

Preliminary evaluation of an intervention to address the gendered social and economic precursors of youth HIV risks in KwaZulu-Natal, South Africa

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Abstract

South Africa is a complex environment socially, politically, economically, and culturally. Illness, stigma, and death from HIV and AIDS, high rates of disenfranchisement and unemployment, growing poverty coupled with extreme income inequality, and traditional tribal leadership structures make it a challenging place in which to transition from childhood to adulthood. Various programs and policies in South Africa nominally address young people, but many fail to acknowledge the internal diversity of “youth,” or to tackle core livelihood and social support issues that underlie vulnerability to HIV. This paper provides an evaluation of one program designed to reach young women and men with a comprehensive package of skills that were not only HIV-related but also designed to address gendered social and economic factors. Preliminary quantitative and qualitative analysis indicates that the program was successful in building knowledge, skills, and promoting a number of the targeted asset-building and health-enhancing behaviors among young intervention participants.

Description of topic¹

South Africa is a complex setting socially, politically, economically, and culturally. Illness, stigma, and death from HIV and AIDS, high rates of disenfranchisement and unemployment, growing levels of poverty coupled with extreme income inequality, and traditional tribal leadership structures make this country a challenging environment in which to make the transition from childhood to adulthood. The links between HIV risk and economic and social conditions have been well-established in varying contexts (Mathur, et al., 2001). These difficulties are reflected in the situation of young South Africans today. The country has fewer than one percent of the world’s 15-24 year olds, yet these young people account for approximately fourteen percent of all HIV infections among this age group worldwide (UNICEF-UNAIDS-WHO, 2002).

HIV

South African young women are at particular risk—among 15-24 year olds, four times as many females as males are living with HIV (16.9 percent versus 4.4 percent) and that difference is on the rise; the HIV incidence ratio among this group is eight to one, female to male (Shisana et al., 2005). Prevalence is highest in the country’s most populous province, KwaZulu-Natal, and among residents of informal urban settlements. Orphanhood rates are also greatest in these

¹ This section draws on Hallman 2004 and Hallman 2005.

settings (Pettifor et al, 2004), leaving affected young people with weaker family support. Prevalence rates for 15-24 year olds in KwaZulu-Natal (KZN) are highest among African (black) females residing in poor locales: approximately one in five poor young African females in the province is living with HIV (Sishana et al., 2005). Though HIV/AIDS is not exclusively a disease of poverty or of women, in African countries (such as South Africa) with high income inequality and high HIV prevalence new HIV infections disproportionately affect young poor females (UNAIDS, 2004).

The double disadvantages conferred by poverty and gender inequality increase the HIV risks that poor females face via mechanisms that are often outside of their ability to change. Young women's higher relative risk of HIV infection in developing countries is due to a number of factors: higher physiological susceptibility of infection of females during heterosexual intercourse (Nicolosi et al. 1994; Stanton 2002; UNAIDS 2004); sexual violence against females, including the fact that 15 to 30 of first female sexual experiences are nonconsensual (Varga 1997; Wood et al. 1998; Human Rights Watch 2001; Jejeebhoy and Bott 2003); a high value placed on female virginity at marriage, with girls attempting to preserve the image of their virginity by engaging in unsafe sexual and reproductive health practices such as anal sex and avoiding reproductive health services (Gupta 2000; Health Systems Trust 2001); norms of appropriate sexual behavior that lead young men to downplay the threat of HIV/AIDS and engage in sexual conquests that weaken the ability of young women to negotiate safe sex (Baylies 2000; UNAIDS/Panos 2001; Varga 1997); age, education, and economic differences resulting in power imbalances between sexual partners (MacPhail et al. 2002; Gregson et al. 2002; Luke and Kurz 2002; Quisumbing and Hallman, 2005); social norms that encourage young women in longer-term relationships to 'prove' their fertility, which may increase the frequency of unprotected sexual encounters (Rutenberg et al. 2003); and female economic dependence upon males (e.g., Gregson et al. 2002; UNAIDS 2004). Given the structural nature of many of these issues, it becomes clear that HIV information and services alone are not enough to mitigate the risks young women face.

In addition to these underlying factors that result in greater susceptibility to HIV, many young people in developing countries, especially females, also lack accurate information about HIV transmission. In 17 countries surveyed by UNICEF (2001), over half of adolescents were unable to name a single method of protecting themselves against HIV. In all instances, girls knew less than boys. Moreover, in many countries where HIV prevalence is high, a surprising number of young people who have gained some knowledge of the virus—and who are sexually active—think they face little or no risk of becoming infected (UNAIDS 2003).

Social change and economic trends as contributing factors

Other social and economic trends deemed to contribute to HIV risk for young people in sub-Saharan Africa include the rising age at marriage occurring without an equal accompanying

delay in age at sexual debut, which lengthens the period of premarital sex when multiple sexual partners are more likely (Mensch et al. 2005), as well as the “globalization” of youth culture, alongside worsening economic conditions. Shifting cultural values, poor economic prospects, and high prevalence of HIV/AIDS coupled with low expectations of tangible changes in the near future may create social disillusionment and encourage some young people, particularly those who are already socially or economically marginalized, to engage in unsafe sexual and health practices (Collins and Rau 2000). Although Ray (2003) asserts that failure of economic aspirations and poverty may be inextricably linked, the associations between aspirations, failures and HIV risk behaviors among young people in settings like South Africa, where economic inequality and HIV prevalence are both high, have not been explored to any extent. Many young people residing in impoverished communities lack access to skills building programs, jobs, savings mechanisms, or even basic recreational opportunities (Emmett et al. 2004). These young people, especially females, are at high risk for early (often forced) sexual initiation, coerced sex, and exchanges of sex for money or gifts—acts that are usually not protected by condoms (UNAIDS 2004; Campbell 2003).

A national study in South Africa of the situation of young people aged 18 to 35 years (Richter et al., 2005) highlights the fact that the rising age at marriage, early and unwanted pregnancies, crime and violence, and financial and residential dependence on parents are major contributors to youth marginalization and social exclusion. Nationally, 66 percent of respondents had never participated in a sports team, 75 percent had never been involved with a community society or club, and 80 percent had never been a member of a community organization. Religious services were the only social activity in which youth were actively engaged, with about half regularly attending.

Limited economic prospects and access to financial information or services

The report also found that socially disadvantaged youth do not receive, in school or elsewhere, the information required to access job training opportunities. Only 12.9 percent of 18-24 year-olds had received any training; and racial disparities were high and in favor of already privileged groups: 31.4 of Whites, 20.9 percent of Coloreds, and 10.2 percent of Africans had received training. In many areas, including KwaZulu-Natal, training programs exist, but the most at-risk youth lack the skills, information, and social connections to access them. Although educational attainment is high in South Africa relative to the rest of the continent, levels of learning are quite low. Among ten SSA countries that participated in the Monitoring Learning Achievement, a test of numeracy and literacy of 4th graders, South Africa had by far the lowest numeracy scores and ranked fifth on literacy (Richter et al., 2005). Other studies have supported this finding (IEA 2003). KwaZulu-Natal has the highest rate of teachers lost to AIDS and shortages physical classroom space per student in the country, resulting in large class sizes which may in turn affect learning (Badcock-Walters et al. 2003).

Unemployment among young people is very high: fewer than one-third of all respondents had ever worked for pay. Africans, Coloreds, and females (in all race groups) frequently lacked the personal contacts and social networks to avail themselves of existing training and employment opportunities.

Similarly, even basic financial services do not reach the young, the poor, the unemployed, and rural dwellers, and the limited financial education that is available in South Africa is mainly supply-driven and focused on traditionally-served wealthy clients (ECIAfrica, 2004). What's more, most financial education in South Africa fails to recognize the financial causes and consequences of HIV/AIDS (ECIAfrica, 2004). In addition, although there is a wide range of social grants available – for example, disability grants for people with HIV/AIDS, child support grants for impoverished children, and school fee waivers – uptake of some of these is low. Those less likely to apply for and ultimately receive these benefits are those that need them most, i.e., low uptake and receipt are correlated with lack of knowledge and low social and human capital (Giese et al., 2003; Case et al., 2003; Booysen, 2003; among others).

Programs to build the capacity of young people with regard to budgeting, saving, finances and planning for the future are sorely lacking. That formal financial services do not reach large sections of the population has helped fuel the view that instruction in finance and budgeting is beyond the grasp of the most disadvantaged (ECLAfrica, 2004). This unfortunate stereotype impedes young people's ability to become fully functioning members of their families and society. Informal financial strategies exist and are used, but carry high risks for the individual (e.g., robbery and/or pressure from family and friends) and for the community through loss of group funds due to the large number of funerals families are asked to contribute to and covariate risks such as food shortages (FinMark 2006). It is more typical that the poor find safe places to store money for short periods of time, but not actually develop savings strategies that are safe and effective to protect them against the many potential economic risks and shocks they face (ibid).

Exploring the link between socioeconomic status and HIV

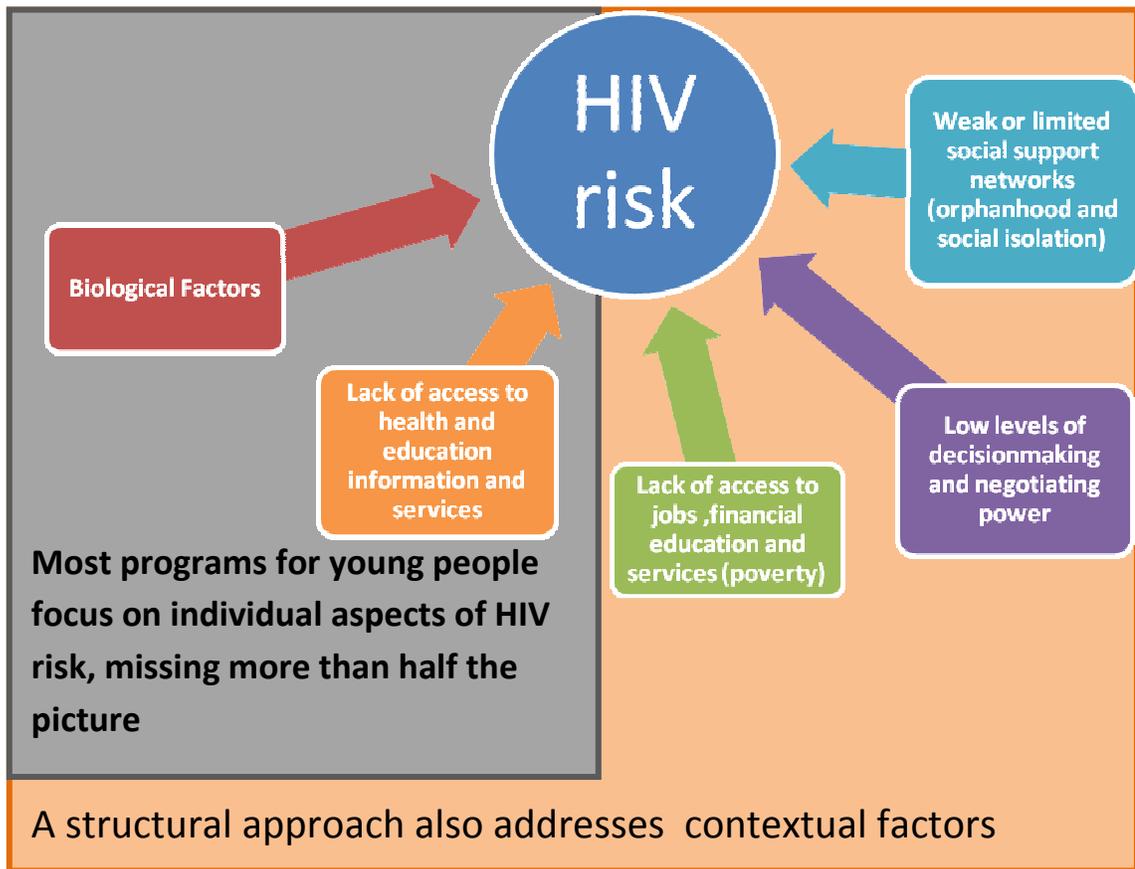
The ways in which social and economic disadvantage drives the HIV epidemic are often obscured. As aptly expressed by Simmons et al. (1996), “the term ‘risk behavior,’ unless carefully contextualized, exaggerates individual agency and leaves unacknowledged and unexplained the ways in which large-scale social and economic factors structure risk for individuals and groups, particularly those who are systematically marginalized from power and from access to the goods, services, and opportunities which power ensures.” Those at the periphery of such power structures are often the young, females, and the relatively poor. Relative disadvantage can manifest itself in a number of ways, including lack of access to jobs, property, health and education opportunities, and decisionmaking power more broadly. Describing the situation in South Africa, Von Donk (2002) states: “At the national and local level, the uneven distribution of HIV/AIDS is closely associated with social divisions based on

factors such as age, class, gender, race, and ethnicity.” Collectively, these factors create ‘interlocking structures of inequality’ (Baylies 2000), which enhance vulnerability to HIV infection and the impacts of AIDS.”

Recent population-based studies of young people within KZN find that being female, poor, African, or orphaned contribute substantially to the risk of a number of unsafe sexual behaviors (Hallman, 2004, 2008a; Thurman et al. 2006; Operario et al. 2007) and teenage pregnancy (Grant and Hallman, 2008). Teen childbearing is high—Grant and Hallman found that one-third of 18-19-year-old females in this metro area had already given birth; three quarters of those births were reported as unwanted and the vast majority of those young women had neither completed secondary school nor returned to school after the birth of their child. These schooling disruptions have negative impacts on poor girls’ future prospects for labor force participation, productivity and accumulation of savings and other assets. Moreover, with recent South Africa Department Of Education recommendations that make it more difficult for pregnant girls to remain in school (SA DOE 2007), the potential negative repercussions of an adolescent pregnancy could become even greater.

Understanding how factors such as one’s age, gender, and socioeconomic status confer vulnerability to unsafe sexual behaviors among young people is important for designing appropriate and effective health, social, and economic development policies and programs. The issue is markedly pertinent in South Africa because of its high HIV prevalence rate that exists in conjunction with high levels of poverty and inequality. Over a decade after apartheid, economic deprivation continues to dominate policy discussions in South Africa. Although ranked as an upper middle-income country (WDR 2008), South Africa has the tenth most unequal income distribution in the world (UNDP 2008). Adato et al. (2006) report growing numbers of people living in poverty and increasing inequality since the end of apartheid, due largely to drops in the real incomes of formerly near-poor African households. These rising inequalities diminish the already low social confidence felt by many young people at the bottom end of the socioeconomic spectrum. Absolute poverty limits the resources and opportunities available to young people (Wilkinson, 1996). Relative poverty, on the other hand, has the potential to impede functional abilities and confidence within any given setting (Parker et al., 2003). Psychosocial distress experienced by those who are poorer can reduce the personal efficacy and exercise of claims to available economic, social and health rights and opportunities (Patel 1998).

Figure 1. Determinants of HIV risk among young people in South Africa



Existing programs for young people

Despite these statistics, many HIV/AIDS prevention programs aimed at South African youth focus on a narrow set of topics—often limited to biology and moral values—without addressing the social and economic milieu in which risky sexual behaviors take place. Even if all youth had basic information about HIV prevention (and obviously many do not), the type of information provided by many youth HIV prevention programs in South Africa is not sufficient for youth residing in impoverished communities who lack access to skills building programs, savings mechanisms, basic recreational opportunities, and employment. Some components of existing HIV information programs may also be less than useful. Emphasizing the delaying of sex until marriage may not prove salient in an environment where one-quarter to one-half of all female first sexual encounters are reported as unwilling (Pettifor et al. 2003; Hallman 2004), one-third of all girls give birth before the age of 19 years (SA DOH 1999), and mean age at first marriage for females and males is 28 and 30 years, respectively (UN 2000). Many programs fail to acknowledge the diversity of “youth” —there is generally a lack of recognition among most

existing program models that HIV risk may actually differ by age, gender, poverty, social connectedness, and orphanhood status. The most vulnerable groups are seldom reached, and those smaller interventions that appear to reach disadvantaged groups are often not evaluated (NRC/IOM 2005).

In fact, few programs large or small that purport to reach young people in South Africa have been evaluated. A recent survey of school-based HIV prevention programs for young people in South Africa found only twelve programs that had been evaluated at all, and almost none of these evaluations were done using rigorous pre-and post-intervention research designs (Mukoma and Flisher 2008). This paper provides an evaluation of one program that aimed to reach young women and men with a comprehensive package of skills that were not only HIV-related but were also designed to address gendered social and economic factors.

Designing an intervention—formative research

In 1999, the Population Council, in collaboration with the University of KwaZulu-Natal, Development Research Africa, and Tulane University, began a four-year longitudinal study of young people aged 14–24 in KwaZulu-Natal. Researchers examined a range of issues, including the relationships among poverty, orphanhood, social isolation, and risky sexual behaviors. Findings indicate that these factors are associated with higher chances of risky sexual behavior and nonconsensual sex, particularly among girls. Moreover, these vulnerabilities often go hand-in-hand. Residing in a poor household significantly increased females' chances of engaging in transactional and nonconsensual sex and of having multiple sexual partners. Compared to their more affluent peers, girls from poor households reported a lower age of sexual debut and a reduced rate of condom use during sex. Poor girls also faced an increased pregnancy risk. Both males and females from poor households were less apt to discuss safe sex practices with recent sexual partners (Hallman 2005). Orphanhood was associated with earlier sexual debut and reduced communication about HIV among girls and boys, and having older sexual partners among girls (Hallman 2004; Hallman 2008a). Social isolation was associated with girls' risk of experiencing sexual coercion; girls were much less socially connected than boys, and even the wealthiest girls had fewer friends than the poorest boys (Hallman and Onabanjo, 2005; Hallman 2008b).

The common thread tying together personal health risks (specifically HIV and reproductive health) and economic disadvantage is the need to increase personal knowledge and skills and build social networks. Because young people's lives are multidimensional, bundling topics of interest and benefit to them, and which have shared underlying skills-building aspects, sets the stage for an intervention that is both efficient to deliver and that is well-received by youth. Work previously done by the authors in KwaZulu-Natal gives a strong indication that it is possible to develop such educational materials and deliver them to at-risk youth.

To assess the situation in our study site of metro Durban, KwaZulu-Natal South Africa, an inventory of programs was conducted. We searched for programs that had a focus on one of five themes relevant to our findings: youth, gender, economic empowerment, safe spaces, or HIV/AIDS. Inventories our team undertook of existing school- (Magnani et al., 2005) and non-school-based (Swan and Hallman, 2003) programs for youth in the Durban metro found that there were a large number of programs operating in the area, but that most were rather uni-dimensional in their approach. Many programs did not reach the most vulnerable young people; few considered the differing needs of girls versus boys or younger versus older children; and the majority had weak or nonexistent monitoring and evaluation components. Virtually none had economic skills building components, and the few that did focused on producing handicraft items that local markets were already flooded with.

Social change and economic trends as contributing factors

This lack of attention in programming to the needs of vulnerable subgroups of youth spurred researchers to develop a multidimensional, evidence-based pilot program designed to provide locally relevant strategies to enhance the social capital, financial skills, HIV/AIDS and reproductive health knowledge and future life options of young people residing in poor, HIV-affected communities in South Africa. Recognizing the importance of addressing the underlying social and economic context of sexual risk, this program took a structural intervention approach, in that it attempted to address the contextual factors that lead to poor health rather than solely considering individual attributes (Blankenship et al., 2006). Typically, interventions are directed toward individuals and strive to impart information to reduce risk-taking. The assumption is that individuals have control over their choices and only need information on which to act. Structural approaches conversely start with the idea that behaviors are shaped by the political, economic, social, and physical environment an individual is a part of. These interventions, which make efforts to change the underlying social determinants of health by focusing on contextual factors rather than just on individual capabilities, have the potential to result in longer-lasting and broader impacts than interventions that deliver information to individuals alone (Blankenship et al., 2006). The intervention is guided by the Sen capabilities approach (Sen, 1999), the sustainable livelihoods framework (Chambers and Conway, 1992; DFID, 1999), and social-cognitive theory (Bandura, 1986). It draws upon successful youth financial education programs in the US (Greenspan, 2002) and developing countries (Financial Education for the Poor, 2006), social capital building initiatives for young people in developing countries (Harpham et al., 2004; Erulkar and Chong, 2005), and adolescent HIV-prevention programs in sub-Saharan Africa (AED 2005; CDC 2005; Gallant 2004).

The Population Council collaborated with several South African institutions: Isithunzi Development in eThekweni (i.e., Durban), the Pinetown Highway Child and Family Welfare Society in eThekweni, Empowerment for Success Training in Cape Town, and Development

Research Africa. The intervention was carried out from July to November 2005 and March to October 2006.

The program mainly reached the following types of people:

- Young people from poor, peri-urban AIDS-affect communities on the periphery of the Durban area aged 16-24 years (at baseline) who were no longer attending school. These participants met weekly in groups of 10-12 under the guidance of a young adult facilitator/mentor in various community locations such as community halls, schools after school hours, and crèches.
- Young people aged 14-22 years at baseline enrolled in grades 8-11 in local secondary schools who met weekly in groups on school grounds on Saturdays.

The three main components of the intervention were:

- **Safe spaces and social networks that recognize age and gender-specific needs.**

Small groups of young people met regularly with young adult mentors. In addition to giving young people an identity beyond home and school, such networks are considered critical to HIV prevention because they reduce social isolation, build positive social relationships, and encourage healthy and productive behaviors among young people.

- **Financial management and economic literacy.** This component included training in numeracy and interpretation of data, budgeting, establishing individual and group savings accounts, accessing social benefits available to self and family, and identifying safe and appropriate local income-generating opportunities. Basic principles of numeracy and money management were designed to respond to the needs of the population and the issues they face. For example, learning how to build and safeguard assets is particularly important for orphans. The curriculum also included modules on how to access available opportunities for services like social benefits and job training. Additionally, participants learned how to prepare for predictable events such as paying school fees, and to deal with special challenges like pregnancy or the death of a parent. Since policies provide an overall context for action, these interventions cannot take place without a supportive policy environment.

- **Awareness about HIV/AIDS.** Sessions focused on HIV/AIDS and STIs, with the goal of dispelling myths, providing accurate information about how infection is transmitted, teaching skills for avoiding infection, how those already infected can access treatment, and coping with AIDS within the family and community. The knowledge and skills

elements of the intervention were conveyed through a curriculum specially designed for this context, age, and socio-cultural group.

Specific modules of the curriculum were:

- (1) Making Life and Work Choices;
- (2) Collecting, Recording, and Interpreting Data;
- (3) Personal and Household Financial Management;
- (4) Personal Income Tax and Payslip Education;
- (5) Sexuality, Sexually Transmitted Infections, and HIV/AIDS Education;
- (6) Awareness of Household and Business Activities.

The curriculum developed for the program is has been accredited by the South African Qualifications Authority (the national government body that accredits education and training curricula).

Data and research methods

This study used a quasi-experimental evaluation design and employed both quantitative and qualitative methods. For the evaluation, participants were statistically matched ex-post with similar young people from a neighboring community who were also measured at baseline and endline. 238 out-of-school young men and women were interviewed at baseline in June 2005 and again 20 months post-baseline, with both interviews taking place in their homes (184 respondents were lost to follow-up). All data was collected using face-to-face interviews in either Zulu or English, as chosen by respondent, and conducted by same-sex interviewers. Informed consent was obtained for all respondents and parental consent was also obtained for respondents who were under age 18. An effort was made to reduce social desirability bias by conducting interviews in a private place in the respondent's home, out of earshot of others in the home, though differences between interviewers in terms of style or characteristics is still a possible source of bias (Mensch et al, 2003). The survey included questions in categories including education, employment and work seeking, time use, life skills, financial literacy and behaviors, perceptions of social connectedness and safety, decisionmaking, knowledge of and access to social grants, self esteem, gender attitudes, goals and expectations for the future, knowledge, risk perception, stigma and behaviors related to sex, HIV/AIDS and STIs, childbearing, and marriage.

We also conducted focus groups with participants in the intervention arm of the study, as well as with their parents, grandparents, and guardians, and with young adult program mentors to assess acceptability and comprehension of the intervention components, feasibility of where and when the intervention was delivered, and beliefs regarding the efficacy of the intervention at meeting participants' needs. The original target population was the out-of-school group, which met for five hours each week. After non-school going participants were recruited and the

baseline was completed, several in-school groups formed organically due to the high interest among siblings and friends of out-of-school participants. These groups met on Saturdays at their school and their involvement was very consistent. The experience of these participants was assessed only qualitatively.

Sample description

Table 1 describes the study and control populations. Although the program was open to both males and females, there were more females than males in both the study and the control populations. Out-of-school males in this age group were more likely to reside in the community part-time, and among those still in the community some had jobs, which limited their ability to participate since the intervention took place during the week during daylight hours. Additionally, our implementation partners in the community reported that those who got jobs during the program dropped out early and were much less likely to have been able to be interviewed at endline.

Ages were comparable across the female study and control populations, but there was a statistically significant difference between control group and intervention males (the control group was older). Among young men at baseline, those in the control group were more likely to be either the child or grandchild of the head of household than those in the participant group, though the opposite pattern is found among the female population. Rates of orphanhood--in this case defined as having a deceased mother, father or both--are not significantly different across groups. . Though the respondents were mostly not currently attending any type of school², all but a handful had attended school at some point, with the mean highest grade passed falling between tenth and eleventh grade. Respondents reported low levels of participation in any groups and moderate levels of social connectedness. Consistent with the high rates of unemployment found in South Africa, many respondents had never worked for pay in either the participant or the control group, and fewer females than males had worked for pay in the last 12 months. By endline, both participant males and participant females report higher rates of working for pay than either control group (significantly different for females). Respondents are almost exclusively unmarried, and the majority have had sex. Females reported that their primary sexual partner was on average approximately 2-3 years older than them, while males' partners were about 2-3 years younger. Most females reported having only 1 partner in the last 12 months, and males had an average of 2-3 partners. At the endline survey, over 70% of females in both the control and participant groups had ever been pregnant. The average age of sexual debut was uniformly younger for females than for males.

² This was an out-of-school group, but respondents could be attending university or technikon, Technikons, which are being renamed "Universities of Technology", provide career and technology education and research in cooperation with the private and public sectors in South Africa.

Table 1. Description of the sample

Variable	Young Men % (range)				Young Women % (range)			
	Participant		Control		Participant		Control	
	Baseline (n=38)	Endline (n=37)	Baseline (n=47)	Endline (n=50)	Baseline (n=59)	Endline (n=61)	Baseline (n=68)	Endline (n=67)
Mean age, in years (range)	20.79 (18-24)	23.00 (20-27)	22.06 (18-25)	24.02 (19-27)	21.22 (15-25)	23.03 (18-27)	21.46 (17-25)	23.00 (17-27)
Son or daughter of head of household	71.05	72.97	80.85	88.00	89.83	78.69	75.00	82.09
Grandchild of head of household	5.26	2.70	14.89	8.00	6.78	4.92	13.24	10.45
Currently in school (or university or technikon)	11.11	2.70	6.38	4.08	11.86	13.11	2.94	9.38
Mean highest grade passed (range)	10.70 (5-12)	11.16 (5-12)	10.49 (6-12)	10.70 (6-12)	10.97 (7-12)	11.03 (6-12)	10.28 (6-12)	10.34 (5-12)
Ever attended school	97.37	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Participation in groups: mean number of groups belong to (range)	1.39 (0-3)	0.78 (0-2)	1.28 (0-4)	0.57 (0-3)	1.22 (0-7)	1.08 (0-4)	0.75 (0-2)	1.01 (0-3)
Mean social connectedness score ³	5.16	5.75	5.04	5.73	4.75	5.37	5.19	5.03
Worked for \$ in last 12 months	47.37	67.57	48.94	56.00	20.34	42.62	31.91	25.37
Unmarried	97.37	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Orphan status (lost either mother or father)	65.79	67.57	53.19	56.00	61.02	54.10	57.35	58.21
Ever had sex	92.11	89.19	89.36	93.88	83.05	88.52	86.76	92.19
Ever pregnant	-----	-----	-----	-----	54.24	67.21	73.53	71.64
Average age of sexual debut (range)	16.40 (10-22)	16.39 (10-21)	16.98 (14-23)	18.04 (14-25)	18.59 (13-23)	18.65 (13-23)	18.15 (13-24)	18.52 (13-24)
Mean number of sexual partners in last 12 months (range)	2.20 (1-6)	2.94 (1-20)	2.07 (1-8)	1.65 (1-6)	1.06 (1-2)	1.00 (1-1)	1.02 (1-1)	1.00 (1-1)
Mean sexual partner age difference: primary partner-respondent (range)	-2.77 (-6,6)	-2.53 (-9,4)	-2.87 (-8,1)	-2.38 (-9,2)	3.30 (-6, 14)	2.65 (-5,10)	3.48 (-1,10)	3.22 (-3,9)

*Bold values indicate a statistically significant difference between the participant and control groups at a 0.05 level.

³ The social connectedness score is a scale from 0-7, with 7 being the highest. The components of this scale include questions on: Having friends; Having a feeling of safety in the community; Presence of social networks among neighborhood families; Freedom from fear of crime and violence; Trust among community members.

Exposure to the intervention

Among participants, the average number of sessions attended was 8.89 for males (range: 2-30) and 8.84 for females (range: 1-19). Recall of discussing key concepts was statistically higher among participants across all categories post-intervention, and non-participants reported low levels of discussions about these topics. Even HIV/AIDS, a topic that might be assumed to be a common topic of conversation in South Africa, was infrequently discussed among the control group relative to the participant group. Table 2 shows data for recall of discussing each topic in the preceding year. Both young women and young men who participated in the project showed dramatic increases in recall of discussing key topics addressed in the intervention, such as sexuality, self-esteem, violence and sexual abuse, and financial decisionmaking, while control group respondents had only small increases in recall of discussing a few topics (self-esteem and financial decisionmaking for both males and females) but decreases or no change in other areas.

Table 2. Recall discussing key topics in last 12 months

Topic	Young Men %				Young Women %			
	Participant		Control		Participant		Control	
	Baseline (n=38)	Endline (n=37)	Baseline (n=47)	Endline (n=49)	Baseline (n=59)	Endline (n=61)	Baseline (n=68)	Endline (n=64)
Sexuality	31.58	51.35	21.28	18.37	49.15	67.21	20.59	23.44
Self-esteem	10.53	54.05	8.51	24.49	38.98	68.85	4.41	23.44
Relationships & negotiation	23.68	51.35	12.77	18.37	37.29	62.30	17.65	21.88
Contraception	18.42	51.35	14.89	18.37	54.24	60.66	32.35	26.56
Violence/ sexual abuse	23.68	54.05	17.02	20.41	47.46	63.93	26.47	23.44
HIV/AIDS & Condom use	31.58	59.46	31.91	20.41	64.41	75.41	32.35	26.56
Financial decisionmaking	13.16	59.46	4.26	22.45	27.12	72.13	5.88	20.31

*Bold values indicate a statistically significant difference between the participant and control groups at a 0.05 level.

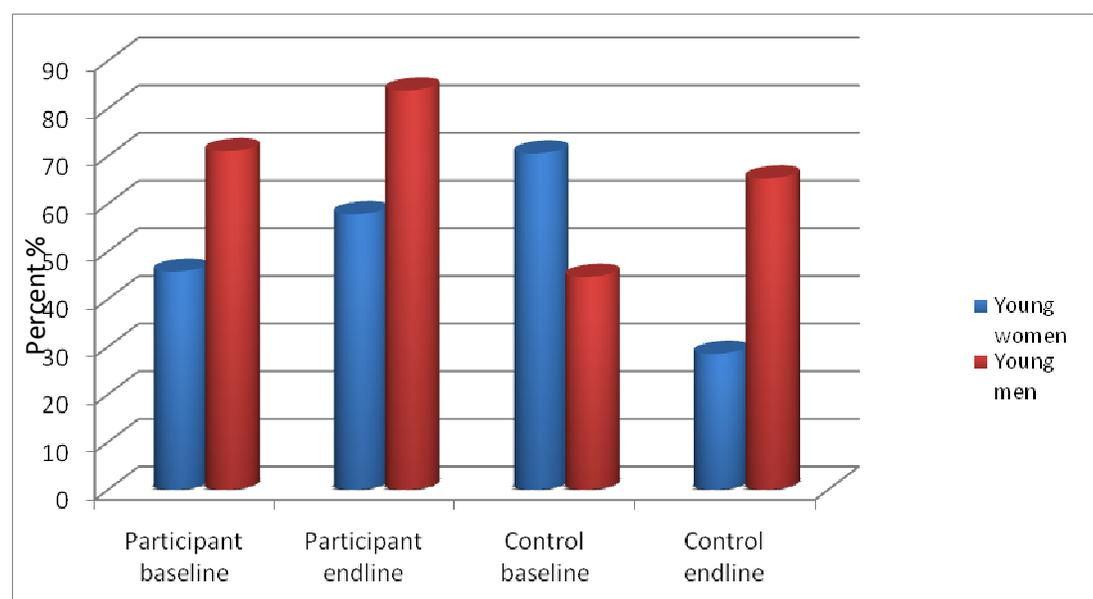
The intervention resulted in important changes in participant attitudes and behaviors targeted by the program. Participant young men and women improved in several important areas, including attitudinal and behavioral changes regarding self-esteem, finances, and protection from HIV.

Social capital and self-esteem

Though a composite social connectedness score revealed no statistically significant difference between participant and control males and females at endline (Table 1), participation in the project increased an important component of social capital for participants--having many friends in the community. Though males are still more likely than females to report having friends for both the participant and control groups overall, gains in reporting friends were seen from

baseline to endline in both groups of males and among participant females (chart 1). Differences between participant and control groups were statistically significant for males and females at baseline and endline. It is notable that in the control group females were even less likely to report having friends at endline compared to baseline. Findings from the baseline survey indicate (to high statistical significance) that among females more social capital was associated with having fewer sexual partners in the year before the survey and a greater likelihood of having had an HIV test (Hallman et al. 2007).

Chart 1. Young people reporting that they have many friends in their community



Participants reported that the program changed how they thought about themselves and helped them to better manage their lives. Attitudes about their own lives also improved after the intervention. Seventy-six percent of girls and 61% of boys who participated in the program said that participation in the program had changed their views on themselves and their capabilities. Over 70% of girls and 64% of boys said participation in the program gave them the ability to better manage life. There are also indications that participation in the program was helpful in encouraging aspirations, goals and ambitions among young people.

“I think it helped me by telling me that whatever my dream is, your dream can come true if you can take it step by step, not rush.” –out-of-school male participant in 21-24 year-old all-male focus group

Financial attitudes and behaviors

Key financial behaviors changed among the intervention participants relative to the comparison group. Participants had higher rates of both talking about financial matters and

applying what they had learned, by taking actions such as starting to save money (Tables 2 and 3). Among young women, for example, 72% of participants had discussed financial decision-making, while only 20% of non-participants had (up from 27 and 6%, respectively, at baseline). Among young men, almost 60% of participants had discussed financial decisionmaking, but only 22% of the control group had (13 and 4% at baseline). There are indications that attitudes toward finances are changing and that behaviors are also beginning to change.

According to one participant:

“We learnt about budgeting and saving and all those things, because we only think that when we get money we spend it. This program was like an eye-opener to us, because, we know now when we get some money, we have to save something. And when we got something you don’t just have to spend it any way, you have to prioritize and budget and now what this is, this is what I have got to do.” –out-of-school male participant in 21-24 year-old all male focus group

Before the project began, almost 20% of young men in the participant group believed that bank accounts are only for rich people. This same group began using banks themselves during the intervention, with almost half reporting having used a bank by the end of the project, up from just 5% at baseline (Table 3).

Table 3. Financial Attitudes and Behaviors

Topic	Young Men (%)				Young Women (%)			
	Participant		Control		Participant		Control	
	Baseline (n=45)	Endline (n=45)	Baseline (n=47)	Endline (n=49)	Baseline (n=75)	Endline (n=75)	Baseline (n=68)	Endline (n=64)
Has budget	13.33	28.89	14.89	14.29	25.33	37.33	7.35	25.00
Plans ahead for how to spend money	75.56	60.00	63.83	24.49	66.67	62.67	22.06	45.31
Belongs to saving group (stokvel)	7.89	10.81	6.38	12.24	20.34	39.34	4.41	23.44
Has used bank in past 12 months	5.26	51.35	2.13	32.65	8.47	16.39	4.41	3.13
Believes that bank accounts are for the rich	18.42	0.00 (n=36)	6.38	2.08 (n=48)	3.45	0.00	0.00	3.13

*Bold values indicate a statistically significant difference between the participant and control groups at a 0.05 level.

Young people have also started saving money and adopting strategies to protect their savings: the percentage of people who report having savings is up in both male groups and among intervention females (Table 4). The difference between participant and control females is statistically significant at endline. Though the numbers of savers are still modest, those who are saving are mostly putting their savings in more secure places such as banks, and the proportion of people who think it is likely that their savings could be stolen has decreased in the three groups that reported having savings, reflecting their changes in savings methods.

Table 4. Savings

Topic		Young Men (%)				Young Women (%)			
		Participant		Control		Participant		Control	
		Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline
Has savings		21.05 (n=45)	35.14 (n=45)	12.77 (n=47)	32.65 (n=49)	18.64 (n=75)	29.51 (n=75)	8.82 (n=68)	6.25 (n=64)
Where savings are kept	Home	62.50	30.77	16.67	12.50	27.27	5.56	33.33	25.00
	With friend/relative	-----	-----	-----	-----	0.00	16.67	16.67	0.00
	Bank	25.00	61.54	83.33	87.50	36.36	44.44	33.33	75.00
	Stokvel/saving group	12.50	7.69	0.00	0.00	36.36	33.33	16.67	0.00
Believes savings are likely to be stolen		62.50 (n=8)	0.00 (n=13)	16.67 (n=6)	12.50 (n=16)	54.55 (n=11)	5.56 (n=18)	16.67 (n=6)	25.00 (n=4)

*Bold values indicate a statistically significant difference between the participant and control groups at a 0.05 level.

Parents of participants report being impressed by their children’s participation in the project, being especially hopeful that the training they received would make their children more marketable for jobs.

“The training they have received is very valuable and I can notice it at home. Before, we used to spend money any how but now they have taught us to be aware as to what we spend the money on and budgeting and especially as a parent I used to spend the money any how but now with my child’s help I have learned to save some for later. I have learned to be very wise with the money.” – Mother of a participant

In fact, more people in every category except control females report having worked for money at the end of the project than before (Table 1). Tables 5 and 6 show that despite the fact that many participants who obtained jobs were not available for follow-up at endline, among those who were, participant young women and young men engaged in a wider variety of work in

the last year than control youth and that participant young people had a range of goals for the future.

Table 5. Paid employment in the last 12 months

Young Men				Young Women			
Participant		Control		Participant		Control	
Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline
Welding	Welding	Welding	Taxi driver assistant	Teaching (3);	Waiter	Teaching	Teaching
Teaching	Teaching (2)	Taxi driver assistant	Shop Assistant (2)	Shop Assistant	Teaching (3)	Shop Assistant (5)	Packing
Taxi driver assistant (2)	Shop Assistant	Shop Assistant (4);	Security (2)	Sales	Shop Assistant	Domestic worker (2)	Labourer (3);
Shop Assistant	Security (2)	Security (3);	Police Officer	Domestic worker	Sales	Childcare	Full time or permanent work
Sales	Petrol Attendant	Part time or casual work	Part time or casual work (3)	Catering	Restaurant	Builder	Domestic worker (5);
Gardening (2)	Panel beating	Driver	Painting	Sewing/ dressmaking (3)	Quality Control	Clerk	Cook
Driver	Painting	Builder (5)	Packing	Cleaner	Part time or casual work (2)	Community work	Childcare (2);
Builder	Machine-Operator (2)	Community work (2)	Overseeing workers		Manufacturing (2)	Cleaner (3)	Cashier (3)
Photographer	Labourer (4)	Cleaner (2)	Manufacturing (2)		Labourer (6)		
Cleaner (2)	making helmets and protective gear		Machine Operator		Information Collection		
	Gardening (2)		Labourer (4)		Hairdresser		
	Fire fighting (3)		Full time or permanent work (3)		Full time or permanent work		
	Driver (2);		Facilitator		Domestic worker (4);		
	Domestic worker		Delivery (3)		Cashier		
			Chemical engineer				
			Census				

Table 6. Employment aspirations: what young people would like to be doing in 5 years

Young Men				Young Women			
Participant		Control		Participant		Control	
Baseline	Endline	Baseline	Endline	Baseline	Endline	Baseline	Endline
Architecture	Court interpreter	Computer technician	Business manager	Computer lecturer	Lawyer	Micro-biologist	Catering
Investigator	Human resources	Journalist	Correctional services	Doctor	Supervisor	Vendor	Financial management
Radio DJ	IT specialist	Body-guard	Fashion design	Hair-dressing			Janitor
	Journalist	CD composer	Financial management	Minister of Education			Lawyer
	Living better life	Correctional services	nt	No wishes			Living poor life since unemployed (2)
	radio broadcaster	Firm called man	Having own family(2)	To be independent			Get married and have children (3)
	Sports management	singing	Human resources				
	Own my own house		Labourer				
	Travel and tourism		Soldier				
			Same work doing now				
			To have my own house				
			Welding				

HIV/AIDS and Reproductive Health knowledge, attitudes, and behaviors

In the all male focus group, the young men claimed the module on HIV/AIDS had little effect on them since they did not learn anything about HIV/AIDS that they did not already know. But some said it had changed their attitudes:

“It changed my attitude, because I know how to use a condom and I know how to trust my partner and I know how to advise my partner, when we are sitting together and talking about, how to have sexual intercourse and I know even to advise the community as a whole about HIV/AIDS that is why we want to learn more about HIV/AIDS because we are willing to assist our community members about HIV/AIDS, because they are blank in their minds, that is our willingness.” –out-of-school male participant in 21-24 year old all-male focus group

In fact, attitudes toward condom use improved dramatically for both males and females, as shown in table 7.

Table 7. Condom attitudes

Agrees with the following statements	Young Men (%)				Young Women (%)			
	Participant		Control		Participant		Control	
	Baseline (n=38)	Endline (n=37)	Baseline (n=47)	Endline (n=49)	Baseline (n=59)	Endline (n=61)	Baseline (n=68)	Endline (n=64)
Carrying condoms is difficult since it makes it look as if you have planned to have sex	55.26	21.62	51.06	21.62	45.76	18.08	44.12	37.50
Condoms reduce sexual pleasure	42.11	45.95	39.13	27.08	17.86	8.93	24.91	21.88
When a relationship goes from casual to serious, no longer necessary to use condoms	31.58	35.14	36.17	37.50	31.58	3.51	4.41	21.88
A woman loses a man's respect if she asks him to use a condom	42.11	2.70	21.28	10.42	25.86	4.92	5.88	18.75
Using condoms is a sign of not trusting your partner	29.73	5.41	27.66	20.83	27.59	11.48	10.29	20.31

The quantitative data (Tables 8a, 8b and 9) show that the intervention group did show changes in HIV-related knowledge and behavior compared to baseline, though some knowledge levels were already high. The young women and young men also seem to be acting on their knowledge by getting tested for HIV at higher rates among all groups. All respondents were able to name at least one place to get an HIV test. Among both females and males rates of having actually had an HIV test were significantly lower among the participant group at baseline, but post-intervention the rates of having a test had risen and were no longer significantly different, indicating improvements in test-seeking.

Table 8a. Sexual and reproductive health knowledge and behavior changes

Topic	Young Men (%)				Young Women (%)			
	Participant		Control		Participant		Control	
	Baseline (n=38)	Endline (n=37)	Baseline (n=47)	Endline (n=49)	Baseline (n=59)	Endline (n=61)	Baseline (n=68)	Endline (n=64)
Knows that a person can protect themselves from getting HIV	92.11	97.30	59.57	100.00	83.05	100.00	97.06	96.88
Have had an HIV test	21.05	35.14	6.38	42.86	37.93	62.30	57.35	61.29
Has heard of STIs (other than HIV/AIDS)	60.53	100.00	46.81	73.47	61.02	75.41	29.41	67.19
Knows one can get pregnant if only have sex once	89.47	100.00	89.36	100.00	91.38	95.08	94.03	95.31

Table 8b. Sexual behavior changes: Condom use with partners

Condom use at last sex	Young Men (%)				Young Women (%)			
	Baseline		Endline		Baseline		Endline	
	Participant	Control	Participant	Control	Participant	Control	Participant	Control
Most recent partner	66.67 (n=30)	53.85 (n=39)	59.38 (n=32)	64.86 (n=37)	63.83 (n=47)	32.76 (n=58)	62.75 (n=51)	48.08 (n=52)
Second recent partner	62.50 (n=16)	57.14 (n=21)	100.00 (n=21)	84.62 (n=13)	Too few observations to report			
Third recent partner	58.33 (n=9)	55.56 (n=9)	100.00 (n=10)	80.00 (n=5)				

Table 9 shows that young women in the participant group became more likely to discuss key topics with their partners, such as avoiding or delaying sex, avoiding STDs and HIV, and using condoms, though differences between participant and control groups were not statistically significant at endline.

Table 9. Young women and men having discussions with partners about sex, HIV, and STDs

Topic discussed with partner	Young Men (%)				Young Women (%)			
	Participant		Control		Participant		Control	
	Baseline (n=30)	Endline (n=32)	Baseline (n=39)	Endline (n=37)	Baseline (n=47)	Endline (n=51)	Baseline (n=58)	Endline (n=52)
Avoiding or delaying sex	50.00	43.75	30.77	67.57	59.57	76.47	77.59	65.38
Avoiding STIs	66.67	75.00	74.36	80.56 (n=36)	78.72	90.20	93.10	88.46
Avoiding HIV/AIDS	76.67	75.00	87.18	78.38	78.72	90.20	96.55	86.54
Using a condom	76.67	78.13	84.62	86.49	82.98	94.12	96.55	84.62

Discussion and conclusions

The successful implementation of this project in this population gives a strong indication that it is possible to develop informal, yet systematic educational materials and programs and deliver them to at-risk youth in South Africa. The curriculum developed for this project has been officially accredited by the South African Qualifications Authority, the national government agency responsible for accrediting education and training programs. Young people who complete accredited programs can use the certificates they are awarded by the programs to find jobs. The skills taught in this curriculum are quickly applicable in careers such as adult basic education training and auxiliary social work, among many others. Implementing a program using accredited curricula can make the sessions more appealing to young people since it can result in more than just personal enrichment.

It is clear that young people who are still in school need to develop practical lifeskills to help them navigate the social, health and economic challenges of the transition into adulthood (Rule 2006). Though these are offered in South African schools as part of the standard curriculum, the content has not been tested and often is not delivered by teachers. The South African government has begun to recognize the importance of life skills and this year (2008) is beginning to administer tests to students based on its lifeskills curriculum. As post-apartheid education curricula are only slowly transforming to strike a balance between theory (formerly emphasized) and practicable knowledge and experience, supplemental programs such as the one we undertook are being sought and viewed as desperately needed to help bridge this gap (Rule, 2006). If social networks, access to employment opportunities, financial literacy, increased control over finances, and ability to discuss and negotiate sensitive topics are all key factors in mitigating HIV risk, this intervention demonstrates that it is possible to make important changes in these areas. The preliminary results shown here demonstrate that such interventions can be particularly effective in building supportive structures in which young people can make healthy choices for their lives.

The regular meetings this vulnerable group of out-of-school youth had as part of the intervention resulted in more friendships for participants, a source of social support that is especially lacking for young people who do not have regular fora such as school or jobs in which to meet and form friendships with other young people.

The program provided a safe forum for young people to discuss and gain accurate information about critical issues that were not being discussed elsewhere, such as sexuality, violence, sexual abuse, contraception, HIV/AIDS, and financial decisionmaking. Attitudes toward condom use in particular dramatically improved. In some cases the discussions have led to young people discussing these issues outside of the group, with family members or with their sexual partners. Young people who participated in the project experienced important attitudinal and behavioral changes related to health, economic security, and aspirations for the future. Though encouraging young people to develop hopes and goals for the future is a critical first step, the program has also given participants tools to work toward achieving them, and some participants have already started to do so. One important contribution of this program was the emphasis on transferable skills related to job seeking and financial decisionmaking, such as how to create a CV, and how to find jobs. This gives young people confidence, the ability to pursue multiple routes and the flexibility to change course when as employment options arise or fall away.

Challenges

The out-of-school group targeted with this intervention posed many challenges to implementation. This is a group that is very socially isolated, difficult to convene for regular meetings, and challenging to retain over time. Participants also faced problems with transportation, since this is an area in which many options for travel are unsafe, unavailable, or unaffordable. Additionally, this was a very food insecure group, and asking participants to be present for hours-long sessions required providing food so that they would be able to participate. During a brief period when a funding lapse led to the program being unable to provide food for some sessions, attendance dropped dramatically. Focusing on an older group also meant that when the program began, most of them had already sexually debuted and that some of the information would be less relevant for them, or come too late to have protective effects. This highlights the importance of taking into account the situations of very vulnerable young people, including key age- and gender-related differences, and tailoring programs accordingly. Attention and sensitivity to context is particularly necessary when the group participating in an intervention is from such a vulnerable population.

Lessons learned

Critical to the success of the program was early and close collaboration with the community the program was to be implemented in. This ensured that the skills imparted would

be relevant in and sensitive to their context. This highlights the importance of developing evidence-based programs and the necessity of assessing the current program and policy landscape in a setting so that groups are properly targeted, efforts are not duplicated and so a program does not contradict local policies.

Another lesson learned is the need to consider evaluation early on in a project, particularly if a project faces time pressures in service delivery.

Next steps

We plan further analysis of the data to investigate more fully the program's effectiveness, with the next phase of analysis using propensity score matching to correct for any possible self-selection bias in the participant and control groups.

The program is expanding. We already have clues that our program would be appealing to a younger, in-school group since younger siblings and friends of the pilot program participants wanted the information and skills the program offered, and began meeting in groups at the school grounds after school hours and on weekends. Program staff from our project took on the extra work of mentoring these newly formed groups because the enthusiasm and commitment of the new participants was so strong. This speaks to the potential sustainability of the approach. The approach tested in this pilot program is now being tested in a randomized intervention among a younger group of in-school youth (10th and 11th grade learners) in a neighboring area in KwaZulu Natal. This group was chosen with the hope of reaching young people with these critical skills and sets of information before the majority are sexually active and when they will be better equipped to use the information imparted by the curriculum. For the purposes of a randomized control trial a school-based intervention results in easier randomization and should also lead to higher levels of retention in the program. Some former young adult participants from the pilot have been recruited to serve as mentors to the in-school groups in the next phase of the project. Delivering the skills-building sessions both within and outside of school hours will enhance the potential replicability of the approach to settings outside of South Africa.

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