

Report on Dual Method Use in Jamaica

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1.0 EXECUTIVE SUMMARY

Dual protection refers to the simultaneous protection against sexually transmitted infections (STIs) and unintended pregnancy and represents an important public health intervention. Specifically, dual method protection is defined as the use of an effective primary method with the condom as a secondary method. The 2002 reproductive Health Survey reported dual method use among an average of 12.8% of sexually active women.

Since the 1990s the National Family Planning Board (NFPB) has supported the integration of efforts aimed at preventing HIV and other STIs into its programmes and has thus introduced the condom for dual method use. Condoms which are often considered less effective as a contraceptive method are now being actively promoted as a primary and secondary method.

The following are the results of a study commissioned by the NFPB to understand the social context in which individuals are making decisions for dual method protection. The study encompassed both qualitative and quantitative research ending with a national survey among 2400 sexually active persons, 15-49 years. Data were collected in the last quarter of 2006.

- Conclusions

It was just under two-thirds, 63% of the sample of sexually active persons, 15-49 years, that reported use of a contraceptive method(s) at last intercourse. Among those so reporting it was 14.6% of the women and 6% of the men that reported dual method use.

The following factors emerged in correlation analysis as having a significant association with dual method use. These were:

- Partner support for condoms
- Length of time partner known
- Confidence in one's ability to use the condom and to negotiate condom use
- Rejection of the view that condoms reduce trust and pleasure
- Community and social network support for condom use
- Relationship status with partner
- Number of partners in last year

The emergence of these factors confirm the association between dual method use and the context of the relationships as found in studies conducted in other countries. They also highlight influences more peculiar to the Jamaican context including the association between dual method use and: partner support for condoms, community and social network support for condoms, condom self-efficacy and ability to negotiate use, rejection of condoms as reducing pleasure and trust, and the number of partners had in the last 12months.

- Partner attitudes about different methods

Generally the partner's attitude towards condoms and contraceptives was found to impact the method(s) of choice. The vast majority of dual method users reported strong partner support for both contraceptives (91.5%) and condoms (85.6%) unlike condom only users who reported high partner support specific to condoms (90%) or non-barrier users who reported high partner support specific to contraceptives (84%).

Correlation analysis performed showed partner support having a moderate and significant relationship to dual method use.

- Relationship status and frequency of sex

Dual method users and condom users tended to have a less stable relationship profile. It was 49% of dual method users and 59% of condom users who described their last partner as "one who stays overnight" or "a partner I see occasionally". This compares to 30% of non-barrier method users stating similarly.

Relationship status has implications for frequency of sex. Generally, non-barrier users reported more frequent sexual activity, than the condom only or dual method user. This can be understood in the context of a cohabiting union.

- Personal risk perception

Concern for becoming pregnant was highest among non-barrier users while concern about contracting an STI was highest among persons using a condom. Supporting this relationship is the fact that non-barrier method users and dual method users were significantly more likely to hold a negative view of the consequences of a current pregnancy than their condom using counterparts hence their reliance on the more effective contraceptive methods.

- Social acceptability of contraceptives

Dual method users and condom only users were found to acknowledge the highest social support and acceptability for condoms as well as other contraceptives. Both groups reported significantly greater community and social network support for contraceptives than their non-barrier counterparts. Additionally, correlation analysis showed a small but significant relationship between dual method use and higher levels of community and social network support for contraceptive and condom use.

- Access to methods

Condom users and dual method users were significantly more likely to report willingness to carry a condom while dual method users were, importantly, also more willing to purchase a condom.

Embarrassment to purchase condoms is still a real issue among women as revealed in the qualitative phase of this project. Here all groups made the point that when buying condoms women were often seen as 'whores, prostitutes, and promiscuous', hence a reluctance among

women to purchase condoms themselves. However, many participants had, in fact, bought condoms for themselves, and would continue to do so, saying 'I just ignore anyone who stares at me'. This was particularly so among the middle and upper income women who seem to have become more empowered to challenge the negative view of society in this respect. Of note also is the fact that only these middle and upper income female groups, and the 35 - 49 lower income group, had members willing to carry condoms around in their purse, all other participants thought it would be unnecessary, and 'look slack'.

- Availability of different methods

The qualitative phase of this project highlighted the fact that women were more comfortable buying condoms at a pharmacy, compared to other locations. Pharmacies, in their opinion provided a more 'respectable and private' atmosphere and the condoms were less likely to be past the expiry date. However, they thought men might be more comfortable buying condoms in a bar or shop. From the quantitative phase it emerged that regardless of method group, condoms were purchased primarily at the shop, pharmacy, supermarket and health centre.

- Attitudes towards sexual intercourse

Non-barrier users offered the greatest endorsement for sexual responsibility and were the strongest rejecters of statements presenting a more liberal view of intercourse. Dual users showed similar views and tended to mirror the non-barrier users closely. Condom users, in contrast, generally displayed a more liberal or at least a more open attitude towards sex and thus tended to score lower on the scale.

- Gender related power differentials

Ease of negotiation and initiation of condom use was dependent upon the type of relationship within which the sex act was occurring. Women in casual relationships found it easier to be firm in their demand for condom use. On the other hand, they were more tentative about actually pulling out a condom for fear of being seen as 'the sleep around type'. In this regard, upper income groups expressed less reservation than their lower income counterparts.

In contrast, as was to be expected, women in committed relationships generally had a greater challenge introducing a condom during sex. Nonetheless the majority of participants felt that a man could be convinced to wear a condom. In some cases, it could be done by simply stating 'no condom, no sex'. In other cases, it would be necessary to be very firm, maybe even to the point of an arguing.

Despite all groups declaring that it is both the man and woman's responsibility to provide condoms, many participants within each group ascribed more of the responsibility on the man. The lower income 18 - 24 year old groups, placed the most emphasis on it being 'more proper' for the man to buy and carry condoms. The other groups felt that women had a responsibility to themselves to be prepared.

2.0 BACKGROUND:

The National Family Planning Board (NFPB) was established in 1967 and in 1970 was empowered by an Act of Parliament for the preparation, implementation, coordination and promotion of family planning services. Since its establishment the Board has aimed to achieve the National Population Policy fertility goals as outlined in its mission statements.

Over the years the NFPB has undertaken numerous activities including the promotion of contraceptive use, particularly those which are highly effective at pregnancy prevention. These are however non-barrier methods. This has been done in an effort to fulfill its mandate to empower women to achieve their reproductive intentions safely.

As noted in Riehman et al 1998¹, use of non-barrier methods only leaves both men and women vulnerable to STDs including HIV. It is thus important to promote condom use among individuals who use efficient contraceptives. Since the 1990s the NFPB has supported the integration of efforts aimed at preventing HIV and other STIs into its programmes and has thus introduced the condom for dual method use. Condoms which are often considered less effective as a contraceptive method are now being actively promoted as a primary and secondary method.

Previous studies done on this topic in other countries highlighted specific influencers of dual method use and were used to inform the research presented here. Rehamn et al, 1998 found in their study of dual method use among women in an ethnically diverse population that individual characteristics and the context of sexual relationships directly influenced whether dual method protection was applied. Additionally, they found that the involvement of male partners in family planning decision-making and women's control over economic decision-making also ensured greater protection against HIV.

Logistic regression analysis used in a study of 717 women in Baltimore² showed that the factors which significantly predicted dual use included: a positive attitude to safer sex, self-efficacy/perceived control as indicated by ever having refused sex because no condom was available and a greater belief in condom effectiveness. Indices of personal and partner risk were found to have no significant association.

In 2006 the Board commissioned a study to understand the social context in which individuals are making decisions for dual method protection. The social context in this instance was defined by the Board as a compilation of individual and community factors including:

- ✓ Individual factors:
 - a. Partner attitudes about different methods
 - b. Frequency of sexual intercourse
 - c. Risk perception
 - d. Attitudes towards pregnancy including the consequences of same

¹ Riehman, Kara S. et al.; "Dual Method Use Among an Ethnically Diverse Group of Women at Risk of HIV Infection", *Family Planning Perspectives*, 1998, 30(5):212-217;

² Santelli JS et al., "Combined use of condoms with other contraceptive methods among inner-city Baltimore women", *Family Planning Perspectives*, 1995, 27(2):74-78.

- ✓ Community factors:
 - Social acceptability of contraception
 - Access to methods
 - Availability of different methods
 - Attitudes towards sexual intercourse
 - Gender- related power differentials
 - Other factors affecting use and consistency of use

Results of this study are to be used to improve interventions which seek to encourage protective behaviors as well as clarify the strategies to be implemented.

3.0 OBJECTIVES

Overall the study sought to understand the social context in which individuals were making decisions about dual method protection. The study specifically attempted to determine the predictors of dual method use particularly as it relates to individual, attitudinal and community factors as well as demographics (including gender and urban/rural status).

The study also sought to:

1. Explore the behavior patterns adopted by men and women towards a secondary method and to identify the risk factors affecting them.
2. Obtain a wide range of information on women's experiences in negotiating condom use (facilitating and impeding factors).
3. Identify the differentials across health regions, rural/urban distributions and socio-economic characteristics in order to assess the impact of the primary method of choice being used with the condom.

4.0 METHODOLOGY

In order to achieve the above objectives a combination of qualitative and quantitative methodologies were employed. Specifically quantitative methods were used to explore objectives 1 and 3 while qualitative methods were used to explore objective 2.

Quantitative Phase:

Objective 1: Explore the behavior patterns adopted by men and women towards a secondary method and to identify the risk factors affecting them.

Objective 3: Identify the differentials across health regions, rural/urban distributions and socio-economic characteristics in order to assess the impact of the primary method of choice being used with the condom.

In order to fulfill the research needs of the above objectives a national cross-sectional survey was undertaken. The methodology for this survey is detailed below.

In order to ensure reliable data and thus reliable recall of behavior it was suggested that respondents be currently sexually active defined by last sex act being within the last 12 months. Questions on method used then related to the partner with whom the respondent last had sex.

Inclusion criteria:

To be included in the study respondents had to be:

- a) Of reproductive age (15-49yrs.)
- b) Sexually active
- c) Must have had sex in the last 12 months

As noted in the 2002 Reproductive Health Survey, 12.8% of females reported dual method use. In the absence of data on dual method use among men this prevalence was also used to calculate the appropriate sample size and project incidence.

A total of 2400 interviews was proposed. Given an incidence of 12.8% dual users, a sample of 2400 sexually active respondents was projected to yield 300 dual method users, this would yield results projectible +/- 5% at the 95% confidence level. The sample was quota controlled by age, gender, socio-economic status, health region and urban rural status to mirror population distributions. The actual survey however produced a usage rate of 14.6% among contracepting women and 6.2% among contracepting men or 10.1% among the total contracepting sample. This resulted in a sample of 153 dual method users in total. (see Table 1)

Sample was broken down as follows:

Table 1: Dual Method Use by Gender & Age

	f=153
Gender:	
Male: % (f): (n=796)	6.2%: (49)
Female: % (f); (n=714)	14.6%: (104)
Age:	
15-24yrs. : % (f) : (n=595)	9.4%: (56)
25-34yrs. : % (f) : (n=482)	11.6%: (56)
35-44yrs. : % (f) : (n=334)	9.3%: (31)
45-49yrs. : % (f) : (n=99)	10.1%: (10)

- **Sample Design:**

The sample design used a multi-stage random approach. Specifically the island was first stratified into parishes, then constituencies and finally electoral districts which represented primary sample units. A random sample of PSUs was then selected with probability proportional to size (PPS). A systematic sample of households was then selected, with all persons within the designated ages interviewed using a carefully designed questionnaire.

✓ **Data Collection:**

Confidential, face-to-face interviews were conducted by teams of trained interviewers using a structured questionnaire.

In an effort to preserve confidentiality and anonymity of respondent, no names or addresses of respondents were recorded. As a result supervisors accompanied the interviewers into the field to allow for the required validation of data as well as on the spot supervision.

A pre-test was also conducted prior to the official start of the project and adjustments made to the instrument accordingly. All instruments used were designed in collaboration with the client.

✓ **Variables probed:**

The impact of each of the following was explored:

- Individual factors:
 - a) Partner attitudes towards different contraceptive methods
 - b) Frequency of sexual intercourse
 - c) Perception of risk of pregnancy and STI including severity of risk
 - d) Perception of the consequences of pregnancy
 - e) Age of sexual initiation

- Community factors:
 - f) Social acceptability of contraception
 - g) Access to methods
 - h) Availability of different methods and contraceptive history

- Attitudinal factors:
 - i) Condom self-efficacy as explored by the condom self-efficacy scale (CUSES)
 - j) Attitudes to condoms including perceptions of effectiveness and condom use
 - k) Attitudes to sexual negotiation and ease of same
 - l) Attitude to use of contraceptives and family planning
 - m) Attitudes towards sexual intercourse

- Demographic factors:
 - n) Age
 - o) Education
 - p) Rural urban status
 - q) Health region
 - r) Socio-economic status

- Background characteristics including relationship status:
 - s) Relationship status
 - t) Partner status of person last had sex with
 - u) Primary method being used

- The study also explored:
 - v) The extent to which persons may be unwilling to use two methods or may be dissuaded from using a condom
 - w) Perceptions of the level of trust in a relationship when negotiating condom use
 - x) The involvement of the partner in family planning decision-making
 - y) If women are more inclined to combine condom with a longer term method than a method requiring daily compliance such as an oral contraceptive.
 - z) The reason for low levels of dual method use even where women express fear and distrust within the relationship

Measuring Attitudes:

Attitudes are best described as state-of-mind constructs which, although not directly observable, can be measured using established approaches and scales. This project employed the use of the Likert scale, which is one of several attitudinal-scaling formats which have proved to be very reliable across a variety of situations. Specifically, the Likert scale is an ordinal scale format that asks respondents to indicate the extent to which they agree or disagree with a series of behavioural or belief questions. Respondents were asked to use a five-scale descriptor to indicate the extent to which they agree or disagree with statements representative of attitudes.

✓ Data Analysis:

Data were analyzed using SPSS 12.0. Participants were grouped according to the methods they and/or their partners used during their most recent act of sexual intercourse namely:

- a. Dual method users: defined as persons who used a male/female condom as well as a barrier method during their most recent act of sexual intercourse
- b. Condom use alone: persons whose sole method of protection was male or female condom during their most recent act of sexual intercourse.
- c. Non-barrier contraception use alone
- d. No method use

Women who used non-barrier contraception alone at last intercourse formed the reference category for the analyses. Additionally, last sexual intercourse was the decided reference period since self-reports of method use of last intercourse are less susceptible to recall errors than are reports of previous intercourse events due to relative recency.

While the initial project design proposed conducting analysis which treated males and females as separate cohorts, this was based on projected incidence of dual method use of 12.8% among a sexually active population. Thus a sample of 300 dual method users was anticipated. After data collection an incidence of dual method use emerged at approximately 6% or 153 persons. Given a much smaller yield and that preliminary analysis showed little

significant difference by male and female dual method user, the decision was taken to conduct analysis based on method used at last sex only and report on gender differences where necessary.

Survey Limitations:

It is important to note that the study is limited as it relies solely on the self-report of the target as well as the reliability of recall of past behaviour.

✓ **Qualitative Phase:**

Objective 2: Obtain a wide range of information on women’s experiences in negotiating condom use (facilitating and impeding factors).

In order to achieve the objective stated above, the qualitative method of focus group discussions and depth interviews among females was employed. Given that women’s experiences and attitudes may vary based on age, socio-economic status and urban rural classification a total of 7 groups stratified by age, socio-economic status as well as urban rural status were conducted broken down as follows:

**Table 2
Focus Group Composition**

	AGE GROUP	Socio-economic Status	Urban/Rural location
FGD 3	18 -24	Middle income	Urban
FGD 2	18 -24	Lower middle/lower	Urban
FGD 6	18 -24	Lower middle/lower	Rural
FGD 5	25 -34	Middle income	Urban
FGD 4	25 -34	Lower middle/lower	Urban
FGD 7	25 -34	Lower middle/lower	Rural
FGD 1	35 – 49	Lower middle/lower	Urban

In addition, seven individual interviews were held, with separate persons who met qualifications for each category. They were as follows:

Table 3
Depth Interview Composition

AGE GROUP	Socio-economic Status	Relationship Status
18 -24	ABC1	Casual Relationship
18 -24	C2/D	Lives w/ gentleman
18 -24	C2/D	Married
25 – 34	ABC1	Casual Relationship
25 – 34	C2/D	Married
25 – 34	C2/D	Lives w/ gentleman
35 – 49	C2/D	Casual Relationship

The discussions were conducted by a trained Moderator. A Topic Guide was the instrument used. To facilitate analysis, sessions were tape-recorded and these were used in conjunction with highlights of both verbal and non-verbal communication. Participants received an incentive for their participation.

✓ **Topic Guide:**

The topic guide probed women’s experience as it related to sexual relationships, contraceptive use, condom use and sexual negotiations. Areas specifically probed included:

- Attitudes to sexual intercourse
- Attitudes towards contraceptives
- Attitude towards contraceptive use
- Attitudes to STIs
- Attitudes towards pregnancy
- The power relations experienced and evident in sexual relationships
- Perceptions of sexual relationships
- Thoughts and experiences on sexual negotiation
- Condom use experience
- Attitudes towards condoms and condom use
- Barriers to condom use
- Sexual decision-making dynamics
- Social network support for contraceptive use in general and condom use in particular.

Table 4
Sample Demographics

	Frequency (N=2400)	%
Gender:		
Male	1201	50%
Female	1199	50%
Age:		
15-24yrs.	829	34.5%
25-34yrs.	767	32%
35-44yrs.	605	25.2%
45-49yrs.	199	8.3%
Location:		
Urban	1151	48%
Rural	1249	52%
Health Region		
NERHA	289	12%
SERHA	1180	49%
SRHA	454	18.9%
WRHA	478	19.9%
Sexual activity:		
Currently sexually active	2400	100.0
Contraceptive use at last sex:		
Contraceptive (including condom) used at last sex	1510	62.9
No method used at last sex	890	37.1

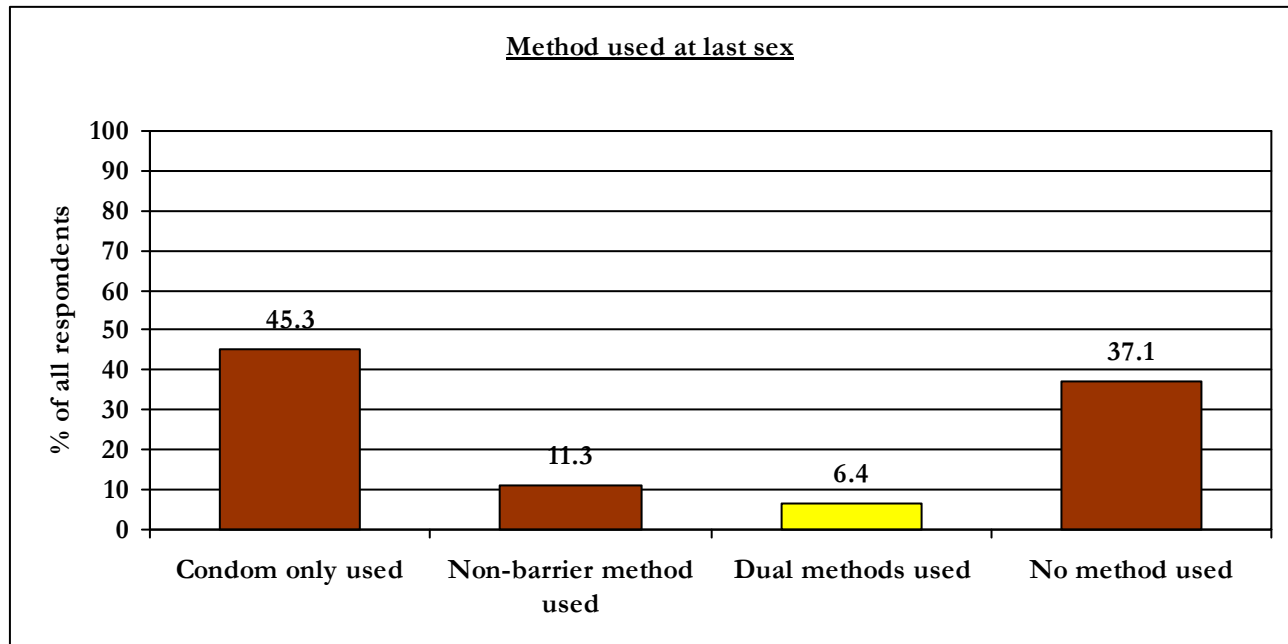
Detailed Findings

5.0 DETAILED FINDINGS

5.1 METHOD USE AND DEMOGRAPHIC CHARACTERISTICS

Of the total sample of sexually active respondents more than a third (37%) had used no method at last sex act. Condoms emerged as the preferred method as 4 in 10 or 45% reported having used only the barrier method, followed by 11% having used only non-barrier methods and 6.4% who had employed dual methods of protection. Therefore, of those persons who reported using a method at last intercourse, 10% had used dual methods.

Chart 1



Overall condoms emerged as the method used by most persons (72%) regardless of location and health region. Condom use was highest among males (84.9%) and among youth aged 15-24yrs (80%). Dual method use was highest among females with 14.6% reporting having used dual methods at last sex compared to 6.2% of males. Dual method use was relatively similar across age groups, location and health region.

Table 5
Demographic Characteristics and Method Use

	Non-Barrier Methods Used Only	Dual Methods Used	Barrier Methods (Condoms) Used Only
Total (<i>Base=1510; i.e. persons reporting contraceptive use at last sex</i>)	17.9%; (270)	10.1%; (153)	72.0%; (1087)
Gender: ***			
Male: % (f): (<i>n=796</i>)	8.9%; (71)	6.2%; (49)	84.9%; (676)
Female: % (f): (<i>n=714</i>)	27.9%; (199)	14.6%; (104)	57.6%; (411)
Age: ***			
15-24yrs. : % (f) : (<i>n=595</i>)	10.6%; (63)	9.4%; (56)	80.0%; (476)
25-34yrs. : % (f) : (<i>n=482</i>)	21.6%; (104)	11.6%; (56)	66.8%; (322)
35-44yrs. : % (f) : (<i>n=334</i>)	22.8%; (76)	9.3%; (31)	68.0%; (227)
45-49yrs. : % (f) : (<i>n=99</i>)	27.3%; (27)	10.1%; (10)	62.6%; (62)
Location:			
Urban : % (f) : (<i>n=723</i>)	16.9%; (122)	9.1%; (66)	74.0%; (535)
Rural : % (f) : (<i>n=787</i>)	18.8%; (148)	11.1%; (87)	70.1%; (552)
Health Region			
NERHA : % (f) : (<i>n=185</i>)	12.4%; (23)	11.9%; (22)	75.7%; (140)
SERHA : % (f) : (<i>n=759</i>)	18.8%; (141)	10.4%; (78)	70.8%; (532)
SRHA : % (f) : (<i>n=283</i>)	19.8%; (56)	10.6%; (30)	69.6%; (197)
WRHA : % (f) : (<i>n=291</i>)	17.2%; (50)	7.9%; (23)	74.9%; (218)
Social Class:³			
AB : % (f) : (<i>n=132</i>)	17.4%; (23)	7.6%; (10)	75%; (99)
C1: % (f) : (<i>n=174</i>)	20.7%; (36)	10.3; (18)	69%; (120)
C2: % (f) : (<i>n=1154</i>)	17.2%; (199)	10.5; (121)	72.3%; (834)
D: % (f) : (<i>n=50</i>)	24%; (12)	8%; (4)	68%; (34)
Employment:			
Full-time employed : % (f) : (<i>n=646</i>)	18.6%; (120)	10.2%; (66)	71.2%; (460)
Part-time employed : % (f) : (<i>n=173</i>)	16.8%; (29)	9.2% : (16)	74% : (128)
Unemployed: % (f) : (<i>n=520</i>)	21.3% : (111)	12.3% : (64)	66.3% : (345)
Student: % (f) : (<i>n=166</i>)	5.4% : (9)	4.2% : (7)	90.4% : (150)
Frequency of church attendance:			
At least once a week : % (f): (<i>n=344</i>)	21.8% : (75)	10.8% : (37)	66.4% : (232)
At least once per month : % (f): (<i>n=279</i>)	16.8 : (47)	16.1% : (45)	67.0% : (187)
Only on special occasions : % (f): (<i>n=717</i>)	17.2% : (123)	9.2% : (66)	73.6% : (528)
Never attend : % (f): (<i>n=110</i>)	10.9% : (12)	3.6% : (4)	85.5% : (94)
Infrequently : % (f): (<i>n=49</i>)	24.5% : (12)	2.0% : (1)	73.5% : (36)

* means $p < .05$; ** means $p < .005$; *** means $p < .000$

³ Highest level of education reached was used as a proxy variable for socio-economic group.

5.2 METHOD USE AND SEXUAL CHARACTERISTICS:

Overall average age of sexual initiation was 15-16years⁴. While age of initiation of sexual activity for both dual method users and non-barrier users was the same, condom users emerged as earlier initiators of sexual activity. Average (mean) age of sexual initiation for condom users was 15 years, one year earlier than other method users. (See Table 6)

Overall dual method users and condom users reported relatively less stable relationships, and less frequent sexual activity than their non-barrier method counterpart. Despite less frequent sexual activity the dual method user and condom user were more likely to have had more than one partner in the last year, unlike their non-barrier counterpart who reported more regular sexual activity with the same partner in the last year.

5.2.1 Type of Relationship:

Type of method used varied significantly by relationship with last partner. Specifically, non-barrier method users were significantly more likely to describe last partner as “a partner I live with” (66%) compared to less than half (45%) of dual method users and approximately a fifth (22%) on condom users. Additionally, both dual method users and condom users appeared to be in less stable relationships with 49% of dual method users and 58% of condom users describing their last partner as “one who stays overnight” or “a partner I see occasionally”. Correlation analysis performed further confirmed this association. Specifically, type of relationship was found to have a small but significant relationship to dual method use ($r=.207$; $p=.000$) and a moderate and significant relationship to condom use ($r=.338$; $p=.000$). This means that persons in less stable relationships were more likely to report dual methods or barrier methods only used at their last sex act. (See Table 6)

5.2.2 Multiple Relationships:

Dual method users and condom users were also more likely to report more than one partner in the last twelve months. Specifically, while just under a fifth (19.6%) of non-barrier users had had more than one partner in last 12 months, significantly more dual method users (35%) and most condom users (52%) reported multiple partnerships in the last 12 months. (See Table 6)

⁴ It should be noted that the mean age of sexual initiation for this project was found to be 15-16years which is higher than the mean age found in more traditional surveys such as the National Knowledge Attitudes, Behavior and Practices Survey conducted periodically. This difference in age of initiation may have resulted from the differences in target definition and inclusion criteria. Specifically while the KABP survey samples and includes a random selection of persons whether sexually active or not, given that this study was an exploration of current contraceptive use, we sought to exclude virgins and include only persons who had had sex within the last 12 months.

5.2.3 Length of Relationship:

Despite differences in number of partners, dual method users and non-barrier users were both more likely to have relatively stable partnerships with 8 in 10 reporting their last sex partner as being someone whom they have known for 3 years or more. As would be expected however, non-barrier method users were more significantly likely to report long-term relationships with approximately 40% reporting their last partner as being someone they have know for 8 years of more, this is in contrast to 29% for dual method users and 19% for condom users. Condom users emerged as persons engaged in more recent relationships with many (49%) having known their last partner for 2 years or less. (See Table 6& Chart 2)

5.2.4 Sex with Greater Regularity:

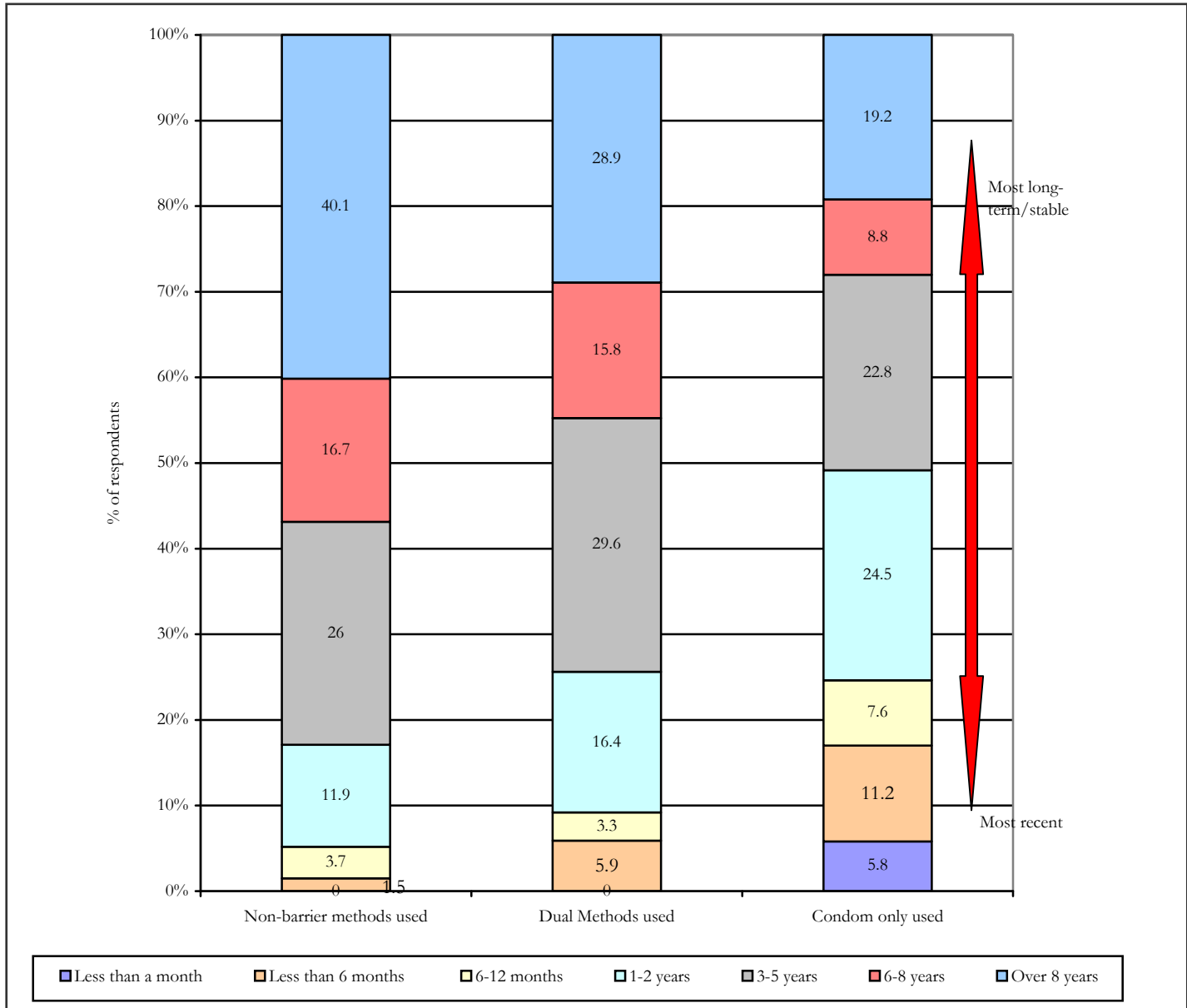
Interestingly, non-barrier users also generally reported more frequent sexual activity than their barrier or dual counterparts. While approximately a half (49.6%) of non-barrier users reported having intercourse more than once a week, just under a third of dual method users (32.7%) and condom users (30.9%) reported the same frequency. Additionally condom users, when compared to other method users, were twice as likely to report intercourse less than once a month (Condom users: 21.7% vs Dual method 11.8% and non-barrier method users 7.4%). (See Table 6)

Table 6
Method Use and Sexual Characteristics

	Non-Barrier Methods Used Only (n=270)	Dual Methods Used (n=153)	Barrier Methods (Condoms) Used Only (n=1087)
Mean age of sexual initiation	16yrs	16yrs	15yrs. *
Relationship with person last had sex:			
A partner I live with: %(f)	66.3%; (179)**	45.1%; (69)	22.3%; (242)
Partner who stays overnight: %(f)	18.5%; (50)	23.5%; (36)	23.7%; (258)
Partner who I see occasionally: %(f)	12.6%; (34)	25.5%; (39)	35.0%; (380)
Just a friend: %(f)	1.1%; (3)	2.6%; (4)	7.5%; (81)
Someone I just met: %(f)	0.0%; (0)	0.7%; (1)	6.2%; (67)
Someone other than my regular partner: %(f)	1.1%; (3)	2.0%; (3)	5.0%; (54)
Number of partners in past year:			
Only 1 partner : %(f)	80.4%; (217)***	64.7%; (99)	47.7%; (519)
More than 1 partner : %(f)	19.6%; (53)	35.3%; (54)	52.3%; (568)
Frequency of sex with last partner:			
Less often than once a month : %(f)	7.4%; (20)	11.8%; (18)	21.7%; (236)
Once a month : %(f)	4.1%; (11)	11.1%; (17)	8.6%; (93)
Twice or more a month : %(f)	13.7%; (37)	16.3%; (25)	15.5%; (168)
At least once a week : %(f)	23.3%; (63)	26.8%; (41)	22.0%; (239)
More than once a week : %(f)	49.6%; (134)**	32.7%; (50)	30.9%; (336)
Length of time know last partner for:			
Less than a month : %(f)	0.0%; (0)	*	***
Less than 6 months : %(f)	1.5%; (4)	5.9%; (9)	11.2%; (122)
6-12 months : %(f)	3.7%; (10)	3.3%; (5)	7.6%; (83)
1-2 years: %(f)	11.9%; (32)	16.4%; (25)	24.5%; (266)
3-5 years: %(f)	26.0%; (70)	29.6%; (45)	22.8%; (248)
6-8 years: %(f)	16.7%; (45)	15.8%; (24)	8.8%; (96)
Over 8 years: %(f)	40.1%; (108)	28.9%; (44)	19.2%; (209)

* means p<.05; ** means p<.005; *** means p<.000

Chart 2
Method Use and length of time known partner



Differences by method used last time and type of relationship is further supported and explained by the findings of the qualitative research conducted.

Specifically, the qualitative research found that regularity of condom usage seemed generally to depend on a person’s type of relationship and personal conviction as to its necessity. The emerging trend was that women in committed relationships do not practice regular use of condoms, while women in non-committed relationships use condoms regularly. This trend also represented the commonly accepted view of what ‘should be done’, meaning, all groups expressed the view that:

‘people in casual relationships must use a condom every time, cause more than likely is not you alone him having sex with..’

Women involved in committed relationships, with some exceptions, reported using condoms less than half of the time, and some not at all. Following are reasons they gave for the times that they DO use condoms:

'..when I'm not taking the pill or injection, and I definitely don't want another baby..'

'..sometimes if I don't see him for a long time, and I'm not sure what he's been up to..'

'...if my vibe tell me to use it(condom) tonight, then I make him use it...'

'...if I don't trust my man, I use it...'

'...sometimes I feel guilty cause I know we supposed to use, then we use it for a while..'

On the other hand, a few of the women involved in committed relationships stated:

'..I trust him but you can never swear for any man so I try and use a condom all the time'

To highlight this point, one group gave the example:

'my man may work late one night, and end up having sex with someone from the office, and more than likely him don't have a condom on him at the time, but him go ahead and do it anyway, so that's why me prefer to use one with him even though I mostly trust him...'

Of note, a large number of the women in committed relationships had the expectation that,

'...if him going to do something out there him must definitely use a condom, and don't bring no disease to me, if he really loves me..'

Following that line of reasoning many of these women will forego use of the condom and practice the 'withdrawal' method, as a means of contraception. Generally, the issue of trust and condom usage in relationships, was heavily linked, as one woman in an in-depth interview explained:

'...I expect that when I get married I won't be using a condom most of the time, because I'm married and can trust my husband'

5.2.5 Availability of methods:

Regardless of method group, condoms were purchased primarily at the shop, pharmacy, supermarket and health centre. Interestingly while many condom only users (40%) purchased condoms at the shop, dual method users were split between shop (25%) and pharmacy (29%) further supporting the female preference for the pharmacy as had emerged in the qualitative phase. Shop (26.8%), pharmacy (26.8%) and clinic/hospital (25.1%) were the more popular sources of condoms for the non-barrier user. (See Table 7)

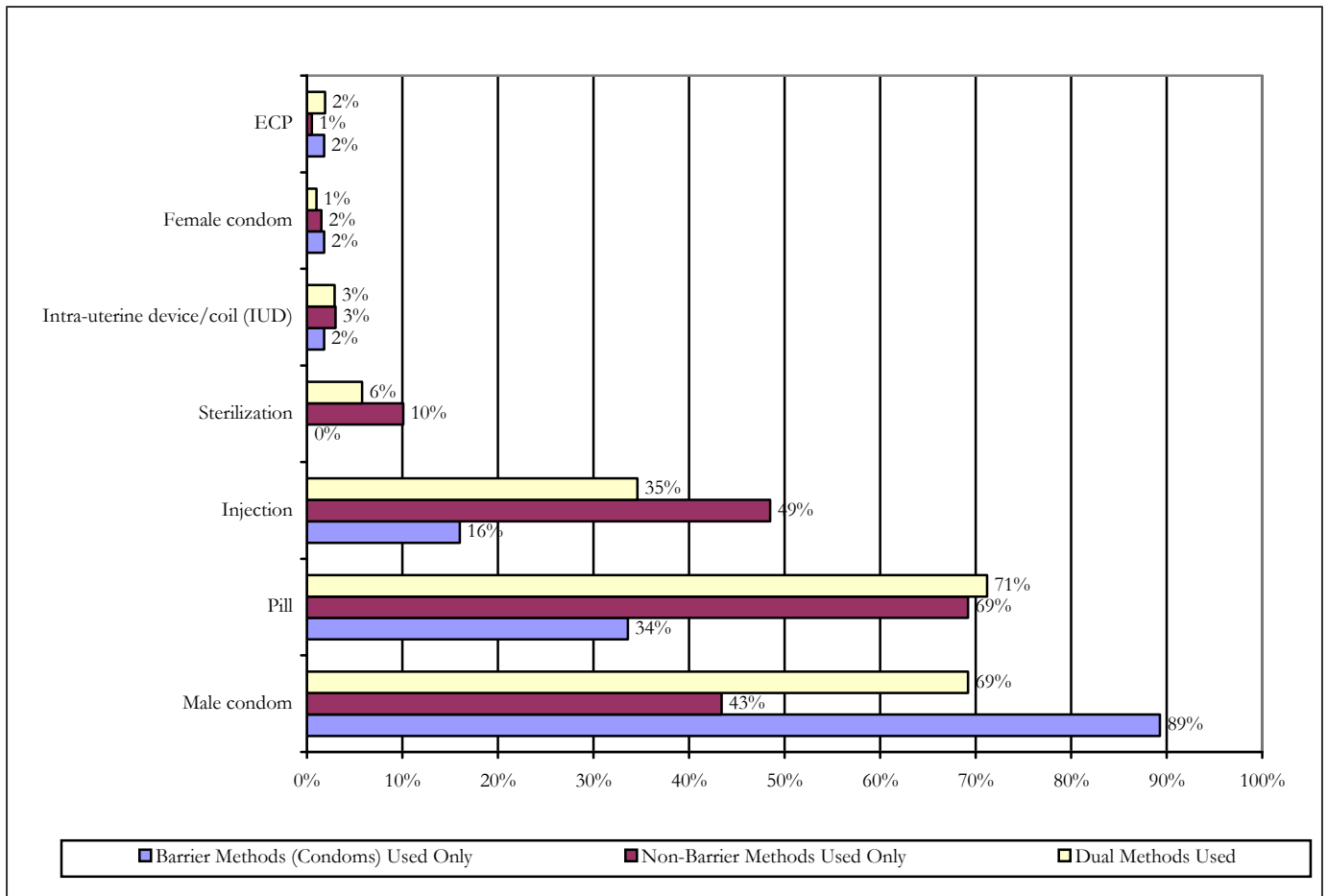
Table 7
Where condoms usually bought by Method Group

	Non-Barrier Methods Used Only (n=270)	Dual Methods Used (n=153)	Barrier Methods (Condoms) Used Only (n=1087)	Total (n=1423)
Shop	26.8%	25.5%	40.0%	36.8%
Pharmacy	26.8%	29.4%	28.9%	28.7%
Clinic/hospital	25.1%	17.6%	14.4%	16.2%
Supermarket	10.4%	13.1%	16.0%	15.0%
Partner	8.2%	15.0%	9.7%	10.0%
Fam. Plan. Centre	8.2%	9.2%	2.0%	3.6%
Friend	1.1%	1.3%	3.0%	2.6%
Bar/hotel	.5%	.7%	1.7%	1.4%
Vendor			.4%	.3%
Other	4.4%	5.2%	6.0%	5.7%

5.2.6 Contraceptive history:

Generally females reported some amount of trial of other methods. Specifically a third of condom users (34%) had also tried oral contraceptives and less than a fifth (16%) had tried the injection at least once in their lifetime. As would be expected most dual method users reported experience with condoms (69%) and oral contraceptives (71%). A third (35%) also reported trial of the injection. Most popular methods among non-barrier users were oral contraceptives (69%) and the injection (49%); less than a half (43%) had ever used a condom. (See Chart 3)

Chart 3
Contraceptive Methods Ever Used In Lifetime by Method Used at Last Sex Classification (Base=Females only)



5.3 METHOD USE AND ATTITUDES TO SEX

In order to evaluate attitudes to sexual intercourse respondents were asked to indicate their level of agreement or disagreement with specific statements. These statements measured attitudes towards intercourse in terms of a responsible attitude versus a more liberal attitude. Statements ranged from the more responsible “*only two people who trust each other completely should have sexual relations*” to the more liberal and less responsible “*the best way to have a good time is to get drunk and have sex with someone*”.

Using specific statements (as detailed in Table 9) a sexual responsibility scale was constructed. The scale showed great internal validity (Cronbach alpha=.7) and evaluated attitudes towards sexual intercourse in terms of liberal versus responsible attitude.

Non-barrier and dual method users offered the greatest endorsement for sexual responsibility and were strong rejecters of statements presenting a more liberal view of intercourse. Condom users, in contrast, generally displayed a more liberal or at least a more open, and thus slightly less responsible, attitude towards sex.

Dual method users and non-barrier users tended to display greater sexual responsibility and thus score higher on the constructed scale. Approximately four in ten (40%) dual method users and non-barrier users (38.7%) showed high sexual responsibility compared to a quarter (25%) of condom only users. Condom users did however show moderate responsibility with two thirds (64.6%) achieving a moderate score on the sexual responsibility scale. It must be noted however that condom users were also twice as likely to display low sexual responsibility when compared to other method users. (Condom users: 10.3% vs Dual method 4.8% and non-barrier method users 3.4%). It may be inferred however that condoms users in recognizing their more liberal attitudes towards sex have assessed their risk and thus chose to protect themselves using barrier methods. (See Table 8 & Chart 4)

A small but significant correlation between condom use and sexual responsibility was noted with condom use being related to lower scores on the scale ($r=.149$; $p=.000$). The condom user’s relatively liberal attitude to sexual activity was also inferred from their weaker rejection of specific statements listed below (see Table 9):

- *It is fun to sexually experiment with strangers*
- *You don’t have to be very close to your partner for sex to be a pleasant experience*
- *It is boring to have the same sexual partner for a long time*
- *The main reason for going to a party is to meet somebody*

It should be noted however that the more liberal attitude of the condom user may be influenced by inherent gender differences as males were found to score significantly lower than females on the sexual responsibility scale. Specifically while 4 in 10 women scored high on the responsibility scale only 2 in 10 men achieved the same score. Similarly men were 7 times as likely to score low on the scale than their female counterparts.

Table 8
Method Use and Sexual Responsibility

	Non-Barrier Methods Used Only (n=270)	Dual Methods Used (n=153)	Barrier Methods (Condoms) Used Only (n=1087)
Sexual responsibility scale: (Alpha= 0.7)			<i>P=0.000</i>
High sexual responsibility: %(f)	38.7%; (103)	40.1%; (59)	25.1%; (264)
Moderate sexual responsibility: %(f)	57.9%; (154)	55.1%; (81)	64.6%; (678)
Low sexual responsibility: %(f)	3.4%; (9)	4.8%; (7)	10.3%; (108)
Pearson's correlation	R=	.005 (p=0.920)	R=-.149 (p=0.000)

Chart 4

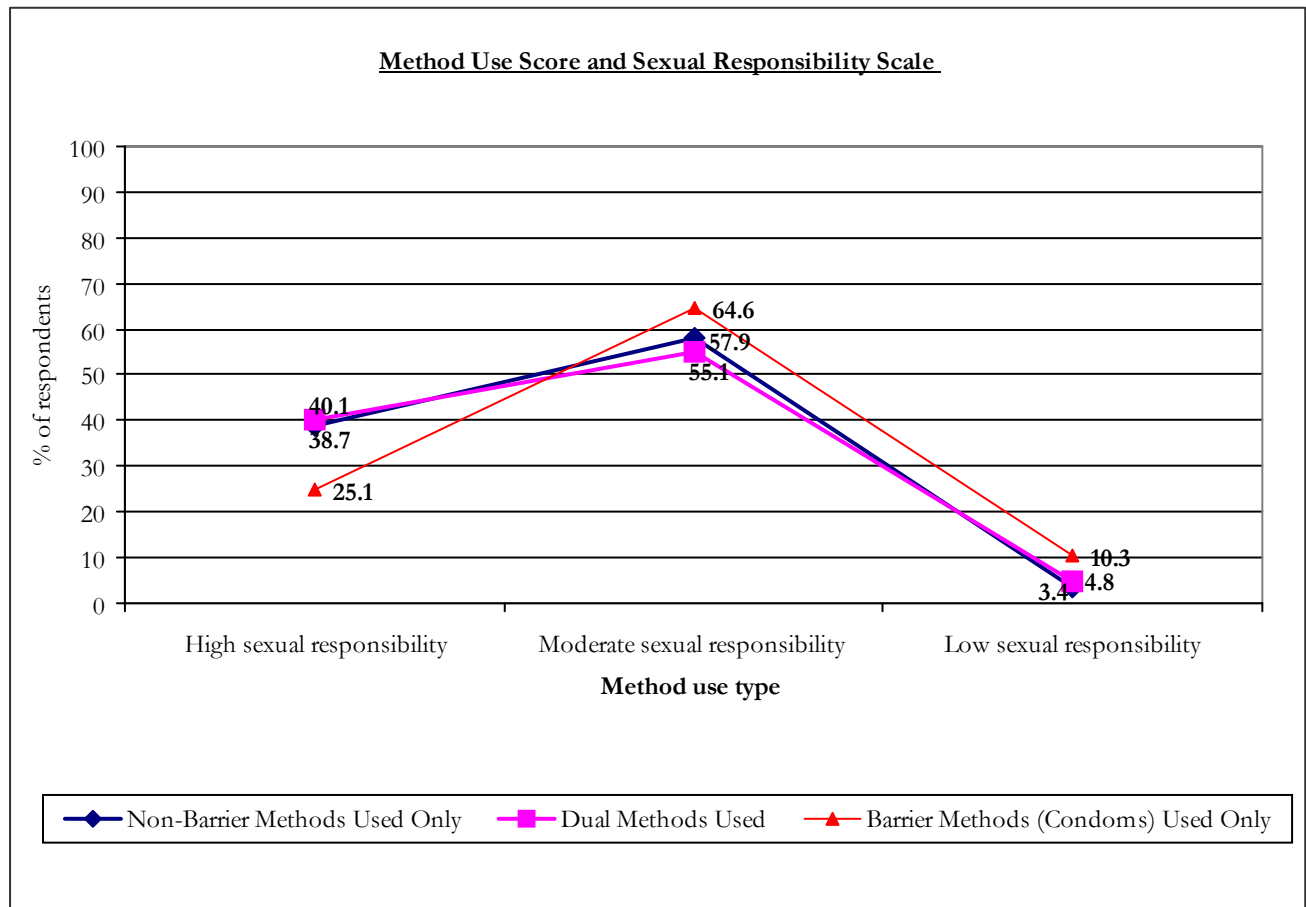


Chart 5

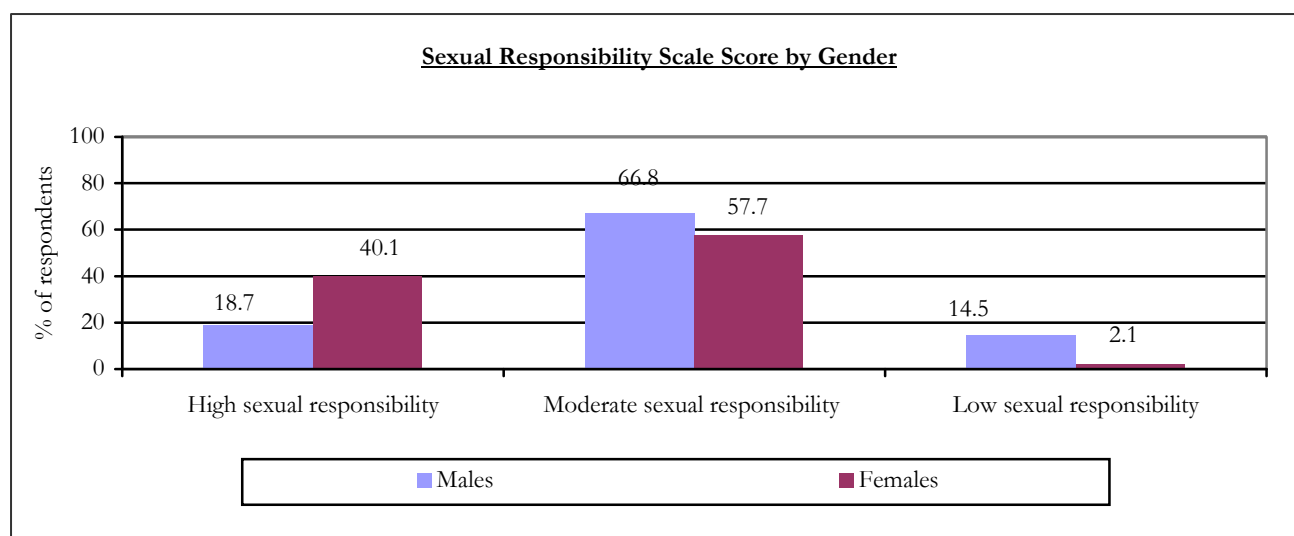


Table 9: Method Use and Attitudes to sex

	Agreement measure	Non-Barrier Methods Used Only (n=270) %	Dual Methods Used (n=152) %	Barrier Methods (Condoms) Used Only (n=1086) %
Before engaging in sexual relations we should think about it carefully	<i>Strongly agree</i>	50.4	51.3	44.2 *
Only two people who trust each other completely should have sexual relations	<i>Strongly agree</i>	31.1	30.4	23.3
It is fun to sexually experiment with strangers	<i>Strongly disagree</i>	42.2	40.8	29.0 **
You don't have to be very close to your partner for sex to be a pleasant experience	<i>Strongly disagree</i>	20.0	26.3	16.6 *
It is better to postpone sexual relations until a person is ready to take responsibility for his/her actions	<i>Strongly agree</i>	42.8	41.7	35.6 *
The best way to have a good time is to get drunk and have sex with someone	<i>Strongly disagree</i>	48.0	55.2	56.6
The main reason for going to a party is to meet somebody	<i>Strongly disagree</i>	50.4	57.2	42.9 *
Faithfulness is very important in a relationship	<i>Strongly agree</i>	67.4	60.4	58.2 *
It is boring to have the same sexual partner for a long time	<i>Strongly disagree</i>	42.6	44.7	28.0 **
Sexual intercourse is an intimate experience	<i>Strongly agree</i>	43.3	44.4	41.7
It is important that a man/woman can talk with his/her sexual partner about their sexual past	<i>Strongly agree</i>	30.5	42.8 *	31.4

* means p<.05; ** means p<.005;

5.4 METHOD USE AND CHILDBEARING HISTORY AND ATTITUDE

Overall non-barrier method users emerged as the group most likely to have had children and tended to have a higher average number of children than the other method groups. (*See Table 10*)

Non-barrier method users were persons most likely to have had children followed by dual method users. Condom users were least likely to report having had children. Specifically while approximately 9 in 10 non-barrier users reported children, it was 8 in 10 dual users who reported the same compared to 5 in 10 condom users. Average age first child was had was between 20yrs (non-barrier users) and 21yrs (dual and condom users). Non-barrier method users reported an average of 3 children while dual method users and condom users had an average of 2 children.

Non-barrier method users worried most about pregnancy while condom users reported the least worry. Specifically while just over a half of non-barrier users (52%) reported worrying a lot about pregnancy it was just over a third (36%) of condom only users who reported the same level of worry. Less than a half (45%) of dual method users reported 'worrying a lot' about pregnancy.

Despite relatively high concern for pregnancy among most method users it was very few who felt a pregnancy was likely in the next six months. In fact most non-barrier users (64%) and dual method users (58.8%) felt it was not at all likely that they would become pregnant or get a girl pregnant in the next six months. Interestingly however condom users were significantly less likely to share this certainty with less than a half (45%) reporting a pregnancy in the next six months as not at all likely. Condom users were in fact twice as likely to believe a pregnancy within the next six months was very/somewhat likely (15.5% vs 8.9% non-barrier and 5.3% dual method users).

Non-barrier method users and dual method users displayed similar current birth control behavior. Specifically almost all non-barrier users (91.5%) and dual method users (95.2%) reported using some kind of birth control every time sex was had in order to avoid getting pregnant. In contrast less than two-thirds (64%) of current condom users reported the same behavior, with as many as 17% reporting not using any kind of birth control even though they were not trying to get pregnant.

In an attempt to probe whether feelings towards pregnancy and the consequences of pregnancy influenced method choice, a question relating to how the respondents would feel if they were told they were pregnant or had gotten a girl pregnant was included. A measurement for negative feelings towards pregnancy was then tallied. Each affirmative response given to negative feelings was given a score of one and summed for each respondent. Negative responses included:

- | | | |
|-----------------|------------|------------|
| ✓ Sad | ✓ Lost | ✓ Afraid |
| ✓ Numb | ✓ Guilty | ✓ Grieving |
| ✓ Irresponsible | ✓ Confused | ✓ Ashamed |
| ✓ Worthless | ✓ Helpless | ✓ Angry |

Interestingly non-barrier users and dual method users had similar scores while condom users scored significantly lower. This illustrates that non-barrier users and dual method users were significantly more likely to hold a negative view of the consequences of a current pregnancy than their condom using counterparts. (See Table 10)

It may be inferred therefore that more negative feelings towards a current pregnancy may prompt more pregnancy avoidance behavior and more concern over the likelihood of getting pregnant bearing in mind that all respondents were currently sexually active persons (had sex within the last twelve months).

Table 10
Method Use and Attitudes to Childbearing

	Non-Barrier Methods Used Only (n=270)	Dual Methods Used (n=153)	Barrier Methods (Condoms) Used Only (n=1087)
Have had children	86.7%; (234)	78.4%; (120)	50.6%; (550)
Mean age had first child	19.9yrs (\pm 3.9)	20.5yrs (\pm 4.3)	21.3yrs (\pm 4.8)
Mean # children currently have	2.88 (\pm 1.8)	2.5 (\pm 1.7)	2.51 (\pm 1.0)
Level of worry about pregnancy:			
Worry a lot: %(f)	52.4%; (141)	45.4%; (69)	36.3%; (395)
Worry a little: %(f)	11.9%; (32)	15.1%; (23)	14.5%; (158)
Do not worry at all: %(f)	35.7%; (96)	39.5%; (60)	47.4%; (515)
Likelihood of pregnancy/getting a girl pregnant in next 6 months:			
Very likely: %(f)	5.9%; (16)	3.3%; (5)	8.5%; (92)
Somewhat likely: %(f)	3.0%; (8)	2.0%; (3)	7.0%; (76)
Neither likely nor unlikely: %(f)	2.2%; (6)	3.9%; (6)	4.1%; (45)
Not likely: %(f)	19.3%; (52)	22.2%; (34)	24.4%; (265)
Not at all likely : %(f)	64.1%; (173)	58.8%; (90)	45.3%; (492)
Current birth control behaviour (females only):			
I use some kind of birth control every time I have sex to avoid getting pregnant : %(f)	91.5%; (182)	95.2%; (99)	64.2%; (264)
I use some kind of birth control when I think there is a risk of getting pregnant : %(f)	3.0%; (6)	3.8%; (4)	9.7%; (40)
I do not use any kind of birth control and would not be unhappy if I get pregnant : %(f)	0.0%; (0)	0%; (0)	3.2%; (13)
I don't use any kind of birth control but I am not trying to get pregnant : %(f)	3.5%; (7)	1.0%; (1)	17.3%; (71)
I don't use any kind of birth control and I am trying to get pregnant : %(f)	0.0%; (0)	0%; (0)	1.7%; (7)
Negative feelings towards pregnancy (mean #)	5.3 (\pm 5.4)	5.8 (\pm 5.2)	4.3 (\pm 5.0) **

* means p<.05; ** means p<.005; *** means p<.000

5.5 METHOD USE AND ATTITUDES TO CONTRACEPTIVES, PARTNER ENDORSEMENT & STI RISK PERCEPTION

Generally reported partner's attitude towards condoms and contraceptives mirrored the respondents' method/methods of choice. Non-barrier users were characterized by the statement "*my partner prefers using other contraceptives and would rather we not use a condom*" (58%); compared to dual users most of whom agreed that "*My partner would rather we use both a condom and another contraceptive*" (58.8%) and condom only users who described their partners as preferring condom use rather than other contraceptives (64.7%). (See Chart 6)

Additionally, most dual method users reported strong partner support for both contraceptives (91.5%) and condoms (85.6%). Condom only users reported higher partner support for condoms (90%) while non-barrier users reported higher support for contraceptives (84%) with only a half (52%) describing their partner as being very supportive of condoms. All groups felt it was easy to talk to their partners about using contraceptives. (See Table 11)

Highest social support and acceptability for condoms and contraceptive use was experienced by dual method users and condom only users. Despite being more sexually active (frequency of sexual intercourse in an average month) than the other cohorts, non-barrier users appeared to experience less support for such protective behavior. This is indicated by relatively fewer of these respondents strongly agree/agreeing with the statements probed as detailed in Table 12.

Overall the majority of all respondents, regardless of choice of method, reported *worrying a lot* about contracting an STI. Seven in ten dual method users and condom users and six in ten non-barrier users reported worrying a lot. Non-barrier users were the group most likely to report "*don't worry at all*" (24%). (See Table 13)

Condom only users were the group most convicted in their perception of their likelihood of contracting a STI with 6 in 10 (63%) reporting being *not likely/not at all likely* to contract an STI. Most non-barrier method users (57.8% *not likely/not at all likely*) and dual method users (56.2% *not likely/not at all likely*) echoed this sentiment. Interestingly it was a quarter (24%) of dual method users who were unsure of their likelihood of contracting a STI. (See Table 13)

Table 11
Method Use and Attitudes to Contraceptives: Partner endorsement
(Top 2 Box: Percentage strongly agree/agree shown)

	Non-Barrier Methods Used Only (n=270)	Dual Methods Used (n=153)	Barrier Methods (Condoms) Used Only (n=1087)
Partner attitudes to condoms & contraceptives :	<i>% agreeing</i>	<i>% agreeing</i>	<i>% agreeing</i>
I enjoy using condoms because my partner enjoys using them: %(f)	27.9%; (72) **	64.1%; (98)	63.6%; (691)
It is easy to talk to my partner about using contraceptives: %(f)	87.6%; (234)	93.5%; (143)	84.8%; (915) *
My partner is very supportive of using contraceptives: %(f)	83.6%; (225)	91.5%; (140) *	82.3%; (886)
My partner is very supportive of using condoms: %(f)	52.4%; (141) **	85.6%; (131)	90.0%; (976)
Partner attitude towards contraceptives:			
My partner would rather we use no method: %(f)	10.5%; (28) **	6.5%; (10)	7.4%; (79)
My partner prefers to use condoms rather than other contraceptive methods: %(f)	9.0%; (24)	18.3%; (28)	64.7%; (695)
My partner prefers using other contraceptives and would rather not use a condom: %(f)	58.1%; (155)	16.3%; (25)	7.0%; (75)
My partner would rather we use both a condom and another contraceptive: %(f)	22.5%; (60)	58.8%; (90)	20.9%; (225)

* means p<.05; ** means p<.005;

Chart 6

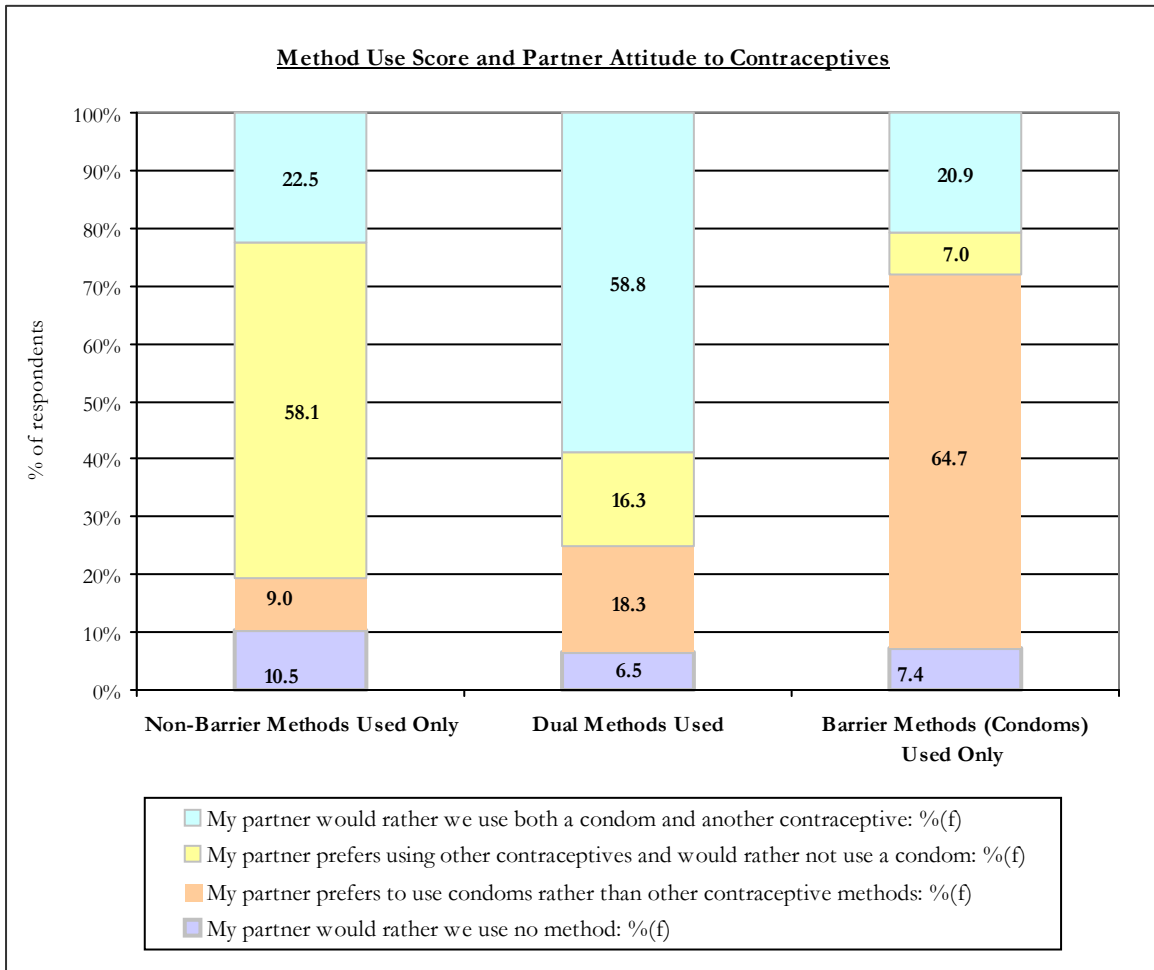


Table 12
Method Use and Social Acceptability of Condoms and Contraceptives

(Top 2 Box: Percentage strongly agree/ agree shown)

	Non-Barrier Methods Used Only (n=270)	Dual Methods Used (n=153)	Barrier Methods (Condoms) Used Only (n=1087)
Social acceptability of condoms & contraceptives:			
People important to me would advise me to always use a contraceptive method: %(f)	77.9%; (208)	82.1%; (124)	79.4%; (854)
My friends would advise me to always use a contraceptive method : %(f)	67.5%; (179)	74.8%; (113)	73.8%; (789)
People in my community/neighbourhood would advise me to always use a contraceptive method : %(f)	53.1%; (137)	61.8%; (89)	62.8%; (650) *
People important to me would advise me to always use a condom : %(f)	75.2%; (200)	84.1%; (127) *	86.3%; (932) **
My friends would advise me to always use a condom : %(f)	69.7%; (184)	77.0%; (117)	81.3%; (871) **
People in my community/neighbourhood would advise me to always use a condom	52.1%; (135)	63.9%; (92)	66.1%; (689) **

* means p<.05; ** means p<.005;

Table 13
Method Use and HIV/AIDS Risk perception

	Non-Barrier Methods Used Only (n=270)	Dual Methods Used (n=153)	Barrier Methods (Condoms) Used Only (n=1087)
Level of worry about getting an STI including HIV/AIDS:			
Worry a lot: %(f)	64.1%; (173)	70.6%;(108)	69.7%; (758)
Worry a little: %(f)	10.7%; (29)	11.1%; (17)	10.1%; (110)
Don't worry at all: %(f)	24.4%; (66)	17.0%; (28)	18.8%; (204)
Likelihood of contracting STI (HIV/AIDS):			
Very likely: %(f)	7.0%; (19)	4.6%; (7)	3.7%; (40)
Somewhat likely: %(f)	8.1%; (22)	5.9%; (9)	8.8%; (96)
Neither likely nor unlikely: %(f)	9.6%; (26)	9.2%; (14)	9.1%; (99)
Not likely: %(f)	22.6%; (61)	24.2%; (37)	23.6%; (257)
Not at all likely: %(f)	35.2%; (95)	32.0%; (49)	39.6%; (430)
Don't know: %(f)	17.4%; (47)	24.2%; (37)	15.2%; (165)

5.6 METHOD USE AND ATTITUDES TO CONDOMS

▪ Attitudes/belief scale

Method use and attitudes to condoms are important to condom use. As a result 50 items expressing evaluative beliefs and attitudes about condoms or safer sex related aspects of sexual behaviour were probed in the survey. Items were included based on 4 categories:

- The condom use self-efficacy scale as developed by Bradfford and Beck 1991
- Attitudes related to the effectiveness of condoms and condom use
- Attitudes to contraceptives and family planning
- Attitudes of social network and partners to condoms and contraceptives.

Items relating to the last three categories were derived from secondary research of relevant articles as well as qualitative research (focus groups and depth interviews) conducted as a first phase of this project. During this phase respondents were asked to complete word association exercises. Specifically participants were first asked to write ten (10) words they would use to describe condoms and ten (10) words which they would use to describe sex. The word groupings derived from these exercises were then included in the survey as a measurement of attitudes and the subsequent construction of scales. These statements, and the scales thus derived, are therefore more culturally appropriate given that these statements were developed based on research with the Jamaican respondent.

For the survey, respondents were asked to respond to specific statements covering each of the categories listed above on a 5 point scale ranging through 1 (strongly agree), 2 (agree), 3 (neither agree nor disagree), 4 (disagree) and 5 (strongly disagree). Factor items were then used to construct six scales and the appropriate scores calculated. All six scales showed great internal reliability with Cronbach alpha values of .7 and higher. The coding of the response therefore means that lower scores are desirable for all positive attitude measurement scales and higher scores most desirable for scales which relate to negative attitudes and beliefs.

▪ *Factor analysis of attitudinal items:*

The fifty items were subjected to a principal components analysis and produced 16 factors with eigenvalues greater than 1. In this exercise several of these factors loaded significantly on one item hence a scree plot was carried out as a means of identifying the most important factors. Six factors resulted. The six factor solution accounted for 40% of variance. These six factors described barriers and justifications for condom and contraceptive use and were:

1. Confident condom use and negotiation
2. Community and social network support
3. Rejection of the view that condoms undermine trust and pleasure
4. Comfort and commitment in using condoms
5. Partner support for condoms
6. Belief in condom effectiveness

Factor 1: Confident condom use and negotiation

This factor consisted of 20 items which demonstrated confidence in the mechanics of condom use and condom negotiation and a rejection of the influence of partner disapproval. This factor also included items which described a great degree of comfort with condom use and confidence in one's ability to use and negotiate condom usage with both a new and current partner. Health as more important than pleasure also emerged in this grouping. This factor accounted for 12% of variance and the scale thus generated showed great internal consistency (Cronbach alpha=.89). Statements included:

- I wouldn't feel confident suggesting using condoms with a new partner because I would be afraid he or she would think I have an STD (*rejection*)
- I wouldn't feel confident suggesting using condoms with a new partner because I would be afraid he or she would think I've had a homosexual experience. (*rejection*)
- I feel confident in my ability to suggest using condom with a new partner.
- I wouldn't feel confident suggesting using condoms with a new partner because I would be afraid he or she would think I thought they had a STD. (*rejection*)
- I feel confident in my ability to discuss condom usage with any partner I may have
- I feel confident I could gracefully remove and dispose of a condom when we have intercourse
- I feel I could use a condom successfully
- I feel confident in my ability to put a condom on myself or my partner
- If I were to suggest condom use to a partner, I would feel afraid that he or she would reject me. (*rejection*)
- I feel confident I could suggest using a condom without my partner feeling 'diseased'
- I feel confident in my ability to persuade a partner to accept using a condom when we have intercourse
- I feel confident I could remember to carry a condom with me should I need one
- Health is more important than short, temporary pleasure
- I feel confident I could purchase a condom without feeling embarrassed
- I feel confident in my ability to use a condom correctly
- If my partner and I were to try to use a condom and did not succeed, I would feel embarrassed to try to use one again (*rejection*).
- I feel confident in my own or my partner's ability to maintain an erection while using a condom
- If I were unsure of my partner's feelings about using condoms I would not suggest using one (*rejection*)
- I would feel embarrassed to put a condom on myself or my partner (*rejection*)
- I would feel comfortable discussing condom use with a potential sexual partner before we ever had any sexual contact.

Factor 2: Community and social network support

A total of 6 items comprised this factor. This factor emerged as a description of the level of support given to condom and contraceptive use by the external environment, specifically the individual's community and social network. Items generally described the level of support given to condom and contraceptive use by friends, members of the community and persons considered important to the individual. This factor accounted for 6.8% of variance. The scale generated from this factor showed great internal consistency (Cronbach alpha=.9). Specific statements were:

- My friends would advise me to always use a contraceptive method
- My friends would advise me to always use a condom
- People in my community would advise me to always use a contraceptive method
- People in my community would advise me to always use a condom.
- People important to me would advise me to always use a condom
- People important to me would advise me to always use a contraceptive method

Factor 3: Reduces trust and pleasure

This 10 item factor expressed respondents' beliefs about condoms in terms of their effects on trust and pleasure. Specifically the factor expressed respondents' beliefs that condoms indicate a lack of trust in one's partner and therefore are inappropriate for long-term "steady relationships" and in marriage. Further, in relationships where there is trust, requesting condom use implies infidelity. Items loading on this factor also illustrated the belief that condoms and contraceptives interfere negatively with the spontaneity and pleasure of sexual intercourse. This factor accounted for 6.6% of variance. The scale generated from this factor showed great internal consistency (Cronbach alpha=.7). Statements comprising this factor were:

- Contraceptives ruin the spontaneity and heat of sexual intercourse
- The use of condoms shows a lack of trust in your partner
- Condoms are too tight and uncomfortable
- Persons in a steady relationship, longer than a month, don't have to use condoms anymore
- If my partner asks if we can use a condom I think he/she has other sexual partners
- Sex is a private thing and when you buy a condom it is as if you posted it on a notice board
- A condom reduces the quality of sex so much that it is better not to use it at all
- The smell of condoms is unpleasant and decreases my interest in sex
- Using a condom in marriage is against God's will
- Condom use causes irritation/itching and burning after sex

Factor 4: Comfort and commitment

This 6 item factor consisted of items which described high level of comfort with and commitment to using condoms. This was expressed by statements describing confidence in using condoms in extreme and extraneous situations such as when drunk and high. Statements also expressed adeptness in using condoms including using condoms without breaking the mood, quickly and as a part of foreplay. This factor accounted for 6.5% of variance. The scale generated from this factor showed great internal consistency (Cronbach alpha=.8). Statements comprising this factor are:

- I feel confident that I would remember to use a condom even after I have been drinking
- I feel confident that I could use a condom during intercourse without reducing any sexual sensations
- I feel confident that I could use a condom with a partner without “breaking the mood”
- I feel confident that I would remember to use a condom even if I were “high”.
- I feel confident in my ability to put a condom on myself or my partner as a part of foreplay
- I feel confident in my ability to put a condom on myself or my partner quickly.

Factor 5: Partner support for condoms

This 4 item factor consisted of the expected measurements of partner support for both contraceptive and condom use. This factor accounted for 4.3% of variance. As a scale this factor showed great internal consistency (Cronbach alpha= .8). Statements included in this factor were:

- My partner is very supportive of using contraceptives
- It is easy to talk to my partner about using contraceptives
- My partner is very supportive of using condoms
- I enjoy using condoms because my partner enjoys using them

Factor 6: Belief in condom effectiveness

This 4 item factor described respondents’ belief in condoms as effective protection and contraception. This factor accounted for 4.1% of variance. The scale generated also showed great internal reliability (Cronbach alpha=.7). Statements comprising this factor were:

- The condom is a highly satisfactory form of contraception
- I think condoms are an excellent means of contraception
- Condoms are an effective method of contraception
- Condoms do not offer reliable protection.

Table 14
Attitudes to condoms and contraceptives: Mean score by method used

Scale	Non-barrier method users (mean score)	Dual method users (mean score)	Condom only users (mean score)
Confident condom use and negotiation	34.96	32.2 **	33.0 **
Community and social network support	15.09	13.64 *	13.58 **
Reduces trust and pleasure	30.8	33.12 **	33.74 ***
Condom comfort and commitment	11.03	10.32	10.9
Partner support for condoms	10.2	7.8 ***	8.34 ***
Belief in condom effectiveness	9.35	9.45	8.86 *

*means p<.05; ** means p<.005; *** means p<.000

Table 15
Correlation analysis

Scale	Dual Method vs Non-Barrier method users	Condom users only vs Non-barrier method users
Confident condom use and negotiation	R=.127; **	R=.082; **
Community and social network support	R=.122; *	R=.098; ***
Reduces trust and pleasure	R=-.153; ***	R=-.183; ***
Condom comfort and commitment	R=.063;	R=.013;
Partner support for condoms	R=.358;***	R=.240; ***
Belief in condom effectiveness	R=-.013;	R=.065; *

*means p<.05; ** means p<.005; *** means p<.000

The mean scores for each of the scales showed significant differences based on method used at last sex. Specifically, dual method users and condom only users scored significantly better than non-barrier users in terms of confident condom use and negotiation, community and social network support and partner support for condom use. Both groups of users were also significantly more likely to achieve higher scores in terms of the trust and pleasure interference scale. (See Table 14)

These results mean that dual method users and condom only users had significantly greater confidence in their ability to use and negotiate condom use than non-barrier method users. The former were also characterized by high external support for contraceptives and condoms both from their community and social network as well as from friends. Dual method users and condom users also showed greater rejection of the belief that condoms interfere with trust within relationships and the pleasure of sex. (See Table 14)

Correlation analysis showed a small but significant relationship between dual method use and confident condom use and ability to negotiate, community and social network support and rejection of beliefs of condoms as interfering with trust and pleasure. Interestingly

however while condom users also showed a small but significant relationship to partner support for condoms, dual method users displayed a more moderate and significant relationship to partner support for condoms. While in both scenarios partner support for condoms appears to influence method choice, for the dual method user the support given by the partner plays a greater role. (See Table 15)

The diagrams below graphically illustrate variations in scores on each scale among method use groups (see Chart 7-12). Scores should be viewed using the arrow on the side of the graph which indicates the direction of the ideal score. The box plots are presented here to allow for a visual comparison of the distribution of attitude scores based on method use group. Each distribution of scores is represented by a box and protruding lines called whiskers. The box contains 50% of cases and the line across the inside of the box represents the median value. The whiskers protruding from the box go out to the variables smallest and largest values.

Chart 7
Confident Condom Use and Negotiation Scale

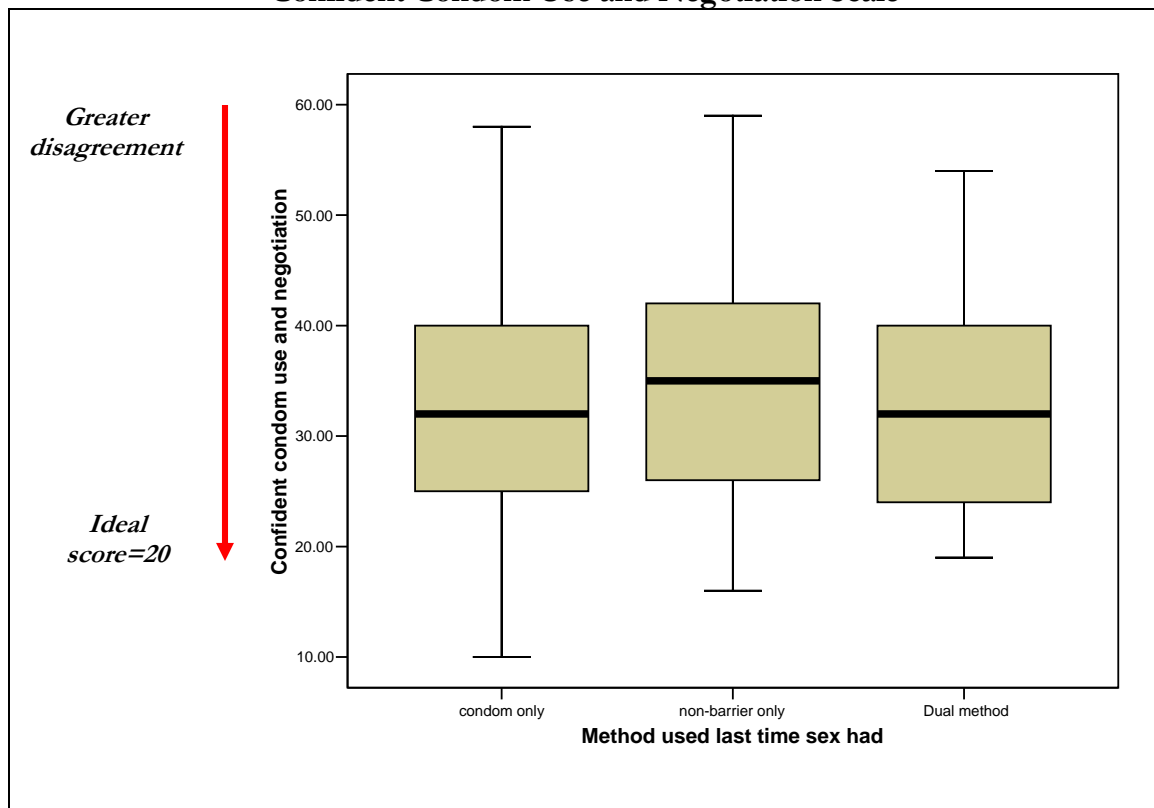


Chart 8
Community and Social Network Support Scale

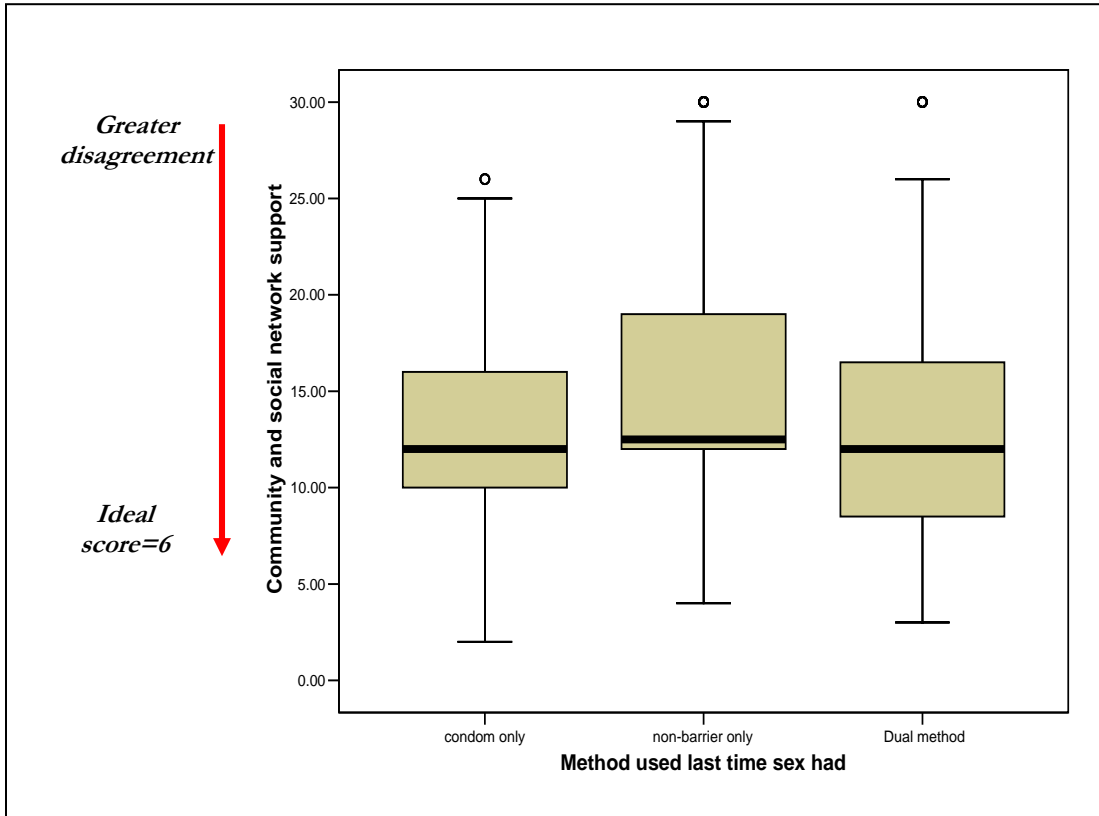


Chart 9
Reduces Trust and Pleasure Scale

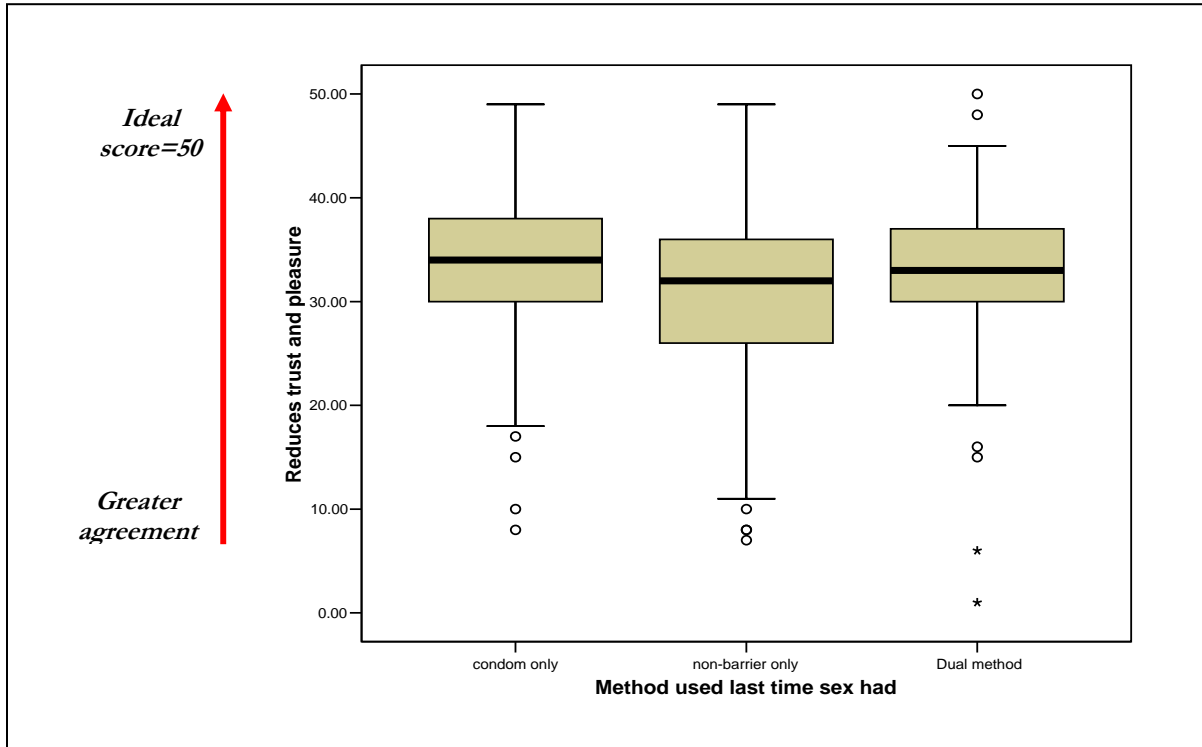


Chart 10
Condom Comfort and Commitment Scale

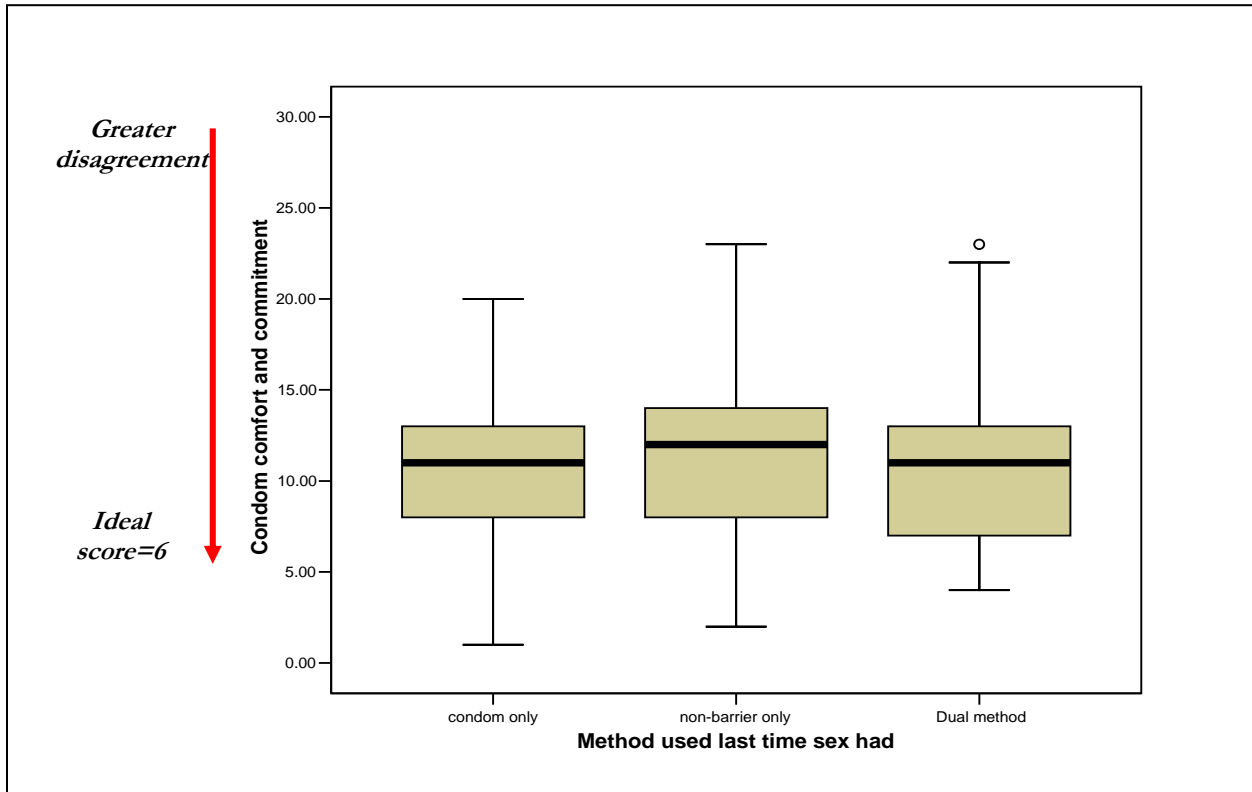


Chart 11
Partner Support For Condoms Scale

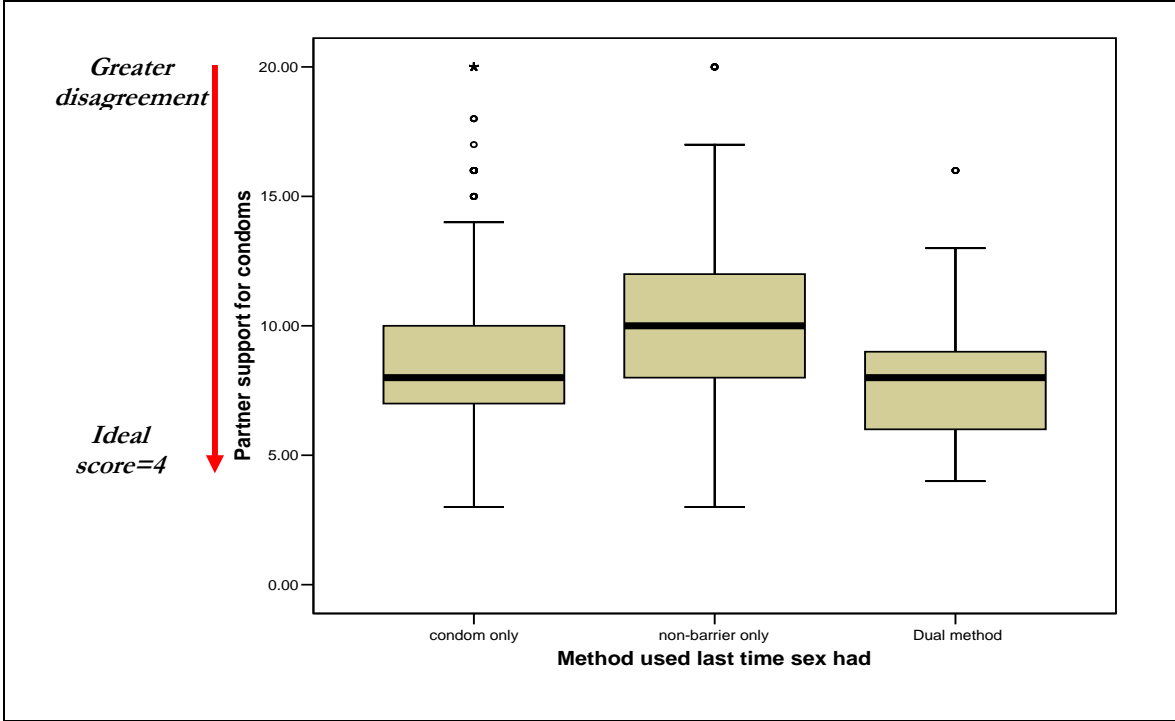


Chart 12
Belief in Condom Effectiveness Scale

