



**Trinidad and Tobago (2008): HIV/AIDS
TRaC Study Evaluating Condom Use
among Young Females Engaging in Sex
with Concurrent Partners in Point
Fortin and Sea Lots**

First Round

T h e P S I D a s h b o a r d

**Port of Spain, Trinidad and Tobago
December 2008**

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Condom Use among Young Females Engaging in Sex with
Concurrent Partners in Point Fortin and Sea Lots
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PSI Research & Metrics
Year (2008)

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<http://www.psi.org/research/cat_socialresearch_smr.asp>.

Summary

Acknowledgements: This TRaC (Tracking Results Continuously) survey was funded by the World Bank (WB) through the National HIV/AIDS Coordinating Committee (NACC) of Trinidad & Tobago. The opinions expressed herein are those of the authors and do not necessarily reflect the views of WB or the NACC of Trinidad & Tobago. Our gratitude goes to PSI research consultant Joel Joseph for designing the sampling and study and for collecting the data and to Clare Barrington for the construction of the report and analysis of findings. Additional gratitude is extended Benjamin Nieto-Andrade (regional researcher), Kim Longfield (research and metrics director), and Justin Buszin (research and metrics consultant), all of whom reviewed this document at different stages of its development.

Background & Research Objectives: In December 2008 PSI Caribbean conducted a baseline TRaC among young females 16-24 years old who engage in concurrent sexual relationships with outside partners in two (2) communities in Trinidad. The study aimed to 1) monitor the levels of indicators of key behaviours, OAM (opportunity, ability and motivation) constructs, and exposure to PSI Caribbean activities, and 2) enable segmentation analysis to determine which OAM and population characteristics have the greatest influence on condom use among young females 16-24 with concurrent partners.

Description of Intervention: PSI/SFH (Society for Family Health) is implementing a 12-month World Bank funded program targeting young females age 16-24 with concurrent sexual partnerships in Sea Lots and Point Fortin. For the purpose of this study, a concurrent partner was defined as a male with whom the young woman was with while having another partner and from whom she received economic help or gifts. The purpose of the program is to promote safer sexual behavior through increased condom use in the target population through peer education, mass media and behavior change communication activities.

Methodology: This baseline study consisted of a representative sample of the target population living in Point Fortin and a concensus sample of the target population living in Sea Lots, in 2008. An RDS methodology (respondent driven sampling) was employed. In total, 129 women 16-24 years with concurrent partners were required; the actual final sample was 121, a few women short due to difficulty in recruitment and the small size of the communities. Women were eligible to participate if they had been sexually active in the last 30 days, had a non-

transactional regular partner and at least one concurrent partner at the moment of the interview with whom she had sex at least 2 times and from whom she received economic help or gifts. The survey included questions regarding demographic characteristics, sexual behavior, condom and lubricant use, OAM determinants, and exposure to PSI/SFH activities. The survey was pre-tested using group interviews with members of the target group prior to implementation. Multivariate logistic regression was employed to obtain the odds ratio of reporting the behavior of interest for each significant independent variable. Analysis of variance (ANOVA) was employed to estimate the adjusted means or proportions of each explanatory variable by the behavior of interest.

Main Findings Condom use varied based on partner type and whether or not it was condom use at last sex or consistent condom use. Condom use at last sex was lowest with a regular partner (46.7%) and higher with casual and concurrent partners (78.7% and 77.3%, respectively). Condom use at last sex regardless of the partner was 86.0%. Consistent condom use during the last month was reported by 32.8% of women with regular partners, 46.6% with casual partners and 65.8% with concurrent partners. Overall, young women reported that condoms are available and mostly pro-condom attitudes, beliefs and expectations. Additionally, young women reported high condom self-efficacy and intentions to use condoms with concurrent partners. Over two-thirds of the young women (68.3%) had participated in a PSI/SFH activity in the last 6 months; 62.0% had participated in an educational activity where they practiced putting a condom on a dildo in the last year. The majority of young women (78.3) had seen PSI/SFH print materials in the last 6 months.

Compared to young women who did not report using a condom at last sex with a concurrent partner, young women who did use a condom were significantly more likely to 1) perceive that condoms are not difficult to get, 2) consider it easy to always have a condom on hand, 3) intend to use condoms with regular, casual and concurrent partners, and 4) have participated in a PSI/SFH educational activity where she practiced putting a condom on a dildo.

Programatic Recommendations: Future programs should consider the following recommendations based on the findings from this study: 1) Emphasize the importance of consistent condom use with all partner types and the risks associated with concurrency as many women did not consider themselves to be the type of person who is likely to get HIV; 2) Promote

having a condom on hand at all times as an HIV prevention strategy; 3) Continue and expand activities with practice-oriented, applied learning to develop condom use skills.

Monitoring Table

Trends in behaviors, OAM Determinants of behaviors, and exposure among females engaged in concurrent sexual relationships with outside partners in Point Fortin and Sea Lots. Trinidad 2008.

Risk: Female engaged in concurrent sexual relationships, 16-24 years old

Behavior: Correct and consistent condom use

INDICATORS	December 2008 (N=121)
BEHAVIOR/USE	
	Mean
Regular ¹ partners in last month	1.0
Casual ² partners in last month	2.0
Concurrent ³ partners in last month	2.0
	%
Condom use at last sex with a regular partner from beginning to end of intercourse	46.7
Condom use at last sex with a casual partner from beginning to end of intercourse	78.7
^Condom use at last sex with a concurrent partner from beginning to end of intercourse	77.3
^Condom use at last sex with any partner from beginning to end of intercourse	86.0
Consistent condom use during the last month with regular partner(s) ⁴	32.8
Consistent condom use during the last month with casual partner(s) ⁵	46.6
^Consistent condom use during the last month with concurrent partner(s) ⁶	65.8
OPPORTUNITY	
<i>Availability</i>	Mean
Supermarkets near to where I hang out or live always have condoms for sale	3.43
Condoms are available within 10 minutes of where I hang out	2.93
It's not difficult to always get a condom when I need one	2.60
It is easy to always have a condom on hand	2.60
<i>Social Norm</i>	
I feel that my female peers consistently use condoms with their outside partners	2.79
ABILITY	
<i>Knowledge</i>	%
Consistent use of a condom reduces the risk of HIV transmission during sexual intercourse	94.2
<i>Social Support</i>	Mean
Social support scale	2.81
<i>Self-Efficacy</i>	
Condom self-efficacy scale	3.07
I can always insist on condom use with my concurrent/outside partners	3.07
<i>Attitude</i>	
It is not inappropriate to use condoms with a concurrent/outside partner	3.17
<i>Belief</i>	
My partners are willing to use condoms consistently	3.19
<i>Intention</i>	
Intention to use condoms scale	3.40
In the future I plan to use condoms consistently with my concurrent partners	3.58
<i>Locus of Control</i>	
The last time I had sex with my outside partner who used a condom, I proposed the use of a condom	3.23
I will eventually end up pregnant	2.63
<i>Outcome Expectation</i>	
Outcome expectations scale	3.70
Using condoms correctly and consistently will prevent the transmission of HIV	3.69
Condoms are effective against pregnancy	3.64
<i>Threat</i>	

Monitoring Table: Young women with concurrent partners

Trinidad and Tobago, 2008

I am at risk for HIV if I have unprotected sex	3.75
I am the kind of person who is likely to get HIV	2.15
EXPOSURE	
	%
Have you participated in PSI activities in the past 6 months	68.3
Have you seen PSI print material in the past 6 months	78.3
Have you participated in an educational activity where you practiced putting a condom on a dildo over the past 12 months?	62.0

^ indicates donor indicator

Scale values range from 1 to 4: "1=totally disagree, 2=disagree, 3=agree, 4=totally agree".

¹Regular partners were defined as male/s with whom you have an intimate relationship and with whom you do not exchange sex for money. Usually these partners are called boyfriends, 'personals', husbands, fiancées or lovers.

²Casual partners were defined as any male with whom you have sexual relations with on an occasional basis (only one time). These partners may be called one night stands etc.

³Concurrent partners were defined as any male with whom you have had an intimate relationship two times or more, and that provides you economic help and gifts. This is an additional partner to your regular (outside man, sugar daddy, friends with benefits).

⁴Among young women who had sex with a regular partner in the last month (N=119)

⁵Among young women who had sex with a casual partner in the last month (n=73)

⁶Among young women who had sex with a concurrent partner in the last month (n=116)

Social Support Scale:

- Q421 Friends who I "hang out" with encourage me to use condoms with my concurrent/outside partner(s)
- Q422 Friends who I "hang out" with encourage me to use condoms with my regular partner(s)
- Q423 I can discuss with my friends the possibility of a person contracting an STD/STI if he/she has sexual intercourse without using a condom
- Q424 My friends and I discuss the use of condoms with concurrent/outside partners
- Q425 My friends and I discuss the use of condoms with regular partners
- Q426 I encourage friends who I hang out with to use condoms when they are going to have sex with their concurrent/outside partner(s)
- Q427 I encourage friends who I hang out with to use condoms when they are going to have sex with their regular partner(s)
- Q428 My mother encourages me to use condoms consistently with my outside partner

Condom self-efficacy scale:

- Q401 I can always insist on condom use with a concurrent/outside partner
- Q402 I feel comfortable asking my non regular partners to use a condom
- Q403 I would feel confident refusing to have sex with a concurrent/outside partner if neither of us has a condom
- Q408 I can "stand up" to my regular partner
- Q411 When I'm with my outside partners, condom use is up to me

Intention to use condoms scale:

- Q521 In the future I plan to use condoms consistently with my concurrent partners
- Q522 In the future I plan to use condoms consistently with my casual partners
- Q523 In the future I plan to use condoms consistently with my regular partners

Outcome Expectations Scale

- Q525 Using condoms correctly and consistently will prevent the transmission of HIV
- Q527 Condoms are effective against pregnancy
- Q529 Using condoms bought in a pharmacy/supermarket is safe to use

Monitoring Analysis: Monitoring Dashboard showing behaviors, OAM determinants, and exposure among females engage in concurrent relationships with outside partners in Point Fortin and Sea Lots, 2008

The preceding 2008 monitoring table presents descriptive data on behaviors, OAM determinants and exposures that are significantly associated with condom use at last sex with a concurrent partner among young women, as well as logframe indicators of interest to donors and for PSI internal monitoring.

Behavior

The mean number of regular partners in the last month was 1.0, casual partners 2.0 and concurrent partners 2.0. With regard to condom use, nearly half of the participants (46.7%) reported using a condom at last sex from beginning to end of intercourse with a regular partner while 78.7% and 77.3% reported using a condom at last sex with casual and concurrent partners, respectively. Condom use at last sex regardless of the type of partner was 86.0%. Reported rates of consistent condom use during the last month were lower across all partner types with 32.8% reporting consistent condom use with a regular partner, 46.6% with casual partners and 65.8% with concurrent partners. In these cases, consistent condom use was defined as using condoms every time respondents had sex with the respective type of partner, regardless of the number of times they had sex.

Opportunity

Within the determinant of Opportunity, indicators of perceived availability of condoms and social norms towards condom use were measured using a response scale of 1 to 4, where 4 means strong agreement with the statement and generally reflects a pro-HIV prevention sentiment. The mean value of 3.43 for the indicator “supermarkets near to where I hang out or live always have condoms for sale” indicates that more women agreed than disagreed with this statement. There was also more agreement than disagreement with the statement “Condoms are available within 10 minutes of where I hang out” (mean 2.93). Of note, the mean values were lower for the two availability indicators that measured actual ease of always having a condom on hand (mean 2.60) and difficulty getting a condom when needed (mean 2.60). With regard to social norms, most women felt that their peers consistently use condoms with outside or concurrent partners (mean 2.79).

Ability

Nearly all women reported that consistent use of condoms reduces the risk of HIV transmission during sexual intercourse (94.2%).

An 8-item scale was constructed to assess social support towards condom use, in particular the giving and receiving of encouragement and discussion around using condoms. The mean value for this scale was 2.81, indicating that slightly more women agreed than disagreed that they give and receive social support for condom use with friends and family. A 5-item scale was constructed to measure the level of self-efficacy towards condom use with concurrent partners, which had a mean value of 3.07 suggesting that most women felt able to negotiate and use condoms with concurrent partners. The specific item, “I can always insist on condom use with my concurrent partner(s)”, also had a mean level of 3.07. Young women with concurrent partners showed predominantly pro-condom attitudes (mean 3.17) and beliefs (mean 3.19).

To measure intentions to use condoms, a 3-item scale including intentions with regular, casual and concurrent partners was constructed, with a mean value of 3.40, indicating that most women intended to use condoms in the future. The mean value of the specific item regarding intentions to use condoms with concurrent partners was even higher, 3.58. Young women also indicated feeling in control of condom use with concurrent partners, reporting more agreement than disagreement with the statement that they had proposed using a condom the last time they had sex with a concurrent partner (mean 3.23). There was slightly more agreement than disagreement with the indicator “I will eventually end up pregnant” (mean 2.63).

Outcome expectations of condoms as effective protection against HIV and pregnancy were measured with a 3-item scale with a mean value of 3.70, indicating a high level of agreement that condoms are effective and safe protection. Finally, young women expressed a high level of agreement with the statement that they are at risk for HIV if they have unprotected sex (mean 3.75) while more women disagreed than agreed with the idea that they are the type of person who is likely to get HIV (mean 2.15).

Exposure

Over half of the young women (68.3%) had participated in PSI/SFH activities and/or had seen PSI/SFH print materials (78.3%) in the last 6 months. Finally, over half of the young women (62.0%) reported having participated in an educational activity where they practiced putting a condom on a dildo in the last 12 months.

Segmentation Table

OAM determinants of condom use at last sex with a concurrent partner among females engaged in concurrent sexual relationships with outside partners in Point Fortin and Sea Lots. Trinidad 2008.

Risk: Female engaged in concurrent sexual relationships with partners, 16-24 years old

Behavior: Condom use at last sex with a concurrent partner from beginning to end

INDICATORS	Condom use at last sex (N=117)		OR	Sig
	Yes (N=92) 78.6%	No (N=25) 21.4%		
OPPORTUNITY				
<i>Availability</i>	Mean	Mean		
It's not difficult to always get a condom when I need one	2.77	2.12	2.8	*
It is easy to always have a condom on hand	2.73	2.17	2.1	*
ABILITY				
<i>Intention</i>				
Intention to use condoms scale	3.50	2.98	4.4	**
EXPOSURE				
	%	%		
Have you participated in an educational activity where you practiced putting a condom on a dildo over the past 12 months?	68.9	38.3	4.5	*

* p<.05; ** p<.01; *** p<.001

Hosmer-Lemeshow goodness-of-fit: χ^2 (df=8) = 20.526, p<0.009

Omnibus goodness-of-fit: χ^2 (df=4) = 47.529, p<0.000

Cox & Snell R²=0.334

Scale values range from 1 to 4: "1=totally disagree, 2=disagree, 3=agree, 4=totally agree".

Intention Scale:

Q521: In the future I plan to use condoms consistently with my concurrent partners

Q522: In the future I plan to use condoms consistently with my casual partners

Q523: In the future I plan to use condoms consistently with my regular partner

Segmentation Analysis: Determinants of Condom Use at last sex with a concurrent partner among young women, Trinidad 2008

The segmentation table identifies the behaviors, OAM determinants, and exposures that differentiate young women who used a condom at last sex with a concurrent partner from beginning to end and those that did not, based on the results of multivariate logistic regression analysis. In this sample, 78.6% of the young women reported using a condom at last sex with a concurrent partner. Mean values or proportions and odds ratios, adjusted for all other significant variables in the model, are presented in the table. Mean values reflect the variables measured with the following scaled responses: 1 “totally disagree”, 2 “disagree”, 3 “agree”, 4 “totally agree”. One reliable (Cronbach’s Alpha 0.802) multi-item scale measuring intentions to use condoms was included. It is important to note that due to the small sample size, and the subsequent small number of variables that could be included, this model does not control for city of residence.

Opportunity

Two indicators of Availability were significant in the logistic regression model. First, young women who reported using a condom at last sex with a concurrent partner were nearly three times more likely to perceive that it is not difficult to get a condom when needed than young women who did not use a condom at last sex with a concurrent partner (mean 2.77 vs 2.12; $p < 0.05$). Second, condom users were over two times more likely than non-users to consider it easy to always have a condom on hand (mean 2.73 vs 2.17; $p < 0.05$).

Ability

Young female condom users were over four times more likely to intend to use condoms than non-users (mean 3.50 vs 2.98; $p < 0.01$). While the levels of intentions to use condoms were high in both the users group and the non-users group, the level was significantly higher among users.

Exposure

Finally, young women who used condoms were over four times more likely than non-users to have participated in an educational activity where they practiced putting a condom on a dildo in the past year (68.9% vs 38.3%; $p < 0.05$).

Programmatic Recommendations

- 1) **Condom use:** While condom use at last sex with casual and concurrent partners was quite high (78.8% and 77.3%, respectively), less than half of the young women in the study reported using a condom at last sex with a regular partner. Levels of consistent condom use were lower with all partner types. Additionally, in general, young women in this study reflected positive attitudes, expectations and abilities with regard to condom use, both as a form of protection against HIV as well as pregnancy. These findings suggest that future programs should emphasize the importance of consistent condom use with all partners.
- 2) **Condom availability:** Young women who considered condoms to be available to them when needed were significantly more likely to report using a condom at last sex with a concurrent partner. While most women knew where condoms were available, fewer women were able to always get a condom when needed or have one with them. Future programs should promote the importance of having a condom on hand at all times and respond to barriers experienced by women in acquiring condoms in their community.
- 3) **Threat:** Most women in this study did not consider themselves the kind of person who are likely to get HIV. This finding is extremely important to consider in future programming, to inform the development of messages regarding the risks associated with concurrent sexual partnerships and inconsistent condom use.
- 4) **Participation in PSI/SFH activities:** Condom use at last sex was over four times higher among young women who had participated in an educational activity where they practiced putting a condom on a dildo in the past year. This finding suggests that hands-on, practice oriented learning can be an effective way to condom use among young women.

Population Characteristics

POPULATION CHARACTERISTICS	N=121 % or mean	
	N	%
City		
Point Fortin	58	47.9
Sea Points	63	52.1
Age		
16	11	9.1
17	19	15.7
18	13	10.7
19	21	17.4
20	8	6.6
21	14	11.6
22	15	12.4
23	11	9.1
24	9	7.4
	Mean 20.0	
Marital Status		
Unmarried living with sex partner	42	34.7
Single	77	63.6
At home with parents	1	0.85
Living alone	1	0.85
Education		
Never attended school	4	3.3
Did not finish primary	9	7.4
Primary	5	4.1
Secondary/high school	59	48.8
Tertiary school	36	29.8
Technical/vocational	8	6.6
Currently employed		
No	55	45.5
Yes	66	54.5
Average monthly incomd/allowance (over last year)		
No income	49	42.2
\$250-\$499	1	0.8
\$500-\$999	7	5.8
\$1000-\$1499	23	19.0
\$1500-\$1999	19	15.7
\$2000-\$2999	10	8.3
\$3000 or above	7	5.8
No response	4	3.3
Missing	1	0.8

Appendix 1: Population Characteristics**Trinidad and Tobago, 2008**

Ethnic descent		
African	74	61.2
Indian	23	19.0
Mixed	24	19.8
Religion		
Anglican	34	28.1
Methodist	8	6.6
Pentecostal	17	14.0
Roman Catholic	35	28.9
Seventh Day Adventist	11	9.1
Muslim	1	0.8
Rastafarian	2	1.7
Baptist	5	4.1
Missing	4	3.3

Cost of Research

PERForMance REVIEW INDICATORS	US\$
Data Collection	11,989
Analysis & Report	3,500
Total	15,489

Methodology

Sampling and participants: The study design called for a respondent-driven sampling (RDS) approach. RDS works by selecting seeds, or initial interviews, and asking them to recruit people they know who fit the study criteria to participate in the survey. It allows for the recruitment of hard-to-reach samples and works like a snowball sample, but uses a system of dual incentives (for study participation and recruitment) and limits the number of recruits any one individual can bring into the study. As a result, the strategy maximizes the number of young females engaging in concurrent outside sexual relationships through informal networks and is used to approximate a probability sample. Using RDS enables researchers to access a broader range of young females engaging in concurrent outside sexual relationships than using another sampling strategy would, not only those who are present in hotspots or particular venues.

The target sample size was 129, the minimum number of young females between 16 and 24 years who within the past 6 months had engaged in concurrent sexual relationships for the purpose of obtaining gifts required to calculate the monitoring table. This sample is smaller than the sample size required for segmentation analysis. While a segmentation table was constructed, it should be interpreted keeping in mind the small sample size. Sample size calculations were based on the following assumptions:

- 15% change in behavior to be monitored over time (from 10% to 25%)
- 100% of target population are at risk (for condom use at last sex with outside partner)
- 10% of target population behave (e.g. use condoms consistently with outside partner)
- 15% difference in bubbles between non-users and users at a low level (15% vs. 30%)

A competitive process was used to select the research agency to conduct this TRaC study. The sampling process began when the research agency or consultant selected six seeds who were the first people to participate in the study. These seeds were then used to recruit others to participate in the study. This process of existing sample members recruiting future sample members continued until 121 young females aged 16-24 engaged in concurrent sexual relationships in Sea Lots and Point Fortin were reached. The recruitment of females in both communities ended before the predetermined number of 129 was attained due to the small sizes of the community where no further females were available to be recruited.

City	Total Sample	Seeds
Sea Lots	63	3
Point Fortin	58	3
Total	121	6

The appropriate number of seeds (see above table) was identified. The “seeds” differed as much as possible on the following characteristics: employment status, number of partners and level of education. For example, young females with the following profiles were recruited:

Seed No.	Employed vs Unemployed	No. of Partners	Level of Education
1	Employed	2 partners	Primary or Lower
2	Unemployed	2 partners	Primary or Lower
3	Employed	2 partners	Secondary or Higher
4	Unemployed	< 2 partners	Secondary or Higher
5	Employed	< 2 partners	Primary or Lower
6	Unemployed	< 2 partners	Secondary or Higher

Each seed in wave 0 was interviewed and then supplied with unique recruitment coupons and required to give those coupons to other persons whom they knew within the target population. When a new member of the target population participated in the study, the recruiter of that person was paid an additional bonus. Incentives were provided for participating in the study and recruiting qualified others.

Those recruits who responded to the coupon arrangements participated in a face to face interview. The recruits in wave 0 then formed wave 1. Upon completion of the screening, a person from wave 1 was provided with recruitment coupons and the process continued. The sampling continued in this way until the desired sample size was reached.

Equilibrium analysis was conducted using the RDSTAT software to determine if enough young women had been sampled in each city so that the traits of the sample converged on those of the population and the sample was not biased by the composition of the initial group of seeds. While the sample did reach equilibrium in Sea Lots, the Point Fortin sample did not. Based on feedback from study interviewers, many participants in Point Fortin were unwilling to participate in the recruitment process even with the promise of being offered an additional incentive. Interviewers were unable to provide any reasons as to why females were reluctant to recruit additional females.

This led to a recruitment of many females with no further recruits below them, which could explain the lack of equilibrium in the Point Fortin sample.

Data collection instrument: A structured questionnaire was used to collect data on concepts in PERForM that are relevant for identifying determinants of behavior, monitoring logframe indicators and assessing program impact. This questionnaire included modules in the following areas: population characteristics, OAM determinants of behavior including output level logframe indicators, behavior as specified by purpose level logframe indicators, and exposure to PSI/SFH interventions. This questionnaire was 18 pages long.

The PSI HIV/AIDS model questionnaire was used for this study after it had been modified to include all relevant logframe indicators and context specific multi-item scales. The determinants measured in this model questionnaire are based on the PSI Behavior Change Framework and a literature review of quantitative and/or qualitative studies. Data from formative qualitative studies and/or input from country program researchers and programmers was used to modify scaled questions and other context specific questions. Multi-item scales were developed to measure additional determinants not covered in the model questionnaire that were discovered during formative research or were suggested by program or research staff.

The questionnaire was pre-tested using at least 2 group interviews one from each of the selected communities with members of the target group. The pre-test was used to gather information on the following points: ease or difficulty of statement, comprehension, confidence in response, level of discomfort and social desirability. Group and cognitive interview guides were developed. The group discussion was led by a facilitator and a note taker who documented participants' feedback.

Data collection procedure: All interviewers attended a two day-training on data collection and management. Participants practiced interviewing and gave feedback on each item in the questionnaires. Any unclear items and mistakes were identified and revised. The following steps were taken in the field interviewing process:

- 1) Research agency field coordinators identified appropriate locations for interviewing. The locations were safe and confidential for young females. Locations were also accessible and stable during the data collection period. Two locations were used. Appointments for

- interviews were made by phone in Point Fortin while in Sea Lots interviewees were interviewed on an unscheduled basis.
- 2) There was one research team consisting of 4 persons (2 persons in each community), one of whom was responsible for supervising, screening respondents, and data management for coupons and ensuring that no one was interviewed more than once (team supervisor); the other person was responsible for conducting interviews.
 - 3) The team of interviewers was responsible for 6 seeds during the entire period of the survey. If recruitment was a problem – if referral chains did not surpass 2 or 3 waves, or if seeds failed to produce recruits - the team recruited another seed with the same profile as a replacement. All young females referred to the study in the RDS process were screened by the team supervisor and those who met the study criteria were interviewed. After completing the interview, interviewees received an incentive for their participation and each interviewee was given three referral cards (with unique serial numbers) and asked to introduce three other young females they know who meet the study inclusion criteria. The process repeated as above until the sample size of 121 was met.
 - 4) Referred subjects brought a referral card to the interview site and stayed away from the interviewing table. The referee (previously interviewed subject) could come with the referred young females to introduce her to the team supervisor. Only those subjects with a referral card were screened for the opportunity to be interviewed. The referee was paid for her referrals once the screening and interview process were completed. Referees were only paid for those referrals who actually completed an interview. Ineligible referrals did not receive an incentive, nor did the referee receive an incentive for referring them.
 - 5) At the end of each day, interviewers met in a group to share feedback, lessons-learned, and to exchange information.
 - 6) Data collection was done between December 8, 2008 and December 23, 2008.

Data Management: The research agency was responsible for the data management. This entailed the entering of data into an SPSS format. As much as possible, the dataset attempted to provide enough information so that it is not necessary to refer to the questionnaire. Data quality steps included checking the questionnaire for internal consistency (in accordance with a scrutiny note), filtering errors, appropriate coding for non-response or missing values, values that fall out of range, and other logical checks. The numbering for questions included in further survey rounds will remain consistent and the 2008 and follow-up data sets will be merged for monitoring

and evaluation data analysis. The data will be laid out in a rectangular format with one record signifying one respondent. Copies of cleaned data will be made available in SPSS format.

Analytic Technique: The monitoring table will track trends in behavior and related OAM indicators. It portrays the baseline indicators in 2008. Despite the small sample size, a segmentation table was produced based on multiple logistic regression analyses. Explanatory variables (i.e., OAM perceptions, demographic characteristics) which significantly contribute to the explanation of the variance in the behavior of interest (i.e., consistent condom use) were identified. Odds ratio of involvement in the behavior of interest were reported for each significant explanatory variable. Analysis of variance (ANOVA) was employed to estimate the adjusted means or proportions of each explanatory variable by the behavior of interest. Each explanatory variable was assessed in ANOVA with the behavior of interest serving as the group variable and other significant explanatory variables serving as covariates.

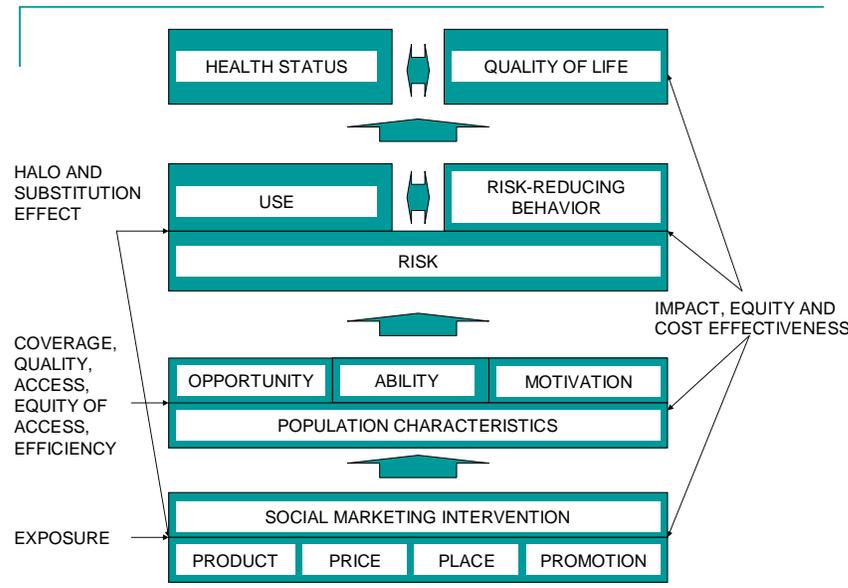
Reliability Analysis

Composite Variables	2008 (N=121)	
	Cronbach's Alpha	# of items
OPPORTUNITY		
<i>Social Support Scale:</i>	0.948	8
<i>Condom Self-Efficacy Scale:</i>	0.931	5
<i>Intention to use condoms Scale</i>	0.802	3
<i>Outcome Expectations Scale</i>	0.823	3

Distribution of the variables that make up multi-item scales of OAM determinants

INDICADORES	N=121
ABILITY	Mean
<i>Social support</i>	
Q421 Friends who I “hang out” with encourage me to use condoms with my concurrent/outside partner(s)	2.90
Q422 Friends who I “hang out” with encourage me to use condoms with my regular partner(s)	2.70
Q423 I can discuss with my friends the possibility of a person contracting an STD/STI if he/she has sexual intercourse without using a condom	3.08
Q424 My friends and I discuss the use of condoms with concurrent/outside partners	2.96
Q425 My friends and I discuss the use of condoms with regular partners	2.72
Q426 I encourage friends who I hang out with to use condoms when they are going to have sex with their concurrent/outside partner(s)	3.12
Q427 I encourage friends who I hang out with to use condoms when they are going to have sex with their regular partner(s)	2.74
Q428 My mother encourages me to use condoms consistently with my outside partner	2.23
<i>Condom self-efficacy</i>	
Q401 I can always insist on condom use with a concurrent/outside partner	3.07
Q402 I feel comfortable asking my non regular partners to use a condom	3.17
Q403 I would feel confident refusing to have sex with a concurrent/outside partner if neither of us has a condom	3.16
Q408 I can “stand up” to my regular partner	2.87
Q411 When I’m with my outside partners, condom use is up to me	3.04
MOTIVATION	
<i>Intention</i>	
Q521 In the future I plan to use condoms consistently with my concurrent partners	3.58
Q522 In the future I plan to use condoms consistently with my casual partners	3.58
Q523 In the future I plan to use condoms consistently with my regular partners	3.05
<i>Outcome Expectations</i>	
Q525 Using condoms correctly and consistently will prevent the transmission of HIV	3.69
Q527 Condoms are effective against pregnancy	3.64
Q529 Using condoms bought in a pharmacy/supermarket is safe to use	3.75

Performance Framework for Social Marketing



This study design is guided by PSI’s PERForM framework. PERForM describes the social marketing research process, identifies key concepts important for designing and evaluating social marketing interventions and mirrors the four levels and concepts in the logical framework.

The top level consists of the goal of social marketing for any health promotion intervention, namely improved health status and/or for interventions relating to coping with sickness or disability, quality of life.

The second level consists of the objectives of social marketing stated as product or service use on the left side and/or other risk-reducing behaviours that do not involve the use of a product or service on the right side. The adoption or maintenance of these behaviours in the presence of a given risk or need for health services is causally antecedent to improving or maintaining health and or quality of life.

The third level consists of the determinants of PSI Behaviour Change framework summarised in terms of opportunity, ability and motivation that may differ by population characteristics such as age and sex. The fourth level consists of the characteristics of the social marketing intervention.