

# Linking at-risk South African girls to sexual violence and reproductive health services: A mixed-methods assessment of a soccer-based HIV-prevention programme and pilot SMS campaign

Gannett K<sup>1</sup>, Merrill J<sup>1</sup>, Hershov R<sup>1</sup>, Muyebe S<sup>2</sup>, Rakosa B<sup>1</sup>, Barkley C<sup>1</sup>, DeCelles J<sup>1</sup>, Harrison A<sup>3</sup>  
<sup>1</sup> Grassroot Soccer, South Africa; <sup>2</sup> University of Cape Town, South Africa; <sup>3</sup> Brown University, USA

## BACKGROUND

South Africa has one of the highest rates of sexual violence against girls ages 12 to 17 worldwide, fueling the HIV epidemic. Facilitated by female community leaders called "coaches," SKILLZ Street (SS) is an 11-session programme for at-risk adolescent girls that combines life skills and soccer activities. A two-way SMS campaign, called "Coach Tumi," was built to supplement face-to-face interaction.

From September through December 2013, Grassroot Soccer (GRS) carried out an assessment across three primary schools in Soweto, South Africa. The study sought to explore the effects of the SS programme and pilot SMS campaign on girls' knowledge of local health services, perceptions of gender norms and relationships, and self-efficacy to avoid risky sexual behaviour.



SKILLZ Street participants play soccer at Hector Pieterse Primary School in Soweto

## METHODS

A 142-item questionnaire was administered to 289 Grade 6 and 7 female learners (average age 12.3 years) on mobile phones using Open Data Kit (ODK) software immediately before and after the five-week programme. The Wilcoxon signed rank sum test was used to assess changes on questionnaire items. Eight focus group discussions (FGDs) and four in-depth interviews (IDIs) were conducted, involving SS participants, parents, teachers, coaches, and a health-care worker. FGDs and IDIs were recorded, translated, and transcribed. Thematic analysis was performed by a four-person team using NVivo 10 software. Structured participant observation was conducted at 11 sessions.

## QUANTITATIVE FINDINGS

### Baseline Findings

Notable baseline findings include: 41 participants (15%) reported having ever had sex; of the 24 participants reporting having ever used a condom, 96% reported having used a condom at first sex; 21 participants (7%) reported having ever been pregnant; 49 participants (18%) reported having ever been tested for HIV. Selected baseline findings are presented in Table 1.

Table 1

DEMOGRAPHICS		SEXUAL BEHAVIOUR	
Female participants	289	Ever had sex	41 (15%)
Average age	12.3 years	Average age at first-time sex	12.8 years
HEALTH SERVICES		Ever used a condom	24 (59% <sup>^A</sup> )
Ever tested for HIV	49 (18%)	Used a condom at first-time sex	22 (96% <sup>^A^</sup> )
Ever needed pregnancy prevention services	20 (7%)	Average # sexual partners ever	2.7 partners
Ever needed condoms	19 (7%)	Currently has a sexual partner	21 (51% <sup>^A</sup> )
Ever needed abortion services	24 (9%)	Average age of oldest sexual partner	14 years
EXPERIENCE WITH VIOLENCE		PREGNANCY HISTORY	
Ever experienced physical abuse	46 (16%)	Ever been pregnant	21 (7%)
Ever experienced emotional abuse	42 (15%)	Age at first pregnancy	14 years
Ever experienced sexual abuse	39 (14%)	Currently using pregnancy prevention	30 (11%)

<sup>^A</sup>Of participants that have ever had sex.  
<sup>^A^</sup>Of participants that have ever used a condom.

### Baseline & Endline Analysis

Quantitative analysis showed very strong evidence of improvement in knowledge of rape support service locations ( $p < 0.001$ ) and weak evidence of improvement in gender-equitable beliefs as measured by a 10-item adapted Gender Equitable Men (GEM) scale ( $p < 0.10$ ). No significant improvements were observed on knowledge of other local health services, self-efficacy to say no to unwanted sex, or self-esteem indicators. Selected baseline and endline analysis is presented in Table 2.

Table 2

KNOWLEDGE <sup>*</sup>	Baseline	Endline	P Value
I know where to get support services for rape.	52 (18%)	85 (29%)	0.001 <sup>***</sup>
I have the right to say "no" to sex no matter who asks me.	232 (83%)	236 (83%)	0.908
SELF-EFFICACY <sup>*</sup>	Baseline	Endline	P Value
I can strongly say "no" to sex with an older partner even if I am offered gifts or money.	216 (78%)	209 (73%)	0.239
GENDER EQUITABLE MEN (GEM) SCALE <sup>*</sup>	Baseline	Endline	P Value
Overall change <sup>^A^</sup>	5.53	5.77	0.096 <sup>*</sup>
If a wife does something wrong she should expect her husband to punish her.	176 (63%)	201 (70%)	0.052 <sup>*</sup>
A man cannot control himself when he wants sex.	71 (26%)	99 (35%)	0.018 <sup>**</sup>
ROSENBERG SELF-ESTEEM SCALE <sup>*</sup>	Baseline	Endline	P Value
Overall change <sup>^A^</sup>	6.24	6.26	0.785

<sup>\*</sup>Assessed via Wilcoxon signed rank sum test. All figures report desired responses.  
<sup>^A^</sup>Assessed on a scale from 0 to 10, with 10 representing the desired direction.

## QUALITATIVE FINDINGS

### Self-efficacy

Participants showed increased self-efficacy to make healthy decisions, stand up for themselves, and question prevailing gender norms in their communities.

"SKILLZ Street gives you confidence, like strong body language. Not only will I use it to say no to sex, but for other things as well. If you don't want it, 'No.'"

-Participant

The curriculum content, safe space, and coach-participant relationship were highlighted as programme components central to building participants' self-efficacy.

### Communication

Participants felt more comfortable opening up about challenges they were facing and reported having discussed what they were learning with family members, teachers, and peers.

"Because our kids are taught about these things, they come up to us with questions and it becomes easier to discuss these things with them, unlike having to be the one who starts the conversation."

-Parent

### Local Health Services

Teachers and parents highlighted social challenges and dangers facing participants in their communities, which inhibit their ability to safely and regularly access local health services.

"The system fails these kids. The rapists are in their homes. The rapists are their next door neighbors. The rapists are their teachers, pastors, boyfriends, you name them."

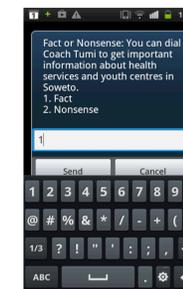
-Thuthuzela Care Centre (TCC) social worker

### Coach Tumi SMS Service

Participants cited that they enjoyed using the Coach Tumi SMS service, which offered a confidential platform that reinforced key messages in the programme.

"I think [Coach Tumi] is interesting because [it talks about] things that we learned in SKILLZ Street and it asks you questions. You are not afraid to answer because you are not afraid of your phone. Nothing must be changed."

-Participant



Sample screen shot of Coach Tumi SMS Service

Participants and coaches cited airtime as a significant barrier to use.

### School Performance & Attendance

Teachers and parents alike suggested that SS participants were more likely to attend classes and perform well after participating in the programme.

"Looking at our learners this side, they mostly like being absent from school, but since [GRS] came along, they been to school at least regularly...I have a few learners that I teach Life Skills...Their marks have improved a lot...The improvement is so amazing...I have seen a vast difference in [the participants]."

-Teacher

### Suggestions for Future Programme Implementation

Study participants recommended extending the length of SS and involving boys, teachers, parents, and other age groups of girls. GRS coaches cited the need for more training on how to manage disclosures and referrals.

## CONCLUSIONS

We observed generally positive effects of the SKILLZ Street programme on this study population of Grade 6 and 7 female learners from Soweto. Baseline findings highlight that some girls in this young age group (11-13 years) are having sex and getting pregnant. Quantitative analysis shows improvements in knowledge of rape service locations and gender-equitable beliefs but limited change on other indicators. Qualitative findings suggest positive effects on participants' self-efficacy, willingness to communicate with family members and teachers, knowledge of the TCC, interaction with the Coach Tumi SMS service, and school attendance and performance. Study limitations include the young age of participants recruited, small sample size, short study timeframe, and lack of a control group. We recommend future piloting of the SS programme and rigorous research to explore effects on participants' uptake of local health services.

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