinations of characters and events, these details assemble together and lead popular narratives to seem widely generalizable to other cases and settings (Polletta 2009). If a situation conjures a familiar narrative sequence in a person's mind, she is likely to base her own actions on her belief that the narrative sequence is already under way, and in so doing increase the chance of it unfolding. In the case explored here, observing a student missing a single class or standing with a boy in public is enough for teachers to assume that poor grades will soon follow. A girl who appears susceptible to peer pressure or seems self-conscious around boys in class may be perceived as a "lovesick schoolgirl" heading for inevitable educational demise. The widespread belief that sexual relationships will lead girls to become incapable of succeeding in school leads teachers and parents behave in ways that bring these students' educational trajectories to a premature end, as these adults create real roadblocks for students. As their actions reinforce the broader opposition between sex and schooling, the teachers and parents continue to believe in the narratives that motivate these actions.

Third, *narrative accounts often hinge on a moral model of causality, which obscures the consequences of preemptive actions and provides crucial reinforcement for the schemas.* Narratives specify sequences and causal pathways that bolster abstract associations between concepts and connect fundamental understandings with observable situations and events (Polletta 2009). The logic inherent in narrative accounts tends to emphasize moral closure: the characters get what they deserve (Ewick and Silbey 2003; White 2009). The causal processes driving outcomes relate to moral characteristics of individuals, such as willpower, virtue, or tragic flaws (Polletta et al. 2011). Yet these moral injunctions are not explicit—rather, they emerge from the schematic associations and oppositions upon which the narrative is based, as well as from attributes of stock characters that arouse either empathy or vilification in the audience. More so than explicit rules or instructions, the moral elements of narratives motivate collective action—they make normative boundaries appear natural and merited, and mobilize passionate responses to uphold these boundaries (Olick and Levy 1997).

Because they place blame squarely on the students themselves, the collective narratives explored here provide a lens through which administering harsh punishments appears not only fair but also banal, an inconsequential part of teachers' jobs. Because the narratives equate sexual relationships with an unavoidable inability to succeed in school, teachers should and in fact must punish these students. In this meaning system, removing such students from school is not what causes them to leave. Instead, it is an appropriate response to the "true" cause: the students' own behavior. By emphasizing the inherent deservingness of observed patterns of outcomes, collective narratives thus misdirect our attention from the ways that our own actions and the actions of those around us contribute to broader behavioral patterns.

This article helps elucidate why sexual relationships are associated with dropout particularly for girls in the sub-Saharan African context (Biddlecom et al. 2008; Clark and Mathur 2012). Scholars have posited that pregnancy may be driving this gender discrepancy (Eloundou-Enyegue 2004; Meekers and Ahmed 1999), but evidence has been mixed

regarding the role that pregnancies actually play (Lloyd and Mensch 2008; Mensch et al. 2001). I find that even when pregnancy cases are removed, girls still face a higher likelihood of leaving school if they report sexual relationships. I argue instead that the cultural schema opposing sex and schooling overlaps with schemas of gender and sexuality, making the boundary between relationships and educational pursuits more salient for female students and exacerbating gendered inequalities in educational opportunities.

These findings also address a broader question about gender inequities in education: why do male students remain in school as their female peers drop out? Dropout rates in the survey were 10% higher for girls than for boys, and this discrepancy was present even among those reporting no sexual relationships (Figure 1). I found no significant gender differences in the school performance measures, which is consistent with research showing that conditional on enrollment, adolescent girls across sub-Saharan Africa perform on par with or better than boys (Grant and Behrman 2010). Neither do these disparities appear to be due to gender differences in aspirations: as Table 1 demonstrates, differences in reported attitudes toward schooling are minimal, and optimism and ambition outpace available educational opportunities for all students in Malawi (Frye 2012).

The interview data suggests a different explanation, whereby the cultural system linking sexual relationships with school failure might contribute to this gendered pattern, even for students who are not in relationships. Teachers and parents *assume* that teenage girls will fall prey to the seductive allure of sexual relationships and they *act* on these assumptions at the slightest hint of sexual interest or activity. Male students are not subject to such scrutiny and suspicion, and thus are better able to combine educational and sexual pursuits. These actions by teachers and parents thus create additional barriers for female students, including those who have begun a sexual relationship but also many who are merely suspected of doing so. Future surveys should collect data on these types of preemptive actions, to examine whether they indeed contribute to the gender gap in dropout patterns.

Policies aimed at keeping sexual activity from stalling educational progress have typically pursued strategies of prevention (i.e., educating youth about the risks and consequences of sex) or mitigation (i.e., allowing students to reenroll after giving birth). This study suggests a different approach: policies designed to reduce the stigma associated with sexual activity might improve educational outcomes, particularly for girls. In the US, abstinence-based sexual education programs promote a moralistic view of sexuality that emphasizes female restraint (Fine and McClelland 2006; Luker 2006), and girls more frequently experience stigma and shaming for engaging in sex than do boys (Crawford and Popp 2003; Kreager and Staff 2009). In Malawi, adolescents face myriad risks as they have sex and fall in love, but sexual relationships are also an important developmental milestone, particularly in a context of early and nearly universal marriage (Frye and Trinitapoli 2015). If adults encourage students to pursue healthy and mutually affirming relationships, rather than preemptively punishing them for any indication of sexual interest, students might experience less friction between having sexual relationships and staying in school. For organizations seeking to develop evidence-based strategies to empower women and increase school retention, reforming policies prohibiting sexual relationships and encouraging teachers and

parents to stop punishing students for being in relationships are two promising areas for future research.

Despite these theoretical and empirical implications, this study suffers from some limitations that should be taken into account. First, the interventions by teachers and parents preempt the behavioral changes described in the narratives, but this does not tell us whether they would have otherwise unfolded had these interventions not taken place. I cannot examine the counterfactual case, in which teachers and parents did not intervene, to determine whether female students in relationships would still face a higher dropout risk.

Second, my reliance on second-hand reports about parents limits my ability to fully understand their influence on students' educational outcomes. I lack insight into the motivations driving parents' decisions to financially disinvest in their children's education after detecting a sexual relationship. Perhaps they are simply responding to unsolvable financial difficulties, and might view the fact that their daughter is in a relationship as a socially accepted justification for no longer paying her fees. Alternatively, parents may be trying to prevent public humiliation that might befall the family if teachers punished their child for being in a relationship. Future research examining the moral and emotional impulses underlying parents' behavior would further clarify parents' role in sustaining the collective narratives.

Third, all evidence reported here relies on respondents' own accounts, so neither the interviews nor the survey data perfectly reflect empirical reality. In particular, two types of bias might have affected the results of the statistical analysis: selection and desirability bias. Regarding *selection*, my sample includes only respondents who were enrolled in school in wave one. If respondents who dropped out before the study began were better able to manage their sexual relationships, dropping out for other reasons, then the association between relationships and dropout might appear stronger in the analyses than it is in reality. Alternatively, if these excluded respondents were more likely to allow sexual relationships to affect their performance in school, then we might see stronger support for the three mechanisms emphasized in the narratives. The survey team tried to minimize *desirability bias* by offering interviewers extensive training on asking sensitive questions, conducting interviews in private rooms removed from respondents' communities, and maintaining interviewer-respondent pairs over time to facilitate trust and rapport. Yet it is likely that some underreporting of sexual relationships remains. If girls who falsely claim to be single are less likely to drop out than those who admit to being in a relationship, then the association between relationships and dropout might be weaker than the survey data suggest.

Finally, I have focused here on the behavior of *individuals*, but *institutions* also play a role in sustaining shared cultural understandings, and they may do so for different reasons than the individuals who populate them. For Malawian schools, the narratives provide a moral explanation for why many students fail to achieve their goals—they fail to resist sexual temptation—which may be more palatable than the structural reason—schools lack sufficient resources to educate all deserving students. Because the narratives center on the foibles and false-steps of wayward students, people can maintain faith in schools' meritocratic and transformative potential, despite widespread evidence of the scarcity of

opportunities (for a similar argument about schools in the US, see Young 2004). HIV/AIDS organizations may also be motivated to perpetuate these narratives, because they neatly echo their fundamental dictum: wait to have sex until you are older and married, or you will face severe consequences. These institutional motivations would be fruitful avenues for future research on the relationship between cultural understandings and aggregate outcomes.

The processes uncovered in this article are likely true for other aggregate behavioral patterns that are culturally salient. For example, cultural schemas associating food with moral restraint (Saguy 2012) might lead healthcare workers and others to be less likely to intervene or assist the obese, leading to diminished health outcomes that are then attributed to their inability to take care of themselves. A second example involves the underrepresentation of women in academic disciplines (Leslie et al. 2015). The cultural schema that men, not women, tend to exhibit raw intellectual brilliance, combined with field-specific beliefs—most widespread in physics and philosophy— that innate talent is required for success, leads women to select out of these fields. Women's underrepresentation, in turn, likely reinforces the belief that women are less likely to possess such brilliance.

Statistical patterns reflect the various ways that people act in relation to cultural meanings—by aligning their own lives with them and by intervening in the lives of others—even, as in the case explored here, when they firmly believe that these patterns are caused by other people's inevitable moral failings. Schemas shape actions that narratives conceal.

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Appendix: Supplementary Quantitative Analyses

In this appendix, I present a combination of fixed-effects and propensity-score models to explore whether the bivariate associations presented in the main text of the article remained after controlling for selection. I also provide information about the timing of each survey wave and sample attrition (Table A1).

Overview of Fixed-Effects and Propensity Score Methods

Fixed-effects models are useful for examining the consequences of events as they unfold over time. They use each individual as her own control, comparing her likelihood of

experiencing an event under one set of conditions (i.e. when she is *not* in a sexual relationship) with her likelihood of experiencing the event under a different set of conditions (when she *is* in a sexual relationship). By comparing observations over time for the same individual rather than focusing on differences between individuals, fixed-effects models remove all unobserved variation between individuals that remains stable over time (Allison 2009).

Fixed-effects models have some limitations: they preclude examining the effects of time-invariant measures and they exclude respondents who experience no change in the outcome. The reduction in sample size results from a trade-off between bias and sensitivity. Bias is reduced by focusing only on within-person variation, as between-person variation is much more likely to suffer from contamination due to other unobserved differences between the two groups. Nonetheless, with smaller sample sizes comes larger standard errors and less power to detect significant associations (Allison 2005).

For the models predicting dropout, this reduction in sample size was substantial. Therefore, to supplement the fixed-effects models, I used propensity score models to examine the effect of relationship status at the start of the study on school dropout. Propensity score models approximate the experimental ideal in observational studies: in this case, assigning a random sample of students to enter sexual relationships and following them to observe their schooling outcomes (Morgan and Winship 2007). Of course, students who are in a sexual relationship and those who are single likely differ in terms of other variables that might influence schooling outcomes, including socio-economic status, age, and educational aspirations. Propensity scores create comparison groups that are similar in terms of these and other measured covariates.

Model Specification

Table A2 presents a summary of which statistical approach was used for each component of this study, along with a description of the sample exclusions pertaining to each model. When examining the association between relationship status and school dropout using the fixed-effects framework, I estimated the effect of being in a relationship on the likelihood of school dropout during the subsequent wave. I had to account for the fact that school dropout is a non-repeated event in my data.

The simplest method for applying fixed-effects logistic regression models to the analysis of non-repeated events uses a “case-crossover” design to compare observations when the individual experiences the event to earlier observations of the same individual. However, this method fails when any covariate is a monotonic function of time (e.g., year in school, survey wave) because the outcome always occurs at the end of the observation period. Therefore, I examined school dropout over time using the “case-time-control” method, which allowed me to include variables that change monotonically over time and still use the fixed-effects framework (Allison and Christakis 2006). This method takes advantage of symmetry of odds ratios for dichotomous variables in logistic regression models, and involves reversing the dependent and main independent variable of interest when estimating the conditional logistic regression equation (Allison and Christakis 2006; Allison 2009; Jensen et al. 2014).

For the propensity score models, I estimated the effect of being in a sexual relationship at wave one on leaving school during waves two through six; thus the outcome of interest was school enrollment status at wave six. Because no students dropped out and then subsequently returned to school, this captures all school-leaving events that occurred during the observation period. I generated the propensity scores using the inverse conditional probabilities from a logistic regression model predicting sexual relationship status, and used these scores as weights in a regression model predicting the outcome of interest (Morgan and Winship 2007). The propensity-score weighting removes all statistically significant differences between the treatment and control groups in terms of all covariates (available upon request). I used the "doubly robust" approach, which includes the propensity scores and the regression model in the same estimator and is more efficient than earlier propensity-score approaches (Bang and Robins 2005). Following advice from Morgan and Harding (2006), I tried several other matching techniques, including nearest neighbor (n=5), radius (r=0.05), and kernel (Gaussian and Epanechnikov). The results did not change substantively.

To examine whether the mechanisms my interviewees emphasized accounted for the statistical associations between relationships and leaving school, I employed slightly different approaches for the different mechanisms. For absenteeism and school performance, I used fixed-effects models to explore whether students who were in a relationship were more likely than single students to report, in the subsequent wave, a school absence during the week preceding the interview or trouble in school during the four months preceding the interview. I then examined whether adjusting for these variables attenuated the association between relationship status and leaving school in the fixed-effects framework. Because students who are in a relationship are necessarily more likely to become pregnant, to assess this causal pathway, I removed from the sample respondents who had experienced a pregnancy and examined whether the association between relationship status and leaving school remained significant using both propensity score and fixed-effects models.

Because previous research leads me to expect that relationships would have different effects across genders, and because it is difficult to interpret interaction terms in nonlinear models, particularly for longitudinal analyses (Karaca-Mandic, Norton, and Dowd 2011), I estimated all models separately for male and female respondents.

The fixed-effects models controlled for the following time-variant measures: survey wave, household wealth,[ix] year in school (ranging from 3 to 12), employment status, respondents' subjective likelihood of remaining in school, and whether respondents experienced difficulty paying school fees or declining health in the previous four months. The doubly robust models controlled for socio- economic status, age, year in school, respondents' satisfaction with their current schooling level, and two measures of expectations for future educational attainment, all measured during wave one. Descriptive statistics for all measures not included in Table 1 in the main text of the article are provided below (Table A3).

[ix]For each wave, I constructed an index using principal components analysis of a list of 20 household goods, personal possessions, and housing attributes.

Results

Supplementary Analyses Predicting School Dropout

In Table A4, I present results from both multivariate modeling approaches to assess whether the significant difference in dropout rates between women who were single and those who were in a relationship remain after controlling for selection. In the fixed effects models predicting school dropout and trouble in school, all independent variables are lagged one wave so the results show the effect of relationship status (and all other time-variant covariates) at time *t* on the likelihood of school dropout in the next wave, at time *t+1*. Just as in Table 2, female students were more likely to leave school after entering a sexual relationship in the previous wave ($p<0.001$), while for male students, there was no association between changes in relationship status and leaving school.

The results of the propensity score analysis, presented in the bottom panel of Table A4, show that female respondents who were in a sexual relationship in wave one were 17% more likely to end the observation period out of school ($p<0.01$), compared with the "control" scenario in which respondents were single at wave one. The second column shows no significant effect of being in a sexual relationship for male students. When we compare the results of the doubly-robust models to the bivariate association depicted in Figure 1, we can determine the degree to which the difference in likelihood of leaving school between students who begin the study with a sexual partner and those who do not is attributable to selection on the characteristics included in the propensity score models. Figure 1 shows that women who begin the study in a sexual relationship are 31% more likely to leave school by wave six compared with those who begin the study with no sexual partner. When we examine the predicted probabilities in Table A4, this difference in the probability of leaving school is reduced to 17% for female students, an attenuation of 45%. For men, Figure 1 shows that men reporting sexual partners at wave one are 9% more likely to leave school with no adjustment for selection; this difference in probability is reduced to 3% in Table A4, an attenuation of two thirds. These comparisons tell us that selection on the characteristics included in the doubly-robust models accounts for some but not all of the significant association between relationship status and school leaving for women observed in the bivariate context.

Supplementary Analyses for School Absence

In Table A5, I assessed whether students who were in a sexual relationship were more likely than students who were not to report absence from school. School absence was measured using a question asking students in school whether they were absent any days in the past week. I estimated the effect of sexual relationship status and other time-variant covariates on school absence using fixed-effects models. The results show that sexual relationships were positively associated with absenteeism for boys (odds ratio = 1.59, $p<0.05$), while there was no association between sexual relationships and absenteeism for female students (odds ratio = 1.02, $p>0.1$).

I also tested whether school absence attenuated the significant association between relationship status and leaving school for female respondents by adding this measure to the

case-time-control model presented in Table A4 and examining the difference in the size of the effect of sexual relationship status (Table A6). Just as with all other independent variables in the fixed-effects models, school absence is lagged one wave, so that absence at time *t* predicts dropout at time *t+1*. The first column of Table A6 shows that when the school absence measure was added to the case-time-control model presented in Table A4, the odds ratio corresponding to relationship status remained the same at 2.98. Together with the lack of a significant association between sexual relationship status and experiencing absence for female students, these results suggest that contrary to the widespread cultural narrative, absence is not part of the causal process through which relationship status leads to dropout for female students.

Supplementary Analyses for Poor Academic Performance

I used two types of variables to measure the academic performance of survey respondents: end of term examination scores in math and English (measured once, at wave 4) and whether or not the respondent reported "trouble in school" during the four months prior to each survey interview. In the top panel of Table A7, I used the doubly-robust propensity score method to estimate the effect of sexual relationship status at wave 3 on examination scores at wave 4. The results show no evidence of significant differences in examination scores by sexual relationship status—the largest difference in scores between the two synthetic comparison groups (students in a sexual relationship and students not in a sexual relationship) was less than 3 percent, for male students' English scores. These results confirm the bivariate results presented in Figure 4, and show no evidence of differences in test scores by relationship status.

I examined the "trouble in school" variable in the bottom panel of Table A7. Because this variable was asked at every wave, I used fixed-effects models, again lagging all independent variables such that an observed value of relationship status (or any other covariate) predicts reporting trouble in school in the subsequent wave. Consistent with the bivariate results presented in Figure 4 in the main text, I find no significant association between relationship status and reporting trouble in school for either male or female respondents.

I also checked to ensure that poor academic performance does not mediate the association between sexual relationship status and school dropout by adding the trouble in school measure to the case-time-control model predicting dropout. These results are presented in the second column of Table A6, and they show that including this measure has a negligent effect on the odds ratio for sexual relationship status (specifically, comparing these results with those presented in Table A4, the odds ratio is reduced from 2.98 to 2.96 with the inclusion of this measure). Together, these results suggest that poor academic performance is not significantly associated with sexual relationship status and is not a mechanism through which being in a sexual relationship leads to subsequent school dropout for female students.

Supplementary Analyses for Pregnancy

I repeated the fixed-effects and propensity score models predicting school dropout, restricting the analytic sample to female respondents who did *not* experience a pregnancy while enrolled in school. These results are presented in the third column of Table A6. In both

models, sexual relationship status remained a significant predictor of leaving school for this "non-pregnant" subsample, though the magnitude of the effect was reduced. In the fixed-effects model, respondents in this restricted subsample who were in a sexual relationship faced more than twice the odds of leaving school compared with those who did not report a sexual relationship. Comparing these results to those for the full sample of female students in Table A4, we can see that the odds ratio corresponding to being in a sexual relationship in the previous wave decreases from 2.98 for the full sample to 2.31 for the reduced "non-pregnant" subsample.

The propensity score models, presented in the bottom panel of Table A6, show that among female students who did not experience a pregnancy, those who began the survey in a relationship were 15% more likely to have left school two years later than those who were not in a relationship at the beginning of the study. When we compare these results to those presented in Table A4, we can see that the association between relationships and leaving school is only slightly attenuated by removing pregnancy cases—the difference in predicted probability between female students who are in a relationship and those who are not declines from 17% in the full sample (Table A4) to 15% in this restricted sample (Table A6). Together, these results show that female students with sexual partners are still more likely than other female students are to leave school, even if they don't get pregnant.

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Tables for Appendix A

Table A1

Timing of TLT Survey Waves and Sample Attrition

Wave	Time Period	Total Random Sample N (% of W1 Sample)	Subsample: In School at Wave one N (% of W1 Subsample)
1	June to August, 2009	2,045 (100%)	843 (100%)
2	October to December, 2009	1,952 (95%)	814 (97%)
3	February to April, 2010	1,895 (93%)	777 (92%)
4	June to August, 2010	1,855 (91%)	757 (90%)

Wave	Time Period	Total Random Sample N (% of W1 Sample)	Subsample: In School at Wave one N (% of W1 Subsample)
5	October to December, 2010	1,752 (86%)	709 (84%)
6	February to April, 2011	1,708 (84%)	686 (81%)

Table A2

Overview of the Analytic Subsamples And Statistical Approaches Used to Examine Each Schooling Outcome

Outcome of Interest	School Leaving	School Absence	School Performance	School Leaving	School Performance
Dependent Variable Measure	Leaving School overtime, waves 2–6	Absence	Trouble in School	Leaving School between wave one and wave 6	Test Scores
Table with Results	Table A4	Table A5	Table A7	Table A4	Table A7
Statistical Model	Fixed Effects Time Series Logistic Regression			Logistic regression with doubly-robust propensity scores	OLS regression with doubly-robust propensi scores
Sample Exclusions	• Respondents who were out of school at start of survey			• 120 respondents who were lost to follow-up or migrated between wave one and wave 6 • 8 respondents with missing values for explanatory variables	• 86 responde who wer lost to follow-u or had migrate by wave • 132 responde who lef school b wave 4 • 44 responde who wer asked bu did not provide t scores • 8 responde with missing values f explanato variable
Descriptive Statistics					
N	843			631	573
Male	37%			39%	38%
Average Age (s.d.)	16.7 (1.7)			16.4 (1.6)	16.4 (1.6)
Average SES Score (s.d.)	0.57 (2.64)			0.07 (2.31)	0.43 (2.56)
Education at Wave one					
Lower Primary	13%			15%	15%

Outcome of Interest	School Leaving	School Absence	School Performance	School Leaving	School Performance
Upper Primary		43%		50%	47%
Lower Secondary		26%		28%	25%
Upper Secondary		18%		7%	13%
In a relationship, wave one		24%		23%	20%

Table A3

Descriptive Statistics for Variables Used in Multivariate Models

Variable[a]	Mean/Proportion (s.d.)	
	Female	Male
Attitudes Towards Schooling		
Unsatisfied with current level of education[b]	0.76	0.80
Subjective likelihood of remaining in school in a year Being in School in a Year	0.85 (2.30)	0.88 (1.98)
Plans to attend college[b]	0.62	0.66
Economic and Health Status		
Household wealth score	0.74 (2.78)	0.29 (2.35)
Decline in Health	0.03	0.03
Difficulty paying school fees	0.21	0.18
Employed (at Wave 4)	0.04	0.06
N	528	315

Notes:

[a] All variables were averaged across all survey waves during which the respondent was still in school, unless otherwise noted. For the propensity score models, respondents' wave one responses were used

[b] These variables were included in the propensity score models only and were measured at wave 1.

Table A4

Multivariate Analysis of Association Between Sexual Relationship Status and Leaving School

	Female	Male
Case-Time Control Models predicting leaving school[a] (Fixed-Effects for Nonrepeatable Events)	OR (se)	OR (se)
Respondent was in a sexual relationship	2.98 (0.87) ***	1.28 (0.57)
Observations (Respondents)	715 (145)	609 (112)
Doubly-Robust Propensity Score Models predicting leaving school [b]		
Predicted probability of leaving school if no respondents were in a relationship at wave one	29%	21%
Predicted probability of leaving school if all respondents were in a relationship at wave one	46%	24%
Difference in predicted probabilities (estimate of effect size of sexual relationship status on leaving school)	17% (0.06) **	3% (0.06)
N	411	264

Notes:

† 0.10,

*0.05,
**0.01,
***0.001.

[a]The case-time-control models include the following time-variant covariates: socio-economic status, current year in school, difficulty paying school fees, declining health, educational expectations, employment status, and dummy variables indicating survey wave. All independent variables are lagged by one wave, so that variables observed at one point in time predict school exits observed at the subsequent survey wave, about four months later.

[b]The doubly robust models account for the following covariates: age, socioeconomic status, current level of school, and attitudes and expectations related to education. I measured all these covariates at wave one and used them to estimate both the propensity scores and the outcome model. The outcome measure includes all school exits from wave 2 through wave 6.

Table A5

Fixed Effects Time Series Logistic Regression Models Predicting School Absence, Waves 2–6

Variable[a]	School absence during week preceding interview	
	Female OR/(se) (1)	Male OR/(se) (2)
Respondent was in a sexual relationship	1.03 (0.20)	1.59 (0.32)*
Socio-economic Status	1.02 (0.06)	1.16 (0.10)†
Current Year in School	1.03 (0.08)	1.03 (0.10)
Trouble paying school fees over past 4 months	1.21 (0.21)	1.49 (0.31)†
Decline in health over past 4 months	1.01 (0.32)	1.77 (0.86)
Probabilistic estimate of being in school in 1 year	0.98 (0.02)	1.03 (0.04)
Employed	2.17 (1.19)	1.12 (0.79)
Observations (Respondents)	1752 (381)	1161 (238)

Notes:
†0.10,
*0.05,
**0.01,
***0.001.

[a]All independent variables are measured at the same time as the school absence variable.

Table A6

Results of Analysis Exploring Whether Accounting for Absence, School Performance, or Pregnancy Attenuates the Relationship Between Relationship Status and Leaving School for Female Survey Respondents.

	Model Includes School Absence Variable	Model Includes Trouble in School Variable	All Pregnancy Cases Removed from Sample
Case-Time Control Models[a]	OR/(se)	OR/(se)	OR/(se)
(Fixed-Effects for Nonrepeatable Events)	(2)	(3)	(4)
Respondent was in a sexual relationship	2.98 (0.87)***	2.96 (0.86)***	2.31 (0.90)*
Observations (Respondents)	715 (145)	715 (145)	556 (103)
Doubly-Robust Propensity Score Models[b]			

	Model Includes School Absence Variable	Model Includes Trouble in School Variable	All Pregnancy Cases Removed from Sample
Predicted probability of leaving school for respondents who were single at wave one			21%
Predicted probability of leaving school for respondents who were in a relationship at wave one			36%
Difference in predicted probabilities (estimate of effect size of sexual relationship status on leaving school)			15% (0.06) *
N			359

Notes:
* 0.05,
** 0.01,
*** 0.001.

[a] The case-time-control models include the following time-variant covariates: socio-economic status, current year in school, difficulty paying school fees, declining health, educational expectations, employment status, and dummy variables indicating survey wave. All independent variables are lagged by one wave, so that variables observed at one point in time predict school exits observed at the subsequent survey wave, about four months later.

[b] The doubly robust models account for the following covariates: age, socioeconomic status, current level of school, and attitudes and expectations related to education. I measured all these covariates at wave one and used them to estimate both the propensity scores and the outcome model. The outcome measure includes all school exits from wave 2 through wave 6.

Table A7

Multivariate Models Predicting Poor Academic Performance

Doubly-Robust Propensity Score Models Predicting End of Term Examination Scores (Percent)[a]	**Female**		**Male**	
	English Coeff./(se) (1)	**Math Coeff./(se) (1)**	**English Coeff./(se) (3)**	**Math Coeff./(se) (3)**
Average predicted value if no respondents were in a sexual relationship at wave 3	53.67	48.31	54.89	53.74
Average predicted value if all respondents were in a sexual relationship at wave 3	51.55	47.06	51.90	55.04
Difference in predicted values (estimate of effect size of sexual relationship status on tests scores)	−2.11 (2.68)	−1.25 (2.83)	−2.99 (2.90)	1.30 (3.11)
N	347	347	214	214

Fixed-Effects Logistic Regression Models Predicting Trouble in school during four months preceding interview[b]	**Female OR/(se) (3)**	**Male OR/(se) (4)**
Respondent was in a sexual relationship	0.87 (0.25)	1.16 (0.32)
Socio-economic Status	0.99 (0.08)	1.33 (0.16) *
Current Year in School	1.39 (0.16) **	1.39 (0.18) *
Trouble paying school fees over past 4 months	1.11 (0.17)	1.23 (0.21)
Decline in health over past 4 months	1.07 (0.43)	1.37 (0.22) †
Probabilistic estimate of being in school in 1 year	0.99 (0.03)	1.03 (0.05)
Employed	2.77 (2.70)	0.30 (0.37)

Doubly-Robust Propensity Score Models Predicting End of Term Examination Scores (Percent)[a]	Female		Male	
	English Coeff./(se) (1)	Math Coeff./(se) (1)	English Coeff./(se) (3)	Math Coeff./(se) (3)
N: Observations (Respondents)	899 (208)		635 (145)	

Notes:
†0.10,
*0.05,
**0.01,
***0.001.

[a]The doubly robust models account for the following covariates: age, socioeconomic status, current level of school, and attitudes and expectations related to education. I measured all these covariates at wave three and used them to estimate both the propensity scores and the outcome model. The outcome measure was measured at wave 4.

[b]All independent variables are lagged by one survey wave, so that variables measured at each point in time predict having trouble in school over the subsequent four months.

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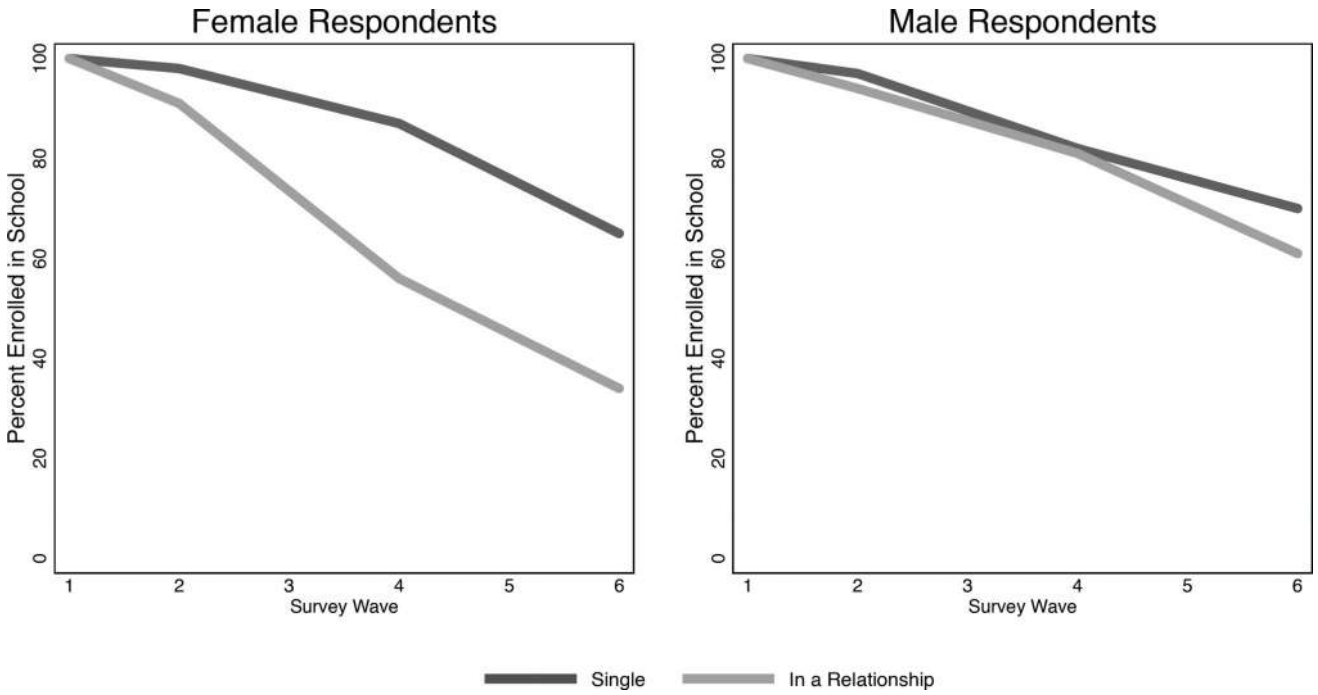

Figure 1.
Proportion of Respondents Enrolled in School at Each Wave by Relationship Status at Wave One

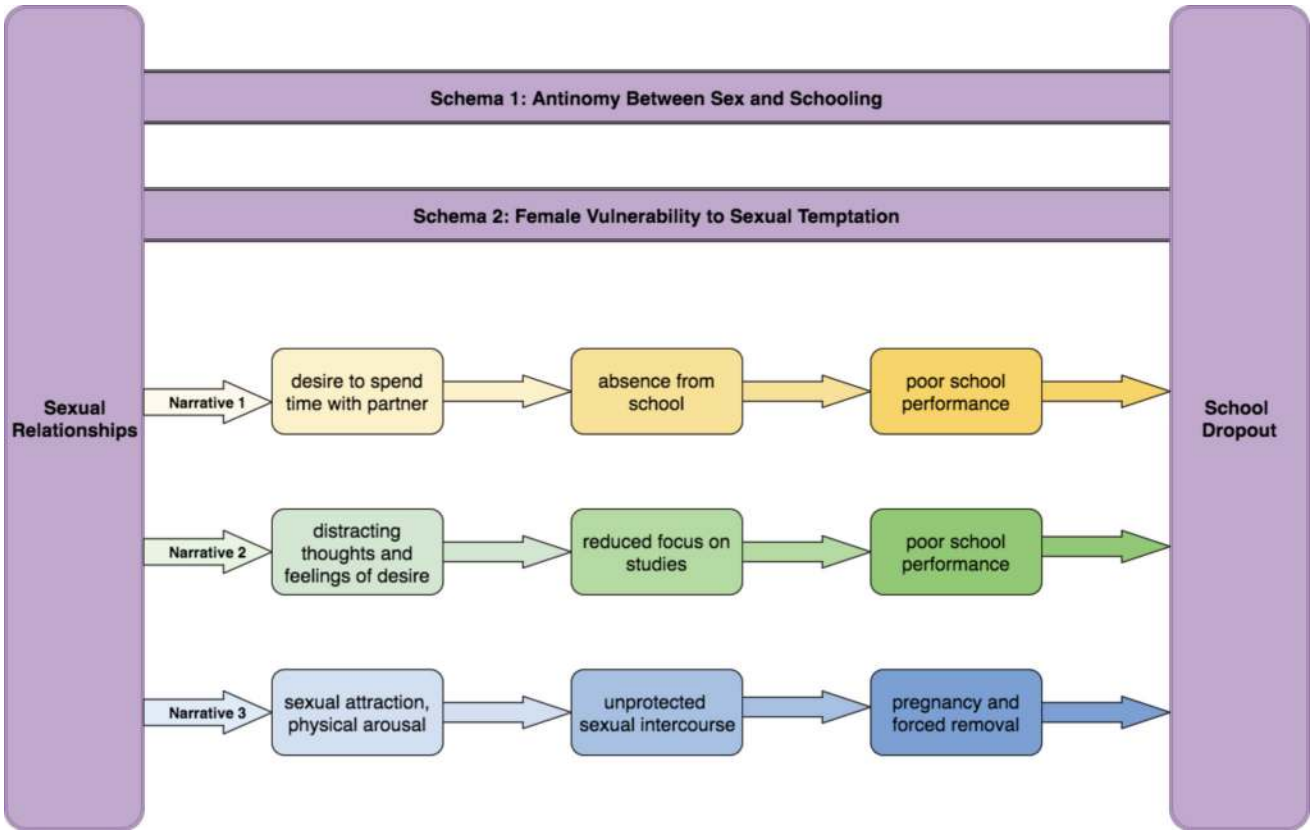

Figure 2.
Overview of Schemas and Narratives Connecting Sex and School Dropout

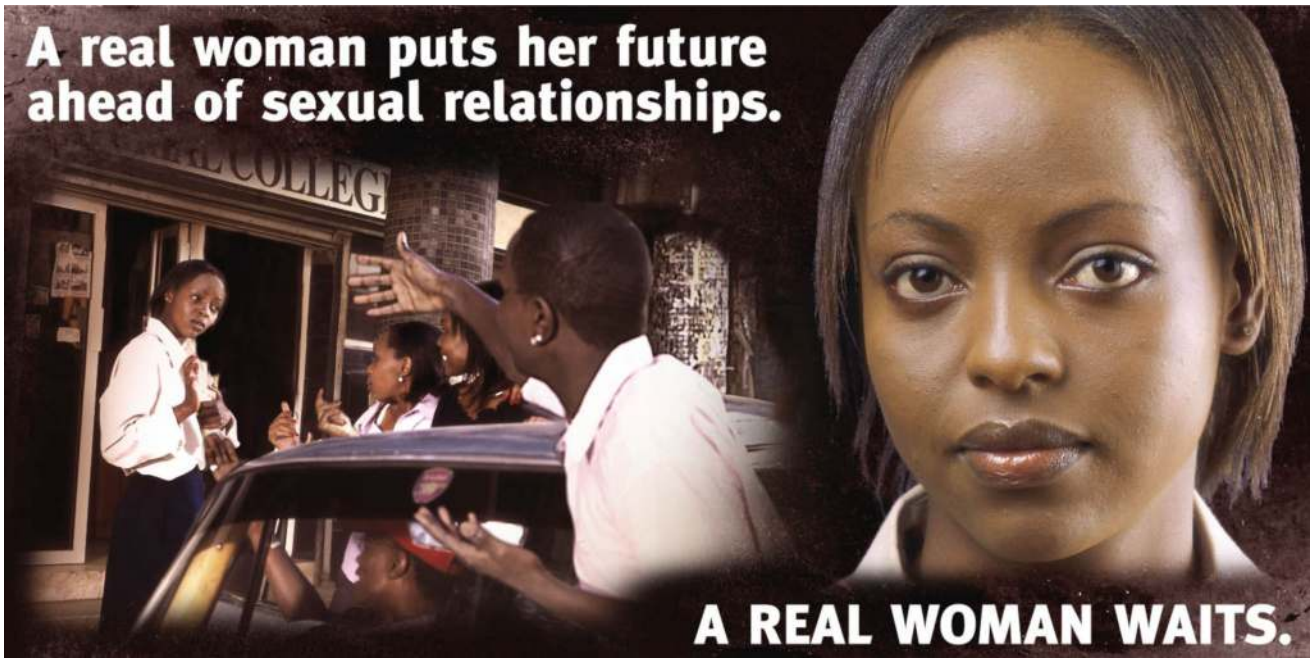

Figure 3.
Poster Hanging in Secondary School Lobby Referencing Cultural Schemas of Antinomy of Sex and Schooling and Female Sexual Vulnerability

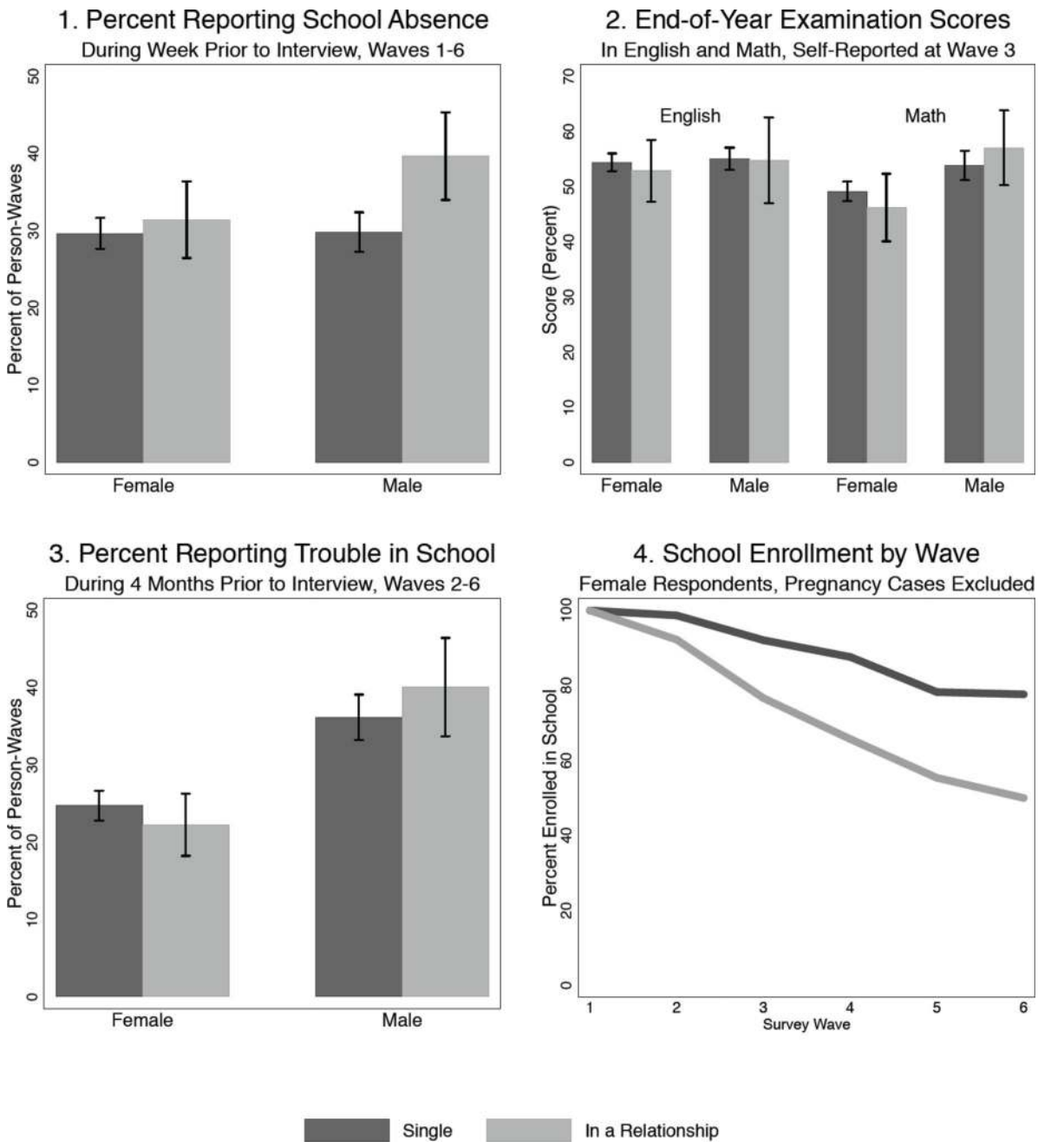

Figure 4.

Evidence in the Survey Data for the Causal Processes Posited in the Collective Narratives Connecting Sexual Relationships and School Dropout

Table 1

Descriptive Statistics of Survey Sample

Variable[1]	Mean/Proportion (s.d.)	
	Female	Male
Age	16.44 (1.55)	17.15 (1.79)
In a Relationship	0.20	0.29
Educational Attainment		
Primary (Grades 1–8)	0.56	0.58
Lower Secondary (Grades 9–10)	0.25	0.27
Upper Secondary (Grades 11–12)	0.20	0.15
Left School by Wave 6	0.42	0.33
Absence[2]	0.32	0.33
Trouble in School[2]	0.18	0.25
Math Exam Score (at Wave 3)	48.3 (17.3)	53.7 (19.6)
English Exam Score (at Wave 3)	53.97 (15.54)	54.95 (14.96)
Experienced Pregnancy by Wave 6	0.09	---
N	528	315

[1] All variables were measured at wave one unless otherwise noted.

[2] These variables were averaged across all survey waves during which the respondent was still in school.

Table 2

Bivariate Analysis of Association Between Sexual Relationship Status and Leaving School

	Female	Male
Rate of School Leaving (% of in-school person-waves followed by a schooling exit)		
In a Relationship	22%	8%
Not in a relationship	6%	6%
T-statistic	9.20***	0.93

Notes:

* 0.05,

** 0.01,

*** 0.001.

Table 3

Comparison of Frequency of Themes Related to Cultural Schemas Across Interview Sub-samples

	Student Interviews			Teacher Interviews		
	All	**Female**	**Male**	**All**	**Female**	**Male**
Explicitly discussed **antinomy of sex and schooling**	74%	80%	67%	93%	89%	95%
Brought up through general discussion of school experiences or issues students face in school[1]	76%	79%	72%	81%	75%	83%
Brought up only when explicitly asked about relationships[1]	24%	21%	28%	19%	25%	17%
Discussed specific story of a student who had a relationship and subsequently dropped out[1]	69%	83%	50%	88%	88%	89%
Explicitly discussed **female vulnerability** to peer pressure or sexual temptation	44%	40%	48%	71%	67%	74%
Brought up during general discussion of school discipline/experiences in school[2]	56%	58%	54%	75%	67%	79%
Brought up only when asked about relationships and/or gender differences in disciplinary issues[2]	44%	42%	46%	25%	33%	21%
Acknowledged that rules applied to both boys and girls or that relationships pose threat to all students	33%	20%	48%	57%	56%	58%
N	57	30	27	28	9	19

Notes: Shaded cells indicate significant differences across the two relevant columns: male versus female respondents or teachers versus students ($p<0.05$).

[1] Denominator limited to respondents who explicitly discussed antinomy of sex and schooling (first row of table).

[2] Denominator limited to respondents who explicitly discussed female vulnerability (fifth row of table).

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Table 4

Comparison of Frequency of Themes Related to Collective Narratives Across Interview Sub-samples

	Student Interviews			Teacher Interviews		
	All	**Female**	**Male**	**All**	**Female**	**Male**
Mentioned **absenteeism**	42%	37%	48%	61%	67%	58%
Narrative involved female student only [1]	38%	36%	31%	41%	50%	36%
Narrative involved male student only [1]	21%	9%	38%	18%	17%	18%
Narrative involved both male and female student [1]	42%	55%	31%	41%	33%	45%
Mentioned **distracting thoughts**	54%	53%	56%	75%	89%	68%
Narrative involved female student only [1]	55%	63%	47%	57%	63%	54%
Narrative involved male student only [1]	13%	6%	20%	14%	13%	8%
Narrative involved both male and female student [1]	32%	31%	33%	29%	25%	38%
Mentioned **pregnancy**	54%	67%	48%	71%	78%	68%
Narrative involved female student only [1]	74%	85%	46%	65%	57%	69%
Narrative involved male student only [1]	3%	0%	15%	10%	14%	8%
Narrative involved both male and female students [1]	23%	15%	38%	25%	29%	23%
N	57	30	27	28	9	19

Notes: Shaded cells indicate statistically significant differences across the gender categories for the characters in narratives: female only, male only, and both genders ($p<0.05$).

[1] Denominator limited to respondents who brought up that particular narrative (absenteeism, distracting thoughts, or pregnancy).

Table 5

Comparison of Frequency of Discussion of Behavioral Responses to Cultural Antinomy of Sex and Schooling Across Interview Sub-samples

	Student Interviews			Teacher Interviews		
	All	**Female**	**Male**	**All**	**Female**	**Male**
Discusses teachers suspending or punishing students for relationships	74%	83%	61%	92%	100%	89%
[Students] report personal experience of teacher punishment for relationships [1]	42%	50%	27%	---	---	---
[Teachers] describe punishing students before detecting evidence of academic or behavioral changes [1]	---	---	---	79%	75%	81%
[Teachers] describe punishing a high-performing student who was caught in a relationship [1]	---	---	---	75%	63%	81%
[Teachers] use language of female vulnerability and/or need to protect girls when discussing punishments [1]	---	---	---	54%	50%	56%
Discusses parents or relatives withdrawing financial support for schooling due to student relationship.	67%	71%	61%	58%	63%	56%
[Students] report personal experience of relatives withdrawing support	21%	38%	0%	---	---	---
[Teachers] describe parents as allies in regulating students' sexual behavior.	---	---	---	65%	75%	61%
[Teachers] describe specific example of a parent intervening due to a relationship	---	---	---	73%	80%	70%
Students discuss relationships as a socially codified way to leave school	43%	58%	22%	---	---	---
Reporting personal experience [2]	28%	36%	0%	---	---	---
Reporting experience of others [2]	72%	64%	100%	---	---	---
N	42	24	18	26	8	18

Notes: Shaded cells indicate significant differences between male and female interview respondents ($p<0.05$).

Unless otherwise specified, denominator for all rows is limited to those who discussed the antinomy between sex and schooling in their interviews (See Table 3).

[1] Denominator limited to respondents who discussed teacher punishment (first row of table).

[2] Denominator limited to respondents who explicitly discussed relationships as socially codified way to leave school (tenth row of table).