



**Romania (2005): HIV/AIDS TRaC Study
among Young People Frequenting Dance
Clubs in Romania**

First Round

The P S I D a s h b o a r d

**Bucharest, Romania
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Research Division
Population Services International
1120 Nineteenth Street NW, Suite 600
Washington, D.C. 20036

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Contact Information:

Clayton Davis, Country Representative
Str. George Calinescu
Nr. 13, et. 3-4
Sector 1, Bucharest
Romania
Phone +4021 230.72.25
Fax +4021 230.72.33
Email cdavis@psi.ro

Varja Lipovsek, Regional Research Advisor
Leningradsky Pr-t, h. 26, bld. 21
Moscow, 125167
Russia
Phone + 7 095 212 2372
Fax + 7 095 213 4898
Email varja@psirussia.ru

Summary

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Background & Research Objectives The objective of this study was to provide baseline data on selected behaviors related to HIV prevention among young people aged 18-24 in Bucharest, Romania, their related determinants, and the exposure to current HIV prevention programming among the target population. The key behaviors are (1) correct and consistent condom use (with different types of partners), (2) use of health services for STI testing and treatment, and (3) having 2 or more sexual partners in the last 3 months. The determinants of highest interest are opportunity, motivation and ability factors related to condom use and related to use of health services, with focus on communication about safe sex between partners.

Description of Intervention The project goal is to contribute to a reduction in STI and HIV infections among young people engaging in high-risk sexual behavior through a combination of mass media and IPC (interpersonal communication) methods focusing on increasing condom use and health service utilization, as well as improving relevant knowledge and attitudes and communication between partners. The project began in the fourth quarter of 2005; a follow-up survey is projected in the 2nd quarter of 2007 to evaluate the effect of the intervention. The project is planned for three years, from 2006 to 2008 and will also be assessed by the second round of a Global Fund Youth Survey expected in 2008 (first round was in 2004). The first year of the intervention, and this survey, focuses on youth who attend clubs in Bucharest and plans are to expand to other major cities if this intervention shows positive impact.

Methodology The study employed a one-stage cluster survey design with the number of respondents per club selected proportional to size of the club. Clubs were selected by convenience (i.e., those which included the target population and in which permission could be obtained to conduct the research). Potential respondents were approached in clubs, explained the

purpose of the study, and asked if they could be contacted within three days at a mobile or fixed phone number, to conduct the actual interview. Subsequently, respondents were interviewed using the computer-assisted telephone interviewing (CATI) method. The questionnaire for both men and women included 61 items focusing on socio-demographic characteristics; sexual experiences and behaviors; knowledge about the use of condoms; knowledge regarding HIV and STI transmission and protection; self-efficacy, perceived threat and locus of control regarding condom negotiation, condom use, and communication between partners; and questions regarding exposure to current HIV prevention programs targeted at young people in Bucharest, Romania.

Main Findings The findings confirm that young people who frequently attend clubs engage in more sexual risk behaviors and are therefore an appropriate target for a sexual-health oriented intervention. Condom use with occasional partner at last sex is reported quite high (over 80%), while condom use with regular partner is somewhat lower (54 – 63%). In contrast, consistent condom use is reported only between 37 – 47%. Additionally, use of health services for STI and HIV testing is also quite low (under 20%). Availability of condoms appears to be high for this population (over 90%). General knowledge regarding condom use, STI and HIV transmission is high, however, specific knowledge, particularly about STIs, remains quite low (e.g., on average, respondents could not name even one correct common symptom of an STI). In addition, accurate and specific knowledge of health services for STI testing is also low (e.g., 40% of the respondents could not spontaneously name even one health facility where an STI test could be obtained).

Segmentation tables show that for both males and females, skills to negotiate condom use and skills to communicate with partners about condom use are significant determinants of actual use of condoms. Furthermore, beliefs about the appropriateness of condom use with different partners, and the role of “trust” between partners as a criteria of stopping condom use are also significant predictors of actual use of condoms. There were few significant determinants of use of STI services; notably, availability and affordability were not significant predictors. For both condom use and service use, supportive peer norms were significantly associated with the desired behaviors.

Programmatic Recommendations The results of this baseline study suggest several directions for the program:

- Explicitly address and promote consistent condom use, highlighting the benefits of condom use for dual protection (against unwanted pregnancy and STI)

- Educate young people about the specifics of STI, including common types of STI and STI symptoms
- Focus on improving the skills of young people to communicate with their partners about condom use, and specifically, the skills to negotiate condom use in different situations and with different partners
- Challenge the beliefs young people hold about the appropriateness of condom use (such as the notion that condoms are to be used with casual partners only)
- Educate young people about the specifics of STI and HIV testing services: where they exist, how to access them, the prices of the tests and the medicines, etc.
- Influence peer norms about condom use and also about STI testing: i.e., promote these behaviors as fitting with the image of modern, fun, yet responsible young people

Baseline results regarding condom use with various partners, having multiple partners, and related determinants, among young people frequenting dance clubs in Bucharest, Romania, 2005 (weighted means and proportions).

Risk Group: Young people aged 18-24 frequenting dance clubs in Bucharest, Romania.

Behaviors: Condom use at last sex with a regular partner, condom use at last sex with an occasional partner, frequency of condom use with any partner in the past 3 months.

MONITORING TABLE 1: CONDOM USE			
INDICATORS	Male	Female	Sig
KEY SEXUAL CHARACTERISTICS	N=299 % or mean	N=297 % or mean	
- Has ever had sex	98.4	89.9	***
- Mean age at sexual debut	16.1	17.9	***
RISK (among sexually active)	N=293	N=256	
- Currently is with a regular partner (same person for 3 mos. or more)	40.5	59.1	***
- Currently has more than 1 sexual partner (vs. 1 or none)	55.6	6.7	***
- In lifetime has had more than 1 sexual partner (vs. one)	94.3	79.1	***
- In lifetime has had 4 or more partners (vs. less)	83.4	23.1	***
- In the last 3 months has had 2 or more partners (vs. less)	59.1	8.6	***
- Frequents dance clubs once a week or more (vs. less than once a week)	66.8	50.7	***
BEHAVIOR/USE (among sexually active)			
- Used a condom at last sex with a regular partner	63.1	54.0	
- Used a condom at last sex with an occasional partner	85.7	80.4	
- Always used condom with any partner in the past 3 months (vs. most of the time, sometimes, or seldom)	46.6	36.8	
OPPORTUNITY			
<i>Availability of condoms and lubricant</i>			
- Can buy condoms whenever want to†	97.6	93.4	*
- Can buy condoms from a club	6.1	3.9	
- Can find a condom within 500m or 5 minute walk from a club	76.1	63.1	
- Finds it easy to buy lubricants	55.3	60.1	
- Has bought any condoms last month	79.5	31.3	***
- Mostly buys condoms in pharmacy (vs. all other locations; among those who have bought condoms in the last month)	53.9	63.2	
- Most or all the time carries condoms when going to a club	49.9	10.2	***
<i>Brand appeal</i>			
- Has bought LovePlus condoms in the past month (of those that have bought any condoms)	61.5	54.5	
<i>Social norms</i>			
- Most or all friends regularly use condoms (vs. few/none)	64.8	43.7	***
ABILITY			
<i>Knowledge</i>			
- Knows that air must be pinched from tip of condom before use	78.4	66.1	
- Can name (unprompted) different STIs (score; range 0-6)‡	2.2 (m)	2.2 (m)	
- Agrees that HIV can be detected by looking at someone	7.7	7.8	
- Knows correct ways of transmitting STIs (score; range 0-5)	4.4 (m)	4.1 (m)	*
- States <i>incorrect</i> ways of transmitting STIs (score; range 0-6)	1.9 (m)	1.9 (m)	
- States correct common symptoms of STIs (score; range 0-4)£	0.5 (m)	0.9 (m)	***
- Knows physical consequences of untreated STI (score; range 0-5)F	0.53 (m)	0.98 (m)	***
<i>Skills: Self-efficacy, and communication</i>			
- Feels able to negotiate condom use with a regular partner	58.6	67.7	
- Feels able to refuse sex with regular partner if partner refuses to use	59.2	71.1	**

MONITORING TABLE 1: CONDOM USE			
INDICATORS	Male	Female	Sig
condom			
- Feels able to negotiate condom use with a casual partner	48.3	68.0	**
- Feels able to refuse sex with casual partner if partner refuses to use condom	58.0	78.8	***
- Agrees that it is difficult to suggest the use of a condom to a partner with whom condoms have not been used before	44.0	36.5	
MOTIVATION			
Belief			
- Believes that a woman who suggests the use of the condom is <i>not</i> promiscuous	47.5	70.3	***
- Believes that once partners trust each other, it is OK to stop using condoms	67.6	58.9	**
- Believes that condoms should be used with all partners, at all times	36.2	54.6	***
- Believes condoms should be used only for casual sexual encounters	55.1	36.8	***
Outcome expectations regarding condoms			
- Agrees that condoms break easily	41.4	34.4	
- Agrees that condoms reduce sexual pleasure	68.1	51.2	***
- Agrees that the benefit of using a condom is not to worry about pregnancy during sex	73.1	69.3	
- Agrees that the benefit of using a condom is not to worry about STIs during sex	67.9	70.9	
- Agrees that condoms are effective against STI	57.8	64.0	
- Agrees that condoms are effective against pregnancy	50.1	54.4	
- Agrees that sexual lubricant maximizes sexual pleasure	67.9	67.8	
EXPOSURE			
- Has seen LovePlus advertised on TV in the past month	88.0	90.2	
- Has seen LovePlus advertised in printed advertisements in the past month	57.7	56.5	
- Has seen the "Youth zone" campaign in the past 3 months	10.9	14.1	
- Has seen the "Esti dotat" campaign in the past 3 months	28.6	21.4	
- Has been approached by a peer in a club in the past month to discuss safe sex or condom use	5.5	6.2	
- Has heard of the FCV website	47.3	50.2	
- Has ever visited the FCV website	13.8	9.5	
- Has visited the FCV website in the past month (of those that ever visited)	1.7	28.7	*
POPULATION CHARACTERISTICS			
Mean age	20.7	20.5	
Currently not married	99.3	98.7	
Currently studying or attending school	75.3	82.9	**
Completed grades 10-12 or more (vs. less)	90.9	93.7	
Worked full or part time last year (vs. none)	66.9	58.1	*
Had 600RON or more at disposal last month (vs. less)	45.8	29.7	**
Currently lives in parental home (vs. other locations)	68.0	58.3	**

All proportions and means are adjusted (unless stated otherwise) for the following socio-demographic characteristics: age, currently studying, highest grade completed, worked in the past year, having more than 600RON at disposal in last month, and currently living in parental home. Population characteristics themselves are unadjusted.

(m) = mean score

*=p<0.05; **=p<0.01; ***p<0.001

† = Unadjusted proportions due to small sample size in one or more cells.

‡ = Most commonly named STIs: HIV/AIDS (91.6%); syphilis (70.9%); gonorrhea (32.4%).

£ = Options include: genital rash (26.2%); genital discharge (17.6%); burns at urination (16.6); genital sores (9.6%).

F = Options include: death (42.9%); infertility (12.6%); transmit to someone else (8.2%); impotence (6.7%); transmit to unborn child (3.0%).

Monitoring Analysis 1:

The preceding monitoring table was prepared in accordance with PSI's behavior change framework, PERForM¹, and presents baseline indicators. These indicators will be monitored over time to detect trends in behavior and opportunity, ability, and motivation related to safe sexual practices.

The monitoring analysis was conducted separately for males and females, as the sample size was also constructed with this stratification in mind. This decision was based on the rationale that sexual experiences, and influences and decisions related to sexual experience, are different for young men and young women. Furthermore, due to the wealth of the data, the monitoring analysis was split into two tables: Table 1 focuses on sexuality-related behaviors and their determinants, while Table 2 focuses on use of health services and related determinants. This also reflects the two programmatic areas of focus for PSI Romania's interventions aimed at young people.

As Table 1 shows, young men and young women surveyed were significantly different in some key population characteristics: more females were currently studying (82.9% vs. 75.3%), however, more males worked in the past year (66.9% vs. 58.1%), males had more money at their disposal (45.8% vs. 29.7%), and more males currently lived in the parental home (68.0% vs. 58.3%). The mean age for both men and women was just over 20 years, and over 90% of both groups completed at least high school. The vast majority of both males and females were unmarried at the time of the interview.

Regarding key sexual characteristics, the majority of both males and females had ever had sex, though the proportion was significantly higher for males (98.4% vs. 89.9%). Also, the mean age of sexual debut was significantly lower for males (16.1 years) than females (17.9 years). Sexual risk profiles were also quite different between young men and young women, with males generally reporting higher risk. A considerably and significantly higher proportion of males reported currently having more than one sexual partner (55.6% vs. 6.7%); and while the majority of both sexes reported having more than one sexual partner in lifetime (males significantly higher at 94.3% vs. 79.1%), there was a more marked difference in the proportion of males reporting

¹ See Annex 4 for diagrammatic presentation of PSI's behavior change framework.

having had more than 4 sexual partners in lifetime (83.4% males vs. 23.1% females), and the proportion of males reporting two or more partners in the last three months (59.1% vs. 8.6). Conversely, more females reported currently being with a regular partner (59.1% vs. 40.5%). The final risk variable related to frequency of attending dance clubs: more males attended clubs at least once a week or more than females (66.8% vs. 50.7%).

There were no statistically significant differences between males and females in terms of condom use behaviors. Use of condom at last sex with occasional partner was reported highest for both males and females (over 80%); use of condom at last sex with regular partner was somewhat lower (63.1% males and 54.0% females); consistent condom use with any partner in the past 3 months was lowest, at 46.6% males and 36.8% females.

It is important to note these findings confirm that the universe of clubbers represents young people who engage in more sexually risky behavior than “average” young Romanians. As compared to the Global Fund* study which collected information from a nationally-representative sample of young people, more young people frequenting clubs in Bucharest had two or more sexual partners in the last three months: 59.1% males and 8.6% females, as compared to 20.9% for males and 2.1% for females in the Global Fund Survey. On the other hand, young people attending clubs in Bucharest also report higher condom use at last sex with any partner than the “average” Romanian youth: 77.6% among males and 55.1% among females, as compared to 59.1% among males and 43.2% among females in the Global Fund Survey.

Furthermore, the study also confirms that among clubbers, those who frequent clubs very often (i.e., once a week or more), engage in riskier sexual behavior: 58.7% of the entire sample frequents the dance clubs at least once a week or more, and this sub-group of young people is more likely to have currently more than one sexual partner (for males, 33.2% among frequent clubbers vs. 12.5 of non-frequent clubbers; the difference for females was not significant; data not shown in table), and more likely have had more than 4 sexual partners in lifetime (48.9% vs. 28.7% for males, and 11.4% vs. 6.6% for females; differences are statistically significant; data not shown in table).

* Global Fund Study: “Knowledge, Attitudes and Practices of Young People 15-24 related to HIV/AIDS and consequences of unprotected sex”, conducted in Jul-Aug 2004, on nationally representative sample of 1,202 individuals.

Opportunity-related factors were measured by variables related to availability, brand appeal, and social norms. Overall, respondents reported high availability of condoms: while there was a difference between males and females, over 90% of both groups reported being able to buy condoms whenever they wanted to. Very small proportions reported being able to buy condoms from a nightclub; however, about two-thirds reported that condoms could be bought within 500m or 5 minute walk from a club. In addition, over half of both males and females reported that it is easy to buy lubricant. Many more males reported having bought condoms in the past month as compared to females (79.5% vs. 31.3%), and over half of all respondents who bought condoms in the last month reported buying them in pharmacies. More males also reported carrying condoms with them when going to a club (49.9% vs. 10.2%). Regarding brand appeal, over half of respondents who bought any condoms in the last month bought Love Plus condoms (no difference between sexes). Finally, social norms were measured as perception of peer behavior: significantly more males than females reported that most or all of their friends use condoms (64.8% vs. 43.7%).

Ability was measured through factors related to knowledge of STI, HIV and condom use, and skills related to self-efficacy and communication. Generally, females scored better on knowledge items than males. Knowledge about general STI transmission was quite high, with mean score for females higher than mean score for males (4.4 vs. 4.1 out of 5). Also, few respondents reported the erroneous belief that HIV can be detected by looking at someone. However, on more specific items, both males and females scored lower: few could name many STIs unprompted (mean score 2.2 for both sexes, out of 6); both groups scored low on stating common symptoms of STIs (though females significantly higher at 0.9 than males at 0.5, out of 4), and on knowing physical consequences of untreated STI (again females significantly higher at 0.9 than males at 0.5, out of 5). Correct condom use was measured by knowing that the air must be pinched from the tip of the condom, as this is a common reason for condom failure. There was no statistical difference between males and females, and while both scored fairly high, this particular knowledge item is often linked to condom breakage and can therefore be improved further. Self-efficacy and communication skills regarding condom use suggest there is room for improvement, particularly among males. Over half of all respondents felt they could negotiate condom use with a regular partner, however, only 59.2% of males (vs. 71.1% females) felt able to refuse sex with a regular partner if partner refused to use a condom. Furthermore, females felt able to negotiate condom use with an occasional partner significantly more than males (68% vs. 48.3%), and females felt able to refuse sex with an occasional partner if the partner refused to use a condom significantly

more than males (78.8% vs 58%). Around 40% of both groups felt that it would be difficult to suggest the use of condom to a partner with whom condoms had not been used before.

Motivation was measured by variables relating to beliefs about condom use, and outcome expectations related to condoms. Overall, the findings suggest that the sense of trusting a partner allows for discontinuation of condoms, and that condoms are seen as more appropriate for casual than regular partners. In addition, females were characterized by having significantly more positive beliefs about condom use than men: 70.3% of women (vs. 47.5% of men) believed that a woman who suggests the use of condoms is not promiscuous; fewer women than men believed that once partners trust each other it is OK to stop using condoms (58.9% vs. 67.6%); more women believed that condoms should be used with all partners at all times (54.6% vs. 36.2%); and fewer women believed that condoms should be used only for casual sexual encounters (36.8% vs. 55.1%). Outcome expectations regarding condoms differed very little between males and females; generally, the results show that young people do not have very high expectations of condoms. One third of females and over 40% of males agree that condoms break easily, males agree significantly more (68.1%) than females (51.2%) that condoms reduce sexual pleasure, and around 70% of both groups agree that the benefit of using condoms is to not worry about pregnancy or STIs during sex. Interestingly, at the same time, just over one half of both groups report agreeing that condoms are actually effective against pregnancy and STIs. Finally, nearly 70% of both groups agree that sexual lubricant maximizes sexual pleasure.

Finally, the respondents were queried about their exposure to a number of sexual-health programs targeted at youth in Bucharest at the time of the survey, including the PSI Love Plus condom marketing campaign. The vast majority of both males and females reported having seen Love Plus advertised on TV in the past month, and just over one half of both groups reported having seen Love Plus advertised in printed media. Much smaller proportions of respondents reported having seen the “Youth zone” campaign implemented by Tineri pentru Tineri (an NGO for Youth) and the “Esti dotat” campaign implemented by the GF partners under the activity of HIV/AIDS prevention among youth. Very small proportion (about 5%) of both groups reported having been approached by a peer in a club in the past month to discuss safe sex or condom use; this measure will also serve as a baseline comparison for the PSI POL intervention planned for 2006. About one half of all respondents also reported having heard of the PSI Fac Ce Vrau (FCV) website, while much smaller proportions had visited it (though nearly 30% of females had visited it in the past month). This is congruent with the PSI advertising of the FCV website at the time of

the survey, and speaks to the visibility and recall of the campaign logo. The youth interventions planned by PSI for 2006 and 2007 will build on both the club setting and environment (through the POL intervention), as well as on providing appealing and relevant health information to young people through a variety of media channels.

Baseline results regarding service utilization for STI and HIV testing, other related behaviors, and relevant determinants among young people frequenting dance clubs in Bucharest, Romania(2005). Note: the population characteristics are the same as those in the previous monitoring table and are not repeated below.

Risk Group: Sexually active young people aged 18-24 frequenting dance clubs in Bucharest, Romania.

Behaviors: Health service utilization for STI and for HIV test (ever, and in the past 12 months), and other testing-related behaviors

MONITORING TABLE 2: HEALTH SERVICE UTILISATION			
INDICATORS	Male	Female	Sig
PRIMARY BEHAVIORS OF INTEREST (among sexually active)	N=293	N=256	
- Ever (in lifetime) gone to a health service to get and STI test	18.2	16.7	
- Ever (in lifetime) been tested for HIV	10.4	12.4	**
- Has gone for STI or HIV test in the past 12 months (of those that have ever gotten tested)	18.8	16.5	**
SECONDARY BEHAVIORS OF INTEREST and related factors			
- Has ever treated self with medicine because was worried that had STI, without going to doctor first	1.6	2.1	
- Has ever tested positive for an STI (of those who have ever been tested)	13.7	22.0	
- Received treatment for STI (of those who have tested positive) †	88.9 (n=18)	100.0 (n=19)	
- Problem was cured through treatment (of those who received treatment) †	87.5 (n=16)	94.7 (n=19)	
- Notified any recent sexual partner (of those who tested positive for STI) †	44.4 (n=18)	47.4 (n=19)	
OPPORTUNITY			
<i>Availability of health services</i>			
- Knows at least one health service where an STI test can be obtained (unprompted)‡	55.3	58.8	
- Health service for an STI test available only within 30 min or more of driving	37.7	38.7	
- Considers distance to health service for STI test short or acceptable (vs. too long)	93.5	94.6	
- Knows at least one health service where an HIV test can be obtained (unprompted) ^h	64.6	66.6	
<i>Service characteristics</i>			
- Price of test is very important in deciding to get an STI test	45.5	34.9	*
- Distance/time to get to the clinic is very important in deciding to get an STI test	34.3	29.3	
- Price of medicines is very important in deciding to get an STI test	38.5	32.6	
<i>Social norms</i>			
- Some or most friends have ever gotten an STI test (vs. few/none)	19.4	26.0	
ABILITY			
<i>Knowledge</i>			
- Can name (unprompted) different STIs (score; range 0-6)‡	2.2 (m)	2.2 (m)	
- Knows correct ways of transmitting STIs (score; range 0-5)	4.4 (m)	4.1 (m)	
- States <i>incorrect</i> ways of transmitting STIs (score; range 0-6)	1.9 (m)	1.9 (m)	
- States correct common symptoms of STIs (score; range 0-4)£	0.5 (m)	0.9 (m)	
- Knows physical consequences of untreated STI (score; range 0-5)F	0.53 (m)	0.98 (m)	
- Would be able to recognize STI symptoms in oneself	63.8	76.9	***

MONITORING TABLE 2: HEALTH SERVICE UTILISATION			
INDICATORS	Male	Female	Sig
<i>Self-efficacy, and communication</i>			
- If detected symptoms, would feel comfortable going to a health service for an STI test	53.3	50.3	
- Would be able to discuss with partner about him/her also getting a test for an STI	64.9	79.9	***
MOTIVATION			
<i>Threat/Risk perception</i>			
- Assesses own risk for STI as moderate, or high (vs. low or no risk)	46.6	27.4	***
<i>Outcome expectations regarding STI treatment</i>			
- Believes there is effective treatment for most STIs	61.8	67.5	
- Believes treatment for STIs is available in Romania	77.4	83.9	
- Believes he/she could obtain STI treatment if needed	77.3	85.3	
<i>Peer & partner pressure/norms</i>			
- Friends' advice is very important in deciding to get an STI test	35.8	32.6	
- Partner's advice is very important in deciding to get an STI test	68.2	52.2	**

(m) = mean score

* = p<0.05; **=p<0.01; ***p<0.001

† = Unadjusted proportions due to small sample sizes

‡ = Most commonly named: Dermato-venerologists in state clinics (49.1%); private clinics (19.3%); family doctor (14.7%); gynecologist (11.1%); family planning cabinets (5.7%).

ⁿ = Most commonly named: Dermato-venerologists in state clinics (25.8%); private clinics (22.9%); family doctor (6.8%); family planning cabinets (5.0%).

‡ = Most commonly named STIs: HIV/AIDS (91.6%); syphilis (70.9%); gonorrhea (32.4%).

£ = Options include: genital rash (26.2%); genital discharge (17.6%); burns at urination (16.6); genital sores (9.6%).

F = Options include: death (42.9%); infertility (12.6%); transmit to someone else (8.2%); impotence (6.7%); transmit to unborn child (3.0%).

Monitoring Analysis 2:

Monitoring Table 2 reports service utilization behaviors and related determinants; as the first monitoring table, it was prepared in accordance with PSI's behavior change framework, PERForM, and presents baseline indicators. These indicators will be monitored over time to detect trends in behavior and opportunity, ability, and motivation related to health service utilization. Some determinants from Monitoring Table 1 could also be relevant to health service utilization, however, for brevity sake, most were not repeated in this second table.

Both males and females reported fairly low rates of having ever gone to a health service for an STI test (under 20% for both). This should be seen in context of the known syphilis rates in Romania, which have been recorded as 15 times higher than elsewhere in Europe: in Romania (per 100 000 per year) there are 45 new cases of syphilis compared to 3 in EU (25 countries).* Young people account for a large proportion of the new infections: from 2000 to 2002 the syphilis rate increased from 44 to 62 cases / 100,000 individuals, more than 57% among young people.** Furthermore, fewer respondents reported ever having had an HIV test (though this was higher for females, at 12.4%, vs. males at 10.4%). Finally, of those who have ever had an STI test, under 20% of both groups report testing in the past 12 months.

The behaviors described above were considered primary behaviors which the PSI program will attempt to change. In addition, a number of related, secondary behaviors were also measured, particularly among those who have ever tested positive for an STI. A very low proportion of respondents reported self-treating for an STI without going to the doctor first; however, 13.7% of males and 22.0% of females who have ever been tested for an STI, reported ever having been diagnosed with an STI. Among those, the vast majority received treatment for the STI and also cured the infection with the treatment. On the other hand, less than one half of both males and females notified any recent sexual partner that they had tested positive for an STI.

Opportunity factors for health service utilization were measured through variables related to availability of health services, service characteristics, and social norms. Knowledge of available health services was not very high, with just under two-thirds of both males and females

* www.euro.who.int/InformationSources/Publications/Catalogue/20060301_8?language=french

** Government of Romania: 2004 – 2007 HIV/AIDS national strategy, Bucharest 2004

spontaneously naming at least one health service where an STI can be obtained; slightly higher proportions were able to name a service where an HIV test could be obtained. Physical accessibility of services did not seem to be a problem: while approximately 40% reported that a service is available only within 30 minutes or more of driving, over 90% of both males and females considered this distance to be acceptable. Among the three factors queried on the survey which could influence the decision to get an STI test, more males than females reported that price of the test itself was important (45.5% vs. 34.9%), while approximately one-third of both groups felt that the distance to the clinic and price of medicines were important factors. Regarding social norms to get an STI test, only 19.4% males and 26.0% females reported that some or most of their friends had ever gotten an STI test.

Ability related to health service utilization was measured by factors relating to knowledge about STIs, and self-efficacy and communication regarding STI testing. Most of the STI knowledge items in this table were already presented in Monitoring Table 1, as these factors were also seen relevant to health service utilization. As was noted in the previous analysis, females tended to score better on knowledge items than males, and while general knowledge about STI transmission was quite high, specific knowledge (relating to naming STIs unprompted, knowing common symptoms of STIs and knowing physical consequences of STIs), tended to be rather low for both groups. In light of these trends, it is worth to note an item unique to Monitoring Table 2: a high proportion of both groups, with females significantly higher, reported that they would be able to recognize STI symptoms in themselves (76.0% females vs. 63.8% males). There is clearly incongruence between respondents' perception of recognizing STIs, and their actual knowledge of STIs. Furthermore, only about one half of both males and females reported that they would be comfortable going to a health service if they detected STI symptoms, and around two thirds of the overall sample reported they could discuss the STI test with a partner (with females at 79.9% significantly higher than males at 64.9%).

Motivation to use health services was measured through a series of variables relating to threat/risk perception, outcome expectations regarding STI treatment, and peer and partner norms. A significantly higher proportion of males than females reported their own risk for an STI as moderate or high (46.6% vs. 27.4%), while both groups reported fairly high outcome expectations of STI treatment, with no difference between the two sexes. Finally, about one-third of both males and females reported that their friends' advice is very important in deciding whether to get

an STI test; while 52.2% of females and 68.2% of males (significantly different) reported that their partners' advice is important in this decision.

Segmentation Table 1: Determinants of condom use at last sex with regular partner (Males and Females modeled separately)

Risk Groups: Sexually active young males and sexually active young females frequenting dance clubs (age 18-24), Bucharest, Romania

Behavior: Condom use at last sex with regular partner

INDICATORS	Males (n=188)			Females (n=239)		
	Non-users (41.6%)	Users (58.3%)	Sig.	Non-users (43.9%)	Users (56.1%)	Sig.
RISK	% or mean	% or mean		% or mean	% or mean	
- Mean age at sexual debut	16.6	17.5	*	16.7	17.4	***
- In lifetime has had more than 1 sexual partner (vs. one)	--	--		82.5	76.3	
OPPORTUNITY						
<i>Availability of condoms and lubricant</i>						
- Has bought any condoms last month	28.8	75.0	***	29.3	76.4	***
- Most or all the time carries condoms when going to a club	12.7	25.8	*	16.2	33.8	
- Finds it easy to buy lubricants	--	--		62.6	54.2	
<i>Social norms</i>						
- Most or all friends regularly use condoms (vs. few/none)	36.9	63.8	*	37.9	64.2	***
ABILITY						
<i>Skills: Self-efficacy, and communication</i>						
- Feels able to negotiate condom use with a regular partner	57.9	73.0	***	--	--	
- Agrees that it is difficult to suggest the use of a condom to a partner with whom condoms have not been used before	--	--	--	48.7	39.3	**
MOTIVATION						
<i>Belief</i>						
- Believes that once partners trust each other, it is OK to stop using condoms	74.0	54.8		74.0	54.8	
- Believes that condoms should be used with all partners, at all times	28.3	57.8		--	--	
- Believes condoms should be used only for casual sexual encounters	60.5	35.2	**	62.9	32.5	*
POPULATION CHARACTERISTICS						
<i>Mean age</i>	21.0	20.6		21.0	20.6	
<i>Currently studying or attending school</i>	66.3	85.4		66.3	85.4	
<i>Completed grades 10-12 or more (vs. less)</i>	92.0	91.9		92.0	91.9	
<i>Worked full or part time last year (vs. none)</i>	74.3	53.9		74.3	53.9	
<i>Had 600RON or more at disposal last month (vs. less)</i>	46.7	31.8		46.7	31.8	
<i>Currently lives in parental home (vs. other locations)</i>	64.5	56.2		64.5	56.2	

The table shows the variables kept in the final logistic regression models; Male and Female models were constructed separately, therefore some variables appear in one model but not the other. Variables marked with dashes (--) were not included in that particular model.

* = p<0.05; **=p<0.01; ***p<0.001

The proportions presented for the significant variables are adjusted for all other variables in the model. The proportions presented for non-significant variables are unadjusted.

Segmentation Table 1: Determinants of condom use at last sex with a regular partner

Segmentation is the process of dividing a heterogeneous population into a homogenous audience whose profile; in other words, the population is divided into those who practice the desired behaviour and those who do not, e.g., condom users and non-users. Then each group is profiled according to the barriers to behavior change that were captured in the surveys, which, in turn, allows programmer to design and implement behaviour change interventions.

Age at sexual debut was significantly associated with condom use with a regular partner for both males and females: condom users were older than non-users (17.5 vs. 16.6 years for males, and 17.4 vs. 16.7 years for females). Having more than one sexual partner was retained in the female model, although was not statistically significant.

Regarding opportunity factors as measured by availability, male and female condom users were more likely to have bought any condoms in the last month than non-users (75.0% vs. 28.8% for males, and 76.4% vs. 29.3% for females); male condom users were also more likely to carry condoms with them when going to a club (25.8% vs. 12.7%), while this variable was not significant for females. Finding it easy to buy lubricants was retained in the female model, although was not significant in the multivariate analysis. For both males and females, those that used a condom at last sex with regular partner were more likely to report similar peer norms: 63.8% of male users vs. 36.9% of male non-users reported that most or all friends regularly use condoms; these proportions were 64.2% for female users, vs. 37.9% for non-users.

Different ability factors related to communication skills achieved statistical significance in the male and female models. Among males, condom users were more likely to report feeling able to negotiate condom use with a regular partner (73.0% vs. 57.9% for non-users). Among females, users were less likely to agree that it is difficult to suggest the use of a condom to a partner with whom condoms had not been used before (39.3% vs. 48.7% for non-users).

Several factors related to the concept of motivation, as measured by beliefs, were included in the final models; for both males and females, the item “believes condoms should be used only for casual sexual encounters” was significantly associated with the outcome. Among males, 35.2%

users believed condoms should only be used for casual sex (vs. 60.5% of non-users), while for females the proportion was 32.5% of users (vs. 62.9% of non-users).

Population characteristics were not significantly associated with the outcome in either the male or the female model.

Segmentation Table 2: Determinants of condom use at last sex with occasional partner (Male and Female combined in one model)‡

Risk Group: Sexually active young people (male and female) frequenting dance clubs (age 18-24), Bucharest, Romania.

Behavior: Condom use at last sex with occasional partner (n=268)

INDICATORS	Non-users (16.6%)	Users (83.4%)	Sign.
OPPORTUNITY			
<i>Availability of condoms and lubricant</i>			
- Has bought any condoms last month	45.2	81.0	***
- Most or all the time carries condoms when going to a club	19.4	47.9	***
<i>Social norms</i>			
- Most or all friends regularly use condoms (vs. few/none)	43.5	65.4	†
MOTIVATION			
<i>Belief</i>			
- Believes that once partners trust each other, it is OK to stop using condoms	91.4	65.0	*
- Believes that condoms should be used with all partners, at all times	33.3	48.0	
- Believes condoms should be used only for casual sexual encounters	72.9	48.9	***
<i>Outcome expectations regarding condoms</i>			
- Agrees that condoms break easily	61.2	36.9	*
POPULATION CHARACTERISTICS			
<i>Female (vs. male)</i>	28.1	21.0	
<i>Mean age</i>	20.9	20.7	
<i>Currently studying or attending school</i>	62.4	80.9	
<i>Completed grades 10-12 or more (vs. less)</i>	92.2	91.4	
<i>Worked full or part time last year (vs. none)</i>	76.2	65.2	
<i>Had 600RON or more at disposal last month (vs. less)</i>	58.2	45.2	
<i>Currently lives in parental home (vs. other locations)</i>	71.5	66.7	

The table shows the variables kept in the final logistic regression model.

‡ Note: males and females combined in this model because the sample size for females (n=60) is too small to conduct independent analysis. The variable “sex” was not significant in the analysis, therefore interactions between other independent variables and the sex variable were not conducted.

* = p<0.05; **=p<0.01; ***p<0.001

† = p<0.10

The proportions presented for the significant variables are adjusted for all other variables in the model. The proportions presented for non-significant variables are unadjusted.

Segmentation Analysis 2: Determinants of condom use at last sex with occasional partner (males and females)

Males and females were combined in this analysis because the number of females who reported on condom use with an occasional partner was too small to conduct independent analysis (n=60). The variable “sex” was included in the model and was found to not be significantly associated with the outcome, nor with any of the independent variables. Overall, the variables in the model predicting condom use with an occasional partner were quite similar to the variables predicting condom use with a regular partner.

Items relating to availability of condoms were significantly associated with condom use: users were significantly more likely than non-users to report they have bought condoms in the past month (81.0% vs. 45.2%), and users were significantly more likely than non-users to carry condoms with them when going to a club (47.9% vs. 19.4%). Regarding social norms, users were more likely than non-users to report that most or all of their friends regularly use condoms (though the difference was significant at only $p < 0.10$ level).

Under motivation, items related to beliefs on when it is appropriate to use condoms were significantly associated with actual use. That is, condom non-users were much more likely to believe that once partners trust each other it is OK to stop using condoms (91.4% vs. 65.0%), and they were also less more likely to believe that condoms should be used with only casual sexual encounters (72.9% vs. 48.9%). Users and non-users also differed in terms of outcome expectations, with non-users much more likely to agree than users that condoms break easily, although the proportion among users is still quite high (61.2% vs. 36.9%).

There were no ability-related characteristics in this model. Also, while the population characteristics were retained in the model, none of them were significantly associated with the outcome.

Segmentation Table 3: Determinants of consistent condom use in last 3 months with any type of partner (Males and Females modeled separately)

Risk Groups: Sexually active young males and sexually active young females frequenting dance clubs (age 18-24), Bucharest, Romania

Behavior: Always used condoms with any partner in the last 3 months

INDICATORS	Males (n=220)			Females (n=226)		
	Non-users (55.3%)	Users (44.7%)	Sig.	Non-users (62.6%)	Users (37.4%)	Sig.
RISK	% or mean	% or mean		% or mean	% or mean	
- Currently has more than 1 sexual partner (vs. 1 or none)	29.4	43.7		--	--	
- Mean age at sexual debut	--	--		16.5	17.2	**
OPPORTUNITY						
<i>Availability of condoms and lubricant</i>						
- Has bought any condoms in the last month	--	--		16.5	20.9	*
- Most or all the time carries condoms when going to a club	37.2	55.9	*	21.6	46.9	†
<i>Social norms</i>						
- Most or all friends regularly use condoms (vs. few/none)	42.8	70.2		48.6	65.0	**
ABILITY						
<i>Skills: Self-efficacy, and communication</i>						
- Feels able to negotiate condom use with a regular partner	60.5	64.2		--	--	
- Agrees that it is difficult to suggest the use of a condom to a partner with whom condoms have not been used before	--	--		46.7	37.1	*
MOTIVATION						
<i>Belief</i>						
- Believes that a woman who suggests the use of a condom to a partner is <i>not</i> promiscuous	--	--		81.6	53.9	**
- Believes that once partners trust each other, it is OK to stop using condoms	75.9	59.9		69.6	48.8	
- Believes that condoms should be used with all partners, at all times	32.0	58.4	**	29.1	59.3	***
- Believes condoms should be used only for casual sexual encounters	61.8	41.8	**	59.8	34.9	*
POPULATION CHARACTERISTICS						
<i>Mean age</i>	20.8	20.5		20.8	20.50	**
<i>Currently studying or attending school</i>	88.0	93.5	*	71.1	87.1	
<i>Completed grades 10-12 or more (vs. less)</i>	91.5	93.6		91.5	93.6	
<i>Worked full or part time last year (vs. none)</i>	69.6	57.3		69.6	57.3	
<i>Had 600RON or more at disposal last month (vs. less)</i>	37.1	50.9		33.1	42.4	†
<i>Currently lives in parental home (vs. other locations)</i>	52.8	74.2	***	58.9	66.0	

The table shows the variables kept in the final logistic regression models; Male and Female models were constructed separately, therefore some variables appear in one model but not the other. Variables marked with dashes (--) were not included in that particular model.

* = p<0.05; **=p<0.01; ***p<0.001

† = p<0.10

The proportions presented for the significant variables are adjusted for all other variables in the model. The proportions presented for non-significant variables are unadjusted.

Segmentation Analysis 3: Determinants of consistent condom use in last 3 months with any type of partner

It is worth to note that the overall proportions of consistent condom use are considerably lower than reported condom use at last sex (with regular and occasional partner). In terms of protection against STIs and HIV, it is arguably consistent use (measured here as “always used a condom in the past 3 months with any sexual partner) that is the critical behavior to promote.

Regarding risk factors, mean age of sexual debut was significantly associated with consistent condom use for the female group, with female condom users reporting a mean sexual debut age of 17.2 years vs. 16.5 years for non-users. The risk factor “having currently more than one sexual partner” was retained in the male model, though it was not significant.

Opportunity was measured by factors related to availability of condoms: among females, consistent condom users were significantly more likely than non-users to have bought condoms in the past month (20.9% vs. 16.5%); for both males and females, consistent condom users were significantly more likely to carry condoms with them when going to a club (55.9% vs. 37.2% among males, and 46.9% vs. 21.6% for females). Social norms were retained in both models, but achieved statistical significance only in the female model, with consistent users being more likely than non-users to report that most or all of their friends regularly use condoms (65.0% vs. 48.6%).

Ability was measured by communication and self-efficacy skills. In the male model, the item “feels able to negotiate condom use with a regular partner” was retained in the model but was not statistically significant; while in the female model users were less likely than non-users to agree that it is difficult to suggest the use of a condom to a partner with whom condoms have not been used before (37.1% vs. 46.7%).

Motivation was measured by factors relating to beliefs about condom use. In both the male and female model, consistent users were more likely to believe that condoms should be used with all partners at all times (59.3% vs. 29.1% in the female model, and 58.4% vs. 32.0% in the male model); also in both groups, consistent condom users were less likely to believe that condoms should be used only for casual sexual encounters (34.9% vs. 59.8% for females, and 41.8% vs. 61.8% for males). In addition, there was an unexpected finding in the female model: consistent condom users were less likely than non-users to believe that a woman who suggests the use of

condoms is *not* promiscuous (53.9% vs. 81.6%). It is unclear what is influencing this item, particularly since 70.3% of all females reported agreeing with this item (see Monitoring Table 1).

A number of population characteristics were significantly associated with this outcome. Among females, consistent condom users were slightly younger (mean age 20.0 years vs. 20.8 for non-users), and were more likely than non-users to have a higher income at their disposal (42.4% vs. 33.1%, borderline significant). Male consistent condom users were also more likely than non-users to be currently studying or attending school (93.5% vs. 88.0%), and more likely to currently live in the parental home (74.2% vs. 52.8%).

Segmentation Table 4: Determinants of having ever (in lifetime) gotten an STI or HIV test (Males and Females modeled together)**Risk Group: Sexually active young people (males and females) frequenting dance clubs (age 18-24), Bucharest, Romania****Behavior: Has ever gotten an STI or HIV test (n=507)**

INDICATORS	Never tested (65.8%)	Tested (34.2%)	Sign.
RISK	% or mean	% or mean	
- In lifetime has had 4 or more partners (vs. less)	51.6	69.0	*
OPPORTUNITY			
<i>Availability of health services</i>			
- Knows at least one health service where an HIV test can be obtained (unprompted) ^a	68.5	75.0	
<i>Service characteristics</i>			
- Price of medicines is very important in deciding to get an STI test	38.4	24.6	†
<i>Social norms</i>			
- Some or most friends have ever gotten an STI test (vs. few/none)	10.7	45.1	***
ABILITY			
<i>Knowledge</i>			
- Can name (unprompted) different STIs (score; range 0-6) ‡	2.2 (m)	2.4 (m)	*
- States correct common symptoms of STIs (score; range 0-4) £	0.6 (m)	0.9 (m)	
- Would be able to recognize STI symptoms in oneself	68.4	73.5	
<i>Self-efficacy, and communication</i>			
- If detected symptoms, would feel comfortable going to a health service for an STI test	46.9	60.9	*
- Would be able to discuss with partner about him/her also getting a test for an STI	67.5	79.6	
MOTIVATION			
<i>Outcome expectations regarding STI treatment</i>			
- Believes there is effective treatment for most STIs	79.8	82.4	
- Believes he/she could obtain STI treatment if needed	78.7	83.5	
POPULATION CHARACTERISTICS			
<i>Female</i>	45.6	48.6	
<i>Mean age</i>	20.5 (m)	20.9 (m)	
<i>Currently studying or attending school</i>	77.0	79.4	
<i>Completed grades 10-12 or more (vs. less)</i>	91.3	93.7	
<i>Worked full or part time last year (vs. none)</i>	61.3	67.5	
<i>Had 600RON or more at disposal last month (vs. less)</i>	36.0	47.2	
<i>Currently lives in parental home (vs. other locations)</i>	62.0	62.7	

The table shows the variables kept in the final logistic regression model.

* = p<0.05; **=p<0.01; ***p<0.001

† = p<0.10

The proportions presented for the significant variables are adjusted for all other variables in the model. The proportions presented for non-significant variables are unadjusted.

^a = Most commonly named: Dermato-venerologists in state clinics (25.8%); private clinics (22.9%); family doctor (6.8%); family planning cabinets (5.0%).

‡ = Most commonly named STIs: HIV/AIDS (91.6%); syphilis (70.9%); gonorrhea (32.4%).

£ = Options include: genital rash (26.2%); genital discharge (17.6%); burns at urination (16.6); genital sores (9.6%).

Segmentation Analysis 4: Determinants of having ever (in lifetime) gotten an STI or HIV test (males and females)

Only 34% of the overall sample had ever gotten an STI or HIV test, and therefore male and female respondents were combined in this analysis. The variable “sex” was not significant in the analysis. Regarding risk factors, respondents who had ever had an STI or HIV test were more likely to have 4 or more sexual partners in lifetime (69.0% vs. 51.6% for those who have never been tested).

Regarding opportunity factors, the item relating to knowledge of services where a test can be obtained was retained in the model although it did not achieve statistical significance. One item measuring service characteristics was retained in the final model and achieved borderline statistical significance: those who have ever been tested were less likely to state that the price of medicines is an important factor when deciding to get an STI test (24.6% vs. 38.4% for those who have never been tested). Relating to social norms, respondents who have ever been tested were more likely to report that some or most of their friends have also been tested (45.1% vs. 10.7% for those who have never been tested).

Ability factors were measured by variables relating to knowledge and self-efficacy. Respondents who had ever been tested had a higher mean score of unprompted naming different STIs (mean 2.4 vs. 2.2 for those who had never been tested), although the mean is quite low for both groups. Both groups also scored quite low on stating correct common symptoms of an STI, although there was no difference between those who had been and those who had not been tested. This is an important finding vis-à-vis the result that the majority of respondents in both groups (ever tested, and never tested), reported they would be able to recognize STI symptoms in themselves (although this factor was not significantly associated with the outcome). In addition, most respondents in both groups also reported that they felt they would be able to discuss STI testing with a partner, though again this factor was not statistically associated with the outcome.

Motivation was measured by variables regarding outcome expectation of the STI / HIV testing services. There were no differences between those who had been and those who had never been tested, but around 80% of both groups reported believing that there is effective treatment for most STIs, and that he or she would be able to obtain the treatment if needed. Finally, none of the population characteristics were significantly associated with the outcome.

Programmatic recommendations

- This study confirms that young people who frequent clubs, and among those, young people who frequent clubs at least once a week or more, engage in more sexually risky behavior than other young people. Therefore, this population appears to be a good target audience for an intervention focusing on sexual responsibility and increased testing for STI, as is being implemented by PSI Romania.
- The study also reveals that this is a sub-group of highly educated young people, the majority of whom are continuing to study; and although they do not have a very high level of disposable income, about two third of them also work at least part time. These are important characteristics when designing the tone and feel of the PSI intervention messages and materials.
- Condom use at last sex is reported quite high among both young men and women, particularly with casual partners (over 80%). However, consistent condom use (defined as “always used a condom in the last 3 months with any type of partner) is much lower (under 50%). This is an important finding, as consistent condom use is key in terms of STI and HIV prevention. The PSI program can educate young people about the false sense of safety that occasional condom use gives, and can focus its messages to promote consistent condom use. Furthermore, given the low rates of knowledge of STIs (and the high rates of STI infection in Romania; though this factor was not measured in the present study), there may be over-reporting of condom use. Young people know that they should be using condoms; however, it is unclear whether this knowledge has translated into actual use.
- Use of health services for STI and HIV testing is somewhat low in this population. Given the uncertainty of how much condom use is over-reported, the low rates of consistent condom use, and the continuing high rates of STIs in Romania, this behavior is clearly well-chosen as one of the key targets of the PSI intervention.
- General availability of condoms and lubricants does not seem to be a barrier among this group of young people. However, young people (particularly young males) who reported carrying condoms with them to clubs were much more likely to also report use of condoms. In addition to convincing young people to “be prepared” by carrying condoms with them, it does appear that the convenience of having condoms accessible at unconventional hours and locations (such as clubs) may be an important determinant of actual use of condoms, and may therefore merit programmatic consideration.

- Availability of health services was reported to be high, however, few young people could name even one place where they could obtain an STI or HIV test. Furthermore, the price of test was cited as the most important factor in deciding to get an STI test, even though the public health care system provides testing free of charge through doctor referral, and, at the time of this writing, an NGO clinic also offered free testing for a number of STIs and HIV. These findings would suggest that an education/information component about the specifics of where, when, how, and how much of STI and HIV testing could be an important part of the PSI intervention.
- As is common in groups of young people, social norms play an important role in influencing behavior, and this study also finds that respondents who report using condoms themselves are much more likely to report that their peers also use condoms. On the other hand, social norms (as measured through peers' behaviors) regarding testing were quite low. The PSI Program can seek to promote healthful social norms regarding both behaviors in question and harness the power of positive peer influences.
- General knowledge about STIs and HIV in this population is quite high. However, it is critical to note that specific knowledge (such as symptoms of STIs) is actually quite low, suggesting the need to move from awareness-raising interventions to ones focused on specific knowledge which enable young people to accurately protect themselves – both in terms of using condoms, and in terms of accessing health services for STI and HIV testing.
- Several factors related to self-efficacy in condom negotiation and communication skills regarding condom use were significantly associated with condom use, a number of them suggesting that the ability to negotiate the use of a condom with either occasional or regular partner is an important skill that could be promoted by the PSI intervention. It is furthermore interesting to note that while both young men and women find it difficult to introduce the use of a condom into a sexual relationship in which condoms were not used before, it is young men who score lower on most self-efficacy items (and these items are significantly associated with condom use). Self-efficacy was also a significant determinant in getting an STI test, further underscoring the need to focus on improving skills to obtain health services among young people.
- The data suggests that the PSI intervention could challenge a number of beliefs that young people hold about condom use, primarily relating to trust: it appears that the use of condoms is equated with not trusting a partner; also, substantial proportions of young people believe that condoms should be used only with casual sexual partners.

- Interestingly, while outcome expectations of condoms were not significantly associated with actual use of condoms, only about one half of respondents agree that condoms are effective against STI and against pregnancy. The PSI intervention could seek to enhance the value that young people put on condoms (provided they are used correctly and consistently) as providing very high protection against both STI and pregnancy.
- Although the current survey is intended as the baseline for the new PSI youth intervention, PSI and other organizations have been implementing a number of youth activities in Bucharest in the past year. Items relating to exposure to these interventions showed that PSI campaigns (TV, print, and website, primarily focused on promoting the Love Plus condom brand) have a high level of recall. This proves PSI's capacity to reach the targeted audience. However, the PSI youth intervention is undergoing a makeover: the new youth media campaign expands beyond product promotion to embodying a healthy lifestyle for young people, and in addition, an intense interpersonal communication program (IPC) component hinging on the popular opinion leaders (POL) model has been designed. The coverage and effectiveness of this new program will be assessed during the follow-up survey.

Methodology

Sample Characteristics The sample was defined as young people aged 18-24 who frequent night/dance clubs in Bucharest. The age group 18-24 was chosen as this is the target group for the PSI youth intervention. In order to be included in the study, respondents had to 1) be of the appropriate age; 2) have not participated in any similar surveys in the past 6 months; 3) not be working in market research, advertising/mass media, or medical services.

Data Collection Procedure The survey used a two-stage cluster sampling design to collect data from 612 young people. A sampling frame was designed with all clubs in Bucharest which included the target audience (according to age criteria). However, as a number of clubs that were part of the sampling frame did not wish to collaborate with the research, the selection of clubs was conducted based on convenience (i.e., clubs that were accessible). In addition, several clubs where the research could not be conducted were subsequently willing to participate in the intervention, creating a slight mismatch between the clubs where data was collected and where the intervention will be implemented. Several suggestions on how to address this are included in section “Improvements for next study round.”

From each club that participated in the survey, the number of potential eligible respondents on an average Saturday night was estimated by polling two key informants (e.g., bar tender and security guard). Saturday night was chosen as the night of the week when most young people in the target group would frequent clubs; weeknights were excluded as it was hypothesized that a different profile of people frequents clubs during those days (most clubs draw very limited crowds during the week). Furthermore, only one weekend night was chosen based on the hypothesis that young people tend to go out on both weekend nights, and since selecting both Friday and Saturday would mean counting each club as a cluster twice, this would artificially inflate the total estimated population size. The final estimated population size also serves as the estimate for the POL intervention (which hinges on 10% of popular opinion leaders being trained).

From the selected clubs, the number of respondents to be surveyed was determined by was determined by proportional allocation, that is, the number of respondents was proportional to the estimated number of youth frequenting each club. The sample was stratified by sex (male/female); the sample size calculations were performed using the change-over-time formula,

with 95% precision and 80% power, setting the desired behavior change at 15% from baseline to follow-up (from 50% to 65% to maximize the sample size). Including a 10% cushion for inappropriate response/non-response, this calculation yielded a desired sample of 294 male and 294 female interviews.

Because of the setting where the respondents were to be sampled (clubs), and the potential difficulties forecasted in conducting lengthy and potentially sensitive questionnaires in such settings, it was decided that the survey would be conducted using the Computer Assisted Telephone Interview (CATI) method. The research implementing agency, Mercury Research, has the appropriate facilities and technology, as well as ample experience in conducting such interviews. Before the actual data collection a pre-test was conducted using both the CATI method and the interview-on-site method. In addition to pre-testing the questionnaire tools, this exercise showed that the success rate from the CATI interview was lower than that of the on-site interview: there was a 27% success rate for obtaining phone numbers from individuals and of those, a 36% success rate was recorded for the completing the CATI interview; this yields an overall success rate of 9.5%. In comparison, the on-site interviews yielded a 24% success rate. Nevertheless, the CATI method was chosen based on two important advantages: 1) the interview is conducted at a time and place of the respondent's choosing (presumably calmer than a dance club), and 2) the data is entered by computer directly into the electronic database as the interviewer and respondent speak, which minimizes errors related to data entry.

Subsequently, data was collected in two phases. Firstly, potential participants were approached by trained interviewers at club entrance. At this point, the potential participant was screened, explained the purpose of the study, and asked to provide a mobile or stationary telephone number at which he or she could be called within 3 days of having made the initial contact to conduct the actual interview. The actual survey was conducted in the 3 day period following the contact.

The number of respondents and pattern of who was approached for the interview at the club was based on the estimated population size at the club and the total number of respondents needed from that club. The desired sample size (294 males and 294 females) was inflated according to the estimated success (failure) rate of the CATI interview. Two steps were considered: the total number of phone numbers obtained which would yield the sufficient number of completed interviews (given the 27% success rate at this stage) and the number of total individuals that needed to be approached in a club to yield a sufficient number of phone numbers (given the 36%

success rate at this stage). With this calculation, the interviewers were instructed to approach every Nth person entering the club, depending on the sample size needed from each club.

There was some concern about the additional step of selection introduced by the CATI method which is not based on representative sampling methods: that is, the potential respondents have the opportunity to refuse participation twice (once at the club, where they can refuse to give the phone number, and then within the next 3 days, when they can refuse to complete the survey; in comparison, in an on-site survey, there is only one instance of refusal). To safeguard against this, interviewers were instructed to attempt to reach respondents who had given their numbers 15 times during the 3 days allotted. Furthermore, limited data were recorded for potential respondents who were either ineligible, or eligible but refused to participate. These data are summarized below:

Table 1: Stage 1 – At Clubs

	Total		Gender			
	Count	Col %	Male		Female	
			Count	Col %	Count	Col %
Qualified- with phone number	1512	47%	751	50%	761	44%
Qualified- refuse to give the phone number	78	2%	32	2%	46	3%
Rejected - age	397	12%	198	13%	199	12%
Rejected - participating in other survey	202	6%	98	7%	104	6%
Rejected - occupations	195	6%	80	5%	115	7%
Refuse from the beginning	849	26%	344	23%	505	29%
Total	3233	100%	1503	100%	1730	100%

Table 2: Stage 2 – CATI Interviews

	Total		Gender			
	Count	Row %	Male		Female	
			Count	Row %	Count	Row %
No answer, busy, no line, other appointment	765	100%	370	48%	395	52%
Wrong telephone number	67	100%	37	55%	30	45%
Not corresponding to the filter criteria	20	100%	7	35%	13	65%
Refuse to answer	48	100%	27	56%	21	44%
Success	612	100%	310	51%	302	49%
Total	1512	100%	751	50%	761	50%

As may be observed from the two tables above, there were somewhat more females than males who refused to participate in the study when approached in clubs (29% vs. 23%). However, as

shown in Table 2, the success rate for the CATI was nearly identical: 51% for males and 49% for females. From these data, no obvious bias in terms of sex can be discerned.

Clearly, it is impossible to eliminate selection bias from any non-randomized study that hinges on voluntary participation. The concern in this study is that selection bias occurs in 2 stages (in the clubs, and in actually completing the telephone interview). Potentially, more vulnerable young people, or those engaging in higher-risk behaviors might be more likely to decline to be interviewed; however, this bias would likely exist even if the surveys were conducted at the club locations.

Survey Instrument(s) There were two instruments used: the recruitment questionnaire, and the CATI questionnaire. The recruitment questionnaire consisted of 4 questions (age, participation in a survey in last 6 months, working social marketing or similar professional area, request of name and telephone number) aimed to determine if the respondents fit the inclusion criteria. The CATI questionnaire consisted of 61 questions, covering the following topics: socio-demographics; type of sexual relationships; condom use with different type of partners at last sex, and consistent condom use; availability of condoms and lubricants; availability of health services for STI and HIV testing; knowledge of STI and HIV transmission and prevention and signs and symptoms of STI; negotiation skills and communication with partners about condom use and STI testing; perceptions and beliefs about the appropriateness of condom use in different relationships; perception of affordability and other characteristics of health services; use of health services for STI and HIV testing; and exposure to PSI and other youth-aimed interventions. The male and female instruments were tailored to each gender, but were otherwise identical.

Analytic Technique The data were analyzed using Stata 8.2 statistical package. Data was examined through univariate statistics (frequencies, distribution). There were no scales. The analytic technique used to create the monitoring tables was adjusted proportions for survey data. For segmentation tables, correlation matrices were examined first; then logistic regression for survey data was used to obtain final models, and the % presented in the tables were calculated using the adjusted proportions command for survey data.

Improvements for Next Study Round The improvements for the follow-up survey primarily concern the sampling methodology:

- Since access to clubs for the purposes of research has been problematic, the resulting baseline sample is not representative of all young people who attend clubs in Bucharest; rather, it is representative only of the young people that attend the particular clubs that are included in the sample. Subsequently, the selection of clubs at follow-up must be purposive (non-random), as there must be as much overlap as possible between the clubs in which the intervention will be implemented and those where the surveys will be carried out. Annex 3 shows the clubs in which the baseline survey was conducted vis-à-vis clubs where the intervention will be focused, and notes are provided to explain the selection of clubs. In summary, of the 23 clubs sampled at baseline, the POL intervention will be implemented in 11 of them. In addition, the POL will be implemented in 5 additional clubs which were not sampled at baseline. The follow-up sample is therefore expected to be composed of 16 clubs.
- In attempt to ensure comparability between the baseline and follow-up samples, the population in the 5 new clubs will be described qualitatively to assess differences between the population in these 5 clubs and the baseline. Furthermore, when follow-up data is available, the characteristics of respondents from the 5 new clubs will be statistically compared to the baseline sample, and to the 11 clubs which were included in the baseline. If possible, differences will be controlled for statistically.
- Sample size is likely to remain the same for the follow-up survey (approximately 600 respondents), but the number of clubs will have decreased (from 23 to 16). Changes to fieldwork may be necessary to ensure that the desired sample size is collected from a smaller number of clubs: for example, the time of data collection may have to be extended.

PSI Romania - List of Clubs in Bucharest for Youth Program

	No.	Club	Club Type	05 Research	LP Placement	POL 05	Target Pop	Selected Clubs		
								10%	Est Pop	POLs
Research .05	1	R2 Excess		Yes	yes		400	40	400	40
	2	Azteca		Yes	yes		250	25		
	3	R3 Blue Night		Yes	yes		700	70	700	70
	4	Maxx		Yes	yes		650	65	650	65
	5	Fever		Yes	no		225	23		
	6	Downtown		Yes	no		125	13		
	7	Web		Yes	no	yes	200	20	200	20
	8	Tipsy		Yes	no		125	13		
	9	Club 290	Manele	Yes	yes		125	13	125	13
	10	Blue		Yes	no		50	5		
	11	Club A		Yes	no		700	70	700	70
	12	Fire		Yes	yes*		475	48	475	48
	13	Backstage		Yes	no		400	40		
	14	Stuff Vama Veche		Yes	no		70	7		
	15	Helios		Yes	no		53	5		
	16	Expirat		Yes	yes*		800	80	800	80
	17	Twice		Yes	yes	yes	900	90	900	90
	18	Salsa 3		Yes	no		300	30		
	19	Revolution		Yes	yes		300	30		
	20	Chicago		Yes	no		55	6		
	21	DejaVu	House	Yes	no		90	9	90	9
	22	Bavaria	House, Mixt	Yes	no		950	95	950	95
	23	Tz`s Cotton	House, Mixt	Yes	no		112	11		
	23	Sub-total Research		23	9	2	8,055	806	5,990	599
POL	1	Temple		No		yes	270	27	270	27
	2	Studio Martin		No		yes	300	30	300	30
	3	B52		No		yes	200	20	200	20
	3	Sub-total POL				3	770	77	770	77
LP	1	Onx			yes*		260	26	260	26
	2	Luna			yes		225	23		
	3	Jukebox			yes*		190	19		
	4	Gossip			yes		400	40	400	40
	5	Underworld			yes			0		
	5	Sub-total LP			5		1,075	108	660	66
	31	Grand Total		23	14	5	9,900	990	7,420	742

NOTES:

1. The clubs highlighted in the list above are those where POL intervention is planned
2. 05 Research = Clubs where sample was selected from in final data set during Q4 2005 for Youth Club Survey
3. LP Placement = Clubs where LP was placed for sale and special promo conducted from Nov 05 to Jan 06
4. POL 05 = Clubs where first 2 groups of youth POLs recruited from for Q4 2005
5. Target Pop = estimated number of 18-24 years olds present in clubs on a "typical" Saturday evening.
 - 5.1. Based on assumption that week days crowd not as regular as weekend crowd
 - 5.2. Assumes that Saturday night is maximum population and includes many that go on Fridays.
 - 5.3. Assumes minimum double counting. i.e. most Sat night clubbers do not "club hop" due to high entrance fees, and going out later, and also clubber loyalty to same clubs.
6. 10% = number of target Pop (equal M/F) to be trained as POLs to reach "tipping point" for diffusion
7. Selected Clubs = those that are the most community-based and best suited for POL activities
 - 7.1. These 16 clubs are well established and will certainly be around through April 2007
 - 7.2. These 16 clubs have a higher proportion of our 18-24 year old target population vs total numbers in club.
 - 7.3. 11 of 16 clubs were part of the research; 3 extra POL clubs for POL were for various reasons not able to participate in research and of 2 LP clubs, Onx was excluded after target reached and Gossip at the time was an "after hours" club.
 - 7.4. All 5 new clubs should have the same pop characteristics as the sample from the 23 clubs for research.
 - 7.5. The follow on survey will be done in Mar/Apr 2007 with sample among 16 selected clubs to provide a survey which is comparable to the Q4 05 baseline - note not representative for all clubbers in BU.
8. The Youth Program will focus its IPC/POL intervention in th 16 selected clubs; other activities have broader reach
 - 8.1. Youth Program team will train 750 POLs (from selected 16 clubs) by Feb 2007
 - 8.2. Other youth program activities, e.g. website, FCV media, LP, will also have impact in these 16 clubs. Other survey data shows that 70,000 18-24 year olds (or 44%) go to clubs in Bucharest once a week or more. The PSI intervention will be impacting fully on a small percentage of all clubbers.

Performance Framework for Social Marketing

