



Impact Evaluation of a School-Based Sexuality and HIV Prevention Education Activity in South Africa

Baseline Survey Report

August 2017

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EVALUATION

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Cover photo: Senior secondary school learners in KwaZulu-Natal, a province in South Africa with the highest prevalence of HIV and AIDS.

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ABBREVIATIONS

CSE	Comprehensive Sexuality Education
DBE	Department of Basic Education
DBS	dried blood spot(s)
DREAMS	Determined, Resilient, Empowered, AIDS-free, Mentored, and Safe
EDC	Education Development Center
HSV	herpes simplex virus
KZN	KwaZulu-Natal
LO	Life Orientation
MP	Mpumalanga
ODK	Open Data Kit
PEPFAR	United States President's Emergency Plan for AIDS Relief
SACMEQ III	Southern and Eastern Africa Consortium for Monitoring Educational Quality III
SES	socioeconomic status
SLP	scripted lesson plan
STATSSA	Statistics South Africa
STI	sexually transmitted infection
USAID	United States Agency for International Development

EXECUTIVE SUMMARY

Background

Gaining the knowledge and skills necessary to make healthy choices about sexual behavior as adolescent learners transition to young adulthood is key to controlling the potentially devastating effects of the HIV/AIDS epidemic. The South Africa Department of Basic Education (DBE) has attempted to attenuate the impact of HIV/AIDS on the nation through its Life Orientation (LO) curriculum, which has been in place since 2000. Previous studies found exposure to the curriculum was associated with better knowledge, attitudes, and some practices, but there was uneven implementation among educators and schools, and challenges with the curriculum (DBE, 2010). In 2015 DBE and the Education Development Center (EDC), with support from United States Agency for International Development (USAID) through the United States President's Emergency Plan for AIDS Relief (PEPFAR), invested in developing and piloting scripted lesson plans (SLPs) and supporting activities to increase the rigor and uniformity of the life skills program. Before rolling out the program nationally, DBE and USAID tasked MEASURE Evaluation to conduct an impact evaluation of the activity in two South African provinces.

The evaluation aims to describe the effect of the SLP on herpes simplex virus 2 (HSV-2) incidence or change in prevalence of pregnancy among a cohort of Grade-8 female learners in 2016 as they progress to Grade 10 in 2018. HIV incidence was initially considered but ultimately not selected as a primary outcome, because of ethical concerns. International guidelines recommend and South Africa policy requires that if HIV testing is done, then precounseling and postcounseling procedures must be implemented and test results must be given immediately or, if that is not possible, within five days of testing (Republic of South Africa Department of Health, 2015). Counseling and provision of results would potentially have a greater effect on learner behavior than the curriculum, so HSV-2 incidence was selected instead as a primary outcome. Because the incidence and prevalence of HSV-2 in young people are higher than for HIV, HSV-2 is often the biomarker of choice for these types of evaluation studies and permits a more accurate assessment of sexual behaviors than self-reported sexual behaviors.

This evaluation has secondary outcomes. First, the evaluation will describe the effects of the program on knowledge, attitudes, school retention, and self-reported risk behavior, HIV counseling and testing, and completed referrals for health services among the cohort of Grade-8 female learners in 2016 as they progress to Grade 10 in 2018. Second, we will compare these secondary outcomes between Grade-10 female learners in 2016 with those of Grade-10 female learners in 2018. Third, using the cross-sectional sample of males in Grade 8 in 2016, Grade 9 in 2017, and Grade 10 in 2018, we will examine the secondary outcomes between learners in intervention and control schools. Secondary outcomes among the cross-sections of male learners are the same as those among the female learners.

This report describes the methods of the impact evaluation of the South African school-based sexuality education program and documents findings from baseline data collection undertaken between August and October 2016.

Methods

The evaluation employed a two-arm, stratified, cluster-randomized design, where a secondary school is a cluster and a student learner is the unit of observation/analysis. Schools were sampled from five education districts in two provinces of South Africa—Bohlabela and Gert Sibande Districts, in Mpumalanga Province, and King Cetshwayo, Pinetown, and Umlazi Districts, in KwaZulu-Natal Province. In total, 58 intervention schools and 57 control schools (115 schools in total) were randomly

selected, and all Grade-8 females, Grade-8 males, and Grade-10 females enrolled in the selected schools in 2016 were eligible for interview upon receipt of their parent's or guardian's consent. Most learners were within the appropriate ages for grade (e.g., Grade 8, ages 13–15, and Grade 10, ages 15–17). Out of the 115 schools selected, 106 schools (55 intervention; 51 control) were included in the final sample, in which 3,606 Grade-8 females, 2,788 Grade-8 males, and 3,739 Grade-10 females were interviewed. The nine schools that were dropped either refused to participate (n=4), no longer had Grade 8-10 classes (n=2), or were not accessible because the schools were in a high-risk crime area (n=3).

Baseline data were collected in the third term in the 2016 school year (from August–October). Learners were asked to take consent forms home for parents and guardians; assent was obtained from all learners along with parental/guardian consent. Learners who were 18 years or older provided consent to participate. Baseline data collection involved the collection of dried blood spots (DBS) by trained nurses; audio-assisted, self-administered survey data from Grade-8 female learners; and survey data (only) from Grade-8 male learners and Grade-10 female learners. At baseline, biomarker testing for HSV-2 was collected through DBS for the Grade-8 female learners. DBS from baseline are being stored until 2018 to permit incidence testing between baseline and 2018 for those female learners who test positive in 2018. At baseline, all participating Grade-8 female learners provided contact information to permit tracking at each follow-up round. Participants will be followed, even if they drop out of school. Institutional review boards at the University of North Carolina at Chapel Hill and University of Pretoria (in South Africa) provided ethical approval of all study procedures.

Data were analyzed, using STATA statistical software (Stata Corp LP, College Station, Texas), by applying sampling weights to account for the sampling design and nonresponse. Descriptive statistics and frequency distribution were computed for all variables analyzed.

Findings

Within each province, there were few observed differences between the intervention and control group, which indicates that randomization within the evaluation study was successful. Therefore, an intention to treat analysis will be appropriate after end line data are collected.

Baseline data demonstrate that just under half of the learners in the study sample were orphans: about one-third were single orphans and about one-tenth were double orphans. The mother was the primary caregiver for most participants, followed in frequency by a grandparent. Many of the young people in the sample valued and appreciated what they were learning in their LO classes. The baseline data indicate gaps in young people's HIV and AIDS knowledge, experience, and self-efficacy that can be addressed through the LO program.

Most of the young people surveyed had never had sex at the time of the survey. Among the Grade-8 boys, a quarter in KwaZulu-Natal (KZN) and one-fifth in Mpumalanga (MP) had ever had sex. One-tenth of Grade-8 girls in each province and among Grade-10 girls one-quarter in KZN and one-third in MP had ever had sex. While three-quarters of sexually experienced boys reported using a condom the last time they had sex, and two-thirds to three-quarters reported using a condom every time they had sex, there remain gaps in condom use that place these young people at risk of acquiring HIV. Furthermore, by Grade 10, one-quarter of the female learners were sexually active, and about 59 percent of females who had ever had sex used a condom at last sex or consistently.

Conclusion

The EDC/DBE scripted LO lesson plans with supplemental activities program is seeking to address young people's sexual behaviors as well as young people's knowledge, self-efficacy, and awareness about HIV/AIDS in South Africa. This evaluation will illuminate gaps in the program and ways to strengthen it to meet the needs of all learners. The EDC team can use this baseline report to determine if they are currently meeting the needs of young people, and over time, the midline and end line data will make it possible to understand whether there are improvements in knowledge, attitudes, self-efficacy, behaviors and health status related to program exposure. This large-scale evaluation of the LO program, prior to national-level scale-up, is valuable because of the information it will provide about current efforts and potential for improvements. Evaluation results may also be used to inform the design and implementation of life skill curriculum and related HIV prevention activities for young people in other developing countries.

INTRODUCTION

Background

Young people in South Africa, especially young women, are at high risk of acquiring HIV. In a 2012 South African national survey, HIV rates rose from 2.4 percent among girls under age 14, to 5.6 percent among adolescent girls ages 15–19. In 2013, 5.4 percent of girls 14–19 years old were pregnant (Stats SA, 2014). Among female learners in 14 high schools in KwaZulu-Natal Province, the prevalence of HIV was 6.4 percent; the prevalence of HSV-2 was 10.7 percent; and the prevalence of teenage pregnancy was 3.6 percent (Abdool Karim, et al., 2014). The authors of the KwaZulu-Natal study concluded, “The high prevalence of HIV, HSV-2, and pregnancy underscore the need for school-based sexual and reproductive health services.” South Africa’s DBE has created a national HIV and AIDS strategy with the goals of reducing the incidence of HIV, other sexually transmitted infections (STIs), and pregnancy among learners in Grades 7–9 in public schools in all nine provinces (DBE, 2010). The need to intervene with young women to reduce HIV incidence is underscored by the objectives of the new Determined, Resilient, Empowered, AIDS-free, Mentored, and Safe (DREAMS) initiative of the U.S. President’s Emergency Plan for AIDS Relief (PEPFAR).

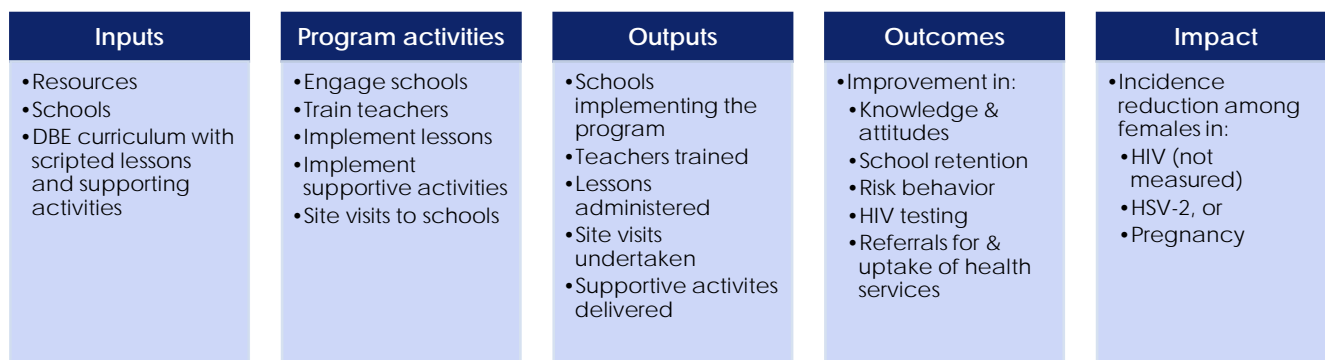
Gaining the knowledge and skills necessary to make healthy choices about sexual behavior as learners transition to young adulthood is key to controlling the HIV/AIDS epidemic and attenuating the potentially devastating effects of the epidemic. Additionally, it is important to identify HIV-positive young people in schools (those who acquire the virus perinatally and behaviorally) and link these youths to HIV testing and counseling and to care, treatment, wellness services, and positive prevention.

Through its life skills curriculum, in place since 2000, the DBE has attempted to address some of these issues. Previous studies found exposure to the curriculum to be associated with better knowledge, attitudes, and some practices, but there is uneven implementation among educators and schools and challenges with the curriculum (DBE, 2010). Because of these problems, DBE, with support from USAID, has invested in developing SLPs and supporting activities to increase the depth of information provided as well as the rigor of the life skills program—the LO curriculum—based on recommendations from the DBE report and the Southern and Eastern Africa Consortium for Monitoring Educational Quality III (SACMEQ III) project in South Africa. The main component of the new program is the sexuality and HIV education program for secondary school learners, which life skills educators deliver. These educators have been trained to use SLPs developed from an extensive review of existing life skills curricula and enhanced with interactive pedagogies. The SLPs aim to delay sexual debut, reduce unprotected sex, increase male and female condom use, reduce the number of sexual partners, and reduce violence and risk. Supportive activities are mobilization and engagement of parents, school management teams, and school governing bodies; focusing on sexual and reproductive health and gender-based violence; strengthening of referrals to health and social services; and linkages and increased access to youth-friendly sexual and reproductive health care services.

The new SLPs are expected to be mandatory. A timetable for their implementation has been developed, and they have been assessed in order to institutionalize comprehensive sexuality education (CSE) in schools. To ensure implementation and the rollout of the new SLPs in select areas, USAID is providing technical assistance (through a five-year contract that was awarded to EDC and its partners the HIV & AIDS Research Division at the University of KwaZulu-Natal, the Society for Family Health, and Mott McDonald, in 2015) to support the DBE with in-service educator training activities in targeted provinces and districts to strengthen the DBE’s ability to implement and monitor the new sexuality and HIV-

prevention education program. EDC trained LO educators before the second quarter of the 2016 school year and subsequently began piloting the SLPs in intervention schools. In addition, the DBE is revising current policies to promote access to HIV-prevention services in schools, using biomedical, behavioral, social, and structural interventions to reduce transmission and vulnerability to HIV. DBE is also planning to roll out CSE. The first years of program implementation focus on Grades 7–9; development and implementation of the curriculum for other grades is in process.

Figure 1. Logic model of the DBE sexuality program



Most studies of similar programs have relied on self-reported risk behaviors, levels of HIV knowledge, and other behavioral data for assessing effectiveness. Of 83 studies of school-based sexuality programs, 65 percent found a significant impact on at least one sexual behavior but did not include biomarkers (Kirby, et al., 2006). A more recent review of adolescent pregnancy prevention programs in developing countries demonstrated that school-based interventions can be effective for increasing contraceptive use and reducing pregnancy among young people; however, the findings were mixed for some of the studies (McQueston, et al., 2013). Other strategies that were effective at reducing pregnancy risk and increasing contraceptive use were cash transfer programs, communication and health services/counseling, and peer education implemented in conjunction with school-based programming (McQueston, et al., 2013). Further, a randomized trial assessing the impact of a school-based program in 328 primary schools in Kenya found that the program had a significant effect on risky HIV-related behaviors and a 65 percent decrease in pregnancies with adult fathers (Duflo, et al., 2006; Dupas, 2006). In another large randomized trial in Tanzania, a teacher-led and peer-assisted sexual health education program with a community component was found to have had a significant impact on knowledge, attitudes, reported sexually transmitted infection symptoms, and sexual behavioral outcomes (Ross, et al., 2007). McCoy, et al., (2010) reviewed the results from studies of nine behavioral interventions conducted in Africa, India, Thailand, and Mexico and found limited evidence, overall, that behavioral interventions successfully change risk behavior and prevent HIV infection for women and girls in low- and middle-income countries.

Locally, Jewkes, et al., (2008) evaluated the Stepping Stones program, an intensive 50-hour sexual health education activity aimed at changing gender norms and HIV risk behaviors, with a large (n = 2,776) randomized cluster trial of South African adolescents and young adults ages 15–26. The evaluation found that the program had prompted improvement in HIV testing rates; HIV-related communication; and HIV-related sexual risk behaviors, including condom use. The evaluation also found that, compared to men in the control group, fewer men who participated in the program reported perpetration of intimate partner violence at 24 months (6% vs. 10%, p = 0.054). There was also a 33 percent decrease in incidence of HSV-2 in the intervention group compared to the control group (Jewkes, et al., 2008). Because the

incidence and prevalence of HSV-2 in young people are higher than for HIV, HSV-2 is often the biomarker of choice for these types of evaluation studies. Furthermore, including a biomarker for HSV-2 permits a better indication of sexual behaviors and is a marker of unprotected sex; self-reporting may miss this relevant information because young people may give socially desirable (and inaccurate) responses about sexual experience and protected sex.

Before rolling out the new program nationwide, the USAID Mission in South Africa and the DBE needed to evaluate the program to see if it is having the expected impact. By contributing to the country's evidence base of effective HIV programming for youth, findings from this study will help to ensure that young people in South Africa receive high-quality sexuality and HIV prevention education while in school. It will help to institutionalize prevention education in the South African school system, therefore helping to ensure that programs aimed at preparing the country's youth to address sexual health and HIV challenges are sustainable.

Aims of the Impact Evaluation

The goal of the impact evaluation is to assess the impact of a school-based sexuality and HIV prevention education activity on learners over a period of two years. The evaluation aims to provide the South African DBE and PEPFAR South Africa with evidence of the effectiveness of the sexuality and HIV education program, by estimating the impact of the SLPs and supporting activities on the incidence of HSV-2 or prevalence of pregnancy among a cohort of girls in secondary school in two provinces of South Africa.

The primary evaluation question is this: What is the effect of the SLPs and supporting activities on the incidence of HSV-2 or pregnancy, at the end of Grade 10, among a cohort of girls enrolled in Grade 8 at the beginning of 2016 in intervention schools, compared to a cohort of girls in Grade 8 at control schools that provide the current life skills program (i.e., the standard of practice)?

The secondary evaluation questions are:

- What is the effect of the SLPs and supporting activities on knowledge, attitudes, school retention, and self-reported risk behavior, HIV and other STI testing, and completed referrals for health services at the end of eighth, ninth, and tenth grades among a cohort of girls first interviewed in Grade 8 and among a cross section of boys interviewed in Grade 8, Grade 9, and Grade 10?
- If there is a reduction in the primary outcome, does the intervention work by increasing school retention, or is the effect independent of school retention?
- Do effects differ by sex or by rural versus urban schools? (Note: After baseline data collection, the realization is that there are not enough urban schools to answer this regional question.)

The primary hypothesis is that the SLPs and supporting activities result in a reduction of the incidence of HSV-2 and/or pregnancy over a period of two years among a cohort of girls enrolled in Grade 8 at the beginning of 2016 compared to girls in schools with the current life skills program (without SLPs).

The secondary hypothesis is that the SLPs and supporting activities increase school retention, knowledge, attitudes, self-reported risk and health behavior (i.e., condom use at last sex and delayed sexual debut), uptake of HIV and other STI testing and counseling, and completed referrals for reproductive health and family planning services among girls and boys in intervention schools in comparison with girls and boys

in schools with the current life skills program (without SLPs). Changes in these secondary outcome indicators, in turn, are expected to lead to reduced incidence of HSV-2, pregnancy, and HIV.

The primary outcome measures for this impact evaluation are the incidence of HSV-2, measured through DBS or self-reported pregnancy. HIV incidence, measured through DBS, was initially considered but ultimately not selected as a primary outcome, because of ethical concerns. International guidelines suggest and South Africa policy requires that if HIV testing is done, then precounseling and postcounseling procedures must be implemented and test results must be given immediately or, if that is not possible, within five days of testing (Republic of South Africa Department of Health, 2015). Additionally, if DBS for HIV were collected, the institutional review boards at the University of North Carolina at Chapel Hill and the University of Pretoria would have required study staff to provide learners with their test results and counseling. Because counseling and provision of test results would potentially have a greater effect on learner behavior than the curriculum, HSV-2 incidence was selected instead as a primary outcome. Dried blood spots for HSV-2 testing were collected for Grade-8 female learners and will be stored for two years. DBS will be collected and analyzed in Grade 10; for any girl who tests positive for HSV-2, we will analyze her Grade-8 DBS to determine if she has an incident infection. Secondary outcome measures are school retention, knowledge, attitudes, self-reported risk behavior (i.e., condom use at last sex and delayed sexual debut), uptake of STI and HIV testing and counseling, and completed referrals for reproductive health and family planning services.

METHODS

Evaluation Design

The evaluation employs a two-arm, stratified cluster-randomized trial, where a secondary school is a cluster and a learner is the unit of observation/analysis. A sample of schools was randomly selected and assigned to intervention and control arms for a longitudinal observation of Grade-8 female learners (data collected at baseline in year 2016, midline in 2017, and end line in 2018). In the intervention arm, educators were trained to provide sexuality and HIV-prevention education based on the new SLPs to learners enrolled in Grade 8 at the beginning of 2016, while in the control arm, schools follow the existing LO curriculum. The impact (at the end of 2018) of the new program will be measured by comparing the incidence of HSV-2, or pregnancy, among the cohort of Grade-8 female learners enrolled in the selected schools in 2016, in the intervention and control arms. The cohort of female learners in the intervention and control arms will take part in an annual panel survey from Grade 8 through Grade 10. Biomarkers for HSV-2 were collected from the cohort of girls in Grade 8 (2016) and will be collected again from the cohort of girls in 2018. All biomarker samples collected in 2018 (in Grade 10) will be tested for HSV-2. Biomarkers collected at Grade 8 are stored at -80 degrees Celsius and will only be tested, for baseline comparison, if the corresponding Grade-10 biomarker result is positive for HSV-2. This permits assessment of whether HSV-2 infection has occurred since the baseline. If approved by the IRB as part of end line data collection, biomarker testing of HIV may also be conducted at end line to estimate HIV prevalence (but not incidence). Pregnancy self-report was obtained during the baseline and will be collected at each survey time. Learners will be followed even if they drop out of school, to ensure a complete picture of intervention effects.

Additionally, a cross-sectional sample of male learners in the same schools participated in the baseline survey in 2016 and will participate in the annual follow-up surveys in 2017 and 2018; no effort will be made to link the male learners over time. Knowledge, attitudes, and behaviors of male learners will be compared between intervention and control schools for each time period. Finally, a cross-sectional sample of Grade-10 girls in the same schools was also surveyed during baseline data collection in 2016 (when the cohort was in Grade 8). Grade-10 girls will be used as a comparison group for the Grade-10 longitudinal sample at end line, so that, in 2018, we can examine the knowledge, attitudes, and behaviors of Grade-10 girls exposed to the program and those not exposed to the program and compare their outcomes to those of the Grade-10 girls in 2016, prior to program launch with this grade. In addition, surveying the boys in the same grade each year as the target girls permits comparing differences between girls and boys as well as relative changes in each group with and without the program.

The evaluation includes a qualitative component at midline. The qualitative study will examine the perspectives of learners, parents, educators, and other stakeholders regarding the sexuality portion of the LO curriculum and supportive activities and how accepting and comfortable educators are with the sexuality education lessons of the LO curriculum. The qualitative study will also examine contextual factors that may influence whether changes in primary and secondary outcomes are observed. Results from the qualitative study are intended to be used by the stakeholders to refine program implementation before the completion of the impact evaluation.

Target Population and Program Assignment

The coverage of the program for the evaluation included five education districts in two provinces with a high prevalence of STIs and pregnancy, as identified by the USAID mission in South Africa (USAID/SA) and the DBE. The districts are Bohlabela and Gert Sibande, in Mpumalanga Province, and

King Cetshwayo, Pinetown, and Umlazi, in KwaZulu-Natal Province. Target schools are those in the three lowest socioeconomic-status (SES) quintiles and those that include learners in Grades 8–10. A random sample of target schools was selected and randomly assigned either to the intervention or control arm. The population covered is a cohort of female learners enrolled in Grade 8 at the beginning of 2016 and a cross-section of female learners in Grade 10 and male learners in Grade 8 at baseline.

Statistical Power/Sample Size

The goal of the sample size calculation was to power the statistical analysis on the primary outcome, i.e., the incidence of HSV-2 or pregnancy among a cohort of Grade-8 female learners. The sampling plan was designed to recruit 2,500 female learners in Grade 8 in each of the two arms (5,000 female learners in total) from 115 schools. Sample size calculations were based on assumptions and specifications of sampling parameters. First, we specified the minimum detectable change in the primary outcomes based on the assumed incidence rate of HSV-2 or pregnancy of 0.04 in the intervention arm versus 0.08 in the control arm over two school years at the significance level (α) of 0.05 (two-sided). Next, we adjusted the sample size for the following: (1) design effect, to account for elevated standard errors in a cluster sample design; (2) baseline prevalence of the primary outcome, to account for loss of units available to estimate the incidence rate¹; and (3) nonresponse of schools and female learners. The design effect from clustering is approximated as $1 + ICC \times (M - 1)$, where ICC is intra-cluster correlation and M is the average cluster size (Kish, 1965).² We assumed an ICC of 0.03 and an average of 50 female learners per school, implying a design effect of 2.47. Next, we assumed the prevalence at 1 percent of HSV-2 and 0 percent of pregnancy at baseline. Finally, we accounted for potential nonresponse in schools (15 out of 115 schools) and assumed a response rate of 70 percent for Grade-8 female learners at baseline. With a total sample size in both arms together of 3,500 female learners successfully interviewed at baseline (or 5,000 female learners recruited for interviews with an assumed response rate of 70%), we estimated a statistical power ($1 - \beta$) of 88 percent.

Sampling

The study applies a stratified cluster sampling approach to obtain a random sample of learners in the intervention and control arms, respectively. The sampling frame was constructed from a list of schools provided by the DBE, which had information on the schools' locations and measures of the SES of the catchment learners. Eligible schools were those in the three lowest SES quintiles and those that include Grades 8–10 learners. Most learners in Grade 8 will be ages 13–15; most in Grade 10 will be ages 15–17. The frame was then stratified by the five education districts in two provinces: Bohlabela and Gert Sibande Districts, in Mpumalanga Province, and King Cetshwayo, Pinetown, and Umlazi Districts, in KwaZulu-Natal Province. A stratified random sample of schools was selected whereby the number of selected schools within each district was proportional to the number of eligible schools in the district within each province to reflect the composition of the target population in each province. Then, within each district, the selected schools were randomly assigned either to the intervention or control arm. In total, 115 schools were randomly selected and assigned to 58 intervention schools (23 in MP and 35 in KZN) and 57 control schools (22 in MP and 35 in KZN) as presented in Table 1. All Grade 8 female, Grade 8 male, and Grade 10 female learners in January 2016 in the selected schools were invited to participate in the baseline study upon receipt of consent of a parent or guardian.

¹ For the estimation of the incidence rate of HSV-2, we need to exclude from data analysis those who are HSV-2 positive at baseline. The HSV-2 status at baseline will be assessed for those whose biomarker testing results are positive at end line. Those who contracted HSV-2 prior to study enrollment will be excluded from data analysis at end line.

² Kish, L. (1965). Survey sampling. New York: John Wiley & Sons.

Inclusion and Exclusion Criteria

Schools were eligible for the study if they met all of the following criteria:

- Located in PEPFAR priority provinces: Bohlabela and Gert Sibande Districts in Mpumalanga Province, and King Cetshwayo, Pinetown and Umlazi Districts in KwaZulu-Natal Province,
- Secondary schools with at least Grades 8–10 present
- Schools in the Quintiles 1–3 range

Individual learners were eligible for the study if they met the following criteria:

- Female learner enrolled in Grade 8 in a selected school at time of baseline; followed longitudinally those who enrolled in the study
- Male learner enrolled in Grade 8 in a selected school at time of baseline
- Female learner enrolled in Grade 10 in a selected school at the time of baseline
- Received parental consent to participate

Selection Bias

We randomized schools to minimize selection bias of schools and learners between the intervention and control arms. However, selection bias may still be a concern if unobserved characteristics of learners in the intervention arm systematically differ from unobserved characteristics of learners in the control arm, and these differences are related to the study outcome(s). First, some learners will not be able to participate in some or all surveys throughout the study. Learners who did not have a parental/guardian consent were not interviewed for the baseline study. Second, there may be attrition of learners when they transfer or drop out of schools. We will monitor learners' transfer or dropout and their exposure to the LO program throughout the study. We will minimize attrition by retrieving contact information from Grade-8 female learners and their schools, and following up with those at home who have left school at midline and end line. We will also apply an intention-to-treat analysis and analyze data from learners based on their initial assignment of the LO program. Using data from the program monitoring system, we will classify schools based on their level of program exposure. This information will be used to include additional variables in the analysis to detect the minimum level of exposure needed to observe changes.

Survey Instrument

The survey instrument was developed in consultation with stakeholders from the DBE, EDC and the consortium partners, and USAID. It covers the following topics that measure questions for the evaluation:

- Demographics and household composition
- Connectivity to caregivers
- School attendance and performance
- Aspirations and expectations about the future
- Risk perception
- Sexual behavior
- Participation in and perceptions of LO curriculum

The surveys were translated to local languages by professional translators. The languages available for this survey were English, Sepedi, SiSwati, xiTsonga, and IsiZulu. The surveys were uploaded onto tablets using Open Data Kit (ODK) and each question could be read or listened to.

Field Implementation

Pilot Study

A pilot study was conducted in three schools in MP (Witbank area) that were not included in the sample. Learners in Grades 8 and 10, representing all language groups, participated in the pilot. The purpose of the pilot study was to test the data-collection procedure and pretest the questionnaire. The study procedure and questionnaire were revised on the basis of feedback from participating learners and educators.

Recruitment of Fieldworkers

Field teams consisting of a provincial coordinator, team leads, data collectors, and nurses were recruited to conduct data collection in each of the two provinces. Most of the data collectors were recruited from the Statistics South Africa (STATSSA) fieldworkers' database—namely those with previous fieldwork experience for large-scale evaluations and proficiency in select local languages.

The field team was required to approach the selected schools, gain permission from the principals and/or school governing bodies, follow consent and assent procedures, guide learners through self-administered surveys (on tablets), collect blood samples (conducted by nurses), and collect contact information for follow-up with Grade-8 female learners for the subsequent data-collection points.

Fieldworker Training

All recruited fieldworkers participated in a three-day training within their province. Training included research ethics, study-specific procedures for data collection and use of data collection tools, gaining permission from sampled schools, obtaining parental consent and learner assent, managing classroom dynamics, and developing approaches for collecting blood samples (for the nurses). The training emphasized the primary ethical standards: informed consent, anonymity, confidentiality and privacy, and doing no harm. All fieldworkers signed statements agreeing to protect the security and confidentiality of identifiable information. In addition to training, a comprehensive standard of operation manual was developed to provide guidance on pre-visit preparations, the use of all data-collection tools (including the tablet-based self-administered survey), the process for nurses to administer a health screening tool and collect DBS from Grade-8 female learners, the flow of onsite procedures, and quality assurance measures to ensure accurate data collection.

Stakeholder Engagement and School Permission

A series of stakeholder engagement meetings were conducted before data collection at all levels: the national, provincial, district, school, and community levels. The purpose of stakeholder engagement meetings was to introduce and discuss the imminent survey and process requirements for their support. Letters of support and endorsement were obtained from the DBE and each Provincial Department of Education.

Once letters of endorsement were obtained, meetings were held with the principals of the selected schools at the beginning of the data collection period. The purpose of the meetings was to provide the principals and members of school staff with information about the study and what would be required of

the school, school staff, and learners in the selected grades. Permission to conduct the study was gained from the principals.

Parental Informed Consent

At the school level, the field teams, with the support of school staff, informed learners in the participating classes in each school about the study and what would be required of them. It was explained that parents or guardians would first need to agree for learners to participate, and learners were given a study information sheet to take home to their parents or guardians. The sheet contained a reply space where parents or guardians were asked to indicate if they consented or not for their child or ward to participate in the study. Learners were asked to return the signed forms to the school within three days. The information sheet also contained contact details for the principal investigator and the ethics committee, so they could be contacted by any parents/guardians who had questions regarding the research.

Learner Informed Consent

All learners whose parents consented to study participation were eligible to participate in the survey (see Table 1 for study response rates). On the day of data collection, the field team summarized the information sheet with the learners and answered all their questions. Potential study participants were clearly told that they were free at all times not to participate in the research and that refusal to participate would in no way affect their academic enrollment or performance at their school. Participants were also encouraged to share with researchers any concern they might have regarding their research participation. Learners who wanted to participate were asked to complete the assent form attached to the information sheet. All returned parental consent and learner assent forms were collected and stored in accordance with ethics requirements.

Questionnaire Completion and Dried Blood Spots Collection

Survey completion and DBS collection, in most cases, occurred within three days after parental informed consent. On the day of data collection, field team members provided instructions to learners before they began completing the ODK survey and DBS collection (for Grade-8 girls). The instructions emphasized the following:

- To learners, that participation was voluntary, and learners were allowed to withdraw from the study at any time
- To learners, to seek assistance from field team members and not from another learner, should they require it
- To learners, the need to abstain from discussing the contents of the questionnaire with other learners
- To the nurses, the need to provide simple explanations to Grade-8 girls of the testing procedures for data collection

The learners completed ODK audio-assisted, self-administered survey interviews.

Biomarker data collection—DBS for HSV-2 testing were collected from Grade 8 female learners at baseline and stored for future testing at end line. Biomarkers will be collected again at end line and tested for HSV-2; biomarkers from baseline are currently being stored at -80 degrees Celsius, and the corresponding baseline samples will be tested only for comparison with those samples that are HSV-2 positive at end line. The later testing of the baseline biomarkers will permit a determination of whether an individual with HSV-2 at end line had an incident infection between baseline and end line or if she was already HSV-2 positive at baseline. All positive biomarker tests will be subject to confirmatory tests to

minimize measurement error. At the end of the study in 2018, when the cohort is in Grade 10, learners will receive the results of the HSV-2 testing and will receive a referral for HIV testing.

The trained nurses also provided a health screening for the cohort of Grade-8 female learners. The health screening involved going through a standardized checklist of the algorithm for syndromic diagnosis of STI. Any learner who presented a health issue, including symptoms of HSV-2, was referred to the local public health clinic for further management. No information from the health screen was stored as part of this study.

Anonymous data-collection strategies were followed to maintain a high level of confidentiality. No questionnaires or specimen-collection forms contained names or other explicit identifiers. Learners were not required to enter their names in the tablet-based survey that uses the ODK mobile data collection application. Instead, all participating learners were assigned a unique identifying number for follow-up. Corresponding names and codes are kept separately from any data, are password-protected, and are accessible only by authorized members of the evaluation team. Furthermore, all Grade-8 girls received a thank you letter in a sealed envelope after the biomarker testing. Those who were referred had an additional piece of paper in the sealed envelope; this was done to protect the privacy of those who needed referral.

Ethics

This study adheres to the three Belmont principles of ethics that guide researchers in conducting safe research: respect for persons, beneficence, and justice. Ethical clearance was obtained from the University of Pretoria Faculty of Health Sciences Research Ethics Committee (Ref No 153/2016) and the University of North Carolina at Chapel Hill Institutional Review Board.

Response Rates

Tables 1–2 present the results of the interviews with schools and learners, by province and district for the intervention and control arms. A total of 115 schools were selected, of which 106 (92.2%) were successfully interviewed: 55 intervention and 51 control. There were two schools that were determined to be ineligible after selection, because they no longer included Grades 8–10. The principal reasons for nonresponse (n=7) among the remaining eligible schools were refusal (n=4) and inaccessibility owing to security concerns (n=3).

In the interviewed schools, 3,606 female learners in Grade 8 (74.0% response rate), 2,788 male learners in Grade 8 (54.0% response rate), and 3,739 female learners in Grade 10 (60.4% response rate) were successfully interviewed; the final total sample size of learners was 10,133. The response rates are calculated based on the number of eligible learners in a class/grade provided by the school or estimated for the small number of schools where this information was not available. The following were the principle reasons given for nonresponse among eligible individual learners: lack of parental consent, learner's refusal, and learner's absence.³

The number (weighted and unweighted) of interviewed learners by district, study arm, grade, and sex is shown in Table 3. The average response rates were applied to three schools missing the number of school enrollees. Sampling weights were obtained by accounting for the sampling design, and response rates were calculated by combination of districts, intervention arms, sex, and grades.

³ From the data available, it is not possible to distinguish refusals from those were absent or did not have parental consent.

Table 1. Response rates, by province and study group

	KwaZulu-Natal		Mpumalanga	
	Intervention	Control	Intervention	Control
Schools sampled	35	35	23	22
Schools eligible	35	33	23	22
Schools interviewed	32	30	23	21
School response rate (%) ¹	91.4	90.9	100.0	95.5
Grade-8 girls interviewed	1064	924	833	785
Grade-8 girls' response rate (%) ²	67.0 ³	75.5 ⁴	75.9	77.6
Grade-8 boys interviewed	736	699	654	699
Grade-8 boys' response rate (%) ²	43.2 ³	48.3 ⁴	58.3	66.1
Grade-10 girls interviewed	1033	975	886	845
Grade-10 girls' response rate (%) ²	62.0 ³	62.8 ⁴	57.2	59.1

¹ Defined as the number of interviewed schools divided by the number of eligible schools

² Defined as the number of respondents divided by the number of enrollees

³ The number of enrollees was missing for two schools. The response rate is calculated excluding the two schools.

⁴ The number of enrollees was missing for one school. The response rate is calculated excluding the school.

Table 2. Response rates, by district and study group*

	KwaZulu-Natal						Mpumalanga			
	Pinetown		Umlazi		King Cetshwayo		Bohlabela		Gert Sibande	
	I*	C*	I	C	I	C	I	C	I	C
School response rate (%) ¹	100.0	85.7	80.0	100.0	90.9	90.5	100.0	100.0	100.0	85.7
Grade-8 girls' response rate (%) ²	60.8	76.2	44.2 ³	81.6 ⁴	77.7	73.0	86.1	83.6	68.8	63.3
Grade-8 boys' response rate (%) ²	43.6	38.9	26.6 ³	59.8 ⁴	46.1	49.7	78.5	72.9	43.8	51.1
Grade-10 girls' response rate (%) ²	57.6	59.1	34.6 ³	82.0 ⁴	70.8	59.6	78.5	73.8	39.2	37.5

*I = intervention group; C = control group

¹ Defined as the number of interviewed schools divided by the number of eligible schools

² Defined as the number of respondents divided by the number of enrollees

³ The number of enrollees was missing for two schools. The response rate is calculated excluding the two schools.

⁴ The number of enrollees was missing for one school. The response rate is calculated excluding the school.

Table 3. Sample sizes (unweighted and weighted)

	KwaZulu Natal			Mpumalanga		
	Intervention	Control	Total	Intervention	Control	Total
Grade-8 girls						
Unweighted	1064	924	1988	833	785	1618
Weighted	1398.0	983.0	2381.0	351.9	340.7	692.6
Grade-8 boys						
Unweighted	736	699	1435	654	699	1353
Weighted	1502.0	1148.0	2650.0	359.6	356.6	716.2
Grade-10 girls						
Unweighted	1033	975	2008	886	845	1731
Weighted	1463.0	1244.0	2707.0	496.9	489.3	986.3

FINDINGS

This section presents the baseline results from the survey of the study participants. Frequencies were computed for each variable by province and intervention and control groups. Separate tables are shown by grade and sex (i.e., for each table, we have a comparable table for Grade-8 girls, Grade-8 boys, and Grade-10 girls.) The full set of tables can be found in the appendix. Here, we present a sample of the characteristics, behaviors, and experiences of the in-school learners. Though not presented here, the tables in the appendix demonstrate that randomization of the schools was successful and generally, across all measures including knowledge, self-efficacy, sexual behaviors, and HIV testing, the intervention and control learners (by grade, sex, and province) are comparable.

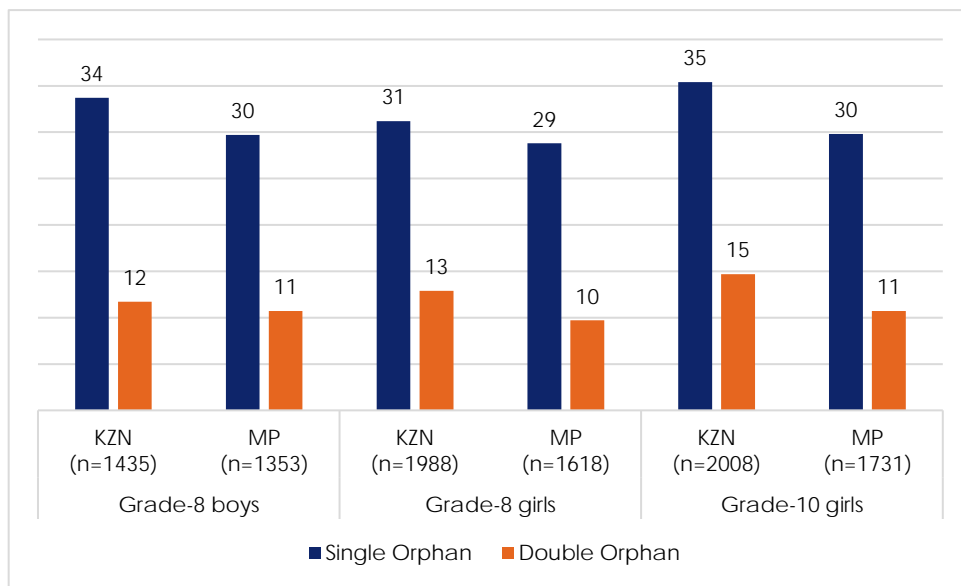
Demographics and School Attendance

Demographics (Appendix Tables A1a–A1c)

The mean age for each group of respondents was 14.3 years for Grade-8 boys, 13.6 years for Grade-8 girls, and 16.0 for Grade-10 girls. The age range for all three groups was 11–25 years; however, most learners were within the appropriate ages for grade (e.g., Grade 8, ages 13–15, and Grade 10, ages 15–17). Mean ages were the same in both provinces. Grade-8 boys were slightly older than Grade-8 girls by approximately eight months. In both provinces, “Mother” was reported as the primary caregiver by more than two-thirds of Grade-8 boys and approximately three-quarters of Grade-8 girls and Grade-10 girls. The second most frequently reported primary caregiver was “Grandparent,” by more than 10 percent of Grade-8 boys, Grade-8 girls, and Grade-10 girls, in both provinces. A greater percentage of Grade-8 boys reported their father as the primary caregiver (about 12.5%) than did Grade-8 girls (5%–6%) and Grade-10 girls (6%–7%).

Children were defined as orphans if they reported a parent was dead or did not know if a parent was alive. It is noteworthy that just under half of all learners were orphans: approximately one-third of all learners who responded had lost one biological parent and more than one-tenth had lost both parents (see Figure 2). There were higher percentages of learners reporting the loss of one or both parents in KZN than in MP. For example, among Grade-8 girls, 31.2 percent in KZN and 28.8 percent in MP had lost one parent; 12.9 percent in KZN and 9.7 percent in MP had lost both parents. Among Grade-10 girls, 35.4 percent in KZN and 29.8 percent in MP had lost one parent; 14.7 percent in KZN and 10.7 percent in MP had lost both parents. A similar pattern was observed among Grade-8 boys.

Figure 2. Percentage of learners who reported losing one or both parents*



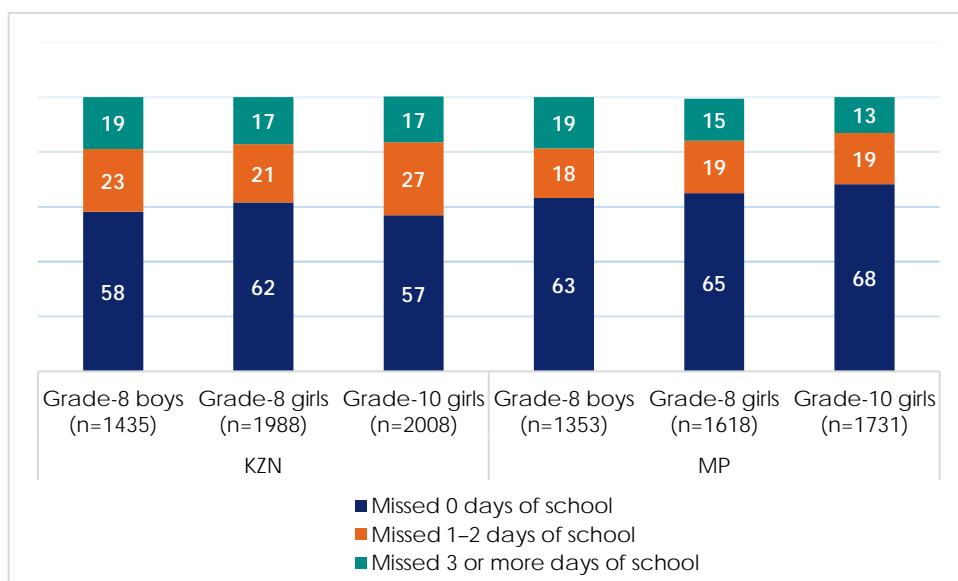
*Reported parent was dead or did not know if parent was alive

School Attendance and Performance (Appendix Tables A2a–A2c)

There was a high percentage of reported school attendance, with almost two-thirds of all respondents in both provinces reporting having never missed school. Additionally, approximately 20 percent of the respondents reported having missed only one to two days of school, and only around 15 percent reported having missed three or more days of school. (See Figure 3.) Among Grade-8 girls, about 25 percent of double orphans missed three or more days of schools, while about 17 percent of single orphans and 15 percent of nonorphans missed three or more days. Among Grade-8 boys, about 28% of double orphans missed three or more days of school, while the proportion for single and nonorphans was 18 percent. (See Table A.2).

Overall, learners in both provinces had high optimism of being promoted to the next grade, though optimism was slightly higher in KZN. Ninety percent of Grade-8 boys, 91 percent of Grade-8 girls, and 95 percent of Grade-10 girls reported that they had some chance or a high chance of passing to the next grade in KZN, compared to 82 percent of Grade-8 boys, 83 percent of Grade-8 girls, and 87 percent of Grade-10 girls in MP. Equally positive is that 90 percent of learners, consistent across all groups and in both provinces, felt that they belong in school.

Figure 3. Reported school attendance (percentage of learners who reported missing school)



Knowledge and Attitudes toward Learning about HIV and AIDS in Life Orientation

Participation in and Perception of the Life Orientation Curriculum (Appendix Tables A3a–A3c)

Learners were asked how much they have learned about sexuality and HIV-related topics in LO class. The majority answered that they have learned a lot. (See Table 4 for results for Grade-8 girls, by province; similar results were found for Grade-8 boys and Grade-10 girls.) Comparing the provinces, more female Grade-8 learners from MP (80%) indicated that they have learned a lot about sexuality and HIV-related topics in LO class, compared to female Grade-8 learners in KZN (75%). In both provinces, more Grade-10 girls (between 82%–84%) reported having learned a lot compared to their Grade-8 female and male peers (see Appendix Tables A3a–A3c). Notably, the Grade-10 learners in both intervention and control schools are getting the standard LO curriculum and not the upgraded SLP version.

The study also asked learners whether they think their parents or caregivers believe that learning about HIV and AIDS in school is a good thing. More than three-quarters of learners in all grades reported that their parents/caregivers consider learning about HIV and AIDS in school to be a good thing. Slightly more than half of the learners reported having talked to their parents/caregivers about the HIV-related topics they had learned about in their LO class; fewer of the Grade-8 girl learners from KZN (51%) indicated talking with parents/caregivers compared to their peers from MP (62%). A lower percentage of Grade-8 girls and a higher percentage of Grade-10 female learners talked to their parents/caregivers (see Tables A3a–A3c).

Table 4. Learners' Life Orientation experience and perceived relevance, and parental/caregiver attitudes toward and learners' involvement in Life Orientation among Grade-8 girls and boys in KZN and MP (percentage of learners indicating the statements were very or mostly true compared to a little or not true)*

	KZN Grade-8 girls (n=1988)	MP Grade-8 girls (n=1618)
I have learned a lot about sexuality and HIV-related topics in my Life Orientation class.	75.0	80.4
The things we learn about gender roles, sexuality, and HIV in the Life Orientation class are similar to what I experience in my life.	56.7	63.1
I am able to apply some of the things I have learned about gender roles, sexuality, and HIV in the Life Orientation class to my personal life.	66.1	70.2
I talk to my parent/caregiver about the sexual and HIV-related topics I learn about in the Life Orientation class.	51.0	61.6
My parents/caregiver think it is a good thing I am learning about HIV/AIDS in school.	77.2	86.8

*Unweighted Ns and weighted percentages shown; see Table 3 for weighted Ns.

Perceived Relevance of the Life Orientation Class

Table 4 above also reveals the degree to which learners perceive the information they learn about gender roles, sexuality, and HIV in the LO class is relevant to their lives. More than half of Grade-8 girls indicated that what they had learned about gender roles, sexuality, and HIV-related topics in LO class was similar to what they experienced in life. Following the same logic, learners were asked whether they found LO to be applicable to their personal lives since knowledge gained from LO is intended to be applicable. More than two-thirds of female Grade-8 learners indicated that they had applied the topics from LO to their personal lives. Similar results were found for Grade-8 boys and Grade-10 girls. These findings can be examined in more depth in the midline qualitative data collection that will focus on the importance of the LO program in the lives of the young people. See Tables A3a–A3c for some distinctions by province.

Sources of Information on and Knowledge of STIs, including HIV (Appendix Tables A4a–A4c)

To assess learners' knowledge of HIV and other STIs, the study focused on facts and myths about HIV and other STIs, general sources of information, and school-specific sources of information on HIV and other STIs. This subsection presents findings from the study about learners' knowledge of HIV and other STIs.

Knowledge of STIs, including HIV

Table 5 shows the percentage of learners who correctly responded that statements about HIV and other STIs were true or false. Generally, the study revealed low knowledge of HIV and other STIs among learners. For example, in MP, about 20 percent of Grade-8 boys, 13 percent of Grade-8 girls, and 14 percent of Grade-10 girls correctly identified as false the statement that one would definitely know if he or she has an STI because he or she would see or feel symptoms. The ability to identify this statement as false was also low in KZN at about 19 percent, 18 percent, and 15 percent for Grade-8 boys, Grade-8 girls, and Grade-10 girls, respectively. In general, learners in KZN had lower levels of knowledge than in MP. For example, about 14 percent of Grade-8 girls in KZN correctly identified as true the statement that not all STIs are curable, in comparison with 45 percent in MP. Similarly, 28 percent of Grade-8 girls in KZN compared to 43 percent of Grade-8 girls in MP correctly identified as false that oral sex poses no risk for STIs. Finally, about 53 percent of Grade-8 girls in KZN correctly identified as false the statement that one

can get HIV from kissing a person who is HIV-positive, in comparison with 65 percent in MP. There was no observed pattern of knowledge of STIs and HIV by orphanhood status.

In comparison with Grade-8 girls, Grade-10 girls were more knowledgeable about HIV and other STIs. Most Grade-10 girls correctly identified as true that not all STIs are curable (54% in KZN; 57% in MP). Additionally, most Grade-10 girls identified as false that one can get HIV from kissing a person who is HIV-positive (72% in KZN; 78% in MP) and that a woman who is pregnant can do nothing to prevent her baby from being born with HIV (62% in KZN; 66% in MP).

Table 5. Percentage of learners who correctly identified the following statements as true or false (correct response in parentheses)*

	Grade-8 girls		Grade-8 boys		Grade-10 girls	
	KZN (n=1988)	MP (n=1618)	KZN (n=1435)	MP (n=1353)	KZN (n=2008)	MP (n=1731)
You can usually tell if someone has HIV/AIDS by the way they look. (FALSE)	36.0	41.8	36.1	42.8	47.8	53.2
If you have a STI you will definitely know because you will see/feel symptoms (FALSE)	19.4	19.8	17.7	12.9	15.1	14.3
Not all sexually transmitted infections are curable. (TRUE)	49.0	51.2	13.4	44.8	54.3	57.3
Oral sex poses no risk for STIs (FALSE)	32.6	46.0	27.7	42.8	37.2	50.6
If a mosquito bites you, it can infect you with HIV. (FALSE)	33.1	39.4	33.7	44.2	39.9	43.9
You can get HIV from kissing a person who is HIV-positive. (FALSE)	52.1	60.9	53.0	64.5	72.4	77.8
A woman who is pregnant can do nothing to prevent her baby from being born with HIV. (FALSE)	40.8	44.5	41.4	46.3	62.0	66.2

*Unweighted Ns and weighted percentages shown; see Table 3 for weighted Ns.

Sources of Information on HIV/AIDS and STIs

In KZN, television shows (35%) and radio commercials and public service announcements (34%) were reported as the most important source of HIV information among the Grade-8 girls and boys and the Grade-10 girls (see Figure 4 for sources among Grade-8 girls, by province). In MP, more than half of the learners cited television shows as the most important source for HIV information. Among Grade-8 girls in MP, family members (32%) and friends (29%) also featured highly as sources of HIV information. In both provinces, street performance and cinema were the least-mentioned sources of information about HIV, AIDS, or other STIs. Except for a significant majority of Grade-10 KZN girls citing radio as their most important source, the same pattern was observed among Grade-8 boys and Grade-10 girls in each province (Table A4a–A4c). Of note, school was not a response option for this question; the question that follows asks details on HIV information learned at school.

Figure 4. Sources of information about HIV and AIDS and other STIs among Grade-8 girls in MP and KZN (%)

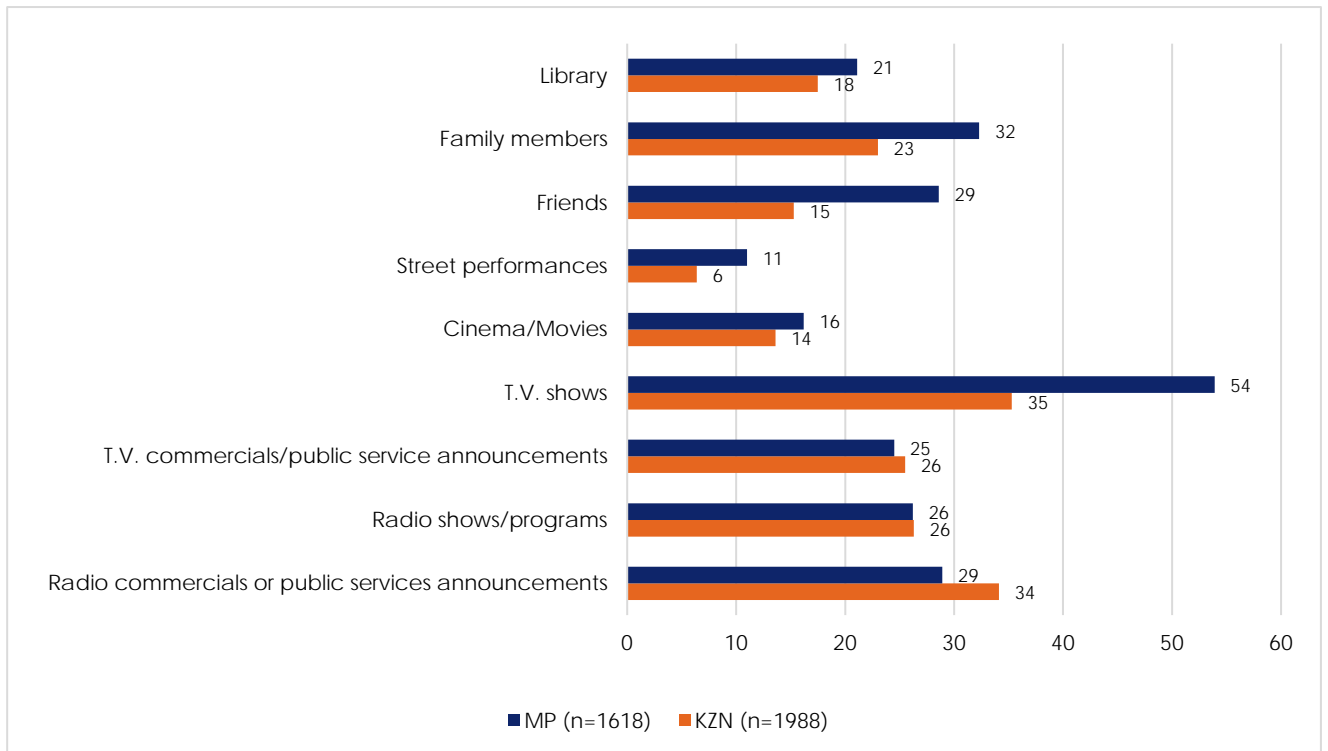
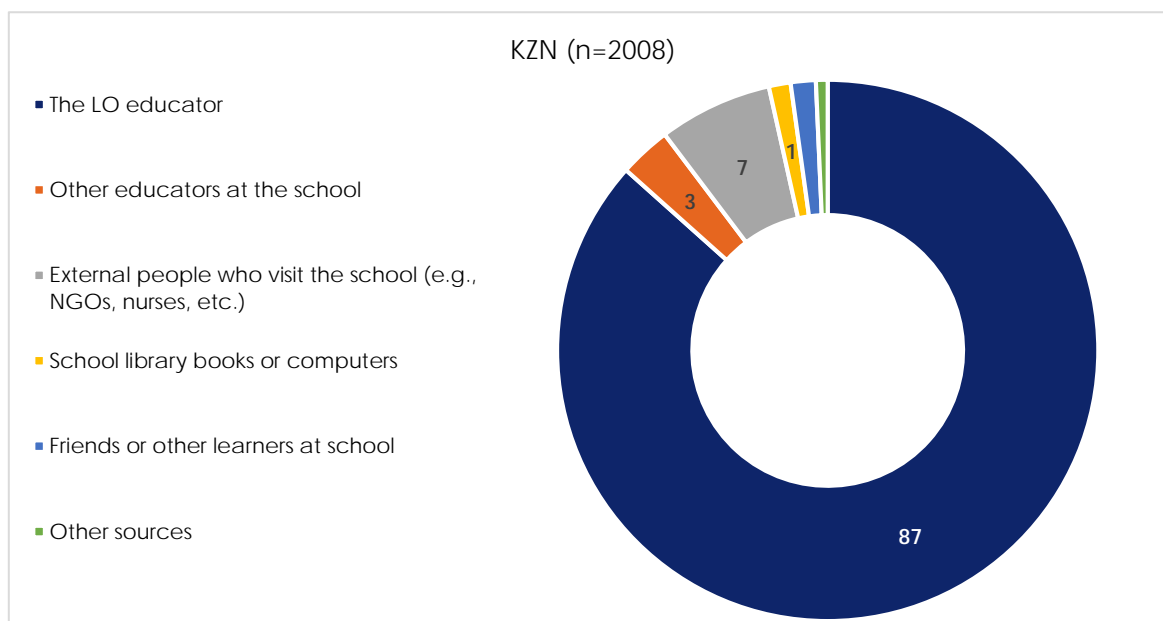


Figure 5 presents responses to the question concerning activities and people at school from whom learners have received information about HIV, AIDS, and other STIs among Grade-10 girls. In both provinces, more than three-quarters of learners reported the LO educator as the most useful source of information for education about sex, sexuality, and HIV. Fewer Grade-10 girls (77%) in MP than in KZN (87%) cited an LO educator as the main source of HIV, AIDS, and other STI information. Relatively more MP Grade-10 learners cited external people who visit the school (e.g., representatives of nongovernmental organizations and nurses) as the sources from whom they learned the most about sex, sexuality, and HIV. In both provinces, school libraries, computers, and friends or other learners were the least important sources of information in school about HIV, AIDS, and other STIs. See Tables A4a–A4c for a depiction of all learners by grade and province.

Figure 5. Respondents learned most about sex, sexuality, and HIV at school (percentage of Grade-10 girls)



Expectations about the Future, Gender Norms, and Self-Efficacy

Expectations about the Future

An assessment of how confident youth are in their ability to negotiate their current life situations can be valuable information about future life planning, and the extent of future life planning is related to the level of risky behaviors, including sexual risk behaviors, youth will take on. Respondents were asked to assess their degree of confidence in solving their problems. The study revealed that about 56 percent of the learners across all grades, in both provinces, have high confidence in their ability to solve problems even when others want to quit while fewer respondents felt that they are capable of coming up with many solutions to a problem. This may indicate that most learners feel able to solve problems, even if they come up with only one or two solutions. A slightly greater share of learners from MP reported that when they have a problem they can find ways to solve it, although this still remained below half—with the exception of Grade-8 female learners in MP (52%). A little more than half of the learners felt that even when others want to quit, they can find a solution. Across all of these items, no significant differences were observed between learners in the two provinces.

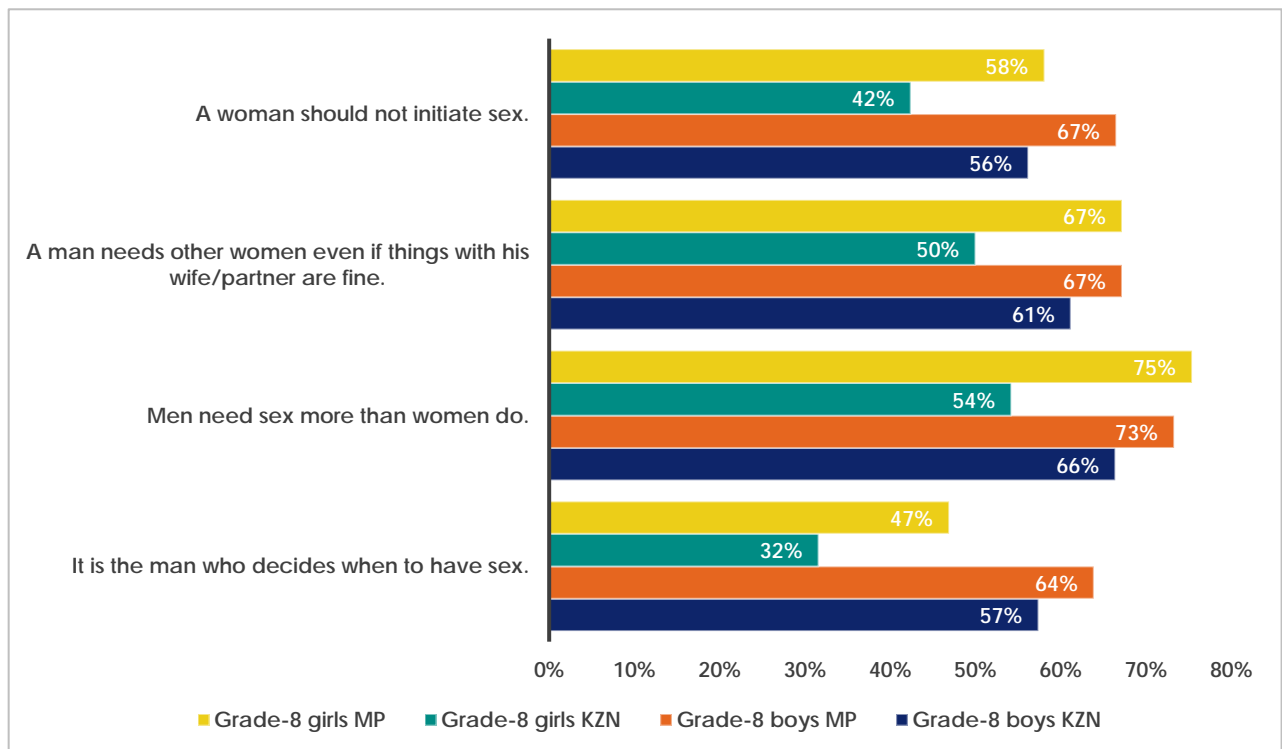
The findings of the research showed that the overwhelming majority of learners were optimistic about their future in the upcoming year and the upcoming five years. Across all groups, more than 80 percent of the learners believed that their life will get better one year from now. Even more learners believed that their life will get better in the next five years. Only 5 percent of the learners thought that their life will get worse in the next year and five years. MP learners were somewhat more optimistic than learners in KZN about life getting better in the next year. However, no difference in their expectations of life getting better in the next five years was observed among the groups in the two provinces.

Full information on aspirations and expectations about the future by the respondents' gender, grade, and residence are presented in Appendix Tables A5a–A5c.

Gender Norm Attitudes

This subsection presents findings on learner's perceptions of gender norms in sexual relationships (sexual communication, sexual pleasure, condom and contraceptive use, and gender roles). Power imbalances in relationships in favor of men mean that women have little or no ability to protect themselves from HIV. In terms of gender attitudes related to preventing HIV, more learners in MP "agreed a lot" or "somewhat agreed" with behaviors that are associated with male power in relationships, in comparison with their counterparts in KZN. For example, a higher proportion of MP female and male Grade-8 learners agreed that a man needs other women, even if things with his wife or partner are fine, compared to female and male Grade-8 learners in KZN who hold a similar opinion (see Figure 6). Similarly, a greater percentage of learners in MP than in KZN agreed that a woman should not initiate sex. Numerous gender-related questions were included as part of the survey; results of these findings by grade, gender, and province can be found in Appendix Tables A6a–A6c.

Figure 6. Percentage of Grade-8 female and male learners who "agreed" or "somewhat agreed" with gender attitudes related to sexual behaviors



In both provinces, most learners were open-minded regarding gender roles as they relate to reproduction. Most learners agreed that it is important for a father to be present in the lives of his children, even if the mother and father are separated. Most learners also agreed that if a man gets a woman pregnant, then the child is the responsibility of both. Even though most learners reported that the couple should decide together if they want to have children, most learners also thought that it is only the woman's responsibility to avoid getting pregnant (see Appendix Tables A6a–A6c).

At the same time, we found large differences by gender in the opinions given on gender equity-related issues (see Table 6). For example, a higher percentage of Grade-8 male learners than Grade-8 and Grade-10 female learners reported the following beliefs: you don't talk about sex, you just have it; a woman or man who has sex before marriage does not deserve respect; and a woman who carries condoms is "loose." Grade-8 and Grade-10 female learners provided similar responses. There was little difference between respondents' opinions across the two provinces (KZN and MP) in the statements presented in Table 6.

Table 6. Percentage of learners who “agree a lot” or “somewhat agree” with statements on gender roles and gender equity issues, by sex and grade*

	Grade-8 boys		Grade-8 girls		Grade-10 girls	
	KZN	MP	KZN	MP	KZN	MP
You don’t talk about sex, you just do it	43.3	48.5	21.2	25.6	24.1	30.4
A woman who has sex before she is married does not deserve respect	54.8	56.7	43.3	52.9	37.7	37.7
A man who has sex before he is married does not deserve respect	51.4	55.1	43.2	52.1	35.7	37.8
Women who carry condoms on them are loose	55.0	60.0	44.6	50.7	39.8	42.3

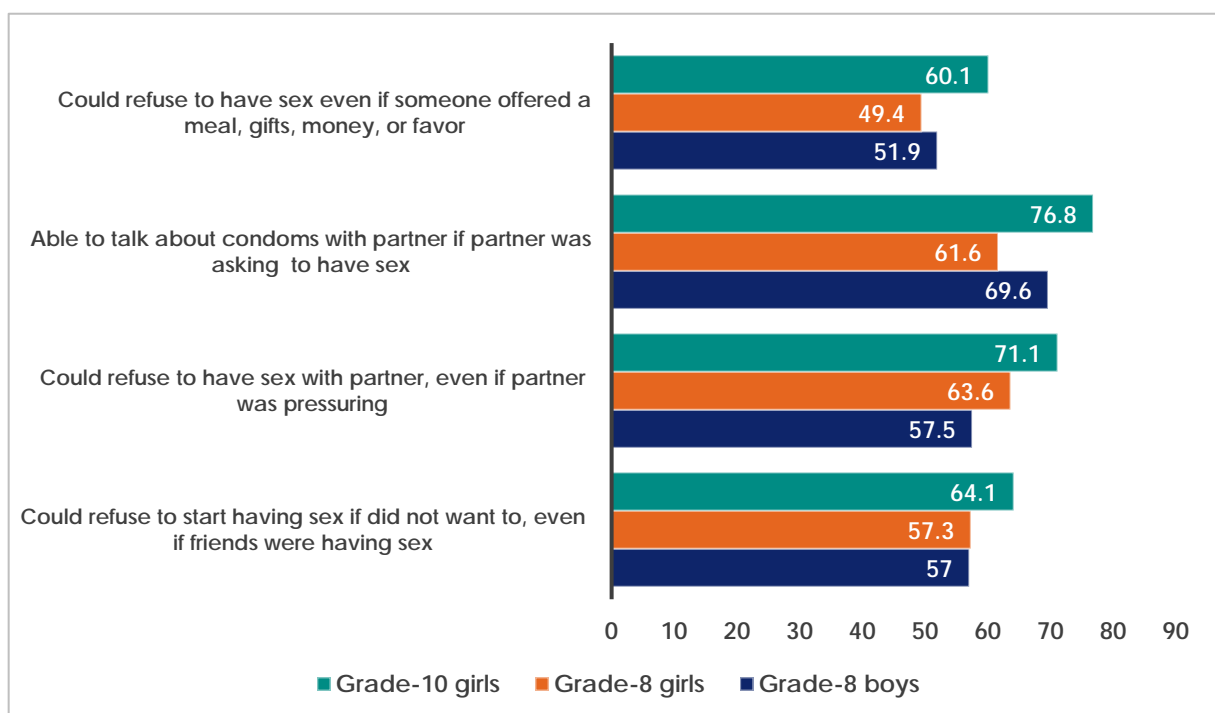
*All percentages are weighted.

Self-Efficacy (Appendix Tables A8a–A8c)

Learners were asked to score their level of self-efficacy on sexual behaviors, condom use, and ability to refuse sexual coercion. Across the grades in both provinces, a higher percentage of Grade-10 girls reported high confidence in their capacity to talk about condoms and refuse to be pressured into sexual activities.

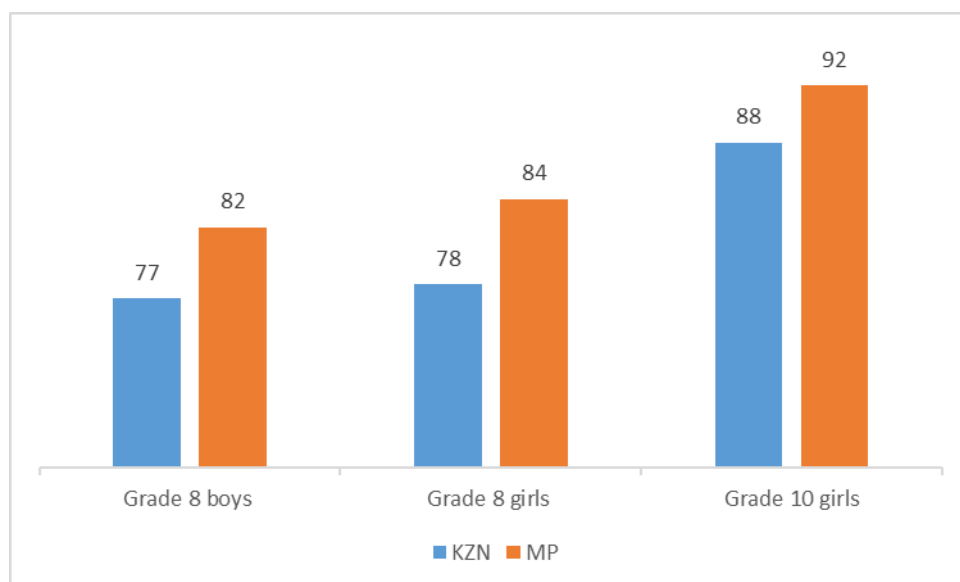
Figure 7 presents the self-efficacy measures for learners from KZN. For all the self-efficacy questions in Figure 8, female Grade-10 learners indicated higher confidence than their Grade-8 peers. Male Grade-8 learners reported high confidence in their ability to talk about condoms with a partner if the partner were asking to have sex. Overall, few learners reported a high degree of confidence that they could refuse to start having sex if they did not want to, even if friends were having sex with their boyfriends or girlfriends. Few learners felt that they could refuse to have sex, even if someone offered them a meal, gifts, money, or favor. Little difference was observed between the reported confidence of Grade-8 girls and Grade-8 boys to refuse sexual coercion when offered something. Similar distinctions by grade and sex were found for MP and can be seen in Appendix Tables A8a–A8c.

Figure 7. Self-efficacy around sexual behaviors among learners from KZN, by grade



Encouragingly, most learners (80% or more) reported knowing where to get tested for HIV. The highest number of learners who reported knowing where to get tested for HIV was among Grade-10 female learners.

Figure 8. Percentage of learners reporting they know where to get tested for HIV, by sex and grade



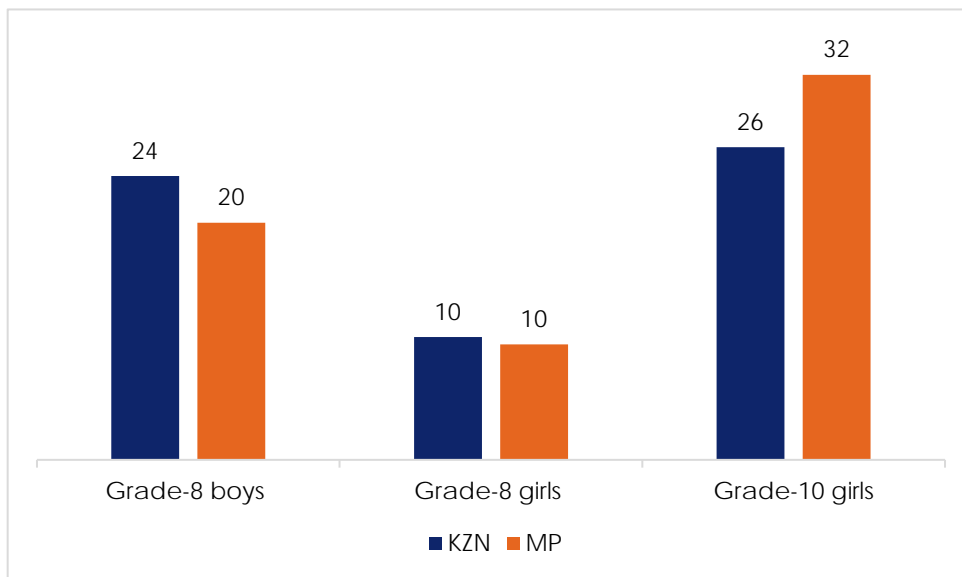
Sexual Behavior, Risk Perception, and HIV Testing and Counseling

Sexual Behavior

About 49 percent of Grade-8 boys, 37 percent of Grade-8 girls, and 68 percent of Grade-10 girls in MP reported having a boyfriend or girlfriend at the time of the survey (see Appendix Tables 9a–9c). A smaller proportion of learners in KZN reported having a girlfriend or boyfriend at the time of the survey, but the pattern there, based on grade and sex, was similar to the pattern in MP (KZN values: 43% of Grade-8 males, 28% of Grade-8 females, and 56% of Grade-10 females).

In KZN, about 24 percent of Grade-8 boys, 10 percent of Grade-8 girls, and 26 percent of Grade-10 girls reported ever having had sexual intercourse. Learners in MP followed a similar pattern, with the highest and lowest proportions of learners reporting that they ever had sex among Grade-10 girls and Grade-8 girls, respectively (see Figure 8).

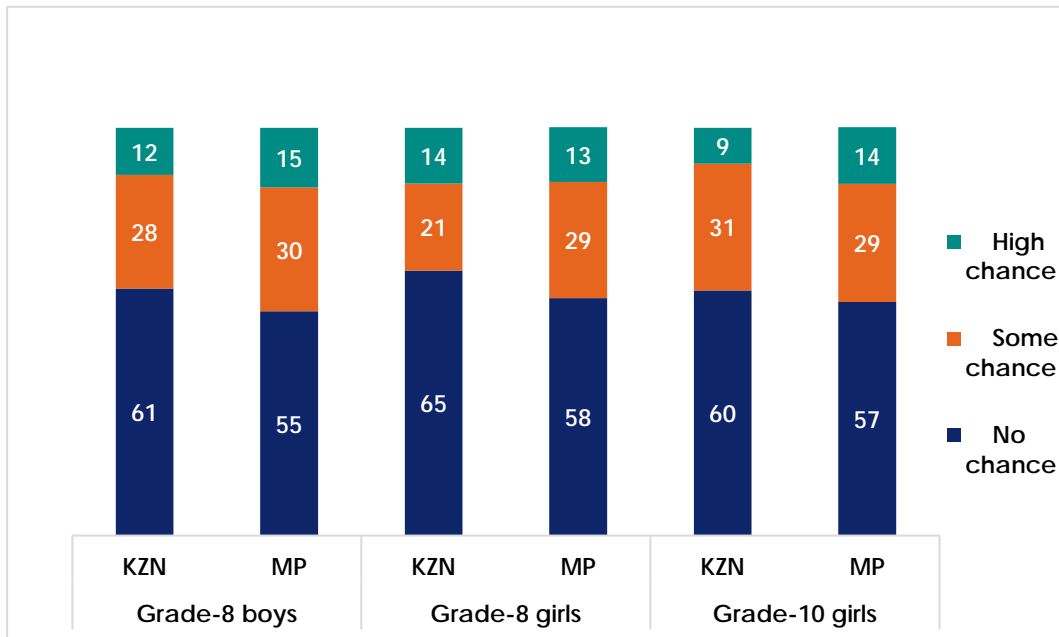
Figure 9. Percentage of learners who report ever having had sexual intercourse, by grade, sex, and province



Risk Perception

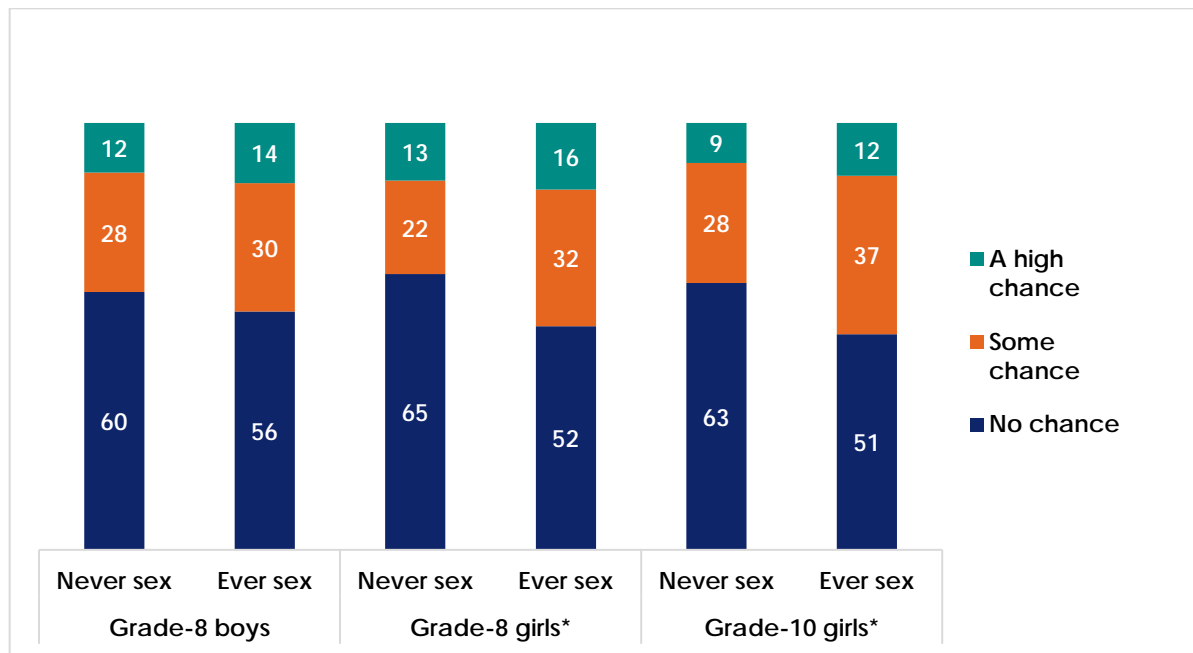
The degree of perceived personal risk is a crucial construct that is associated with risky behavior. People who perceive themselves to be at high risk for acquiring HIV will be more likely to use safe sexual practices. In terms of level of risk perception in relation to HIV, the study revealed that more than half of learners regarded themselves as being at low risk for acquiring HIV (see Figure 9). Comparing the two provinces, more KZN learners than MP learners considered themselves at no risk of acquiring HIV. For example, 65 percent of Grade-8 female learners from KZN perceived themselves to have no chance of acquiring HIV compared to 58 percent of MP girls in the same grade. (See below for analyses of risk perception by sexual experience.) Within the province, little difference was observed among the groups. A similar pattern emerged in terms of the learners' perceived chance of already being HIV-positive. The overwhelming majority of learners believed that they did not have HIV, with more KZN learners than MP learners reporting "no chance." See details by province, grade, and intervention or control group in Appendix Tables A7a–A7c.

Figure 10. Levels of concern among learners about risk for HIV or AIDS during their lifetime, by grade, sex, and province



It is likely that those learners who had ever had sex had different perceptions of HIV risk compared to those who had never had sex. In Figure 10, we provide a similar graphic to the one above, by grade/sex and whether or not the young person was sexually experienced (both provinces are combined). This figure shows that among Grade-8 girls and Grade-10 girls, those who had ever had sex reported significantly higher perceived risk of HIV than those who had never had sex (i.e., greater reporting of some or a high risk of HIV acquisition). Among Grade-8 boys, there was no significant difference in perceived HIV risk by sexual experience.

Figure 11. Levels of concern among learners about risk for HIV or AIDS during their lifetime, by grade, sex, and prior sexual experience



*Significant difference, $p < 0.001$

Risky Sexual Behaviors among Sexually Experienced Learners

Among those who reported ever having had sexual intercourse in MP, the mean number of reported sex partners in the past 12 months was highest among Grade-8 boys, at about 6; lower among Grade-8 girls, at about 5; and lowest among Grade-10 girls, at about 2. Learners in KZN followed a similar pattern (see Table 7). Approximately one-half of Grade-8 boys and girls reported their most recent or current sex partner attended the same school as the learners; among Grade-10 girls, this figure was about 40 percent. Reported condom use at last sex varied widely by learners' grade, sex, and province: about 76 percent of Grade-8 boys in each province reported using a condom at last sex; about 62 percent and 80 percent of Grade-8 girls in KZN and MP, respectively, reported using a condom at last sex; and 62 percent and 73 percent of Grade-10 girls in KZN and MP, respectively, reported using a condom at last sex. There was no observed pattern of condom use at last sex, by orphanhood status. Reports of consistent condom use were higher among learners in MP than in KZN. For example, among Grade-8 girls who had ever had sex, about 73 percent in MP, compared to about 54 percent in KZN, reported using a condom every time they had sex in the past three months. Consistent condom use was generally lowest among double orphans, with the lowest among Grade-8 girls in KZN, at 33 percent. Notably, among Grade-8 girls in MP, 92 percent of double orphans reported using a condom every time they had sex in the past three months, compared to 64 percent among single orphans and 70 percent among nonorphans; one caveat of these analyses is that the sample of sexually experienced by orphanhood status is small.

In MP, reports of giving or receiving money, gifts, or favors in exchange for sex at last sex were highest among Grade-8 boys (46% and 43% for giving and receiving, respectively), lower among Grade-8 girls (33% and 39%, respectively), and lowest among Grade-10 girls (17% and 23%, respectively). Learners in KZN followed a similar pattern, though the proportions were lower in each grade/sex group of learners. See Table A9 for details of sexual behaviors by province, grade, sex, and intervention and control group.

Table 7. Risky sexual behaviors among learners who reported ever having sex, by age and grade*

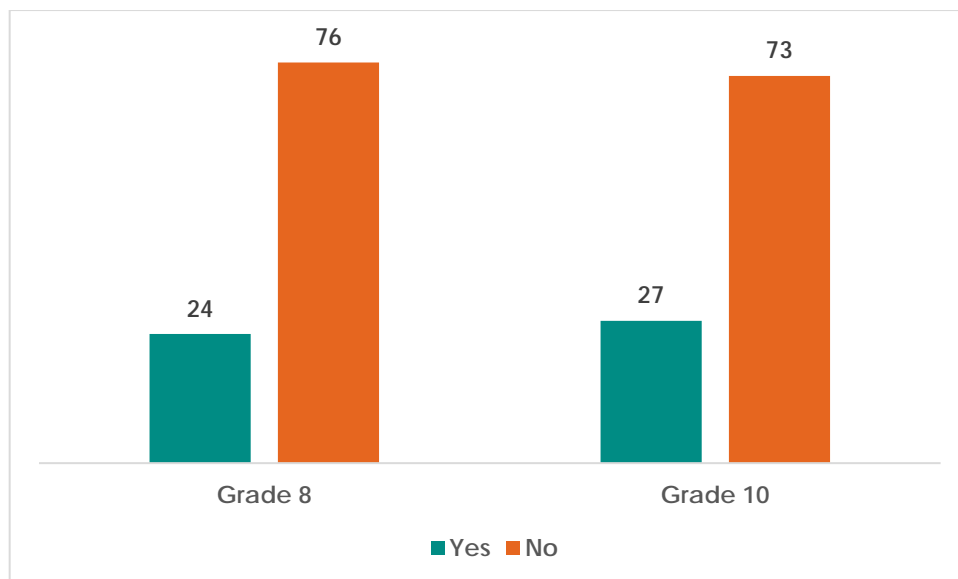
	KwaZulu-Natal			Mpumalanga		
	Grade-8 boys (n=335)	Grade-8 girls (n=183)	Grade-10 girls (n=521)	Grade-8 boys (n=286)	Grade-8 girls (n=163)	Grade-10 girls (n=578)
Mean number of sex partners in past 12 months	4.4	3.6	2.0	5.8	4.5	1.8
Percentage who used a condom at last sex	76.2	62.0	61.8	76.2	80.3	72.8
Percentage who used a condom every time in past 3 months	67.1	54.4	56.2	73.7	73.3	67.3
Percentage who, at last sex, gave or money, gifts, or favors in exchange	31.6	30.1	15.4	45.8	32.9	17.4
Percentage who, at last sex, received money, gifts, or favors in exchange	33.2	31.0	15.9	42.8	39.1	22.7

Unweighted Ns and weighted percentages shown; see Appendix Tables A9a-A9c for weighted Ns.

Pregnancy Experience

Female learners who reported that they had ever had sex were asked if they had ever been pregnant. Given the small number of learners who had ever had sex, we present the pregnancy experience by grade only, with a focus on those learners within two years of their age for grade. Figure 11 shows that there is little difference in pregnancy experience between the Grade-8 and Grade-10 female learners. In particular, one-fifth of sexually experienced female learners have ever been pregnant. Notably, there were more Grade-10 ever-pregnant girls, because the percentage of girls who had ever had sex was higher in Grade 10 than in Grade 8.

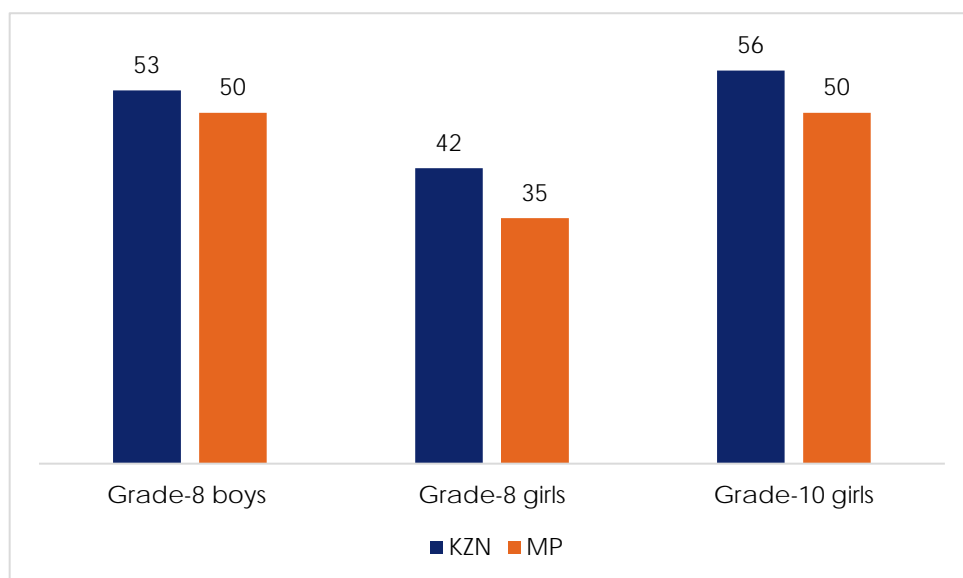
Figure 12. Percentage of sexually experienced female learners who had ever been pregnant



HIV Testing and Counseling

About 48 percent of Grade-8 boys, 34 percent of Grade-8 girls, and 40 percent of Grade-10 girls in KZN reported having been to a clinic or hospital in the past 12 months to get information about sex-related issues. Learners in MP followed the same pattern (see Tables A10a–A10c for details). More learners in KZN than MP had ever been tested for HIV. For example, 42 percent of Grade-8 girls in KZN compared to 35 percent of Grade-8 girls in MP had ever been tested for HIV (see Figure 12). Similar patterns are found for the male learners and the Grade-10 learners. Among learners in both provinces who had ever had an HIV test, Grade-10 girls were the most likely to have received and shared the results of the test with someone else; 91 percent of Grade-10 girls in MP had received the results, and 72 percent had shared the results with someone else. See Appendix Tables A10a–A10c for details on HIV testing and counseling by grade, province, and sex.

Figure 13. Percentage of learners who have ever been tested for HIV, by grade, sex, and province



DISCUSSION

This baseline report has demonstrated some important characteristics of the learners in the South African schools from KZN and MP who participated in this study. First, it is worth noting that few, if any, differences were observed within a province between the intervention or control group. This indicates that randomization as part of the evaluation study was successful. This is important for the overall evaluation and means that an intention to treat analysis is appropriate for the study data.

The baseline data also indicate that many of the learners are orphaned in the study sample, either as single orphans (about one-third) or double orphans (one-tenth). The mother is most often the primary caregiver, followed in frequency by a grandparent. This is an important consideration for programs that are seeking to reach young people with messages about HIV. In the South African context, with high HIV prevalence, most young people have had experience with HIV and AIDS, either within their household or nearby. Programs need to avoid stigmatizing HIV in their messages and approaches.

Most learners get information on HIV and AIDS and STIs from television and radio; and at school, LO educators are the most common source of information on sex, sexuality, and HIV. Many of the young people in the sample value and appreciate what they are learning in their LO curriculum. With the new SLPs, it will be possible to see if these attitudes improve over time, or if knowledge of HIV risks and myths about HIV change with improved teaching methods, particularly in the intervention schools. For the Grade-8 girls and boys, the program needs to consider issues of gender norms, self-efficacy, and aspirations about the future. These baseline data indicate areas where young people are already excelling, but they also indicate gaps in young people's knowledge, experience, and self-efficacy that can be addressed through the SLPs of the LO program and supplemental activities.

Finally, there exist opportunities as well as the need to intervene before young people become sexually experienced. Even though the majority of the young people surveyed had never had sex, there are HIV prevention needs that the LO program should address. Among the Grade-8 boys, one-quarter in KZN and one-fifth in MP were sexually active. Although three-quarters of these boys reported having used a condom the last time they had sex—and two-thirds to three-quarters reported using a condom every time—there are still gaps in condom use that put these young people at risk of acquiring HIV. Furthermore, by Grade 10, one-quarter of the female learners were sexually active, and about 59 percent of them had used a condom at last sex or consistently. The Grade-8 female learners were the least likely to be sexually experienced (10%), but many will initiate sex in the next couple of years, so information about safer sex practices (i.e., protection against HIV and unintended pregnancy) is important for these young girls. Program activities must motivate girls and boys to avoid pregnancy and HIV and AIDS by first helping them recognize their risk, and then helping them develop a prevention plan.

CONCLUSION

The EDC/DBE SLPs for the LO program, with supplemental activities, is seeking to improve knowledge, attitudes, self-efficacy, and behaviors among young people in South Africa. This evaluation will illuminate gaps in the program and ways to strengthen the program to meet the needs of all learners. The EDC team can use this baseline report to determine if they are currently meeting the needs of young people. Over time, with the midline and end line data, they will be able to see whether knowledge, attitudes, self-efficacy, and sexual and health-seeking behaviors improve with exposure to the LO program. The evidence produced by this large-scale evaluation of the LO program will be of great value prior to national-level scale-up. Evaluation results may also be used to inform the design and implementation of life skills curricula and related HIV prevention activities for young people in other developing countries.

The next step for the evaluation will be to collect the midline quantitative data among Grade-9 female and male learners as well as qualitative data from learners, educators, principals, and administrators. This information will provide a context of initial changes and satisfaction with the program that can be used for program strengthening. Midline data collection will happen in the third quarter of the 2017 school year and will provide information on program exposure; changes in knowledge, attitudes, and behaviors; and improvements in the school environments with the new LO program.

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APPENDIX 1. BASELINE FINDINGS

Table Set A1. Demographics characteristics

Table A1a. Demographic characteristics by province and intervention group, Grade-8 girls*

	KwaZulu-Natal			Mpumalanga		
	Intervention (n=1,064)**	Control (n=924)**	Total (n=1,988)* *	Intervention (n=833)**	Control (n=785)**	Total (n=1,618)* *
Mean age (range)	13.6 (11-25)	13.6 (11-25)	13.6 (11-25)	13.6 (11-25)	13.5 (11-25)	13.6 (11-25)
Primary caregiver						
Mother	74.2	73.4	73.9	74.0	74.5	74.3
Father	5.1	5.7	5.3	7.4	5.4	6.4
Older sibling	3.6	3.4	3.5	3.4	4.0	3.7
Aunt and/or uncle	3.3	3.8	3.5	2.6	2.3	2.4
Grandparent	12.3	11.7	12.0	11.0	12.1	11.5
Cousin	0.7	1.5	1.0	0.9	0.4	0.7
Other adult	0.5	0.4	0.5	0.4	0.7	0.5
Other child	0.1	0.1	0.1	0.1	0	0.1
Respondent	0.3	0.1	0.1	0.3	0.5	0.4
Orphanhood***						
Not an orphan	54.8	57.4	55.9	59.9	63.2	61.5
Single orphan	31.7	30.6	31.2	30.0	27.5	28.8
Double orphan	13.6	12.0	12.9	10.1	9.4	9.7
Number of household items (range=0-6)****	1.2 (0-6)	1.4 (0-6)	1.3 (0-6)	1.1 (0-6)	1.0 (0-6)	1.0 (0-6)

*Missing data ≤3.9%

**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

***Child defined as orphan if s/he reported parent was not alive or did not know whether parent was alive.

****Calculated as a sum score of number of different items that the respondent reported having in his or her household. Items were electricity, radio, tap water, television, refrigerator, and car.

Table A1b. Demographic characteristics, by province and intervention group, Grade-8 boys*

	KwaZulu-Natal			Mpumalanga		
	Intervention (n=736)**	Control (n=699)**	Total (n=1,435)**	Intervention (n=654)**	Control (n=699)**	Total (n=1,353)*
Mean age (range)	14.2 (11-25)	14.4 (11-24)	14.3 (11-25)	14.5 (11-25)	14.2 (11-25)	14.3 (11-25)
Primary caregiver						
Mother	66.4	72.4	69.0	71.8	64.1	67.9
Father	13.1	11.8	12.5	10.5	15.0	12.7
Older sibling	3.6	3.6	3.6	5.2	2.6	3.9
Aunt and/or uncle	3.6	1.2	2.6	2.8	3.1	2.9
Grandparent	11.2	10.6	10.9	7.9	12.0	10.0
Cousin	0.4	0.1	0.3	0.2	0.9	0.5
Other adult	1.2	0.3	0.8	1.0	0.9	1.0
Other child	0.2	0.0	0.1	0.4	0.9	0.6
Respondent	0.4	0.1	0.3	0.2	0.5	0.4
Orphanhood***						
Not an orphan	53.4	56.2	54.6	58.6	60.7	59.6
Single orphan	35.1	31.8	33.7	30.0	29.4	29.7
Double orphan	11.5	12.0	11.7	11.4	9.9	10.7
Number of household items (range=0-6)****	1.2 (0-6)	1.3 (0-6)	1.2 (0-6)	1.0 (0-6)	0.9 (0-6)	1.0 (0-6)

*Missing data ≤3.1%

**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

***Child defined as orphan if s/he reported parent was not alive or did not know whether parent was alive.

****Calculated as a sum score of number of different items respondent reported having in his or her household. Items include electricity, radio, tap water, television, refrigerator, and car.

Table A1c. Demographic characteristics, by province and intervention group, Grade-10 girls*

	KwaZulu-Natal			Mpumalanga		
	Intervention (n=1,033)**	Control (n=975**)	Total (n=2,008)**	Intervention (n=866)**	Control (n=845)**	Total (n=1,731)*
Mean age (range)	16.0 (11-25)	16.1 (11-25)	16.1 (11-25)	16.0 (11-25)	15.8 (11-25)	15.9 (11-25)
Primary caregiver						
Mother	71.3	70.7	71.0	76.0	70.3	73.2
Father	7.6	6.9	7.3	5.1	6.1	5.6
Older sibling	4.8	2.8	3.9	4.0	3.6	3.8
Aunt and/or uncle	3.5	4.8	4.1	2.7	3.9	3.3
Grandparent	10.6	12.1	11.3	10.4	14.2	12.3
Cousin	0.8	1.3	1.0	0.6	0.7	0.6
Other adult	1.0	1.2	1.1	0.9	0.6	0.8
Other child	0.2	0.2	0.2	0.1	0.3	0.2
Respondent	0.2	0.1	0.2	0.2	0.3	0.2
Orphanhood***						
Single orphan	50.7	49.1	50.0	57.9	61.2	59.6
Double orphan	34.7	36.1	35.4	30.8	28.8	29.8
	14.5	14.8	14.7	11.3	10.0	10.7
Number of household items (range=0-6)****	1.4 (0-6)	1.5 (0-6)	1.4 (0-6)	1.0 (0-6)	0.9 (0-6)	0.9 (0-6)

*Missing data ≤3.1%

**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

***Child defined as orphan if s/he reported parent was not alive or did not know whether parent was alive.

****Calculated as a sum score of number of different items respondent reported having in his or her household. Items include electricity, radio, tap water, television, refrigerator, and car.

Table Set A2. School attendance, performance, and relationships

Table A2a. School attendance, performance, and relationships, by province and intervention group, Grade-8 girls*

	KwaZulu-Natal (n=1,988)**			Mpumalanga (n=1,618)**		
	Intervention	Control	Total	Intervention	Control	Total
Number of days of missed school						
None	63.6	58.8	61.6	64.4	65.5	65.0
1–2 days	20.0	23.0	21.2	18.3	19.1	18.7
3–4 days	7.1	7.8	7.4	6.3	5.6	5.9
5–6 days	3.6	4.5	4.0	4.2	3.8	4.0
7 or more days	5.7	6.0	5.8	6.7	5.9	6.3
Number of days late to school						
None	60.7	60.8	60.8	61.7	66.6	64.1
1–2 days	23.7	25.1	24.3	27.5	23.6	25.6
3–4 days	7.5	6.7	7.2	6.5	5.3	5.9
5–6 days	2.9	3.0	3.0	1.4	1.4	1.4
7 or more days	5.1	4.4	4.8	3.0	3.1	3.0
Overall mark for last term						
≤20%	5.8	4.5	5.3	5.1	5.6	5.3
20–29%	5.9	5.2	5.6	5.5	5.1	5.3
30–39%	11.4	10.3	10.9	13.1	14.3	13.7
40–49%	17.7	18.0	17.8	23.9	17.1	18.3
50–59%	21.4	22.9	22.0	23.2	20.1	21.7
60–69%	16.2	18.2	17.0	14.2	18.0	16.0
70–79%	10.3	12.9	11.3	11.1	12.0	11.6
≥80%	11.4	8.1	10.0	8.4	7.8	8.1
Learner feels like s/he belongs in school	92.0	91.6	91.8	90.9	89.3	90.1
Learner feels s/he has some chance or high chance of being promoted to the next grade	90.4	92.3	91.2	83.7	82.3	83.0

*Missing data ≤2.2%

**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

Table A2b. School attendance, performance, and relationships, by province and intervention group, Grade-8 boys*

	KwaZulu-Natal (n=1,435)**			Mpumalanga (n=1,353)**		
	Intervention	Comparison	Total	Intervention	Comparison	Total
Number of days of missed school						
None	58.92	58.2	58.25	64.36	62.16	63.26
1–2 days	23.26	22.09	22.76	18.63	17.39	18.01
3–4 days	8.76	7.65	8.28	6.05	7.72	6.88
5–6 days	3.39	4.4	3.83	4.99	4.61	4.8
7 or more days	6.3	7.65	6.89	5.98	8.13	7.06
Number of days late to school						
None	53.37	53.07	53.24	59.8	56	57.91
1–2 days	26.86	27.08	26.94	26.16	27.75	26.95
3–4 days	10	10.14	10.06	6.68	8.72	7.7
5–6 days	5.13	3.66	4.49	4.47	3.78	4.13
7 or more days	4.64	6.06	5.25	2.89	3.74	3.31
Overall mark for last term						
≤20%	8.32	7.77	8.08	7.35	8.06	7.7
20–29%	7.25	7.26	7.25	8.57	8.85	8.71
30–39%	12.98	12.29	12.68	16.4	15.07	15.75
40–49%	23	21.21	22.22	21.2	20.82	21.01
50–59%	21.29	22.07	21.62	22.4	20.74	21.57
60–69%	13.62	13.57	13.6	11.58	13.06	12.32
70–79%	7.24	10.71	8.74	5.73	7.14	6.43
≥80%	6.3	5.12	5.79	6.72	6.26	6.49
Learner feels like s/he belongs in school	92.45	92.55	92.49	88.05	87.14	87.6
Learner feels s/he has some chance or high chance of being promoted to the next grade	87.33	92.52	90.1	82.09	81.07	81.58

*Missing data ≤1.7% **Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

Table A2c. School attendance, performance, and relationships, by province and intervention group, Grade-10 girls*

	KwaZulu-Natal (n=2,008)**			Mpumalanga (n=1,731)**		
	Intervention	Comparison	Total	Intervention	Comparison	Total
Number of days of missed school						
None	59.0	54.4	56.9	65.5	71.0	68.2
1–2 days	26.5	26.7	26.6	20.0	17.4	18.7
3–4 days	6.4	8.8	7.5	4.0	5.0	4.5
5–6 days	3.8	3.7	3.8	3.7	2.2	3.0
7 or more days	4.3	6.3	5.2	6.8	4.5	5.6
Number of days late to school						
None	56.0	61.2	58.4	64.3	63.9	64.1
1–2 days	28.1	25.4	26.9	26.3	23.9	25.1
3–4 days	8.5	8.0	8.2	4.5	6.6	5.5
5–6 days	3.3	1.7	2.5	2.2	2.4	2.3
7 or more days	4.2	3.6	3.9	2.8	3.3	3.1
Overall mark for last term						
≤20%	3.4	3.9	3.6	3.7	1.5	2.7
20–29%	5.8	6.8	6.2	6.3	5.5	5.9
30–39%	18.5	19.2	18.8	21.1	18.9	20.0
40–49%	29.4	27.6	28.5	30.1	31.9	31.0
50–59%	20.1	20.6	20.3	20.6	22.79	21.66
60–69%	12.9	11.3	12.2	10.3	10.19	10.7
70–79%	7.2	6.9	7.0	4.7	6.1	5.5
≥80%	2.9	3.7	3.3	3.2	2.74	2.3
Learner feels like s/he belongs in school	91.2	91.6	91.8	90.9	89.3	90.1
Learner feels s/he has some chance or high chance of being promoted to the next grade	96.17	93.8	95.1	87.3	86.9	87.0

*Missing data is ≤0.7%

**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

Table Set A3. Participation in and perceptions of Life Orientation Curriculum

Table A3a. Participation in and perceptions of Life Orientation Curriculum, by province and intervention group, Grade-8 girls**

	KwaZulu-Natal (n=1,988)**			Mpumalanga (n=1,618)**		
	Intervention	Control	Total	Intervention	Control	Total
Respondent indicated the following is mostly true or very true (reference category is not true or a little true)						
The things we learn about gender roles, sexuality, and HIV in the Life Orientation class are similar to what I experienced in my life.	57.7	55.2	56.7	64.0	62.1	63.1
I have learned a lot about sexuality- and HIV- related topics in my Life Orientation class.	76.2	73.0	75.0	83.1	77.6	80.4
I am able to apply some of the things I have learned about gender roles, sexuality, and HIV in the Life Orientation class to my personal life.	66.7	65.4	66.1	70.6	69.8	70.2
I talk to my parent/caregiver about the sexual- and HIV- related topics I learn in the Life Orientation class.	51.7	50.0	51.0	63.7	59.5	61.6
My parents/caregiver think it is a good thing I am learning about HIV/AIDS in school.	77.7	76.6	77.2	87.3	86.3	86.8

*Missing data ≤2.4%

‡Cronbach’s alpha for participation and perception of LO scale for all Grade-8 girls = 0.72.

**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

Table A3b. Participation and perception of life orientation curriculum, by province and intervention group, Grade-8 boys^{*‡}

	KwaZulu-Natal (n=1,435)**			Mpumalanga (n=1,353)**		
	Intervention	Control	Total	Intervention	Control	Total
Respondent indicated the following is mostly true or very true (reference category is not true or a little true)						
The things we learn about gender roles, sexuality, and HIV in the Life Orientation class are similar to what I experienced in my life.	54.1	58.0	55.8	64.1	61.8	63.0
I have learned a lot about sexuality- and HIV-related topics in my Life Orientation class.	71.1	70.0	70.6	78.0	74.4	76.2
I am able to apply some of the things I have learned about gender roles, sexuality, and HIV in the Life Orientation class to my personal life.	61.1	61.0	61.0	62.6	66.3	64.5
I talk to my parent/caregiver about the sexual- and HIV-related topics I learn in the Life Orientation class.	46.5	49.7	47.9	48.0	50.8	49.4
My parents/caregiver think it is a good thing I am learning about HIV/AIDS in school.	74.5	74.8	74.6	79.3	79.3	79.3

*Missing data ≤2.1%

‡Chronbach's alpha for participation and perception of LO scale for all Grade-8 boys= 0.75.

**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

Table A3c. Participation and perception of life orientation curriculum, by province and intervention group, Grade-10 girls*‡

	KwaZulu-Natal (n=2,008)**			Mpumalanga (n=1,731)**		
	Intervention	Control	Total	Intervention	Control	Total
Respondent indicated the following is mostly true or very true (reference category is not true or a little true)						
The things we learn about gender roles, sexuality, and HIV in the Life Orientation class are similar to what I experienced in my life.	60.4	61.2	60.7	69.3	65.4	67.4
I have learned a lot about sexuality- and HIV-related topics in my Life Orientation class.	83.0	81.8	82.4	85.1	82.9	84.0
I am able to apply some of the things I have learned about gender roles, sexuality, and HIV in the Life Orientation class to my personal life.	70.7	69.2	70.0	74.6	70.8	72.7
I talk to my parent/caregiver about the sexual- and HIV-related topics I learn in the Life Orientation class.	42.2	43.4	42.7	54.6	52.2	53.4
My parents/caregiver think it is a good thing I am learning about HIV/AIDS in school.	83.9	81.1	82.6	89.0	89.2	89.1

*Missing data ≤0.7%

‡Cronbach's alpha for participation and perception of LO scale for all Grade-10 girls = 0.69.

**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

Table Set A4. Knowledge of STIs/HIV

Table A4a. Knowledge of STIs/HIV, by province and intervention group, Grade-8 girls*

	KwaZulu-Natal (n=1,988)**			Mpumalanga (n=1,618)**		
	Intervention	Control	Total	Intervention	Control	Total
Respondent indicated correctly whether the following statements are true or false (CORRECT ANSWER IN PARENTHESES)						
You can usually tell if someone has HIV/AIDS by the way they look. (FALSE)	36.3	35.23	36.1	44.0	41.3	42.8
If you have an STI you will definitely know because you will see/feel symptoms. (FALSE)	17.4	17.9	17.7	13.0	12.8	12.9
Not all sexually transmitted infections are curable. (TRUE)	44.4	13.8	13.4	48.2	41.4	44.8
Oral sex poses no risk for STIs. (FALSE)	29.1	25.6	27.7	42.2	43.5	42.8
If a mosquito bites you it can infect you with HIV. (FALSE)	34.5	32.6	33.7	43.6	44.8	44.2
You can get HIV from kissing a person who is HIV-positive. (FALSE)	52.6	53.6	53.0	63.1	65.9	64.5
A woman who is pregnant can do nothing to prevent her baby from being born with HIV. (FALSE)	41.1	41.9	41.4	47.6	44.9	46.3

Respondents indicated they heard or saw information on HIV/AIDS from...						
Radio commercials or public services announcements	36.4	30.9	34.1	30.0	27.6	28.9
Radio shows/programs	26.5	26.1	26.3	25.7	26.7	26.2
T.V. commercials/public service announcements	24.8	26.5	25.5	26.9	22.1	24.5
T.V. shows	35.9	34.5	35.3	53.0	54.9	53.9
Cinema/movies	13.2	14.2	13.6	17.4	15.0	16.2
Street performances	6.3	6.6	6.4	10.0	12.0	11.0
Friends	15.2	15.6	15.3	27.5	29.9	28.6
Family members	22.5	23.6	23.0	32.7	31.9	32.3
Library	18.0	16.7	17.5	21.7	20.5	21.1
At schools, respondents learned most about sex, sexuality and HIV from...						
The LO educator	86.2	85.1	85.7	84.1	77.2	80.7
Other educators at the school	4.7	5.6	5.1	3.8	4.2	4.0
External people who visit the school (e.g., NGO representatives and nurses)	5.0	5.1	5.1	7.2	13.3	10.2
School library books or computers	2.2	2.4	2.2	1.7	1.7	1.7
Friends or other learners at school	1.1	0.5	0.9	2.0	2.3	2.2
Other sources	0.8	1.2	1.0	1.2	1.4	1.3

*Missing data ≤5.0%

**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

Table A4b. Knowledge of STIs/HIV, by province and intervention group, Grade-8 boys*

	KwaZulu-Natal (n=1,435)**			Mpumalanga (n=1,353)**		
	Intervention	Control	Total	Intervention	Control	Total
Respondent indicated correctly whether the following statements are true or false (CORRECT ANSWER IN PARENTHESES)						
You can usually tell if someone has HIV/AIDS by the way they look. (FALSE)	36.8	35.0	36.0	41.9	41.7	41.8
If you have an STI you will definitely know because you will see/feel symptoms. (FALSE)	19.7	19.1	19.4	19.9	19.6	19.8
Not all sexually transmitted infections are curable. (TRUE)	48.5	49.7	49.0	51.9	50.5	51.2
Oral sex poses no risk for STIs. (FALSE)	35.7	28.6	32.6	46.7	45.3	46.0
If a mosquito bites you it can infect you with HIV. (FALSE)	32.4	34.0	33.1	38.5	40.5	39.4
*You can get HIV from kissing a person who is HIV-positive. (FALSE)	50.7	54.1	52.1	60.4	61.4	60.9
A woman who is pregnant can do nothing to prevent her baby from being born with HIV. (FALSE)	42.2	39.1	40.8	44.7	44.3	44.5

Respondents indicated they heard or saw information on HIV/AIDS from...						
Radio commercials or public services announcements	39.6	38.0	38.9	30.7	30.5	30.6
Radio shows/programs	30.0	28.4	29.3	26.1	27.3	26.7
T.V. commercials/public service announcements	30.0	28.9	29.5	21.2	25.3	23.2
T.V. shows	36.5	38.7	37.4	53.7	55.0	54.4
Cinema/movies	16.5	15.9	16.3	15.5	16.4	15.9
Street performances	8.4	6.8	7.7	7.2	9.0	8.1
Friends	13.8	16.7	15.1	24.3	28.1	26.2
Family members	16.6	16.7	16.6	22.5	27.5	25.0
Library	13.7	14.0	13.8	14.5	16.7	15.6
At schools, respondents learned most about sex, sexuality and HIV from...						
The LO educator	83.1	84.9	83.9	83.2	82.0	82.6
Other educators at the school	5.4	4.9	5.2	4.5	5.0	4.7
External people who visit the school (e.g., NGO representatives and	5.5	5.6	5.6	6.7	8.1	7.4
School library books or computers	3.0	2.1	2.6	1.9	2.0	1.9
Friends or other learners at school	2.1	1.0	1.6	2.5	2.1	2.3
Other sources	0.8	1.5	1.1	1.3	0.9	1.1

*Missing data ≤4.0%

**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

Table A4c. Knowledge of STIs/HIV, by province and intervention group, Grade-10 girls*

	KwaZulu-Natal (n=2,008)**			Mpumalanga (n=1,731)**		
	Intervention	Control	Total	Intervention	Control	Total
Respondent indicated correctly whether the following statements are true or false (CORRECT ANSWER IN PARENTHESES)						
You can usually tell if someone has HIV/AIDS by the way they look. (FALSE)	47.2	48.5	47.8	52.2	54.2	53.2
If you have an STI you will definitely know because you will see/feel symptoms. (FALSE)	15.2	15.0	15.1	15.6	13.0	14.3
Not all sexually transmitted infections are curable. (TRUE)	54.7	53.7	54.3	58.0	56.6	57.3
Oral sex poses no risk for STIs. (FALSE)	38.1	36.1	37.2	51.1	50.2	50.6
If a mosquito bites you it can infect you with HIV. (FALSE)	40.4	39.3	39.9	45.2	42.6	43.9
*You can get HIV from kissing a person who is HIV-positive. (FALSE)	74.7	69.8	72.4	78.0	77.6	77.8
A woman who is pregnant can do nothing to prevent her baby from being born with HIV. (FALSE)	62.0	62.1	62.0	67.0	65.4	66.2

Respondents indicated they heard or saw information on HIV/AIDS from...						
Radio commercials or public services announcements	64.9	67.8	66.3	26.4	27.7	27.1
Radio shows/programs	24.6	28.4	26.4	28.0	28.5	28.2
T.V. commercials/public service announcements	24.2	24.9	24.5	21.7	23.4	22.6
T.V. shows	39.3	38.3	38.9	53.7	55.1	54.4
Cinema/movies	11.2	14.6	12.8	11.5	12.7	12.1
Street performances	7.3	6.2	6.8	9.3	8.9	9.1
Friends	19.9	18.5	19.2	27.4	28.4	27.9
Family members	27.3	24.5	26.0	30.8	34.5	32.7
Library	20.8	17.3	19.2	15.5	17.4	16.5
At schools, respondents learned most about sex, sexuality and HIV from...						
The LO educator	87.5	85.7	86.7	75.8	77.7	76.7
Other educators at the school	2.8	3.4	3.1	4.9	4.1	4.5
External people who visit the school (e.g., NGO representatives and	6.6	7.2	6.8	14.1	12.6	13.4
School library books or computers	1.1	1.4	1.3	2.0	1.0	1.5
Friends or other learners at school	1.4	1.5	1.5	1.8	3.3	2.5
Other sources	0.6	0.8	0.7	1.3	1.4	1.3

*Missing data ≤2.0%

**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

Table Set A5. Confidence and expectations about the future

Table A5a. Confidence[‡] and expectations about the future, by province and intervention group, Grade-8 girls*

	KwaZulu-Natal (n=1,988)**			Mpumalanga (n=1,618)**		
	Intervention	Control	Total	Intervention	Control	Total
Respondent indicated that the following is true most or all of the time (reference category is none or some of the time)						
When I have a problem, I can come up with lots of ways to solve it.	42.5	43.5	42.9	51.6	51.9	51.7
The things I have done in the past will help me in the future.	57.7	59.7	58.5	52.6	53.2	52.9
I believe I can find ways to solve a problem even when others want to quit.	51.1	49.5	50.5	57.8	58.9	58.3
Thinks life will be better, about the same, or worse 1 year from now						
Better	78.0	78.7	78.3	84.9	83.1	84.0
Same	17.6	17.5	17.5	11.2	12.7	11.9
Worse	4.4	3.9	4.2	4.0	4.2	4.1
Thinks life will be better, the same, or worse 5 years from now						
Better	77.7	76.1	77.0	79.6	80.0	79.8
Same	16.6	17.3	16.9	14.9	13.4	14.2
Worse	5.7	6.6	6.1	5.6	6.6	6.1

*Missing data ≤2.1%

‡Chronbach's alpha for confidence scale for all Grade-8 girls= 0.57.

**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

Table A5b. Confidence[‡] and expectations about the future, by province and intervention group, Grade 8 boys*

	KwaZulu-Natal (n=1,435)**			Mpumalanga (n=1,353)**		
	Intervention	Control	Total	Intervention	Control	Total
Respondent indicated that the following is true most or all of the time (reference category is none or some of the time)						
When I have a problem, I can come up with lots of ways to solve it.	43.3	40.2	42.0	46.8	45.1	46.0
The things I have done in the past will help me in the future.	54.0	54.0	54.0	52.8	56.8	54.8
I believe I can find ways to solve a problem even when others want to quit.	51.8	49.6	50.9	53.1	55.2	54.1
Thinks life will be better, about the same, or worse 1 year from now						
Better	74.1	75.4	74.7	77.2	80.5	78.8
Same	20.4	20.7	20.5	18.3	15.4	16.9
Worse	5.4	3.9	4.8	4.5	4.1	4.3
Thinks life will be better, the same, or worse 5 years from now	74.7	75.1	74.9	72.0	75.1	73.6
Better	19.3	20.0	19.6	20.8	18.7	19.8
Same	6.0	4.9	5.5	7.2	6.2	6.7
Worse						

*Missing data ≤1.7%

‡Cronbach's alpha for confidence scale for all Grade-8 boys=0.40.

**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

Table A5c. Confidence[‡] and expectations about the future, by province and intervention group, Grade-10 girls*

	KwaZulu-Natal (n=2,008)**			Mpumalanga (n=1,731)**		
	Intervention	Control	Total	Intervention	Control	Total
Respondent indicated that the following is true most or all of the time (reference category is none or some of the time)						
When I have a problem, I can come up with lots of ways to solve it.	44.3	43.7	44.0	50.3	49.0	49.6
The things I have done in the past will help me in the future.	56.5	53.1	54.9	52.5	54.5	53.5
I believe I can find ways to solve a problem even when others want to quit.	53.9	52.7	53.4	58.0	57.1	57.5
Thinks life will be better, about the same, or worse 1 year from now						
Better	80.4	80.3	80.3	87.6	87.4	87.5
Same	15.7	15.2	15.4	9.4	9.3	9.4
Worse	4.9	4.6	4.3	3.0	3.3	3.2
Thinks life will be better, the same, or worse 5 years from now						
Better	84.7	83.8	84.3	83.8	86.8	85.3
Same	11.9	12.0	11.9	11.0	8.5	9.7
Worse	3.5	4.2	3.8	5.3	4.7	5.0

*Missing data ≤0.8%

[‡]Cronbach's alpha for confidence scale for all Grade-10 girls=0.30.

**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

Table Set A6. Gender norm attitudes

Table A6a. Gender norm attitudes, by province and intervention group, Grade 8 girls*‡

	KwaZulu-Natal (n=1,988)**			Mpumalanga (n=1,618)**		
	Intervention	Control	Total	Intervention	Control	Total
Respondents agreed a lot, somewhat, or not at all with the following statements						
It is the man who decides when to have sex.						
Agree a lot	15.7	14.7	15.3	28.5	24.2	26.4
Somewhat agree	16.8	15.6	16.3	19.7	21.4	20.5
Not at all	67.5	69.8	68.5	51.9	54.4	53.1
Men are always ready to have sex.						
Agree a lot	32.4	33.6	32.9	49.6	46.9	48.2
Somewhat agree	19.1	19.3	19.2	25.7	24.2	25.0
Not at all	48.5	47.1	47.9	24.8	28.9	26.8
Women are always ready to have sex.						
Agree a lot	7.0	6.5	6.8	9.5	8.6	9.1
Somewhat agree	25.7	22.0	24.1	31.0	30.0	30.5
Not at all	67.3	71.5	69.1	59.5	61.4	60.4
Men need sex more than women do.						
Agree a lot	34.3	36.1	35.1	54.8	53.9	54.3
Somewhat agree	18.7	19.7	19.1	20.9	21.3	21.1
Not at all	47.0	44.2	45.8	24.3	24.9	24.6
A man needs other women even if things with his wife/partner are fine.						
Agree a lot	28.9	29.1	29.0	43.1	45.7	44.4
Somewhat agree	22.4	19.0	21.0	23.4	22.2	22.8
Not at all	48.7	51.9	50.0	33.5	32.1	32.8

You don't talk about sex, you just do it.							
Agree a lot	9.1	7.9	8.6	12.3	11.9	12.1	
Somewhat agree	13.0	11.9	12.6	12.4	14.7	13.5	
Not at all	77.9	80.2	78.8	75.3	73.5	74.4	
A woman should not initiate sex.							
Agree a lot	18.4	19.2	18.7	25.0	24.7	24.8	
Somewhat agree	24.2	23.1	23.7	33.3	33.4	33.3	
Not at all	57.5	57.7	57.6	41.7	42.0	41.9	
A woman who has sex before she is married does not deserve respect.							
Agree a lot	23.6	25.4	24.4	33.4	31.5	32.5	
Somewhat agree	20.4	17.0	19.0	20.3	20.6	20.5	
Not at all	56.0	57.6	56.7	46.4	47.9	47.1	
A man who has sex before he is married does not deserve respect.							
Agree a lot	21.8	23.9	22.7	31.0	29.4	30.2	
Somewhat agree	20.9	20.1	20.6	21.0	22.9	21.9	
Not at all	57.3	56.0	56.8	48.0	47.7	47.9	
Women who carry condoms on them are loose.							
Agree a lot	23.0	25.7	24.2	30.3	28.5	29.4	
Somewhat agree	20.3	20.7	20.5	21.3	21.2	21.3	
Not at all	56.6	53.6	55.4	48.3	50.4	49.3	
In my opinion, women can suggest using condoms just like a man.							
Agree a lot	41.8	40.5	41.3	51.7	49.0	50.4	
Somewhat agree	20.8	20.3	20.6	25.0	21.8	23.4	
Not at all	37.4	39.3	38.2	23.3	29.2	26.2	

A couple should decide together if they want to have children.						
Agree a lot	63.0	64.2	63.5	80.3	77.8	79.1
Somewhat agree	14.8	13.7	14.3	10.2	10.8	10.5
Not at all	22.2	22.1	22.1	9.5	11.4	10.5
It is only the woman's responsibility to avoid getting pregnant.						
Agree a lot	41.1	38.6	40.0	56.7	54.3	55.5
Somewhat agree	18.0	22.2	19.8	17.6	18.8	18.2
Not at all	40.9	39.2	40.2	25.8	26.9	26.3
If a man gets a woman pregnant, a child is the responsibility of both.						
Agree a lot						
Somewhat agree	61.6	64.0	62.6	68.9	65.9	67.4
Not at all	14.4	14.0	14.2	13.2	16.0	14.6
	24.1	22.0	23.2	18.0	18.2	18.1
It is important that a father is present in the lives of his children, even if he is no longer with the mother.						
Agree a lot	64.8	69.2	66.7	74.7	71.0	72.8
Somewhat agree	15.6	13.4	14.7	13.2	14.9	14.1
Not at all	19.5	17.4	18.6	12.1	14.1	13.1

*Missing data ≤4.6% data.

¥Cronbach's alpha for gender norms attitudes scale for all Grade-8 girls=0.81.

**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

Table A6b. Gender norm attitudes, by province and intervention group, Grade-8 boys**

	KwaZulu-Natal (n=1,435)**			Mpumalanga (n=1,353)**		
	Intervention	Control	Total	Intervention	Control	Total
Respondents agreed a lot, somewhat, or not at all with the following statements						
It is the man who decides when to have sex.						
Agree a lot	28.7	29.9	29.2	34.0	34.0	34.0
Somewhat agree	27.1	29.7	28.2	29.2	30.6	29.9
Not at all	44.1	40.4	42.6	36.8	35.5	36.1
Men are always ready to have sex.						
Agree a lot	37.7	37.2	37.4	46.1	46.5	46.3
Somewhat agree	29.2	31.6	30.3	30.6	27.4	29.0
Not at all	33.1	31.3	32.3	23.3	26.2	24.7
Women are always ready to have sex.						
Agree a lot	19.5	19.9	19.7	24.9	24.7	24.8
Somewhat agree	35.2	36.4	35.7	40.2	41.5	40.9
Not at all	45.3	43.6	44.6	34.9	33.8	34.4
Men need sex more than women do.						
Agree a lot	40.1	42.9	41.3	45.1	47.3	46.2
Somewhat agree	26.1	23.8	25.1	28.3	25.8	27.1
Not at all	33.8	33.3	33.6	26.6	26.9	26.7
A man needs other women even if things with his wife/partner are fine.						
Agree a lot	29.6	30.1	29.8	41.0	38.5	39.8
Somewhat agree	31.2	31.7	31.4	26.9	27.9	27.4
Not at all	39.1	38.2	38.8	32.2	33.6	32.9

You don't talk about sex, you just do it.							
Agree a lot	18.7	17.5	18.2	26.8	24.1	25.4	
Somewhat agree	25.5	24.7	25.2	22.3	23.8	23.1	
Not at all	55.8	57.8	56.7	51.0	52.1	51.5	
A woman should not initiate sex.							
Agree a lot	19.6	22.2	20.7	23.7	24.9	24.3	
Somewhat agree	35.2	35.8	35.5	42.8	41.5	42.2	
Not at all	45.2	42.0	43.8	33.5	33.6	33.5	
A woman who has sex before she is married does not deserve respect.							
Agree a lot	30.6	28.9	29.8	33.1	34.0	33.5	
Somewhat agree	24.2	25.9	24.9	24.8	21.4	23.1	
Not at all	45.3	45.2	45.2	42.1	44.6	43.3	
A man who has sex before he is married does not deserve respect.							
Agree a lot	26.0	25.2	25.6	28.4	29.0	28.7	
Somewhat agree	26.2	25.2	25.8	27.2	25.6	26.4	
Not at all	47.8	49.7	48.6	44.4	45.4	44.9	
Women who carry condoms on them are loose.							
Agree a lot	33.1	31.8	32.6	32.8	34.4	33.6	
Somewhat agree	22.0	23.0	22.5	28.4	23.6	26.0	
Not at all	44.9	45.1	45.0	38.8	42.1	40.4	
In my opinion, women can suggest using condoms just like a man.							
Agree a lot	51.3	48.2	49.9	51.2	55.8	53.5	
Somewhat agree	23.8	26.2	24.8	27.8	24.4	26.1	
Not at all	25.0	25.6	25.2	21.0	19.8	20.4	

A couple should decide together if they want to have children.							
Agree a lot	64.5	63.7	64.1	72.2	68.8	70.5	
Somewhat agree	17.9	19.6	18.6	15.2	17.6	16.4	
Not at all	17.7	16.8	17.3	12.5	13.7	13.1	
It is only the woman's responsibility to avoid getting pregnant.							
Agree a lot	39.9	37.3	38.8	48.8	50.1	49.5	
Somewhat agree	24.9	24.8	24.9	25.1	25.6	25.3	
Not at all	35.2	37.9	36.3	26.1	24.3	25.2	
If a man gets a woman pregnant, a child is the responsibility of both.							
Agree a lot	60.6	63.0	61.6	59.4	55.8	57.6	
Somewhat agree	20.0	18.2	19.3	20.0	22.2	21.1	
Not at all	19.4	18.8	19.1	20.6	22.1	21.3	
It is important that a father is present in the lives of his children, even if he is no longer with the mother.							
Agree a lot	63.3	62.4	62.9	62.1	62.6	62.4	
Somewhat agree	21.4	23.4	22.2	22.9	22.1	22.5	
Not at all	15.4	14.2	14.9	15.0	15.3	15.2	

*Missing data ≤4.0%

¥Cronbach's alpha for gender norms attitude scale for all Grade-8 boys=0.79.

**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

Table A6c. Gender norm attitudes, by province and intervention group, Grade-10 girls**

	KwaZulu-Natal (n=2,008)**			Mpumalanga (n=1,731)**		
	Intervention	Control	Total	Intervention	Control	Total
Respondents agreed a lot, somewhat, or not at all with the following statements						
It is the man who decides when to have sex.						
Agree a lot	17.7	16.5	17.1	26.3	24.7	25.5
Somewhat agree	22.5	21.6	22.1	24.6	23.7	24.2
Not at all	59.8	62.0	60.8	49.2	51.6	50.4
Men are always ready to have sex.						
Agree a lot	42.9	39.2	41.2	47.5	49.2	48.3
Somewhat agree	25.6	26.2	25.9	24.3	24.9	24.6
Not at all	31.5	34.5	32.9	28.2	25.9	27.0
Women are always ready to have sex.						
Agree a lot	5.8	6.7	6.2	8.3	6.7	7.5
Somewhat agree	32.1	29.9	31.1	34.5	34.9	34.7
Not at all	62.1	63.4	62.7	57.2	58.4	57.8
Men need sex more than women do.						
Agree a lot	49.2	44.4	47.0	54.0	56.7	55.3
Somewhat agree	22.7	20.9	21.9	21.2	19.4	20.3
Not at all	28.1	34.7	31.1	24.8	23.9	24.4
A man needs other women even if things with his wife/partner are fine.						
Agree a lot	40.2	37.7	39.1	50.4	48.7	49.6
Somewhat agree	24.4	24.5	24.4	20.2	17.9	19.0
Not at all	35.4	37.8	36.5	29.4	33.4	31.4

You don't talk about sex, you just do it. Agree a lot Somewhat agree Not at all	9.7 13.8 76.5	9.3 15.5 75.2	9.5 14.6 75.9	12.5 20.0 67.5	9.5 18.7 71.8	11.0 19.3 69.6
A woman should not initiate sex. Agree a lot Somewhat agree Not at all	18.5 33.1 48.4	21.0 29.5 49.6	19.6 31.4 48.9	22.4 36.5 41.1	23.2 33.2 43.5	22.8 34.9 42.3
A woman who has sex before she is married does not deserve respect. Agree a lot Somewhat agree Not at all	17.9 20.4 61.7	21.3 15.7 63.0	19.5 18.3 62.3	23.4 17.2 59.4	18.4 16.4 65.2	20.9 16.8 62.3
A man who has sex before he is married does not deserve respect. Agree a lot Somewhat agree Not at all	14.5 20.4 65.1	19.5 17.2 63.3	16.8 18.9 64.3	23.8 17.9 58.4	17.6 16.2 66.1	20.7 17.0 62.2
Women who carry condoms on them are loose. Agree a lot Somewhat agree Not at all	20.7 20.7 58.6	20.8 17.0 62.2	20.8 19.0 60.2	23.7 18.9 57.4	24.0 18.0 58.0	23.9 18.4 57.7
In my opinion, women can suggest using condoms just like a man. Agree a lot Somewhat agree Not at all	57.9 20.0 22.0	53.6 20.7 25.7	55.9 20.4 23.7	59.5 20.2 20.3	59.9 20.8 19.4	59.7 20.5 19.8

A couple should decide together if they want to have children.						
Agree a lot	80.1	78.4	79.3	83.9	86.6	85.2
Somewhat agree	9.6	10.3	9.9	8.5	6.1	7.3
Not at all	10.3	11.3	10.8	7.6	7.4	7.5
It is only the woman's responsibility to avoid getting pregnant.						
Agree a lot	37.5	41.1	39.1	52.9	47.5	50.2
Somewhat agree	22.9	19.1	21.2	17.0	16.2	16.6
Not at all	39.6	39.8	39.7	30.1	36.3	33.2
If a man gets a woman pregnant, a child is the responsibility of both.						
Agree a lot	78.4	78.8	78.6	74.5	78.5	76.5
Somewhat agree	10.8	11.0	10.9	12.1	9.5	10.8
Not at all	10.9	10.3	10.6	13.4	12.0	12.7
It is important that a father is present in the lives of his children, even if he is no longer with the mother.						
Agree a lot	79.6	79.3	79.5	77.4	82.3	79.9
Somewhat agree	11.1	11.5	11.3	13.4	9.0	11.2
Not at all	9.3	9.2	9.3	9.2	8.6	8.9

*Missing data is ≤2.3%

¥Cronbach's alpha for gender norms attitude scale=0.73

**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

Table Set A7. Risk perception

Table A7a. Risk perception, by province and intervention group, Grade-8 girls*

	KwaZulu-Natal (n=1,988)**			Mpumalanga (n=1,618)**		
	Intervention	Control	Total	Intervention	Control	Total
Respondent's perception of the chance that each of the following will happen to him or her						
The chance of getting HIV in his or her lifetime						
No chance	63.7	66.8	65.0	59.9	56.4	58.2
Some chance	21.4	21.1	21.3	26.0	31.0	28.5
High chance	15.0	12.1	13.7	14.1	12.7	13.4
The chance that he or she already has HIV						
No chance						
Some chance	73.3	74.3	73.7	67.0	72.0	69.5
High chance	15.5	14.5	15.1	21.9	19.1	20.5
	11.2	11.2	11.2	11.1	8.9	10.1

* Missing data ≤5.2%

**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

Table A7b. Risk perception, by province and intervention group, Grade-8 boys*

	KwaZulu-Natal (n=1,435)**			Mpumalanga (n=1,353)**		
	Intervention	Control	Total	Intervention	Control	Total
Respondent's perception of the chance that each of the following will happen to him or her						
The chance of getting HIV in his or her lifetime						
No chance						
Some chance	61.2	59.9	60.6	54.9	55.1	55.0
High chance	26.7	29.2	27.8	31.0	29.8	30.4
	12.1	11.0	11.6	14.1	15.1	14.6
The chance that he or she already has HIV						
No chance	65.2	68.1	66.4	64.4	64.7	64.5
Some chance	24.3	22.4	23.5	23.5	22.9	23.2
High chance	10.5	9.5	10.1	12.2	12.4	12.3

* Missing data ≤4.6%

**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

Table A7c. Risk perception, by province and intervention group, Grade-10 girls*

	KwaZulu-Natal (n=2,008)**			Mpumalanga (n=1,731)**		
	Intervention	Control	Total	Intervention	Control	Total
Respondent's perception of the chance that each of the following will happen to him or her						
The chance of getting HIV in his or her lifetime						
No chance	59.6	60.6	60.1	56.5	58.1	57.3
Some chance	31.8	30.3	31.1	29.7	28.0	28.9
High chance	8.6	9.1	8.8	13.8	13.9	13.9
The chance that he or she already has HIV						
No chance	77.0	78.3	77.6	68.4	75.4	71.9
Some chance	15.9	14.7	15.3	19.9	16.8	18.3
High chance	7.2	7.0	7.1	11.7	7.9	9.8

*Missing data ≤1.6%

**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

Table Set A8. Self-efficacy

Table A8a. Self-efficacy, by province and intervention group, Grade-8 girls*[‡]

	KwaZulu-Natal (n=1,988)**			Mpumalanga (n=1,618)**		
	Intervention	Control	Total	Intervention	Control	Total
Respondent's reported confidence to make the following choices						
Could refuse to start having sex if he or she did not want to, even if friends were having sex with their boyfriends or girlfriends	57.2	57.6	57.3	50.7	54.0	52.4
Could refuse to have sex with boyfriend or girlfriend, even if b/f or g/f was pressuring him or her	63.9	63.3	63.6	58.3	60.4	59.4
Would be able to talk about condoms with b/f or g/f if b/f or g/f was asking him or her to have sex	62.4	60.4	61.6	66.2	68.0	67.1
Felt confidence he or she could refuse to have sex even if someone offered him or her a meal, gifts, money, or favor	49.3	49.6	49.4	46.2	49.2	47.7
Knows where to get tested for HIV	78.2	78.0	78.1	84.4	84.4	84.4

*Missing data ≤6.1%

[‡]Cronbach's alpha of self-efficacy scale for all Grade-8 girls=0.74.

**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

Table A8b. Self-efficacy, by province and intervention group, Grade-8 boys**

	KwaZulu-Natal (n=1,435)**			Mpumalanga (n=1,353)**		
	Intervention	Control	Total	Intervention	Control	Total
Respondent's reported confidence to make the following choices						
Could refuse to start having sex if he or she did not want to, even if friends were having sex with their boyfriends or girlfriends	56.8	57.1	57.0	48.2	45.8	47.0
Could refuse to have sex with boyfriend or girlfriend, even if b/f or g/f was pressuring him or her	58.0	56.8	57.5	50.7	50.1	50.4
Would be able to talk about condoms with b/f or g/f if b/f or g/f was asking him or her to have sex	68.1	71.5	69.6	70.0	70.3	70.2
Felt confidence he or she could refuse to have sex even if someone offered him or her a meal, gifts, money, or favor	50.2	54.0	51.9	46.9	44.9	45.9
Knows where to get tested for HIV	78.7	75.9	77.4	80.6	82.7	81.7

*Missing data is ≤5.1%

†Cronbach's alpha of self-efficacy scale for all Grade-8 boys=0.68.

**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

Table A8c. Self-efficacy, by province and intervention group, Grade-10 girls*[‡]

	KwaZulu-Natal (n=2,008)**			Mpumalanga (n=1,731)**		
	Intervention	Control	Total	Intervention	Control	Total
Respondent's reported confidence to make the following choices						
Could refuse to start having sex if he or she did not want to, even if friends were having sex with their boyfriends or girlfriends	62.6	66.0	64.1	54.6	61.6	58.0
Could refuse to have sex with boyfriend or girlfriend, even if b/f or g/f was pressuring him or her	70.6	71.7	71.1	63.3	70.4	66.8
Would be able to talk about condoms with b/f or g/f if b/f or g/f was asking him or her to have sex	77.6	75.8	76.8	80.2	82.0	81.1
Felt confidence he or she could refuse to have sex even if someone offered him or her a meal, gifts, money, or favor	59.0	61.4	60.1	54.2	58.1	56.1
Knows where to get tested for HIV	87.9	88.0	88.0	90.8	92.2	91.5

*Missing data ≤1.8%

[‡]Cronbach's alpha of self-efficacy scale for all Grade-10 girls=0.70.

**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

Table Set A9. Sexual behavior

Table A9a. Sexual behavior, by province and intervention group, Grade-8 girls*

	KwaZulu-Natal (n=1,988)**			Mpumalanga (n=1,618)**		
	Intervention	Control	Total	Intervention	Control	Total
Currently have a boyfriend or girlfriend	29.8	25.6	28.1	37.3	36.7	37.0
Age of boyfriend/girlfriend (mean)	15.9	15.8	15.9	15.6	15.5	15.6
Ever had sexual intercourse	11.4	8.5	10.2	10.3	8.9	9.6
Among those who ever had sexual intercourse						
	KwaZulu Natal (unweighted n=183; weighted n=233.4)			Mpumalanga (unweighted n=163; weighted n=65.65)		
	Intervention	Control	Total	Intervention	Control	Total
Age at first sex (mean)	12.0	11.7	11.9	12.3	11.7	12.1
Number of sex partners in past 12 months (mean)	3.1	4.4	3.6	5.3	3.5	4.5
Number of different sex partners in past 3 months (mean)	4.5	2.3	3.8	3.6	3.3	3.5
Used a condom at last sex	59.4	67.0	62.0	84.5	74.3	80.3
Used a condom every time in past 3 months	49.4	65.2	54.4	79.7	62.3	73.3
Most recent or current partner attends the same school	39.9	47.0	42.5	48.7	51.3	49.8

At last sex, gave money, gifts, or favors in exchange for sex	34.0	25.2	30.1	35.3	29.9	32.9
At last sex, received money, gifts, or favors in exchange for sex	39.0	17.4	31.0	37.0	41.7	39.1
In lifetime, gave money, gifts, or favors in exchange for sex	29.4	24.8	27.7	18.4	19.4	18.9
In lifetime, received money, gifts, or favors in exchange for sex	28.0	21.2	25.4	22.9	24.4	23.5
Ever had sex with a person 5 years older	22.7	24.2	23.2	18.1	25.0	21.2
Ever did something sexual that she did not want to do						
Yes	24.8	31.6	27.2	32.6	30.8	31.8
I'm not sure	37.4	31.5	35.4	22.9	28.1	25.2

*Missing data ≤4.7%

**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

Table A9b. Sexual behavior, by province and intervention group, Grade-8 boys*

	KwaZulu-Natal (n=1,435)**			Mpumalanga (n=1,353)**		
	Intervention	Control	Total	Intervention	Control	Total
Currently have a boyfriend or girlfriend	41.2	44.1	42.5	47.2	50.6	48.9
Age of boyfriend/girlfriend (mean)	14.8	15.0	14.9	14.7	14.8	14.7
Ever had sexual intercourse	23.5	23.7	23.6	19.5	19.8	19.7
Among those who ever had sexual intercourse						
	KwaZulu-Natal (unweighted n=335; weighted n=606.6)			Mpumalanga (unweighted n=286; weighted n=138.7)		
	Intervention	Control	Total	Intervention	Control	Total
Age at first sex (mean)	12.0	11.6	11.8	11.7	11.3	11.5
Number of sex partners in past 12 months (mean)	4.7	3.9	4.4	5.8	5.9	5.8
Number of different sex partners in past 3 months (mean)	5.3	3.8	4.6	6.2	6.3	6.2
Used a condom at last sex	78.3	73.5	76.2	73.1	79.1	76.2
Used a condom every time in past 3 months	67.7	66.5	67.1	67.8	79.7	73.7
Most recent or current partner attends the same school	50.7	50.2	50.5	55.1	59.9	57.5
At last sex, gave money, gifts, or favors in exchange for sex	33.2	29.7	31.6	53.4	38.4	45.8

At last sex, received money, gifts, or favors in exchange for sex	31.9	34.9	33.2	42.7	42.8	42.8
In lifetime, gave money, gifts, or favors in exchange for sex	24.2	26.0	25.0	34.1	23.8	28.4
In lifetime, received money, gifts, or favors in exchange for sex	26.6	24.7	25.8	34.4	23.8	29.2
Ever had sex with a person 5 years older	34.1	31.6	33.0	26.5	31.4	28.9
Ever did something sexual that he did not want to do						
Yes	28.6	32.5	30.2	40.3	44.0	42.2
I'm not sure	24.0	21.5	22.9	23.7	22.2	23.0

*Missing data ≤9.4%

**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

Table A9c. Sexual behavior, by province and intervention group, Grade-10 girls*

	KwaZulu-Natal (n=2,008)**			Mpumalanga (n=1,731)**		
	Intervention	Control	Total	Intervention	Control	Total
Currently have a boyfriend or girlfriend	57.8	53.6	55.9	67.9	68.1	68.0
Age of boyfriend/girlfriend (mean)	18.9	19.0	18.9	18.4	18.1	18.3
Ever had sexual intercourse	25.4	26.8	26.0	24.6	29.4	32.0
Among those who ever had sexual intercourse						
	KwaZulu-Natal (unweighted n=521; weighted n=696.7)			Mpumalanga (unweighted n=578; weighted n=313.5)		
	Intervention	Control	Total	Intervention	Control	Total
Age at first sex (mean)	15.3	15.3	15.3	15.4	15.1	15.3
Number of sex partners in past 12 months (mean)	2.1	1.9	2.0	1.7	2.0	1.8
Number of different sex partners in past 3 months (mean)	2.8	2.9	2.9	3.0	2.6	2.8
Used a condom at last sex	59.0	64.8	61.8	73.5	72.2	72.8
Used a condom every time in past 3 months	58.2	54.0	56.2	62.8	72.3	67.3
Most recent or current partner attends the same school	35.4	30.1	32.9	38.3	44.1	41.1
At last sex, gave money, gifts, or favors in exchange for sex	15.5	15.4	15.4	17.5	17.3	17.4

At last sex, received money, gifts, or favors in exchange for sex	16.2	15.6	15.9	23.21	22.1	22.7
In lifetime, gave money, gifts, or favors in exchange for sex	14.2	12.5	13.4	11.9	15.7	13.7
In lifetime, received money, gifts, or favors in exchange for sex	15.2	13.4	14.3	11.6	17.5	14.3
Ever had sex with a person 5 years older	27.4	25.9	26.7	18.1	24.2	20.9
Ever did something sexual that she did not want to do						
Yes	33.5	34.0	33.8	23.7	29.6	26.4
I'm not sure	14.7	13.5	14.2	16.9	9.8	13.6

*Missing data ≤9.0%

**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

Table Set A10. HIV testing and counseling and other services

Table A10a. HIV testing and counseling and other services, by province and intervention group, Grade-8 girls*

	KwaZulu-Natal (n=1,988)**			Mpumalanga (n=1,618)**		
	Intervention	Control	Total	Intervention	Control	Total
Visited a clinic or hospital in past 12 months to get information about sex-related issues or get condoms or other contraceptives	35.6	32.6	34.3	28.7	30.3	29.5
Was referred for counseling or testing for STIs or HIV	33.2	33.8	33.4	23.4	27.3	25.3
Has ever been tested for HIV	40.4	44.3	42.1	33.4	37.1	35.2
Among those who have ever been tested for HIV						
	KwaZulu-Natal (unweighted n=786; weighted n=927)			Mpumalanga (unweighted n=584; weighted n=238)		
	Intervention	Control	Total	Intervention	Control	Total
Received results of the HIV test	81.5	84.8	82.9	85.1	81.7	83.4
Shared the results of the HIV test with someone	65.4	64.7	65.1	61.6	70.4	66.1
Among those who were referred for counseling or testing for STIs or HIV						
	KwaZulu-Natal (unweighted n=611; weighted n=727)			Mpumalanga (unweighted n=396; weighted n=169)		
	Intervention	Control	Total	Intervention	Control	Total
Went to the facility he or she was referred to	81.5	84.8	82.9	85.1	81.7	83.4

Among those who were referred but did not go to referral						
	KwaZulu-Natal (unweighted n=200; weighted n=467.1)			Mpumalanga (unweighted n=134; weighted n=109.9)		
	Intervention	Control	Total	Intervention	Control	Total
Reasons he or she did not						
Referral was too far	49.8	56.5	52.5	34.0	44.5	39.7
Referral was too costly	31.2	27.2	29.6	40.7	32.0	36.0
Worries about confidentiality	28.8	34.5	31.1	38.4	41.2	39.9

*Missing data $\leq 9.5\%$

**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

Table A10b. HIV testing and counseling and other services, by province and intervention group, Grade-8 boys*

	KwaZulu-Natal (n=1,435)**			Mpumalanga (n=1,353)**		
	Intervention	Control	Total	Intervention	Control	Total
Visited a clinic or hospital in past 12 months to get information about sex-related issues or get condoms or other contraceptives	48.2	48.3	48.2	41.1	43.0	42.1
Was referred for counseling or testing for STIs or HIV	40.1	43.8	41.7	36.3	33.1	34.7
Has ever been tested for HIV	50.9	56.2	53.2	55.1	44.6	49.9
Among those who have ever been tested for HIV						
	KwaZulu-Natal (unweighted n=716; weighted n=1307)			Mpumalanga (unweighted n=652; weighted n=346.3)		
	Intervention	Control	Total	Intervention	Control	Total
Received results of the HIV test	87.3	85.9	86.7	87.8	83.2	85.7
Shared the results of the HIV test with someone	62.7	64.9	63.7	60.0	67.6	63.3
Among those who were referred for counseling or testing for STIs or HIV						
	KwaZulu-Natal (unweighted n=556; weighted n=1010)			Mpumalanga (unweighted n=463; weighted n=238.6)		
	Intervention	Control	Total	Intervention	Control	Total
Went to the facility he or she was referred to	65.2	62.7	64.1	67.4	71.9	69.6

Among those who were referred but did not go to referral						
	KwaZulu-Natal (unweighted n=200; weighted n=636.4)			Mpumalanga (unweighted n=139; weighted n=162.4)		
	Intervention	Control	Total	Intervention	Control	Total
Reasons he or she did not go to referral						
Referral was too far	48.6	53.4	50.8	50.1	52.9	51.3
Referral was too costly	30.6	37.3	33.7	33.3	44.2	38.1
Worries about confidentiality	27.1	21.5	24.5	34.1	29.8	32.2

*Missing data is ≤10.2%

**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

Table A10c. HIV testing and counseling and other services, by province and intervention group, Grade-10 girls*

	KwaZulu-Natal (n=2,008)**			Mpumalanga (n=1,731)**		
	Intervention	Control	Total	Intervention	Control	Total
Visited a clinic or hospital in past 12 months to get information about sex-related issues or get condoms or other contraceptives	40.7	39.3	40.1	44.4	36.7	40.5
Was referred for counseling or testing for STIs or HIV	35.3	39.0	37.0	30.2	26.5	28.4
Has ever been tested for HIV	55.6	56.7	56.1	54.3	46.0	50.2
Among those who have ever been tested for HIV						
	KwaZulu-Natal (unweighted n=1,111; weighted n=1481)			Mpumalanga (unweighted n=845; weighted n=487)		
	Intervention	Control	Total	Intervention	Control	Total
Received results of the HIV test	95.0	91.4	93.3	93.2	88.8	91.2
Shared the results of the HIV test with someone	73.1	72.3	72.7	71.4	72.8	72.0
Among those who were referred for counseling or testing for STIs or HIV						
	KwaZulu-Natal (unweighted n=725; weighted n=968.7)			Mpumalanga (unweighted n=476; weighted n=272.4)		
	Intervention	Control	Total	Intervention	Control	Total
Went to the facility he or she was referred to	68.9	67.3	68.1	73.8	72.0	72.9

Among those who were referred but did not go to referral						
	KwaZulu-Natal (unweighted n=232; weighted n=655.8)			Mpumalanga (unweighted n=139; weighted n=195.4)		
	Intervention	Control	Total	Intervention	Control	Total
Reasons he or she did not go to referral						
Referral was too far	59.6	44.0	52.1	38.4	67.3	52.0
Referral was too costly	24.2	36.7	30.2	26.8	25.7	26.3
Worries about confidentiality	22.4	29.0	25.6	45.4	17.0	32.0

*Missing data is ≤5.3%

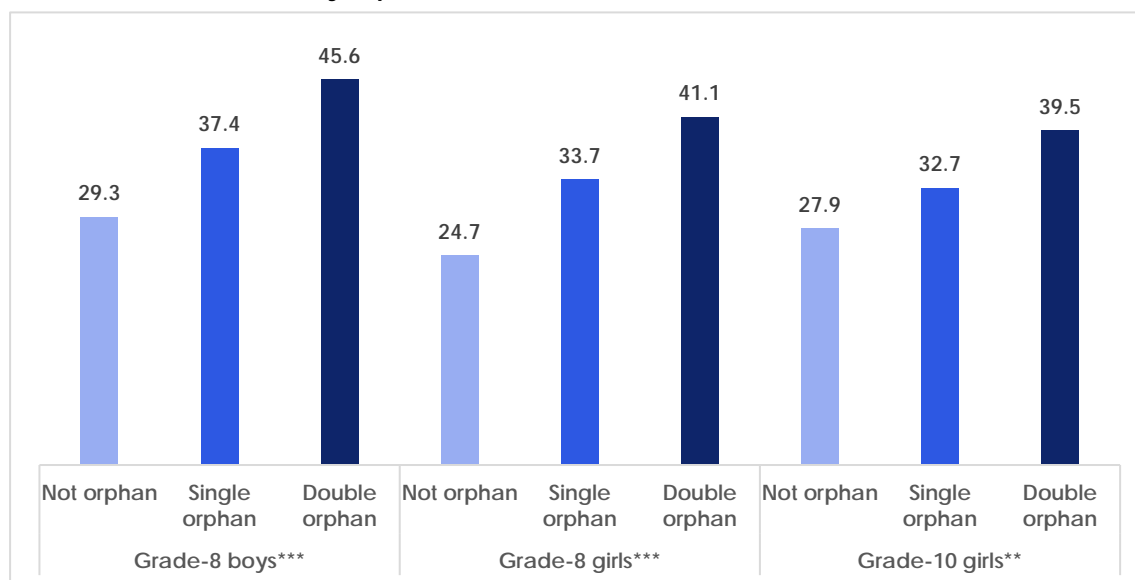
**Unweighted Ns shown here. Calculations based on weighted Ns. See Table 3 for weighted Ns.

APPENDIX 2. ADDITIONAL FINDINGS

The analyses and figures presented below were generated after in-country dissemination meetings to explore specific areas of interest in greater depth. Each figure reports information about a subsample of youth who were at or within two years of the typical age for their grade. This eliminated from our study learners who were two or more years older than the typical age for their grades: 72 Grade-8 boys (2.6%), 59 Grade-8 girls (1.7%), and 142 Grade-10 girls (3.8%). We dropped these older learners because they would have been exposed to the outcomes of interest (e.g., sexual experience, pregnancy, and HIV testing) for a longer period than their peers, thus biasing the results.

To examine characteristics of young people who reside in food-insecure households, we used the variable, how many of the past three days the household went without food. We considered any days without food to be “food-insecure” and no days without food to be “not food-insecure.” We coded orphanhood based on whether the learner’s biological mother or father was alive. Thus, we coded young people who reported either that their mother or father was not alive or that they did not know if their mother or father was alive as orphans, because they lacked access to a parent. All values are weighted and significance testing was undertaken using an F-test; p-values are shown for significant differences. All figures are for both provinces combined.

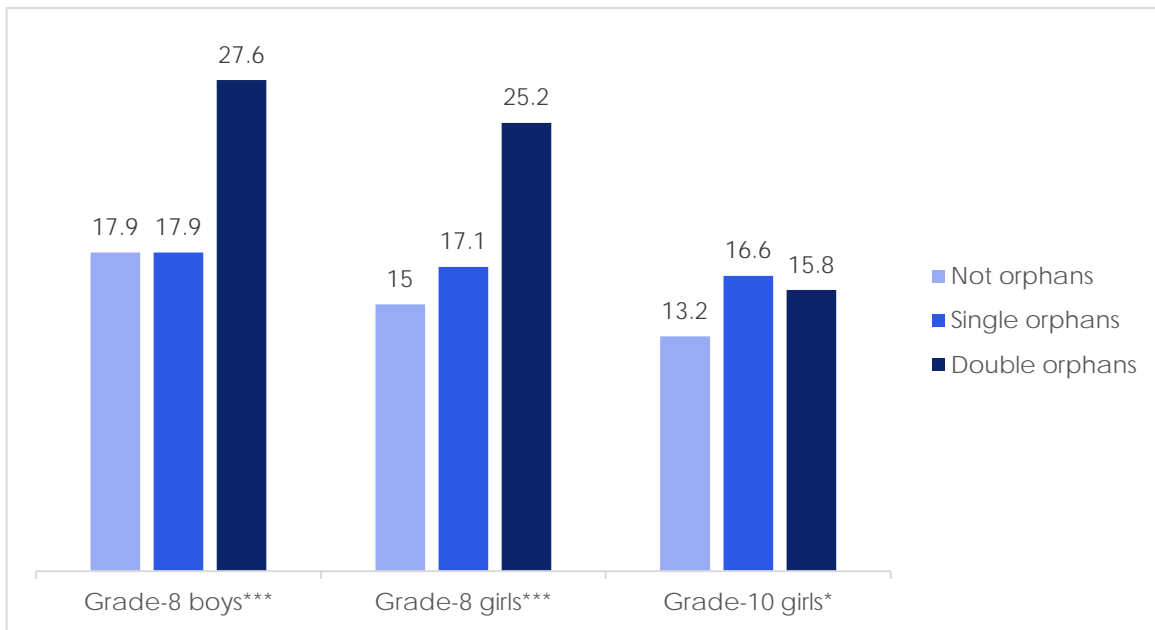
Figure A.1. Percentage of learners who went any of the past three days without food in their home (food-insecure), by orphanhood status



p≤0.01; *p≤0.001

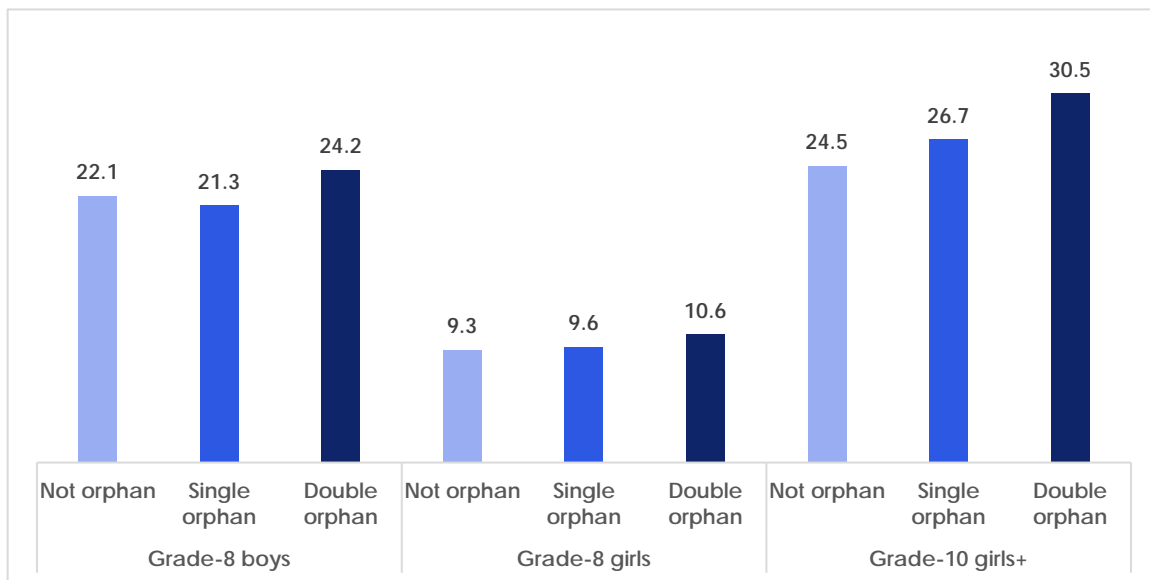
Summary: Orphans (single and double) were significantly more likely to reside in food-insecure households than nonorphans. Double orphans came from the most food-insecure households. The same results were seen for all grade groups. In total, 33.8 percent of Grade-8 boys, 29.5 percent of Grade-8 girls, and 31.1 percent of Grade-10 girls reported that their homes had gone without food for any of the past three days.

Figure A.2. Percentage of learners who missed school, by grade and orphan status



Summary: Among Grade-8 boy and girl learners, double orphans were more likely than other learners to have missed three or more days of school ($p \leq 0.001$). Among Grade-10 girls, single and double orphans were more likely than nonorphans to have missed three or more days of school ($p < 0.05$).

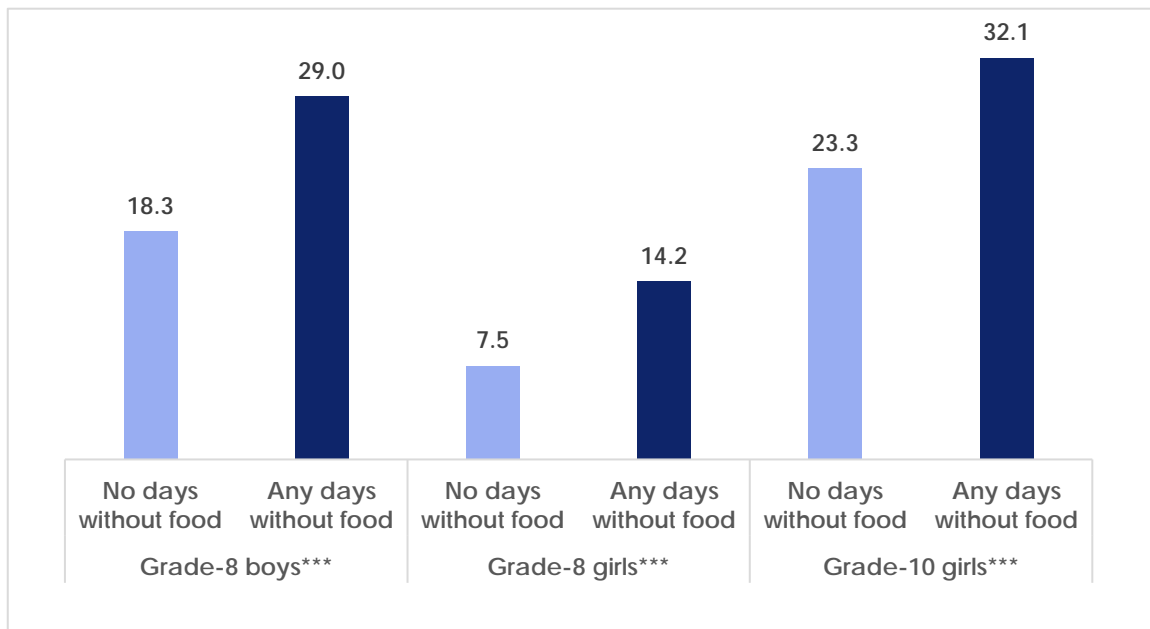
Figure A.3. Percentage of learners who had ever had sex, by grade and orphan status



+ $p \leq 0.10$

Summary: Double orphans were more likely than other learners to have ever had sex, although this was only borderline significant among Grade-10 girls ($p \leq 0.10$).

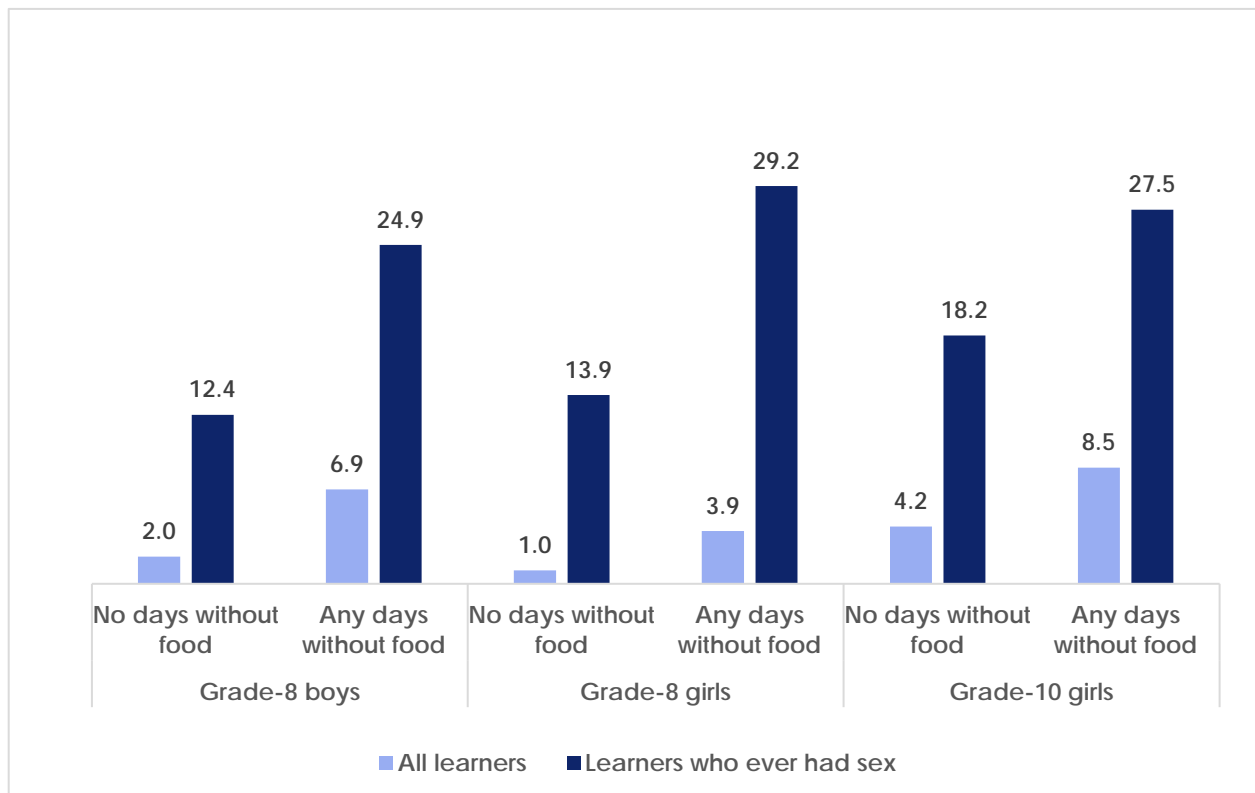
Figure A.4. Percentage of learners who had ever had sex, by grade and by household food insecurity (i.e., went any days without food in the past 3 days vs. had food all those days)



***p≤0.001

Summary: Learners who resided in food-insecure households were significantly more likely to have ever had sex than the learners who did not reside in food-insecure households.

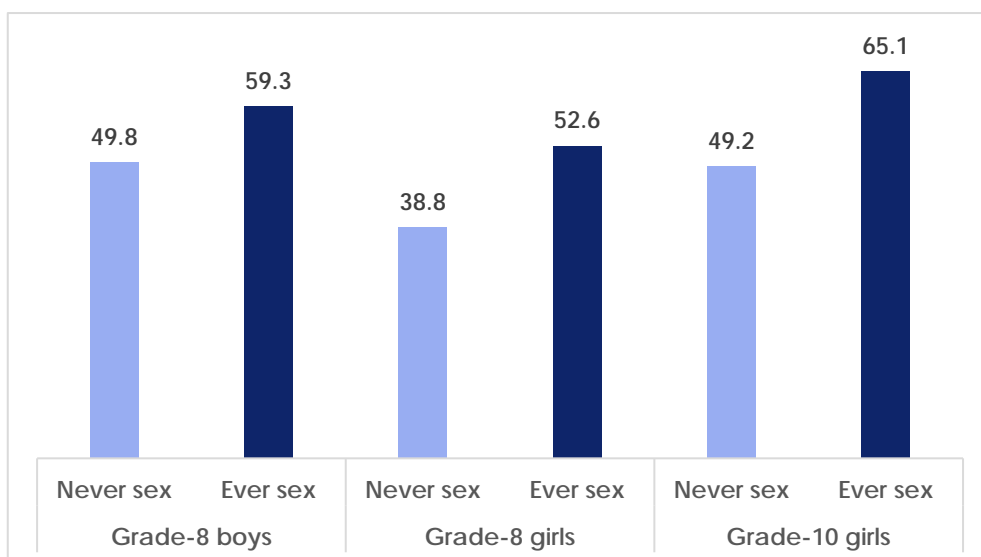
Figure A.5. Percentage of learners who had ever been pregnant (or gotten a partner pregnant) by grade and by household food insecurity for a) all learners; and b) learners who had ever had sex*



*These comparisons are all significant at p≤0.01.

Summary: Learners who resided in food-insecure households were more likely to have ever been pregnant (or to have gotten a partner pregnant) than learners who did not reside in food-insecure households. Among learners who had ever had sex, a large proportion of those who resided in food-insecure household had ever been pregnant or gotten a partner pregnant (about one quarter).

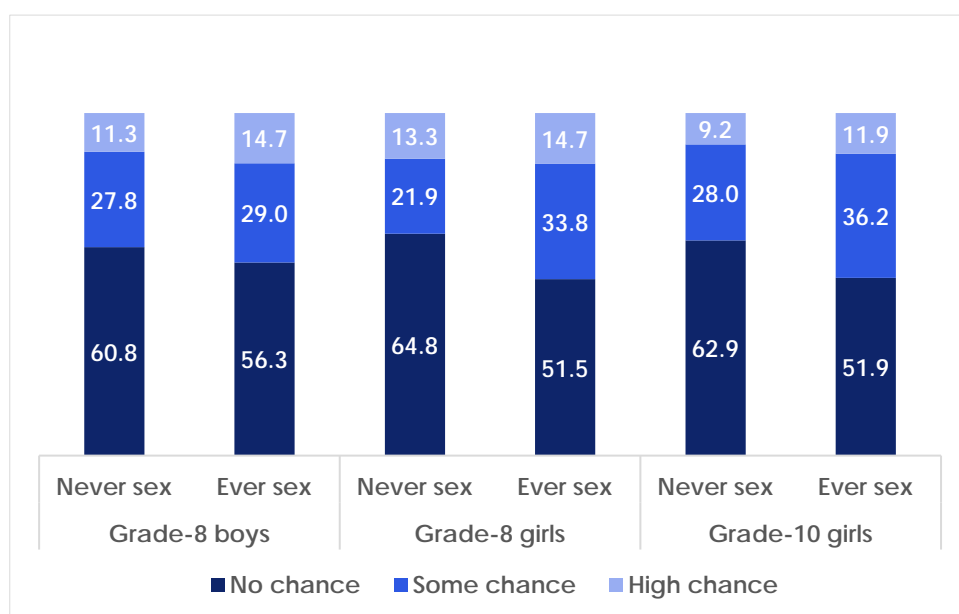
Figure A.6. Percentage of learners who had ever been tested for HIV, by sexual experience and grade*



*These comparisons are significant at $p \leq 0.001$.

Summary: A high percentage of learners had ever been tested, and the percentage was higher among learners who had had sex than among those who had never had sex.

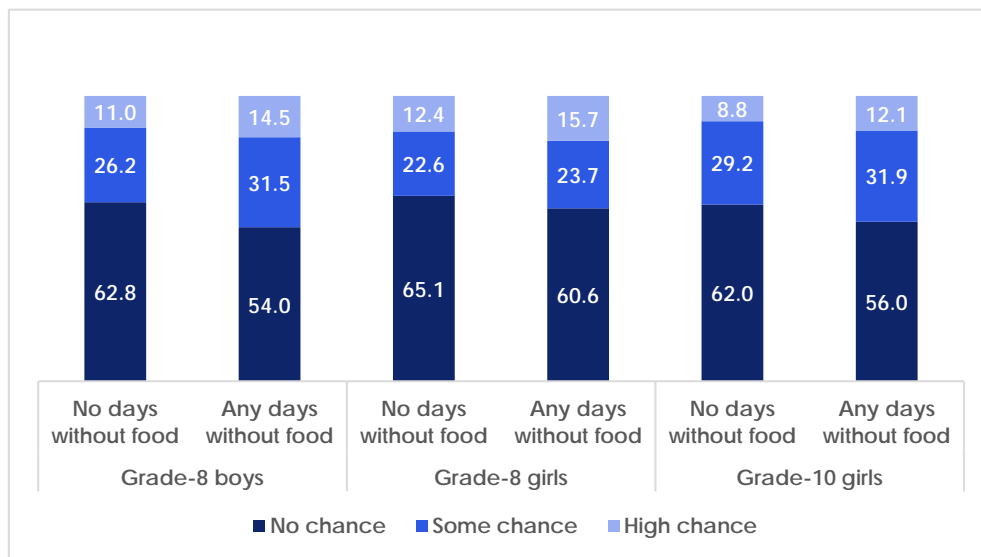
Figure A.7. Learners' perceived chance (no chance, some chance, high chance) of acquiring HIV, by sexual experience and grade (%)*



* $p \leq 0.001$ for all comparisons

Summary: Learners who had ever had sex were significantly more likely to perceive some chance or a high chance of acquiring HIV in their lifetime than learners who had never had sex.

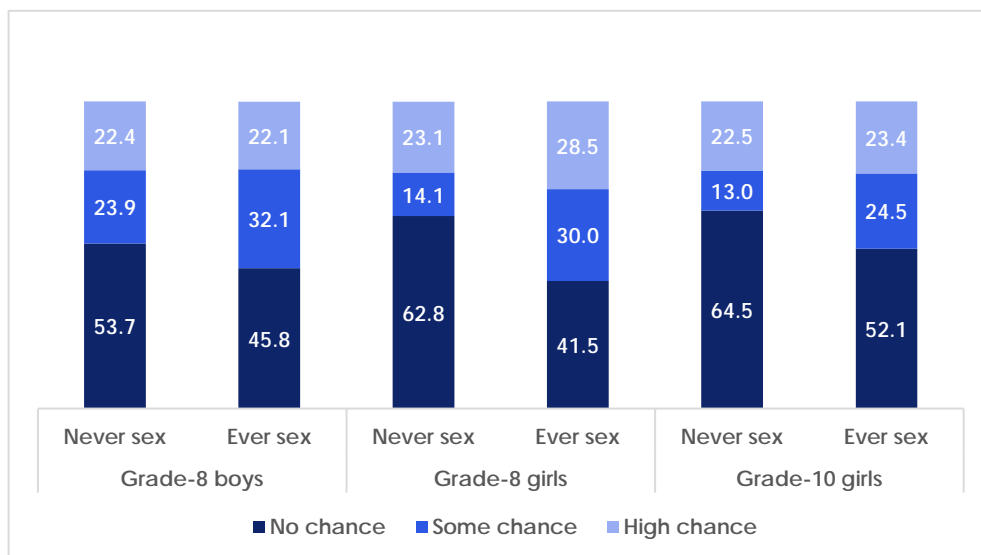
Figure A.8. Learners' perceived chance (no chance, some chance, high chance) of getting HIV, by household food insecurity and grade (%)*



* $p \leq 0.05$ for all comparisons.

Summary: Learners who had gone any days without food perceived a higher risk of acquiring HIV in their lifetime than those who had had food in the past three days.

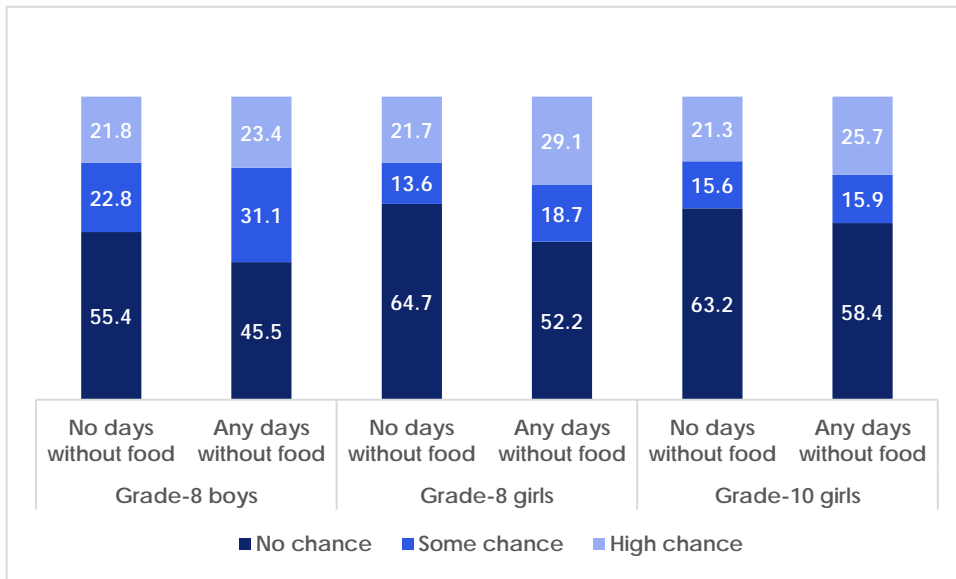
Figure A.9. Learners' perceived chance (no chance, some chance, high chance) of getting pregnant or getting a partner pregnant while in high school, by sexual experience and grade (%)*



* $p \leq 0.05$ for boys and $p \leq 0.001$ for all girl comparisons.

Summary: Learners who had ever had sex (particularly females) perceived a greater chance of getting pregnant or getting a partner pregnant while still in high school than learners who had never had sex.

Figure A.10. Learners' perceived chance of getting pregnant or getting a partner pregnant while in high school, by household food insecurity and grade (%)*



*p≤0.01 for boys and p≤0.001 for all girl comparisons.

Summary: Learners who had gone without food any of the past three days perceived a higher risk of getting pregnant or getting a partner pregnant while in high school than learners who had not gone without food.

APPENDIX 3. BASELINE QUESTIONNAIRE

Baseline Questionnaire for Grades 8 and 10 Learners

Province	
District	
School	
Student Number	
Name of Life Orientation Teacher	
Class Code (facilitator will tell you the class code to select)	
Date (dd/mm/yy)	
Time	

A. Demographics and HH Composition

Tell us a bit about yourself and your household			
Questions		Response Options	Codes
A1	How old were you on your last birthday?	[Respondent enters age]	
A2	In what school grade are you currently enrolled?	Grade 8 Grade 10	1 2
A3	Are you female or male?	Female Male	2 1
A4	What race group are you?	Black Indian White Coloured Other	1 2 3 4 5
A5	What is your religion?	Christian Jewish Muslim Hindu Ba'hai Traditional Other	1 2 3 4 5 6 7
A6	Aside from wedding and funerals, how often do you attend religious services/church?	Usually once a week Usually once or twice a month Usually a few times a year Seldom Never	1 2 3 4 5
A7	Who is your primary care giver? This could be your mother, father, granny or someone else. We call this person your primary caregiver .	Mother Father Older brother or sister Aunts and/or uncles	1 2 3 4

		Grandparents	5
		Cousins	6
		Other adults who are not blood relatives	7
		Another child	8
		I am the head of the house	9
A8	What is the highest level of education your primary caregiver completed?	Did not go to school	1
		Attended some primary, but did not complete primary school	2
		Completed primary school	3
		Attended some secondary, but did not complete secondary school (grade 12)	4
		Completed secondary school (grade 12)	5
		Completed a diploma	6
		Completed a university or technikon degree	7
		Don't know	8
A9	Is your biological mother still alive?	Yes	1
		No	2
		Don't know	8
A10	Is your biological father still alive?	Yes	1
		No	2
		Don't know	8
A11	Do you live with your biological mother?	Yes	1
	ASKED ONLY IF "Yes" to question A9	No	2
A12	Do you live with your biological father?	Yes	1
	ASKED ONLY IF "Yes" to question A10	No	2
A13. Does your household have any of these things?			
A13a	Electricity	Yes	1
		No	2
A13b	Radio	Yes	1
		No	2
A13c	Tap water	Yes	1
		No	2
A13d	Television	Yes	1
		No	2
A13e	Fridge	Yes	1
		No	2
A13f	Motor car	Yes	1
		No	2
A14	What kind of toilet does your house have?	Flushing toilet	1
		Pit toilet/long drop	2
		No toilet facility	3
A15	What kind of floor does your house have? CHOOSE ONLY 1 ANSWER THAT APPLIES TO THE MAIN AREA OF YOUR HOUSE	Earth or Sand or Dung	1
		Bare wood planks	2
		Parquet or polished wood	3
		Vinyl or asphalt strips	4
		Ceramic tiles	5
		Cement	6
		Carpet	7

		Don't know	8
A16	What is the main material used for the outside walls of your house?	Bricks Cement block/concrete Corrugated iron/zinc Wood Plastic Cardboard Mud or cement mix Wattle and daub Tile Mud Thatching/grass Asbestos Don't know	1 2 3 4 5 6 7 8 9 10 11 12 98
A17	In the past 3 days, how many days have you been without food in your home?	0 days 1 day 2 days 3 days	1 2 3 4
A18	How long have you lived in your house?	Less than 12 months 12 months or more → SKIP TO A21	1 2
A19	The last time you moved, where did you move from?	From a house in the same village or town From a different village or town From a different Province From outside South Africa	1 2 3 4
A20	How many times have you moved to a different village or town in the past 12 months?	None Once 2-3 times 4-5 times 6 or more times	0 1 2 3 4
A21	Is someone in your household HIV positive?	Yes No Don't know	1 2 8

B. Relationship to Caregivers

Now please tell us about your relationship to your caregivers, whether that is your parents, other family members, or someone else			
Questions	Response Options	Codes	
B1	If I am going to be home late I am expected to tell my parent/caregiver to let them know where I am	Never Rarely Sometimes Often Very often	1 2 3 4 5
B2	My parent/caregiver knows who my friends are	Never Rarely Sometimes Often Very often	1 2 3 4 5
B3	My parent/caregiver comes to events at my school like parent meetings, prize giving, sports days, etc.	Never Rarely Sometimes Often	1 2 3 4

		Very often	5
B4	My parent/caregiver asks me what I learned in school	Never Rarely Sometimes Often Very often	1 2 3 4 5
B5	If I have a problem I can talk to my parent/caregiver	Never Rarely Sometimes Often Very often	1 2 3 4 5

C. School Attendance, Performance, and Relationships

Please tell us about your schooling			
Questions		Response Options	Codes
C1	Of the last 10 school days , how many did you miss?	None 1-2 days 3-4 days 5-6 days 7 or more days	1 2 3 4 5
C2	Last month how many days were you late to school?	None 1-2 days 3-4 days 5-6 days 7 or more days	1 2 3 4 5
C3	Which month of this school year did you miss the most days of school when school was open?	I have not missed any days of school → SKIP TO C5 January February March April May June July August September October November	0 1 2 3 4 5 6 7 8 9 10 11
C4	How many days of school did you miss in that month?	None 1-2 days 3-4 days 5-6 days 7 or more days	1 2 3 4 5
C5	What was your overall mark across all the subjects for the last term?	≤20% 20-29% 30-39% 40-49% 50-59% 60-69% 70-79% ≥80%	1 2 3 4 5 6 7 8

C6	Do you feel emotionally close to other classmates at your school? By emotionally close, we mean that you consider classmates to be your friends and like to spend time with them.	Yes No	1 2
C7	Do you feel like you belong in your school?	Yes No	1 2
C8	During the last full school year, were you happy to be at your school?	Yes No	1 2
C9	During the last full school year, did you feel that the teachers at your school treated learners fairly?	Yes No	1 2
C10	In your opinion, what is the chance that you will be promoted to the next grade?	No chance Some chance A high chance	1 2 3
C11	In your opinion, what is the chance that you will still be in school next year?	No chance Some chance A high chance	1 2 3

D. Aspirations & Expectations about the Future

How often are the following statements true?			
Questions		Response Options	Codes
D1	When I have a problem, I can come up with ways to solve it	Not at all Sometimes Mostly Always	1 2 3 4
D2	The things I have done in the past will help me in the future	Not at all Sometimes Mostly Always	1 2 3 4
D3	I believe I can find ways to solve a problem even when others want to quit	Not at all Sometimes Mostly Always	1 2 3 4
Tell us what you think about your future.			
Questions		Response Options	Codes
D4	Do you think your life will be better, about the same, or worse 1 year from now?	Better Same Worse	1 2 3
D5	Do you think your life will be better, about the same, or worse 5 years from now?	Better Same Worse	1 2 3

E. Participation and Perceptions of Life Orientation Curriculum

Please tell us about the Life Orientation (LO) Curriculum. How true are the following statements?			
Questions		Response Options	Codes
E1	The things we learn about gender roles, sexuality, and HIV in the Life Orientation	Not true A little true Mostly true	1 2 3

	class are similar to what I experience in my life	Very true	4
E2	I have learned a lot about sexuality and HIV related topics in my Life Orientation class	Not true A little true Mostly true Very true	1 2 3 4
E3	I am able to apply some of the things I have learned about gender roles, sexuality, and HIV in the Life Orientation class to my personal life	Not true A little true Mostly true Very true	1 2 3 4
E4	I talk to my parent/caregiver about the sexual and HIV related topics I learn in the Life Orientation class	Not true A little true Mostly true Very true	1 2 3 4
E5	My parents/caregiver think it is a good thing I am learning about HIV and AIDS in school	Not true A little true Mostly true Very true	1 2 3 4
E6	How would you rate your level of participation in class discussions in Life Orientation lessons?	I don't really participate I participate a little I participate a lot We don't have class discussions	1 2 3 4
E7	How often do you ask the teacher questions during your LO lessons?	I don't really ask questions I ask questions sometimes I ask questions often	1 2 3
E8	To what extent do you listen to what the teacher is teaching you in LO lessons?	I don't really listen to my teacher I listen a little to what my teacher teaches in LO I listen most of the time to what my teacher teaches in LO	1 2 3
E9	How motivated are you to learn about LO?	I am not motivated to learn LO I am a little motivated to learn about LO I am very motivated to learn about LO	1 2 3
E10	How much time and effort do you put into doing assignments or studying for LO tests?	I don't put in much time or effort I put in some time and effort I put in a lot of time and effort	1 2 3
How true are the following statements?			
E11	My LO teacher encourages the students to learn the material.	Not true A little true Mostly true Very true	1 2 3 4
E12	My LO teacher understands the material that he/she presents	Not true A little true Mostly true Very true	1 2 3 4
E13	My LO teacher wants all students to feel respected	Not true A little true Mostly true Very true	1 2 3 4

F. Knowledge of STIs/HIV

Now please tell us what you know about HIV/AIDS and other sexually transmitted infections (STIs)			
Questions		Response Options	Codes
F1	You can usually tell if someone has HIV and AIDS by the way they look	True False Don't know	1 2 8
F2	If you have a sexually transmitted infection (STI) you will definitely know because you will see/feel symptoms	True False Don't know	1 2 8
F3	Not all sexually transmitted infections are curable	True False Don't know	1 2 8
F4	Oral sex has no risk for STIs	True False Don't know	1 2 8
F5	When used correctly and consistently, condoms protect you from all STIs	True False Don't know	1 2 8
F6	If a mosquito bites you it can infect you with HIV	True False Don't know	1 2 8
F7	You can get HIV from kissing a person who is HIV positive	True False Don't know	1 2 8
F8	A woman who is pregnant can do nothing to prevent her baby from being born with HIV	True False Don't know	1 2 8
F9	In the past 6 months , where did you hear or see information on HIV and AIDS? <i>Tick all that apply</i>	Radio commercials Radio shows/programs T.V. commercials T.V. shows Cinema/Movies Cell phone messages Social media like Facebook, WhatsApp or Twitter School clubs Religious gatherings Street performances Friends Family members Library Sporting events Don't remember I did not hear or see information on HIV and AIDS in the last 6 months	A b c d e f g h i j k l m n y z
Tell us from where you most learn about sex and HIV			
F10	At your school, where do you learn the most about sex, sexuality, and HIV?	The Life Orientation educator Other educators at the school External people that visit the school (like NGOs, nurses, doctors, or social workers)	1 2 3

		The school library books or computers	4
		My friends and other learners at school	5
		Another source (specify)	6

G. Sexual Behavior

We would like to ask you some questions about your sexual activity. Try to answer as honestly as you can. None of your answers will be shared with anyone. These questions are not meant to make you feel uncomfortable. If there is a question that you really do not feel comfortable asking, you can skip that question.			
Question		Response Options	Code
G1	Do you currently have a boyfriend or girlfriend? A boyfriend or girlfriend is someone you have a romantic relationship with.	Yes No → SKIP TO G3	1 2
G2	How old is your boyfriend or girlfriend?	[Respondent enters age]	
G3	Have you ever had sexual intercourse (sex) before? By 'sex' we mean 'going all the way' or vaginal or anal penetration.	Yes No → STOP THIS SECTION. SKIP TO H1	1 2
G4	How old were you when you had sex for the first time?	[Respondent enters age]	
G5	In the past 12 months how many different people have you had sex with?	Respondent enters number IF RESPONDENT ENTERS 0, THEN SKIP TO G13	
G6	Did you or your most recent (or current) sex partner use a condom the last time you had sex? A sex partner is someone you have had sex with.	Yes No	1 2
G7	Did (Does) your most recent (or current) sex partner attend the same school as you?	Yes No	1 2
G8	The last time you had sex, did you give money, gifts, or favours (for example, cell phone, cash, or clothes?) in exchange for sex?	Yes No	1 2
G9	The last time you had sex, did you receive money, gifts, or favours (for example, cell phone, cash, or clothes?) in exchange for sex?	Yes No	1 2
G10	In the past 3 months, how many different people have you had sex with?	[Respondent enters number] IF RESPONDENT ENTERS 0, THEN SKIP TO G13	
G11	How many times have you had sex in the last 3 months?	[Respondent enters number]	

G12	Did you use a condom every time you had sex in the last 3 months?	Yes No Don't know	1 2 8
G13	In your life, have you ever given money, gifts, or favours in exchange for sex? ASKED ONLY OF RESPONDENTS WHO ANSWER NO TO G8	Yes No	1 2
G14	In your life, have you ever received money, gifts, or favours in exchange for sex? ASKED ONLY OF RESPONDENTS WHO ANSWER NO TO G9	Yes No	1 2
G15	In your life, have you ever had sex with a person who was more than 5 years older than you?	Yes No Don't know	1 2 8
G16	Have you ever done something sexual with someone else that you wish you had not done?	Yes No I'm not sure	1 2 3

H. Gender norm attitudes (from GEM scale)

We would like to ask you about your opinion about men's and women's roles. For each statement tell us if you agree a lot, somewhat agree, or do not agree at all.			
Question		Response Options	Code
H1	It is the man who decides when to have sex	Agree a lot Somewhat agree Do not agree at all	1 2 3
H2	Men are always ready to have sex	Agree a lot Somewhat agree Do not agree at all	1 2 3
H3	Women are always ready to have sex	Agree a lot Somewhat agree Do not agree at all	1 2 3
H4	Men need sex more than women do	Agree a lot Somewhat agree Do not agree at all	1 2 3
H5	A man needs other partners even if things with his wife/partner are fine	Agree a lot Somewhat agree Do not agree at all	1 2 3

H6	A woman needs other partners even if things with her husband/partner are fine	Agree a lot Somewhat agree Do not agree at all	1 2 3
H7	You don't talk about sex, you just do it	Agree a lot Somewhat agree Do not agree at all	1 2 3
H8	A woman should not initiate sex	Agree a lot Somewhat agree Do not agree at all	1 2 3
H9	A woman who has sex before she is married does not deserve respect	Agree a lot Somewhat agree Do not agree at all	1 2 3
H10	A man who has sex before he is married does not deserve respect	Agree a lot Somewhat agree Do not agree at all	1 2 3
H11	Women who carry condoms on them are loose	Agree a lot Somewhat agree Do not agree at all	1 2 3
H12	Men who carry condoms on them are loose	Agree a lot Somewhat agree Do not agree at all	1 2 3
H13	In my opinion, women can suggest using condoms just like a man can	Agree a lot Somewhat agree Do not agree at all	1 2 3
H14	A couple should decide together if they want to have children	Agree a lot Somewhat agree Do not agree at all	1 2 3
H15	It is only the woman's responsibility to avoid getting pregnant	Agree a lot Somewhat agree Do not agree at all	1 2 3
H16	If a man gets a woman pregnant the child is the responsibility of both	Agree a lot Somewhat agree Do not agree at all	1 2 3

H17	It is important that a father is present in the lives of his children, even if he is no longer with the mother	Agree a lot	1
		Somewhat agree	2
		Do not agree at all	3

I. Risk Perception

People have different perceptions about their risk of getting HIV and AIDS. What do you think the chances are that each of the following will happen to you?			
Question		Response Options	Code
I1	The chances that you will get HIV in your lifetime?	No chance Some chance A high chance	1 2 3
I2	The chances that you already have HIV	No chance Some chance A high chance	1 2 3

J. Attitudes Towards People Living with HIV and AIDS

Please tell us if you have fear or do not have fear about getting HIV, in response to the following statements:			
Question		Response Options	Code
J1	Being exposed to the spit of a person with HIV or AIDS	Have fear of this Do not have fear of this Do not know	1 2 3
J2	Being exposed to the sweat of a person with HIV or AIDS	Have fear of this Do not have fear of this Do not know	1 2 3
J3	Sharing eating utensils with a person who has HIV or AIDS	Have fear of this Do not have fear of this Do not know	1 2 3
J4	Physically caring for a person living with HIV or AIDS	Have fear of this Do not have fear of this Do not know	1 2 3

Please tell us if you agree or disagree with the following statements:			
Question		Response Options	Code
J5	HIV is a punishment from God	Agree Disagree	1 2
J6	HIV and AIDS are punishment for bad behavior	Agree Disagree	1 2

J7	It is women prostitutes who spread HIV in the community	Agree Disagree	1 2
J8	It is men prostitutes who spread HIV in the community	Agree Disagree	1 2
J9	People with HIV are promiscuous	Agree Disagree	1 2
J10	I would be ashamed if I were infected with HIV	Agree Disagree	1 2
J11	I would be ashamed if someone in my family had HIV and AIDS	Agree Disagree	1 2

K. Self-Efficacy

Now please tell us about your confidence to make choices.			
Question		Response Options	Code
K1	If your friends were having sex with their boyfriends or girlfriends, could you refuse to start having sex if you did not want to?	Yes A little bit I'm not sure No	1 2 3 4
K2	If your boyfriend or girlfriend was pressuring you to have sex and you did not want to, could you refuse to have sex with him or her?	Yes A little bit I'm not sure No	1 2 3 4
K3	If your boyfriend or girlfriend was asking you to have sex, would you be able to talk about condoms with him or her?	Yes A little bit I'm not sure No	1 2 3 4
K4	Do you feel confident you could refuse to have sex even if someone offered you a meal, gifts, money or favour in exchange for sex?	Yes A little bit I'm not sure No	1 2 3 4
How confident are you that you would be able to go to the clinic or hospital if you needed to for the following reasons?			
K5	To get information about sex-related issues (e.g. STIs, HIV, pregnancy, contraception)	Not at all confident Somewhat confident Confident Very Confident	1 2 3 4
K6	To get condoms	Not at all confident Somewhat confident Confident Very Confident	1 2 3 4
K7	To have an HIV test	Not at all confident Somewhat confident Confident	1 2 3

		Very Confident	4
K8	To get medical treatment for an STI or HIV if needed	Not at all confident Somewhat confident Confident Very Confident	1 2 3 4
Please tell us more about your ability to get health services			
K9	If you wanted to get tested for HIV, would you know where to go?	Yes No	1 2
Below are some statements about sex and condoms. For each statement please tell us if you agree a lot, somewhat agree, or do not agree at all with the statements			Code
K10	I can ask a new partner to use condoms	Agree a lot Somewhat agree Do not agree at all	1 2 3
K11	I can ask a partner to use a condom even if we have had sex before without a condom	Agree a lot Somewhat agree Do not agree at all	1 2 3
K12	I can refuse sex when I don't have a condom available	Agree a lot Somewhat agree Do not agree at all	1 2 3
K13	I can find condoms if I want to use them	Agree a lot Somewhat agree Do not agree at all	1 2 3

L. HIV Testing and Counseling and Other Health Services

Question	Response Options	Code	
L1	In the last 12 months, have you been to the clinic or hospital to get information about sex related issues (such as pregnancy or HIV) or to get condoms or other contraceptives?	Yes No	1 2
L2	We do not want to know the result, but have you ever tested for HIV?	Yes No→ SKIP TO L10	1 2
L3	When was the last time you were tested?	[Respondent enter month and year]	mm/yy
L4	The last time you were tested, where was the test done?	Government hospital Government health center Stand-alone VCT center Family planning clinic Government mobile clinic Community health worker/Ward-based outreach worker Other public medical site Private hospital Private clinic Private stand-alone health center Pharmacy NGO mobile clinic Other private medical site Home Other (specify)	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

L5	The last time you were tested, did anyone accompany you to get tested?	Yes No → SKIP TO L7	1 2
L6	Who accompanied you to get tested? <i>Tick all that apply</i>	Your boyfriend or girlfriend Other sexual partner(s) Mother Father Brother Sister Other relative Friend Classmate Educator Religious leader Community leader Your doctor, nurse, or other health care worker Teacher Peer educator Other (specify)	a b c d e f g h i j k l m n o x
L7	The last time you were tested, did you get the results of the test?	Yes No→SKIP TO L10	1 2
L8	The last time you got the results of the HIV test did you share the results with anyone?	Yes No→SKIP TO L10	1 2
L9	Who did you share your results with? <i>Tick all that apply</i>	Your boyfriend or girlfriend Other sexual partner(s) Mother Father Brother Sister Other relative Friend Classmate Educator Religious leader Community leader Your doctor, nurse, or other health care worker Teacher Peer educator Other (specify)	A b c d e f g h i j k l m n o x
L10	Have you ever been referred for counseling or testing for STIs or HIV?	Yes No→SKIP TO L13	1 2
L11	Did you go to the facility/place you were referred to?	Yes→SKIP TO L13 No	1 2
L12	Why did you not go for the referral? <i>Tick all that apply</i>	Referral was too far Referral was too expensive I was worried about confidentiality	A b c
ASKED ONLY OF RESPONDENT WHO ANSWER YES TO L1, L2 OR L11. We would like to ask you some additional questions about your experience with getting health service.			
L13	The last time you went to a clinic, hospital or health facility for sexual health-related information or services did you feel respected by the healthcare staff?	Yes No	1 2

L14	The last time you went to a clinic, hospital or health facility for sexual health-related information or services did you feel comfortable asking for the information or services you needed?	Yes	1
		No	2

M. Pregnancy (Girls Only)

Now we would like to ask you about pregnancy. Your answers will not be shared with anyone. These questions are not meant to make you feel uncomfortable. If there is a question that you really do not feel comfortable answering, you can skip that question.			
Question		Response Options	Code
M1	When a woman reaches a certain age, she starts her monthly period (menstruation). Have you started your monthly period?	Yes No→SKIP TO M3	1 2
M2	When was the first day of your last period?	[Respondent enters date]	dd/mm/yy
M3	How important is it for you to avoid pregnancy now?	Not important Somewhat important Very important	1 2 3
M4	What do you think are the chances that you will fall pregnant before you finish school?	No chance Some chance A high chance	1 2 3
QUESTIONS M5 - M17 ASKED ONLY OF FEMALE RESPONDENTS WHO ANSWER YES TO G3			
M5	Are you currently pregnant?	Yes No→SKIP TO M8 Don't know→SKIP TO M8	1 2 8
M6	How many weeks pregnant are you?	[Respondent enters number]	
M7	Have you had any antenatal visits?	Yes No	1 2
M8	Have you ever been pregnant?	Yes No→SKIP TO M15	1 2
M9	What was your age at first pregnancy?	[Respondent enters age]	
M10	Was your first pregnancy wanted at the time, wanted later, or not wanted at all?	Wanted at the time Wanted later Not wanted at all	1 2 3
M11	What was the outcome of your first pregnancy?	Live birth Miscarriage Abortion	1 2 3
M12	How many times have you been pregnant? In addition to babies carried to term, this may include miscarriage, babies that were stillborn, or pregnancies that were terminated	[Respondent enters number]	
M13	How many living children do you have, that you have given birth to?	[Respondent enters number]	
M14	How many children that you have given birth to live with you?	[Respondent enters number]	
M15	Did you use birth control the last time you had sex?	Yes No →SKIP TO M17	1 2
M16	What birth control method(s) did you use the last time you had sex? <i>Tick all that apply</i>	Birth control pills Injectable: Depo-Provera (3 monthly injection)	a b

		Injectable: NET-EN (known as Nuristerate, 2 monthly injections) Male condoms Female condoms Mirena/IUD Implant/Implanon Patch Cycle beads/Standard days method Emergency contraception Rhythm method/observation of menstrual cycle Traditional methods Withdrawal Other (specify)	c d e f g h i j k l m x
M17	Why did you not use birth control the last time you had sex? <i>Tick all that apply</i>	I am not in a sexual relationship It is too expensive I do not know where to get it I am too embarrassed to ask for it I do not know about or understand birth control I did not think about it I am worried about the side effects Healthcare worker refused to give me birth control I am opposed to birth control My partner is opposed to birth control Other reason(s) (specify)	a b c d e f g h i j x

N. Pregnancy (Boys Only)

Now we would like to ask you about pregnancy. Your answers will not be shared with anyone. These questions are not meant to make you feel uncomfortable. If there is a question that you really do not feel comfortable answering, you can skip that question.			
Question	Response Options	Code	
N1	How important is it for you to avoid getting a partner pregnant now?	Not important Somewhat important Very important	1 2 3
N2	What do you think are the chances that you will get a partner pregnant before you finish school?	No chance Some chance A high chance	1 2 3
QUESTIONS N3 – N9 ASKED ONLY OF MALE RESPONDENTS WHO ANSWER YES TO G3			
N3	Have you ever gotten a partner pregnant?	Yes No→SKIP TO N7 Don't know→SKIP TO N7	1 2 98
N4	How many times have you gotten a partner pregnant? In addition to babies carried to term, this may include miscarriage, babies that were stillborn, or pregnancies that were terminated	[Respondent enters number]	
N5	How many living children do you have, for whom you are the biological father?	[Respondent enters number]	

N6	How many children live with you, for whom you are the biological father?	[Respondent enters number]	
N7	Did you or your partner use birth control the last time you had sex?	Yes No →SKIP TO N9	1 2
N8	What birth control method(s) did you or your partner use the last time you had sex? <i>Tick all that apply</i>	Birth control pills Injectable: Depo-Provera (3 monthly injection) Injectable: NET-EN (known as Nuristerate, 2 monthly injections) Male condoms Female condoms Mirena/IUD Implant/Implanon Patch Cycle beads/Standard days method Emergency contraception Rhythm method/observation of menstrual cycle Traditional methods Withdrawal Other (specify)	a b c d e f g h i j k l m x
N9	Why did you or your partner not use birth control the last time you had sex? <i>Tick all that apply</i>	I am not in a sexual relationship It is too expensive I do not know where to get it My partner did not know where to get it I am too embarrassed to ask for it My partner is too embarrassed to ask for it I do not know about or understand birth control My partner does not know about or understand birth control I did not think about it I am worried about the side effects My partner is worried about the side effects Healthcare worker refused to give me birth control Healthcare worker refused to give my partner birth control I am opposed to birth control My partner is opposed to birth control Other reason(s) (specify)	a b c d e f g h i j k l m n o x

END OF SURVEY

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