INTRODUCTION AND MOTIVATION
Sexual violence against women and girls is widespread globally. In their lifetime, one in three women will experience intimate partner physical or sexual violence and 7 per cent will experience forced sex by someone other than an intimate partner. While violence has become increasingly recognized on the global agenda as an important issue with adverse financial, social and health-related consequences, few interventions have been identified that are proven to reduce women’s and girls’ risk of sexual violence, particularly in lower- and middle-income countries.

STUDY AIMS AND MAIN FINDINGS
In this study we used quasi-experimental methods to examine the ability of educational attainment to reduce the risk of sexual violence experienced by women and girls in Malawi and Uganda. In Malawi, approximately 34 per cent of women in the sample (n = 4,413) report lifetime sexual violence, while in Uganda, approximately 40 per cent of women in the sample (n = 1,028) report lifetime sexual violence. We found that, on average, a one-year increase in grade attainment led to a nine percentage point reduction in the probability of ever experiencing sexual violence in Ugandan women aged 18-29 years, but we did not find similar protective effects among Malawian women aged 19-31 years. Further, these protective effects were found for experiences of sexual violence over their lifetime, but not sexual violence experienced in the previous 12 months.

PATHWAYS
We explored the following pathways to understand why school attainment might be protective against sexual violence: through delaying marriage, increasing risk of premarital sex (as delays in marriage increases potential exposure), literacy and engaging in work for pay in the previous 12 months. Delaying marriage may improve women’s bargaining power within marriage, as may economic empowerment through improved labour market opportunities (represented by the latter two pathway variables). We found that increased school attainment delayed marriage in both Malawi and Uganda (females in the age range studied were, on average, 11 and 13 percentage points less likely to have ever been married by the time of interview in Malawi and Uganda, respectively). There were no impacts on the likelihood of engaging in work for pay in the previous 12 months, but schooling did improve literacy in Malawi (but not Uganda) in these samples.

Further, it is not entirely clear from this analysis why increased school attainment was protective in Uganda but not Malawi, and this finding underscores the importance of context and how similar interventions may not work in different settings. Average levels of school attainment are higher in Uganda than Malawi, and indeed girls in Uganda enrolled in secondary school at higher rates than those in Malawi. Thus a minimum threshold level of schooling may be needed to convey protective impacts.

METHODS AND CONTRIBUTION OF THE STUDY
Studies to date on the relationship between education and sexual violence have been limited in their ability to draw conclusions about the causal nature of this relationship, because they have largely been conducted using observational data without methods to address potential biases in examining these relationships with this type of data. This bias may be caused by unobserved confounders which simultaneously affect both school attainment and the risk of sexual violence but are either not available in the data or are unobservable to researchers.
Examples of confounders that are unobserved or are not controlled for may include parental preferences about girls’ time use and community-level availability of services and the general risk environment. For example, if parents perceive travelling to school or the school environment itself to be a risk factor for sexual violence, they may choose not to send their girls to school (unobserved heterogeneity bias), or if a girl drops out of school after experiencing sexual violence (reverse causality), then these would represent examples of how the observational estimates of the relationship between schooling and sexual violence may be biased.

The study summarized here improved upon previous studies by using quasi-experimental methods. Data used in this analysis came from two waves of Demographic and Health Surveys, which are nationally representative surveys, from each country (2004 and 2010 in Malawi and 2006 and 2011 in Uganda). We used the introduction of national policies which removed school fees at the primary level (referred to as Universal Primary Education (UPE) policies) implemented in the mid-1990s as exogenous variation in educational attainment and then estimated the causal relationship between education and sexual violence. We did this using a regression discontinuity design (RDD) approach. Briefly, girls who attended primary school during or after this fee removal would have experienced a positive, exogenous shock on their total school attainment as compared to girls attending prior to fee removal, and this exposure depended on the girls’ year of birth (the instrumental variable used to predict schooling attainment). More details on the methods can be found in the full paper.

CONCLUSION

This study finds protective effects of educational attainment against lifetime experience of sexual violence among women in Uganda, but not in Malawi. Further, in our pathway analyses, we find large impacts on delaying marriage in both countries. These results suggest that policies aimed at increasing educational attainment among girls may have broad-ranging long-term benefits. Because the protective effects were found only for lifetime experiences and not 12-month experiences of violence, this suggests that educational attainment might be protecting against sexual violence at earlier stages in the life course. Further, the different findings between countries underscore the importance of contextual factors and suggest that a minimum threshold of educational attainment may be needed before protective effects incur on average, and Malawi may not yet have reached that threshold. However, protective effects may still be possible at the higher end of the distribution of educational attainment.

Funding

Funding for this study was received from the Building Evidence for Primary Prevention of Intimate Partner and Sexual Violence in Low and Middle Income Countries RFP, Sexual Violence Research Initiative (SVRI) through the Medical Research Council, South Africa in a grant to Stony Brook University (State University of New York; Principal Investigators: Palermo, Peterman, Behrman).

https://dx.doi.org/10.1016/j.jadohealth.2016.09.010