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**Investigating the Feasibility of Social  
Marketing Baggy Condoms: A Study Comparing  
Double Springers with Standard Latex**

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## **Investigating the Feasibility of Social Marketing Baggy Condoms: A Study Comparing Double Springers with Standard Latex**

### **Abstract**

**Objective:** To assess the feasibility of social marketing Double Springers (DS) brand baggy condoms by investigating their acceptability to consumers.

**Data and methods:** The Double Springers condom is a latex condom with a baggy end shaped like a spiral. The condom was designed to give greater pleasure to both men and women while providing the same protection from HIV and pregnancy as a standard condom. The study recruited 250 couples 21–39 years old to test three DS and three standard condoms (SC) made of latex. Half of the couples were randomly assigned to try the DS first, and half tried the SC first. Couples received three condoms in unmarked packages, were given up to 10 days to try them, and returned to the study site to be interviewed individually about their opinions regarding various attributes of the condom. They then received three of the other type of condom. After trying the second type, the couples were interviewed about their experiences with that condom and were also asked to compare the two condom types. The results were analyzed using statistical tests for significant differences between groups and discriminant analysis.

**Results:** Only three couples dropped out of the study after trying the first condom, and no couples reported adverse effects. Respondents overwhelmingly preferred the standard latex condoms. This finding held for all factors that were probed, whether ratings were of the DS condom alone or in comparison to the SC. With regard to specific advantages purportedly associated with baggy condoms, of those interviewed, 5 percent said that the DS stimulated pleasurable sensations, 59 percent thought the DS was too large, and around 30 percent thought the DS was too thick and/or had too much lubrication. Respondents preferred the SC over the DS for sensitivity (80 percent), stimulation (79 percent), and appearance (75 percent). Only 16 percent said they were more likely to buy the DS than the SC, with another 4 percent saying the chances of them buying the two condoms were equal. The DS scored its highest ratings for the following factors: 25 percent of respondents preferred DS condoms' lubrication, 22 percent preferred their strength, and 20 percent said they were easier to put on. Discriminant analysis failed to identify any factors that would distinguish a niche market for the DS.

**Conclusions:** Baggy condoms such as the Inspiral and Double Springers are marketed as innovations in condom design that increase pleasure for both men and women. Expectations of a product can influence perceptions, and marketing can effectively appeal to consumers who are receptive to product innovations. This study found that in a blind test where consumers do not have such expectations, they seem surprised by the size and appearance of the DS. A marketing campaign that prepares consumers for these differences and stresses the potential for greater pleasure with protection could influence consumers' perceptions. But the strongly negative results of this study make designing a cost-effective social marketing campaign for Double Springers a risk.

## **Background**

The demand for condoms in the fight against AIDS has led to innovations in their design. In particular, manufacturers have attempted to create new types of condoms that, whether through a different shape, new materials, or other improvements, give consumers greater pleasure and variety.

Dr. Alla Venkata Krishna Reddy has been called “the Leonardo da Vinci of condoms” (Brown, 1999). An Indian medical doctor, he has invented several types of baggy-ended condoms (including the Pleasure Plus and Inspiral brands). The design includes a pouch at the head of the condom, allowing the penis greater freedom to move, while the spiral shape creates extra folds of latex that provide increased friction for both partners. Dr. Reddy manufactures Inspiral condoms at his own plant in Chennai, India; they are Food and Drug Administration (FDA) approved and currently on the market in the United States, Latin America, several European countries, and India. Double Springers are similar to Inspiral condoms, except they have an extra spiral at the end; like standard latex condoms, they are prelubricated with silicone. The condom was approved by the FDA in 2002 but is not currently on the market.

If innovations in condom design lead to an expansion in condom use, they could become an important factor in the success of HIV prevention campaigns. However, consumer acceptability studies are necessary to confirm manufacturers’ claims of the new condoms’ advantages over conventional condoms. This is especially true for social marketing programs, because the new condoms’ higher costs must be balanced by the assurance that they will reach consumers who have rejected currently available condoms.

To investigate the feasibility of social marketing the new baggy condom design, Population Services International (PSI) implemented a study to determine whether consumers would prefer Double Springers condoms to standard latex condoms in a blind test. The study was conducted in Abidjan, Côte D’Ivoire, in late 2001.

## Previous Studies

New condom designs generally undergo consumer testing for acceptability as well as efficacy before they are approved by the USFDA. Randomized controlled trials have evaluated efficacy and consumer reactions to condoms made of materials other than latex, including polyurethane and Tactylon. Several studies testing polyurethane condoms have found that they had higher breakage and slippage rates than latex condoms (Frezieres et al., 1998, 1999; Steiner et al., 2003). Consumer reaction to the polyurethane condom is mixed: while one study found that male participants preferred the polyurethane to latex (Frezieres et al., 1998), most studies found a higher preference for latex or other materials (Frezieres et al., 1999; Frezieres and Walsh, 2000). Also, those using the polyurethane condoms were more likely to drop out of the study (Frezieres et al., 1999). An intervention including condom skills-building as well as condom choice found that including the polyurethane condom did not increase rates of condom use (Kalichman and Cherry, 1999). Two studies had participants compare Tactylon condoms with latex (Callahan et al., 2000; Trussel et al., 1992). Breakage rates were found to be similar for the two condoms in the Trussel study, although the Tactylon breakage rates were somewhat higher in the Callahan study. The latter study found that participants tended to prefer the Tactylon condom and rated it higher than the latex condom on ease of use, fit, appearance, comfort, and sensitivity. A recent review of studies involving nonlatex condoms concludes that while breakage rates appear to be higher, they provide an alternative for those with allergies or other sensitivities to latex (Gallo et al., 2004).

Other studies have examined consumer reactions to nonstandard condom shapes. In a study comparing four different condom shapes, Garside (1999) found that while participants could perceive differences among the condoms and state preferences, the preferences were equally split among three of the four condom shapes (straight, flared, and contoured). Another U.S.-based study had couples compare a baggy latex condom with a standard (straight-shaft) condom made by the same manufacturer (Macaluso et al., 2000). It found that breakage and slippage rates were virtually the same for the two condoms. Participants in the study preferred the baggy condom over the conventionally shaped one, reporting that it created more friction for both partners, felt more natural during sex, and made intercourse more enjoyable. The investigators concluded that the new baggy design had the potential to attract and retain users for more consistent use than did standard condoms and could thus increase condom use overall. Another new condom with a baggy shape is the eZ-on polyurethane condom developed by Family Health

International (Gardner et al., 1999; Gilmore, 1999). Besides having a baggy design, the eZ·on is slipped onto the penis rather than rolled on, and it can be pulled on using either side. Trials have found that the eZ·on and standard condoms have similar breakage rates, but the eZ·on receives more consumer complaints regarding difficulty in putting the condom on (Bounds et al., 2002). The eZ·on also results in slightly higher pregnancy rates than do latex condoms (Steiner et al., 2003).

## **Data and Methods**

The study recruited 250 respondents to try two male latex condom designs: Double Springers (DS) and a standard 52mm latex condom manufactured in South Korea and tested in the United States. In Côte D'Ivoire, the standard condom (SC) is social marketed by PSI under the brand name Prudence. For the purposes of the research study, both condoms were packaged with blank foil.<sup>3</sup> The fieldwork for the study was conducted by a private research agency, Research International Côte d'Ivoire, with PSI oversight.

### ***Recruitment***

Couples were recruited from middle-class neighborhoods in Abidjan. Neighborhoods of socioeconomic class "C," consisting mainly of nonmanagerial white-collar workers and small businessmen, were identified using data from the latest census. From these, five neighborhoods were selected randomly for inclusion in the study. Interviewers selected households at regular intervals from a random starting point within the neighborhood and then screened potential respondents for eligibility for the study. If a couple between the ages of 21 and 39 was identified in the household, the interviewer explained the study objectives and requirements. Information on the study was left with the couple to discuss and make a joint decision on whether to participate. Several days later, the interviewers contacted the couple again to determine interest in participating in the study. If positive, an appointment was made for the first interview.

In each neighborhood, a neutral location such as a community hall or youth center was used for study interviews. At the time of the first interview, the eligibility of the couple to participate was verified. Eligibility criteria were as follows:

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<sup>3</sup> See Appendix 1 for more details on packaging of the study products.

- Both individuals were between the ages of 21 and 39.
- Couples would be monogamous for the period of the study. “Monogamous” in this case did not necessarily mean married or co-residing, but the couple had to agree to have sexual relations only with each other for the period of the research study.
- Couples declared that they were using a reliable contraceptive method (nonbarrier) or that one partner had been sterilized, or the couple did not object to a pregnancy.
- Neither partner had a current sexually transmitted infection (STI), suspected that he/she had an STI or HIV, or had had a positive test result for HIV.

In addition, the screening interviews identified and classified couples according to their condom use status as follows:

- Condom users reported that they had used a condom at least once in the past month and that they “often” or “always” used condoms with their sexual partner(s).
- Nonusers reported that they had not used a condom in the past month and that they “seldom” or “never” used condoms with their sexual partner(s).

If the man and the woman had different levels of condom use, the couple was classified according to the male partner’s experience. Half of the couples enrolled for the study were identified as “regular condom users” and half as “nonusers”.

At the first appointment, couples were rebriefed on the study design and their responsibilities while participating. They were informed that the objective of the study was to compare two different types of condoms in terms of how much they liked them, whether they had problems or difficulties using them, and whether the condoms broke or slipped during use. They read and received instructions on how to use condoms and were also given a demonstration of the correct way to put on a condom. Once it was verified that the recruited couples met eligibility criteria, understood the study protocol, and had signed the consent form (described below), they were enrolled in the study. Recruitment continued until 125 regular condom users and 125 nonusers were enrolled, for a total of 250 couples.

### ***Study Protocol***

A randomized crossover design was used for the study: enrolled couples were randomly assigned to one of two use-sequence groups. Group 1 used the DS condom first, followed by the SC; Group 2 used the SC first, followed by the DS condom. Each member of the couple was interviewed individually to obtain

demographic information and background on previous sexual experience.<sup>4</sup> Enrolled couples received a study pack containing a Fact Sheet and three condoms of one type, according to their random assignment. Couples and interviewers agreed on a date to return to the research organization for the second interview.

The couples returned to the research organization office in 1 to 14 days and were interviewed individually about their experiences with the first condom type. If the couple wished to continue in the study, they were then given a packet containing three condoms of the other type. They again agreed a date to return to the research organization for the final interview, during which they were interviewed individually about their experiences with the second condom type and answered a series of questions comparing both condom types.

Respondents were paid the equivalent of US\$20 for their participation in the study. Payments were made on completion of the study or at the end of the couple's participation period. Couples who chose to discontinue early received a pro rata payment, based on the length of their participation.

### ***Protection of Human Subjects***

Before any participants were recruited into the research study, the protocol and all related appendices were submitted for approval to the Protection of Human Subjects Committee (PHSC) of Family Health International. Côte d'Ivoire's national AIDS committee (Programme National de Lutte contre le Sida) also reviewed these protocols and authorized the study. A pilot test of the procedures and research tools was conducted with couples corresponding to the demographic profile for the study and the documents were then finalized.

Before couples were enrolled in the study, the interviewers explained the study procedures and the risks and benefits of taking part in the research. Participants also watched a video that was prepared for the study; it briefed them on study objectives and methodology and included a condom demonstration. Couples who agreed to participate in the research were asked to read (or have read to them) and sign the Consent Form (Appendix 2). A copy of the Consent Form was provided to all participating couples.

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<sup>4</sup> Survey instruments are included in Appendix 3.

### ***Analysis Methods***

A t-test was used to determine whether there were significant differences among participant groups. Differences in perceptions of the two condoms were analyzed using a two-tailed chi-square test. Discriminant analysis was used to investigate whether a niche market of consumers who did prefer the Double Springers condom could be identified. Discriminant analysis is used to determine which variables discriminate between two or more naturally occurring groups (Klecka, 1980; StatSoft, 2004). Once these variables are identified, they may then be used to predict group membership among a larger population.

## **Results**

### ***Characteristics of Study Participants***

Table 1 shows participants' characteristics: 60 percent of the women in the study were under 25, and 65 percent of the men were between 25 and 34. This reflects the age disparity in the couples participating: on average, men were 3.3 years older than their female partners. Reflecting the middle-class status of the couples recruited, most had at least secondary education, and 47 percent of the men had higher education.

More than 75 percent of the couples participating in the study described themselves as boyfriend/girlfriend or fiancé/fiancée; another 20 percent were living together. Only a few were legally married or described themselves as friends/acquaintances. Most had been in the relationship for at least two years, with the average duration of the relationship being three years.

In analysis not shown here, some significant differences in participant characteristics were found between regular condom users and nonusers. Regular condom users were somewhat younger than nonusers ( $t$ -test = -3.77, with  $df=498$ ,  $P=.00$ ) and on average had been in the relationship for a shorter duration ( $t$ -test = -2.36, with  $df=498$ ,  $P=.02$ ). Regular condom users were less likely to live with their partners than were nonregular users ( $\chi^2=12.9$ , with  $df=3$ ,  $P=.01$ ). These findings illustrate the fact that couples are less likely to use condoms in a long-term, stable relationship and that older participants are more likely to be in a long-term relationship.

### ***Adverse Results and Dropout Rate***

On arrival for both the second and final interviews, participants were asked if they had experienced any medical problems or difficulties while using the research study products that they had just tried. No

adverse effects were reported by the couples who participated in the study and there were no discontinuations for this reason. Three couples dropped out because of personal reasons after completing the trial of the first condom.

### ***Perceptions of Double Springers***

In the interviews conducted concerning the condom just tried, participants were asked for general comments about the condoms and then were asked to rate them on a series of factors, such as size, lubrication, and sensitivity. Most of the open-ended comments about the DS were negative. Some participants seemed put off by the unusual appearance and size of the condom, and participants also made negative comments about the stimulation provided by the DS. Some said that the DS had too much lubrication and that the lubricant was difficult to wash off. A few participants did have positive comments about the DS—some liking the very qualities that others disliked, such as the size of the condom and the lubricant.

In rating specific factors in close-ended questions, participants were more likely to make positive comments about the standard condom than about the DS (Figure 1). About 33 percent of respondents said “nothing” when asked what they liked most about DS, compared with 5 percent for SC. Moreover, only 5 percent of respondents said that the DS stimulated pleasurable sensations (compared with 15 percent for SC). As seen in Figure 2, respondents were also more likely to make negative comments about DS than about SC. Fifty-nine percent thought the DS was too large, and 29 percent thought the DS was too thick, while 30 percent thought it had too much lubrication. When asked a series of specific questions about various aspects of the condom they just tried, respondents rated the SC more highly than DS on all aspects (Figure 3).

### ***Comparison of DS and SC***

Figure 4 shows results from the final interview, where respondents were asked to use a series of specific factors to compare the two condoms. On nearly all factors, standard condoms were overwhelmingly preferred. Eighty percent of respondents were particularly likely to prefer SC for sensitivity, 79 percent for stimulation, and 75 percent for appearance. Only 16 percent said they were more likely to buy the DS than the SC, with another 4 percent saying the chances of them buying the two condoms were equal. The DS scored its highest ratings for the following factors: 25 percent of respondents preferred DS condoms’ lubrication, 22 percent preferred their strength, and 20 percent said they were easier to put on.

### ***Confounding Factors***

Exploratory analysis was conducted to find out if results were influenced by such confounding factors as (1) the length of time that couples took to test the six condoms, (2) whether the respondent was a regular condom user or a nonregular user, and (3) which condom the couple tried first. The chi-square test was used to examine whether the differences among these groups were significant.

Few significant differences were found in perceptions of the DS between those who used the three condoms very rapidly (1–3 days) and those who took more time. Those who used the DS rapidly were somewhat less likely to think DS was the right thickness and somewhat less likely to say they would buy it. In comparing the SC and the DS, there were no significant differences on the basis of speed of use.

Few differences were found between regular and nonregular condom users. The only factor showing a significant difference was that regular condom users were more likely to find the DS easier than the SC to put on (when comparing the two condoms). Since condom use status for the couple was determined by the male's status, differences by regular use status were also investigated for the males alone; none were found to be significant.

Significant differences were found in the perceptions of the DS depending on whether the respondent tried the DS first or second (Table 2). Those who tried the DS first were more likely to have positive comments about the condom and to rate it highly on various factors in the initial interview than were those who tried it second. It should be noted that there were *not* significant differences in these factors in the final comparison of the two condoms on the basis of which was tried first—only in the initial interview about the condom just tried. And those who tried the SC first were generally not more likely to make positive comments about it than were those who tried it second. It should be remembered that a minority of respondents rated the DS highly, even among those who tried it first. As seen in Figures 5 and 6, while 38 percent of those who tried DS first rated its sensitivity as good or very good, versus 20 percent of those who tried it second, 79 percent of this group rated the SC as more sensitive once they had tried the two condoms.

### ***Breakage and Slippage***

While the main purpose of the study was to examine acceptability, participants were also asked if they experienced breakage or slippage of the study condoms. Breakage rates were minimal: 8 couples

experienced breakage with the DS and 10 couples with the SC. In all cases, the couples experienced breakage with only one of the study condoms, for a total breakage rate of 1.1 percent for the DS and 1.3 percent for the SC. These rates are below the rate of 2–5 percent generally found by U.S. studies (Grady and Tanfer, 1994; Steiner et al., 1994). For both condoms, participants attributed the breakage to “fragility of the condom,” “accelerated rhythm of sexual intercourse,” and/or “too much lubricant.”

With regard to slippage of condoms during sexual intercourse, couples experienced slippage with the SC at a rate of 2.8 percent, comparable to other studies (Grady and Tanfer, 1994; Steiner et al., 1994). However, slippage rates for the DS were extremely high: fully 21 percent of the couples reported the DS slipping off the penis for at least one of the DS condoms they tried. Altogether, the slippage rate for the DS condoms was 12.1 percent. Clearly, difficulty in using the DS contributed to the negative comments about the condom, including comments about excess lubricant and the size being too large. If the DS were to be marketed, these problems with slippage would have to be resolved, as they greatly diminish its ability to protect users from HIV and other sexually transmitted infections (STIs).

#### **Potential for a Niche Market for Double Springers**

Nonstandard condoms such as the Double Springers are designed to appeal to a subgroup of consumers—those who are attracted by the greater stimulation provided by the condom design, who like the larger size, or who like the variety provided by the different shape. This group could be newly protected from HIV and other STIs if they are not currently using condoms but are willing to use the DS. For this reason, social marketing the DS may be a cost-effective intervention if it provides protection to consumers not reached by standard condom social marketing.

In this analysis, participants were divided into two groups: those who said they would be more likely to buy the DS over the SC and those who said they would not.

The factors examined were as follows:

- Sociodemographic factors (age, sex, and completion of secondary school), which would identify a segment of consumers that could be targeted by social marketing campaigns.
- Relationship factors (duration of the relationship and whether the couple lived together), which could identify whether the DS appeals to those seeking variety in a long-term, stable relationship.

- Sexual behavior (whether respondents had another partner in the past year), which could identify whether the DS appeals to those who have multiple partners.
- Condom attitudes (whether the respondents reported that they felt that condoms suppress feelings in the initial interview), which would identify whether there is a market for the DS among those who dislike standard condoms.
- Condom use (whether the couple used condoms regularly), which would identify whether those not currently using condoms regularly may be attracted by the DS.
- Penis size (whether the respondent perceived the man's penis to be larger than average), to indicate whether those with a larger penis tend to prefer the DS.

Percentage breakdowns for the two groups by these factors are shown in Table 3.

Forward stepwise discriminant analysis was performed, in which variables were entered into the model only if they met a minimum criterion for discriminating between the two groups. None of the variables met the criteria for inclusion into the model; in other words, all failed to discriminate between those who preferred the DS and those who did not. This indicates that preference for the DS is not characterized by any particular consumer profile but by personal factors that are less readily identified. These findings indicate that none of the factors thought to identify a niche market for the DS would successfully predict a preference for the condom. Thus, identifying an effective segmentation of the market to successfully market the condom remains a challenge.

### **Conclusions**

The results of the study indicate that in a blind test comparing Double Springers with standard latex condoms, respondents overwhelmingly preferred standard latex condoms. This finding held for all factors that were probed, whether ratings were of the Double Springers condom alone or in comparison to the standard condom.

Versions of the baggy condom have sold successfully in some markets, mainly where consumers have already been exposed to variations in condom shape, flavor, color, and the like. Expectations of a product can influence perceptions, and marketing can effectively appeal to consumers who are receptive to

product innovations. This marketing appears to have been a success for the Inspiral condom, which has been on the market since 1999. But when consumers do not know what to expect, they seem surprised by the size and appearance of DS. It may be that an effective social marketing campaign that stresses that this is a different kind of condom, with a different size and shape, could appeal to consumers who are interested in trying something new. Marketing campaigns focusing on the potential for increased pleasure with protection could greatly influence consumer perceptions; this perspective was completely lacking in this blind test. But the fact that this study was unable to identify factors that would characterize a niche market for the product makes developing such a campaign a risky undertaking, especially given its higher cost.

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**Table 1: Characteristics of Study Participants (in percentages)**

<i>Characteristics of individuals</i>			
	<b>Male</b>	<b>Female</b>	<b>Total</b>
<b>Age</b>			
21–24	27.6	60.4	44.0
25–29	41.2	31.2	36.2
30–34	23.6	6.4	15.0
35–39	7.6	2.0	4.8
<i>Median age</i>	27	23	25
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>(N)</b>	<b>250</b>	<b>250</b>	<b>500</b>
<b>Educational attainment</b>			
None	0.0	7.6	3.8
Primary	2.0	15.6	8.8
Secondary	50.8	57.2	54.0
Higher	47.2	19.6	33.4
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>(N)</b>	<b>250</b>	<b>250</b>	<b>500</b>
<i>Characteristics of couples</i>			
<b>Mean age difference</b>			<b>3.3 years</b>
<b>Relationship status</b>			
Friends/acquaintances			1.2
Boyfriend/girlfriend or fiancé/fiancée			77.6
Cohabiting			20.4
Married			0.8
<b>Total</b>			<b>100.0</b>
<b>(N)</b>			<b>250</b>
<b>Duration of relationship</b>			
Less than 6 months			7.6
Between 6 and 11 months			9.2
1 year			16.0
2 years			26.0
3 years			12.4
4 years or more			28.8
<b>Total</b>			<b>100.0</b>
<b>(N)</b>			<b>250</b>
<b>Mean duration</b>			<b>3.0 years</b>

Table 2: Condom Ratings by Whether Condom Was Tried First or Second and Total Ratings (in percentages).

	Double Springers			Standard Latex			Total Double Springer
	Tried 1 <sup>st</sup>	Tried 2 <sup>nd</sup>	Signif. b/t Groups	Tried 1 <sup>st</sup>	Tried 2 <sup>nd</sup>	Signif. b/t Groups	
Liked something about the condom	75.2	59.2	**	95.6	94.4		67.
Didn't dislike anything about the condom	20.4	11.2	**	41.2	43.6		15.
Feels like having sex without a condom	46.0	22.2	**	69.2	79.3	**	34.
Different from other condoms in a good way	30.0	13.6	**	45.2	33.2	**	21.
Easy to put on	78.0	72.4		86.8	82.0		75.
Looks good	39.2	18.0	**	69.2	66.0		28.
Size just right	45.2	26.0	**	87.2	84.0		35.
Thickness just right	44.8	26.8	**	64.4	69.2		35.
Pleasant odor	84.4	75.6	*	84.4	86.4		80.
Lubricant feel G/VG	65.2	60.0		86.4	85.2		62.
Lubricant amount G/VG	52.8	42.8	*	64.0	64.0		47.
General comfort G/VG	54.8	32.4	**	86.4	85.2		43.
Sensitivity G/VG	38.0	19.6	**	63.6	62.0		28.
Stimulation G/VG	33.2	17.2	**	60.8	62.4		25.
Confident or very confident in protective value	63.6	42.0	**	89.2	85.2		52.
Would buy	51.2	26.2	**	82.0	81.3		37.
Would recommend to a friend	54.4	30.2	**	84.0	82.1		42.

\*\* Chi-square significant at  $p < .01$  \* Chi-square significant at  $p < .05$

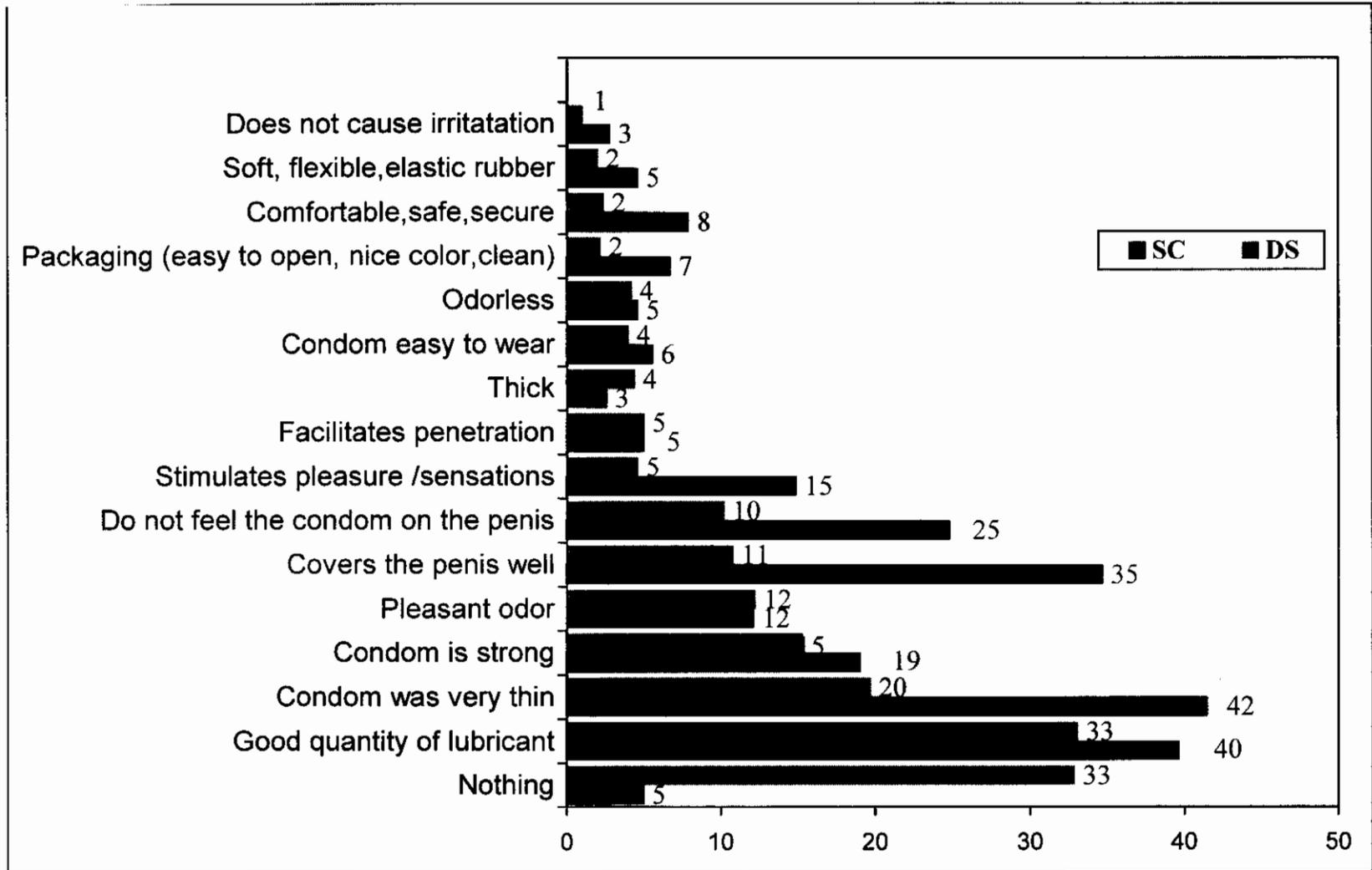
G/VG: Rated good or very good.

**Table 3: Whether Respondent Reported Being More Likely to Buy Double Springers over Standard Latex Condoms, by Various Characteristics (in percentages)**

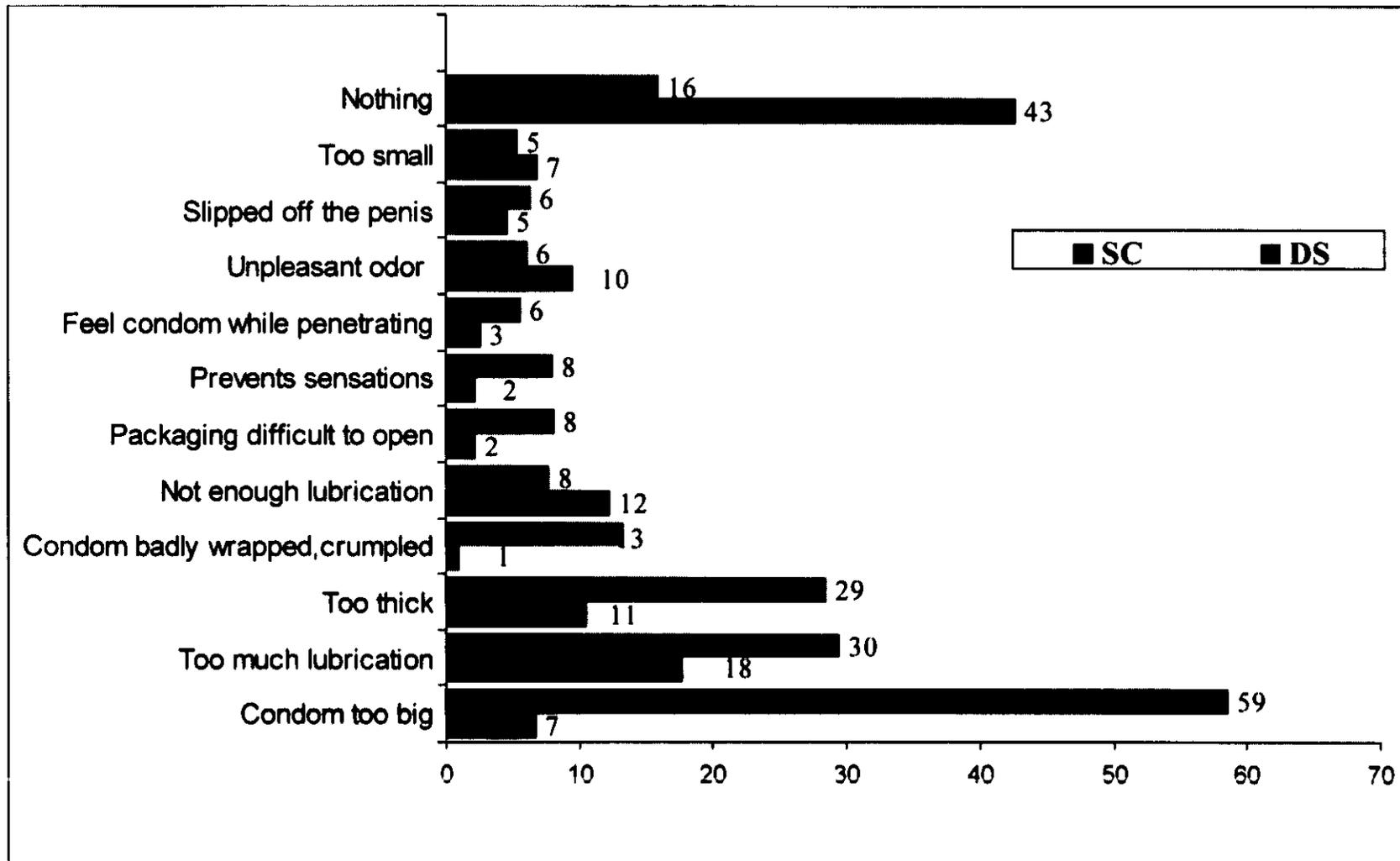
	More Likely to Buy DS	More Likely to Buy SC, no Preference, or Don't Know	Total	(N)
<b>Total</b>	15.6	84.4	100.0	(494)
<b>Sex</b>				
Male	15.4	84.6	100.0	(247)
Female	15.8	84.2	100.0	(247)
<b>Age</b>				
21–24	15.9	84.1	100.0	(214)
25–29	18.2	81.8	100.0	(181)
30–34	9.3	90.7	100.0	(75)
35–39	12.5	87.5	100.0	(24)
<b>Educational attainment</b>				
Less than secondary school completion	15.6	84.4	100.0	(237)
Secondary school completion or higher	15.5	84.5	100.0	(238)
<b>Duration of relationship*</b>				
Less than 1 year	22.5	77.5	100.0	(85)
1 year	6.5	93.5	100.0	(77)
2 years	12.8	87.2	100.0	(125)
3 years	14.5	85.5	100.0	(62)
4 years or more	19.3	80.7	100.0	(145)
<b>Relationship status</b>				
Live together	18.9	81.1	100.0	(106)
Do not live together	14.7	85.3	100.0	(388)
<b>Number of partners in the past year</b>				
One	16.4	83.6	100.0	(287)
Multiple	14.5	85.5	100.0	(207)
<b>Thinks that condoms suppress feelings</b>				
Yes	14.3	85.7	100.0	(28)
No	15.7	84.3	100.0	(466)
<b>Regular condom user</b>				
Yes	15.6	84.4	100.0	(250)
No	15.6	84.4	100.0	(244)
<b>Penis size larger than average</b>				
Yes	16.7	83.3	100.0	(42)
No	15.5	84.5	100.0	(452)

\*Chi square significant at  $p < .05$ .

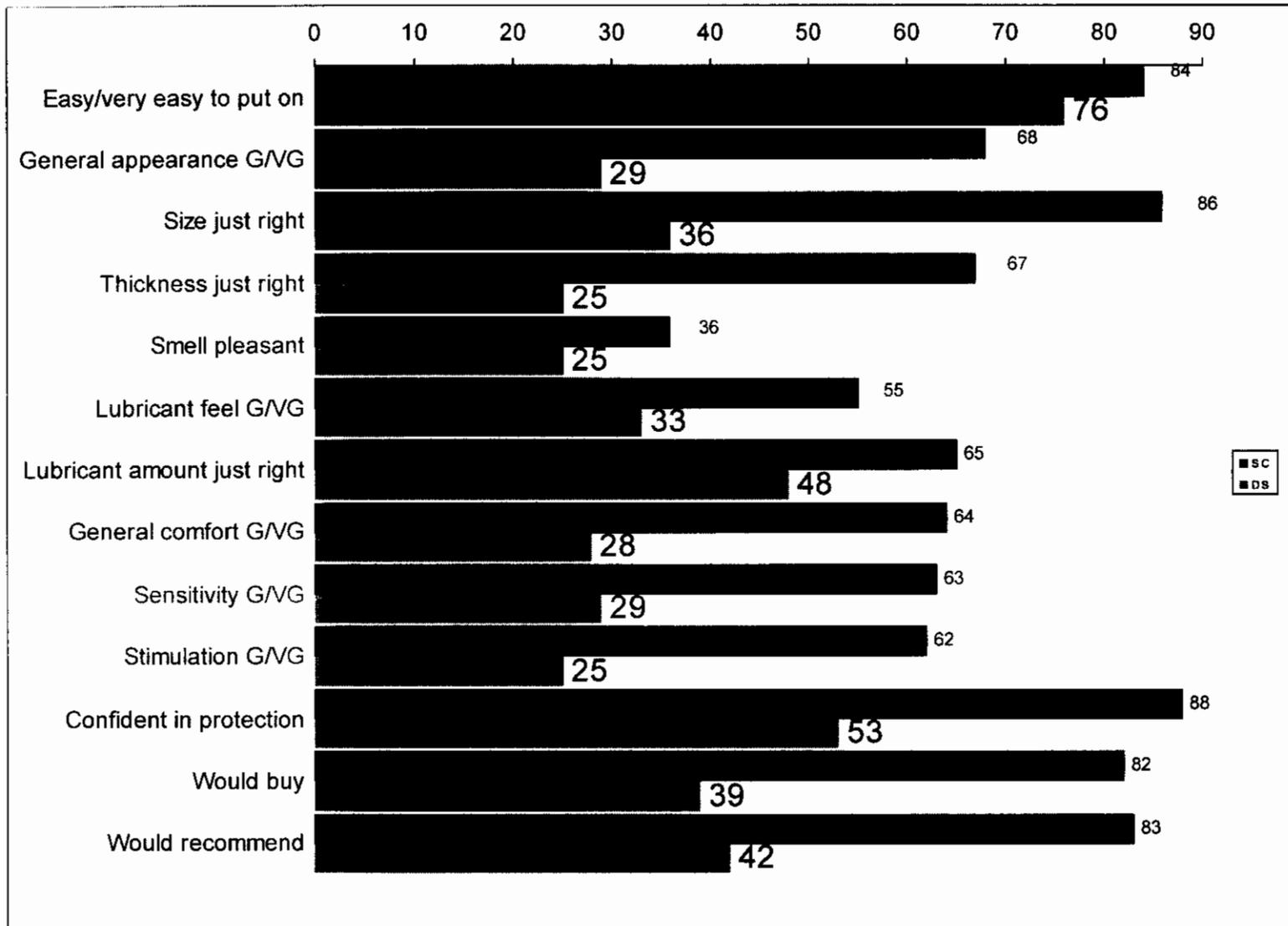
**Figure 1: What Respondent Liked Most about Condom Just Tried (Open-ended Responses)**



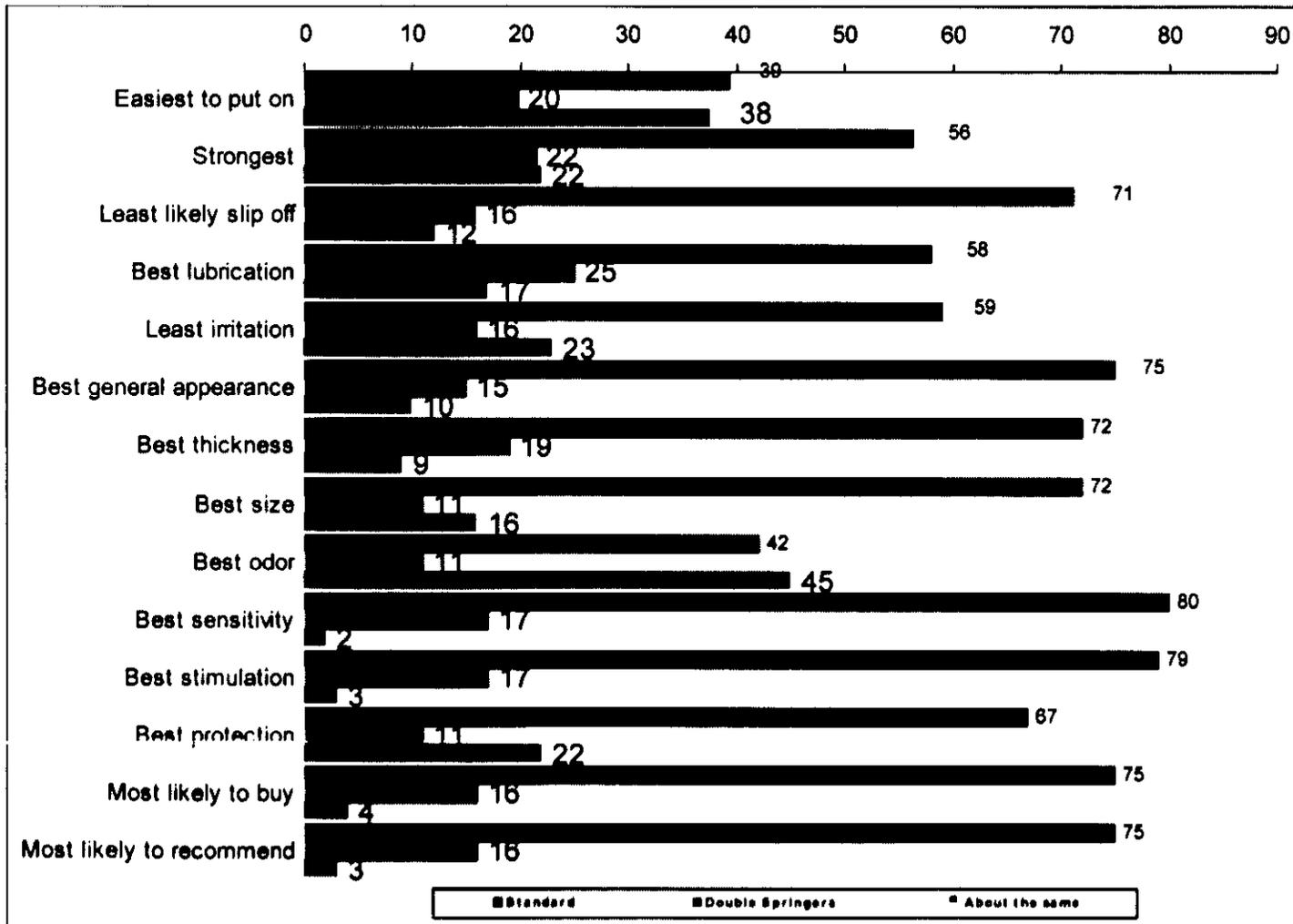
**Figure 2: What Respondent Liked Least about Condom Just Tried (Open-ended Responses)**



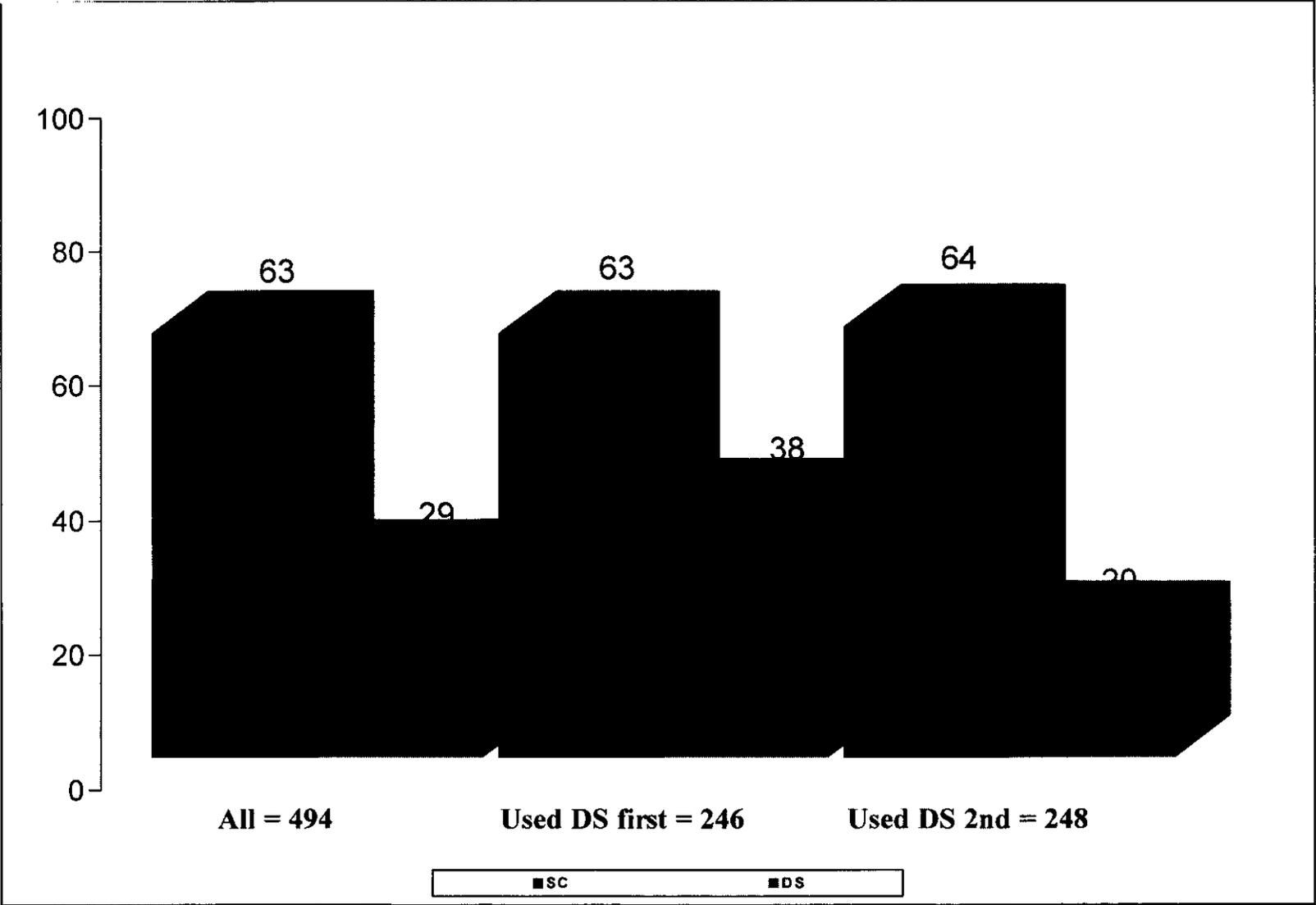
**Figure 3: Ratings of Standard Condom and Double Springers on Various Factors, Drawn from Interviews about Condom Just Tried**



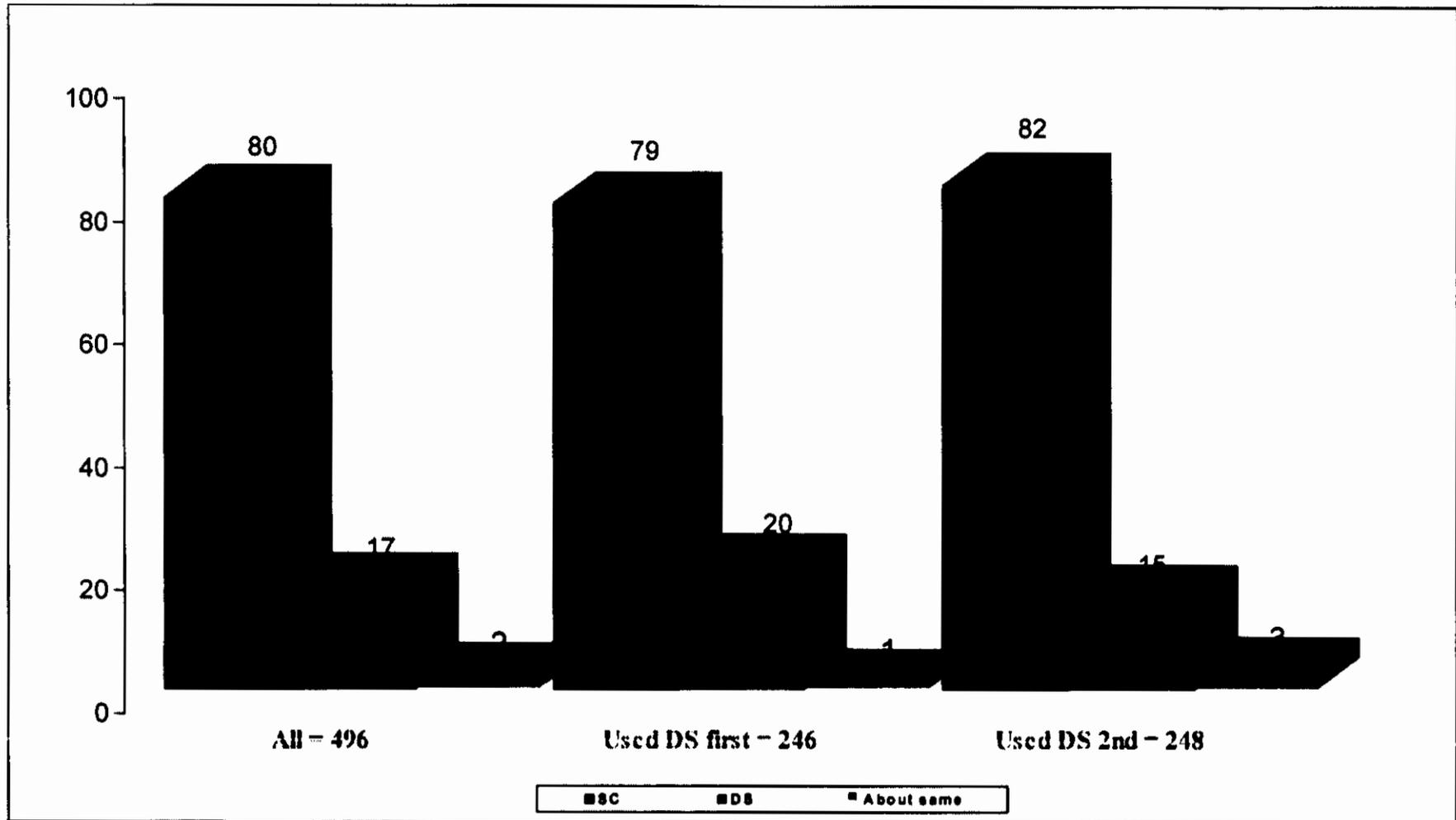
**Figure 4: Comparison of Standard Condom and Double Springers on Various Factors, Drawn from Interviews Asking Respondents to Compare the Two Condoms Tried**



**Figure 5: Percentage Rating Sensitivity of Condom Just Tried as “Good” or “Very Good,” by Condom Type and Whether Tried First or Second**



**Figure 6: Percentage Reporting Greater Sensitivity in Final Interview, by Condom Type and Which Condom Tried First**



## Appendix 1: Labeling and Packaging of Study Products

Two research study packs were given to qualified participants. The contents of each pack were as follows:

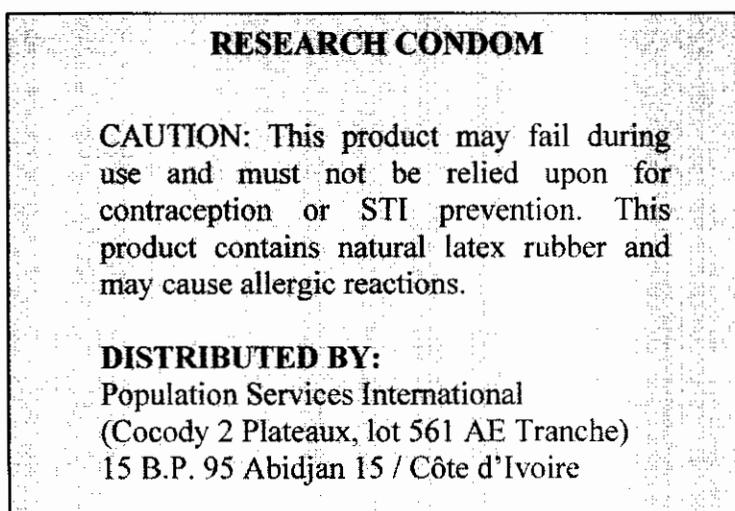
### (1) Double Springers Pack : coded "S5"

- ✦ One fact sheet, which provided information about the research study;
- ✦ One instruction sheet on how to use a male latex condom;
- ✦ Three Double Springers condoms.

### (2) Standard Latex Condom Pack : coded "E3"

- ✦ One fact sheet, which provided information about the research study;
- ✦ One instruction sheet on how to use a male latex condom;
- ✦ Three standard latex condoms.

Both study products were individually packaged in plain foil wrapping with a label that included information on lot/batch number and expiration date. Both types of condom were labelled with the following additional information:



The following is a replica of the fact sheet:

# **FACT SHEET**

## **INFORMATION ON PARTICIPATING IN THIS RESEARCH STUDY “COMPARATIVE RESEARCH STUDY OF USER PREFERENCE AND ACCEPTABILITY OF TWO CONDOMS”**

### **PURPOSE OF THIS RESEARCH STUDY**

In this research study, you will use two kinds of condoms. We would like you to use the two kinds of condoms and compare them. We want to know how you liked them, if you had problems or difficulties using them, and if the condoms broke, tore, or slipped during use. Also, we will ask you questions about your past use of condoms. We will ask you to answer questions about the condoms during interviews. We will interview each partner separately. Your partner will not know how you responded to these questions.

In this research study, you will use two different condoms. One type of condom is sold throughout this country. The other is new and is not sold in stores, but it is approved for use by the Food and Drug Administration of the United States. Both research study condoms are made of latex and lubricated with silicone, the same lubricant used on most male condoms.

### **INSTRUCTIONS FOR BEING IN THIS RESEARCH STUDY**

- > Read this FACT SHEET before beginning the study. **Read both sides of this page.**
- > Read the INSTRUCTION SHEET. This will tell you how to put on the condoms and how to use them correctly.
- > Select a condom from the research study packet.
- > Use this condom during one act of sexual relations.
- > Think about how you liked this condom. Notice whether the condom broke. Think about how the condom felt during use.
- > Repeat this process for each condom in the research study packet.
- > When you have finished using all three condoms in the packet, go to the research center as soon as possible to be interviewed about the research study condoms. You should use all three condoms in the study packet within the next ten days.

### **IF A CONDOM BREAKS**

- If a condom breaks before you have sex or during sex, select another condom from the research study packet. Use this condom during sexual relations.

### **PROBLEMS WITH THE RESEARCH STUDY PRODUCTS**

- If you or your partner experience genital burning, genital irritation, genital itching, genital rash, genital pain, or any other medical event related to your use of the study condoms, make sure that you tell the interviewer during your interviews.
- If you or your partner experience a medical problem while using the study condoms and it is severe or lasts 24 hours or more, immediately call or contact \_\_\_\_\_ at the research organization.

### **AFTER THREE CONDOM USES OR TEN DAYS**

- Both partners should come to the research organization and arrange to be interviewed.
- If you have questions about this research study or the instructions, please call or contact \_\_\_\_\_ at the research organization.

**THANK YOU FOR TAKING PART IN THIS IMPORTANT RESEARCH.**

## **Appendix 2: Consent Form**

### **INFORMED CONSENT**

**Population Services International (PSI)**

**NAME OF RESEARCH STUDY:** "Comparative Research Study of User Preference and Acceptability of Two Condoms"

**PRINCIPAL INVESTIGATORS:** Kerry Richter, Deputy Director of Research, AIDSMark/Population Services International (PSI); Jacqueline Devine, Director of Social Marketing, Population Services International/ Santé Familiale et Prévention du SIDA (SFPS).

**INTRODUCTION:** This Informed Consent Form contains information about the research study named above. In order to be sure that you are informed about being in this research, we are asking you to read (or have read to you) this Informed Consent Form. You will be asked to sign the Volunteer Agreement also. This research study has been approved by the ethics review committee of Family Health International (FHI), the Protection of Human Subjects Committee (PHSC). We will give you a copy of this form to keep.

**REASON FOR THE RESEARCH:** You are being asked to take part in a research study to determine which condom you like best and if the study condoms are different. This research study will help us decide if we should market different types of condoms.

**GENERAL INFORMATION ABOUT THE RESEARCH STUDY PRODUCTS:**  
The products being studied in this research are two types of male latex condoms.

The condoms are lubricated with silicone for comfort during use. Both products have been approved by the U.S. Food and Drug Administration (USFDA) for contraception and sexually transmitted disease prevention. One is currently sold worldwide.

**YOUR PART IN THE RESEARCH STUDY:** We will ask you to use two different types of latex condoms over a period of about three weeks. We would like to know how you and your partner like using the condoms. We want to know if the condoms break, and if the condoms feel different when you use them. About 250 couples will take part in this research study. You will be asked to have sexual relations with only one partner during the research study.

We will ask you some questions to find out if you are able to be in the research study. If you are able to join this research study:

- You will read (or have read to you) the FACT SHEET, which tells about the study. You will also be interviewed about some personal information such as your present method of contraception, sexual history, HIV/STI history and status, and your pregnancy status;
- You will read or we will read you this INFORMED CONSENT form and ask you to sign the Volunteer Agreement Form.

After you join the research study, you will be given a study packet with the research study condoms and complete instructions for their use. We will explain these instructions to you and demonstrate correct use of a condom. You will be given three latex condoms to use during a 7- to 10-day period. When you have used all three condoms in this packet, you will come back to this office for a brief interview about your experiences using the first type of condom. You and your partner will be interviewed separately. You will not be told how your partner answered any of the questions in his/her interview. After the interview, we will give you a second study packet, which contains three of the other type of condom and instructions for use. You will be asked to use these condoms during the next 7 to 10 days. When you

have used the condoms in the second packet, you will come back to this office for an interview about your experiences using these condoms. Again, you and your partner will be interviewed separately. You will not be given information on how your partner answered the interview questions. We will also ask you to compare the two different condoms you have used in this research study.

**POSSIBLE RISKS AND BENEFITS:** What is learned from this research may not directly benefit you. It may help improve the health of others in the future by making more types of condoms available.

While these products are approved by the USFDA, they may fail. It is possible for condom users to become pregnant or contract a disease. To be in this research study, as a couple, you must be using a reliable form of nonbarrier birth control or do not object to a pregnancy. You must be in a sexual relationship with only one partner. If you are allergic to latex or silicone (the lubricant usually found on condoms), you should not be in this research study.

**IF YOU DECIDE NOT TO BE IN THIS RESEARCH STUDY:** You are free to refuse to be in this research study or to withdraw from this research study at any time.

**CIRCUMSTANCES THAT WOULD CAUSE YOU TO BE REMOVED FROM THIS RESEARCH STUDY:** If the researchers find that you gave false information in this consent form about your eligibility criteria, or that you have not fulfilled your agreement to remain in an exclusive sexual relationship, or that you provided false information about whether you have used the six study condoms, you will be removed from the research study without receiving compensation.

**CONFIDENTIALITY:** We will protect information about you and your part in this research study to the best of our ability. If you are accepted into the research study, you will be assigned a number. That number will appear on all study documents and forms, not your name. If the results of this research are published, your name will not be shown. However, the staff of Research International, SFPS, PSI, and/or the United States Food and Drug Administration and/or other sponsoring organizations may sometimes look at records of those who take part in the research study. Someone from PSI may want to ask you questions about being in the research study, but only if you agree. A court of law could order medical records shown to other people, but this is unlikely.

We will contact you if you do not return to this office for your scheduled interviews, but your participation in this research study will remain confidential.

**COMPENSATION:** You will be compensated for transportation costs resulting from your participation in this research study. The most you will be paid is 15,000CFA. You must use all six research study condoms and complete the three interviews in order to be paid the 15,000CFA. If we ask you to leave the research study early, or if you choose to leave after using the first three condoms, your payment will be 10,000CFA. You must use at least 3 condoms (one research study packet) in order to be paid.

**STAYING IN THE RESEARCH STUDY:** We will tell you if we learn something new about the condoms that could affect your choice to stay in this research study.

**LEAVING THE RESEARCH STUDY:** You may leave the research study at any time. If you choose to leave the research study, please contact \_\_\_\_\_.

Also, you may be asked to leave the research study if you:

- do not follow research study procedures, or

- the research study is stopped.

**CONTACT FOR QUESTIONS:** Please contact [principal investigator] if you have any problems or questions about this research study. If you have any questions about your rights while you are in the research study, you may contact:

[Name and address of PSI contact]

**IF YOU HAVE A PROBLEM:** If you have a problem that you think might be related to your being in this research study, please contact [principal investigator]. Financial compensation for a research-related injury or illness, lost wages, disability, or discomfort is not available. You do not waive any legal rights by signing this consent form.

**YOU SHOULD KEEP THESE TWO PAGES FOR YOUR INFORMATION.  
READ BOTH SIDES OF THIS PAGE**

## INFORMED CONSENT VOLUNTEER AGREEMENT FORM

We have read the Informed Consent describing the procedures to be followed when we participate in this research study. We agree to follow those procedures.

We are both between the ages of 21 and 39 (inclusive) years old.

We agree to be in an exclusive sexual relationship during the three-week study period.

We are protected from pregnancy by using one of the following birth control methods: birth control pills, an IUD, Norplant™, Depo Provera®, or female or male sterilization; OR my partner and myself do not object to a pregnancy (during the study period).

We do not suspect that I have an active STI; and we currently do not have symptoms such as abdominal pain, discharge from the vagina, itching in the genital area, burning pain on urination, pain during intercourse, genital ulcers or open sores, swelling in the genital area, or blood in the urine.

We have both been tested for HIV and the result was negative OR We have not both been tested for HIV, and we do not suspect that we have been exposed to HIV.

We do not have an allergy to latex or silicone lubricant (the type of lubricant typically found on latex condoms); we have used latex condoms in the past without having allergic symptoms.

We agree to use all six study condoms during six acts of sexual intercourse during the three-week research study period.

We agree to participate in three interviews and answer questions about the research study condoms. Many of these questions are of a personal and sensitive nature.

We agree to read (or have read to you) and sign the Informed Consent form.

We agree to provide the research study staff with a phone number, address or personal contact where we can be reached during the research study period.

If we have any problems while we are in this research study, we will inform the research staff at once.

We have read the risks and benefits of being in this research study "Comparative Research Study of User Preference and Acceptability of Two Condoms" and agree to participate as volunteers.

---

Date Signature of Male Volunteer

---

Printed Name of Male Volunteer

---

Date Signature of Female Volunteer

---

Printed Name of Female Volunteer

I certify that information about the nature and purpose, the potential benefits and the possible risks associated with participating in this research study have been provided to the above individuals.

---

Signature of Investigator or Designee Who Obtained Consent Date

***A COPY OF THIS PAGE IS PROVIDED FOR YOU TO KEEP***

Appendix 3: Study Instruments

## AIDSMARK Condom Study Initial Questionnaire

ID or Status Category	Responses	Code
Couple identification number		/___/___/___/___/
Gender	Male 1 Female 2	/___/
Condom use status:	Regular condom user 1 Nonuser 2	/___/
Study group:	Group A 1 Group B 2	/___/
Name of the interviewer: _____		/___/___/___/
Date: _____(day-month-year)		/___/___/___/___/
Time at the beginning of the interview (hour:minute) (24-hour clock) _____:		/___/___/___/___/

*I would like to ask you a few questions about your background.*

N	Questions	Responses	Code	Skip
101	How old are you?	Age	/___/___/	
102	What is your relationship with your partner in the research study?	<u>LIVE TOGETHER:</u> Married Not married <u>DO NOT LIVE TOGETHER:</u> Fiancé/fiancée Boyfriend/girlfriend Friend/acquaintance	1 2 3 4 5	

N	Questions	Responses	Code	Skip
103	How long have you been sexually involved with this partner?	Months OR Years	/ __ / __ /  / __ / __ /	
104	Are you currently doing something or using any method to delay or avoid getting pregnant?	No Yes	0 1	<i>If 0 → Q106</i>
105	What form of contraception are you using?  <b>NOTE: COUPLE MAY NOT MEET STUDY CRITERIA. DISCUSS CONSENT FORM AGAIN WITH BOTH MEMBERS OF COUPLE.</b>	Pill Injection IUD Female sterilization Male sterilization Condom Diaphragm/foam/jelly Female condom Periodic abstinence Withdrawal Other ( _____ )	1 2 3 4 5 6 7 8 9 10 11	→ <b>Q107</b>
106	Why are you not using contraception at this time?  <b>NOTE: COUPLE MAY NOT MEET STUDY CRITERIA. DISCUSS CONSENT FORM AGAIN WITH BOTH MEMBERS OF COUPLE.</b>	Want children  Difficult to get pregnant Cost too high Not available Lack of knowledge Side effects Health concerns Against religion Partner opposed Self opposed Friends opposed Family opposed Infrequent sex Breastfeeding Other ( _____ )	1  2 3 4 5 6 7 8 9 10 11 12 13 14 15	

<b>N</b>	<b>Questions</b>	<b>Responses</b>	<b>Code</b>	<b>Skip</b>
107	Do you have any children (either with thi partner or with someone else)?	No Yes	0 1	<i>If 0→ Q109</i>
108	How many children do you have?	Number	/___/___/	
109	Have you ever been to school?	No Yes	0 1	<i>If 0→ Q112</i>
110	What is the highest level of schooling that you attended?	Primary Secondary Higher	1 2 3	
111	How many years of education did you complete at that level?	YEARS COMPLETED	[_   _]	
112	Can you read a letter or newspaper easily, with difficulty, or not at all?	Easily With difficulty Not at all	1 2 3	
113	How do you currently earn a living?	Unemployed Homemaker Student Farmer Day labor Public sector employee (Occupation_____) Private sector employee (Occupation_____) Entrepreneur/own business Other (_____)	1 2 3 4 5 6 7 8 9	

N	Questions	Responses	Code		Skip
			No	Yes	
114	In your house, is there someone who currently owns _____?  <b>READ EACH ITEM</b>	Radio	0	1	
		TV	0	1	
		Video player	0	1	
		Bicycle	0	1	
		Moped/motorcycle	0	1	
		Car	0	1	
		Refrigerator	0	1	
115	Currently, in your house is there :  <b>READ EACH ITEM</b>	Electricity	0	1	
		Piped water	0	1	
		Indoor toilets	0	1	
		Telephone	0	1	
116	Do you or does your family own a house?	No	0		
		Yes	1		

Now I would like to ask you a few questions about condoms.

N	Questions	Responses	Code		Skip
			No	Yes	
201	Could you tell me the purpose of a condom? Anything else?  <b>(DO NOT SUGGEST AN ANSWER. CIRCLE 1 EACH TIME AN ANSWER IS MENTIONED BY THE RESPONDENT. MULTIPLE RESPONSES POSSIBLE.)</b>	Prevent pregnancies	0	1	
		Prevent STIs	0	1	
		Prevent HIV/AIDS	0	1	
		Other (_____)	0	1	
		Don't know	0	1	
202	Do you think that condoms are effective for preventing pregnancy?	No	0	<b>If 1 → Q204</b>	
		Yes	1		
		Don't know	8		

N	Questions	Responses	Code	Skip
203	Why not? <b>(DO NOT SUGGEST AN ANSWER. CIRCLE 1 EACH TIME AN ANSWER IS MENTIONED BY THE RESPONDENT. MULTIPLE RESPONSES POSSIBLE.)</b>	Break easily Other ( _____ )	1 2	
204	Do you think that condoms are effective for preventing sexually transmitted diseases?	No Yes Don't know	0 1 8	<i>If 1 → Q206</i>
205	Why not? <b>(DO NOT SUGGEST AN ANSWER. CIRCLE 1 EACH TIME AN ANSWER IS MENTIONED BY THE RESPONDENT. MULTIPLE RESPONSE POSSIBLE.)</b>	Break easily Other ( _____ )	1 2	
206	Do you think that condoms suppress feelings?	No Yes Don't know	0 1 8	
207	Do you think that condoms break easily?	No Yes Don't know	0 1 8	<i>If female → Q211</i>
208	<b>FOR MEN ONLY</b> Have you ever experienced problems with condoms breaking due to the size of your penis?	No Yes Don't know	0 1 8	
209	<b>FOR MEN ONLY</b> Have you ever experienced problems with condoms feeling tight due to the size of your penis?	No Yes Don't know	0 1 8	

N	Questions	Responses	Code	Skip
210	<p>FOR MEN ONLY</p> <p>Compared with other men, would you say that your penis is larger than average?</p>	<p>No</p> <p>Yes</p> <p>Don't know</p>	<p>0</p> <p>1</p> <p>8</p>	<p>→Q301</p>
211	<p>FOR WOMEN ONLY</p> <p>Compared with other men, would you say that your spouse's/partner's penis is larger than average?</p>	<p>No</p> <p>Yes</p> <p>Don't know</p>	<p>0</p> <p>1</p> <p>8</p>	

Now I have a few questions about your spouse/the partner who you are participating in the study with and any other sexual partners you may have.

N	Questions	Responses	Code		Skip
			No	Yes	
301	What condom brands have you used? Please tell me all the brands that you can remember.  <b>(MULTIPLE RESPONSES POSSIBLE.)</b>	X	0	1	
		Y	0	1	
		Public sector	0	1	
		Other(_____	0	1	
		_____)	0	1	
		Don't remember	0	1	
		Don't know	0	1	
			0	1	
			0	1	
302	How often do you use condoms with your spouse/partner? Would you say it was never, sometimes, often, or always?	Never	1		
		Sometimes	2		
		Often	3		
		Always	4		
303	In the past 12 months, have you had any other sexual partners besides your spouse/the partner you are participating in the study with?	No	0		<i>If 0→ Q311</i>
		Yes	1		
304	How many other sexual partners have you had in the past year?	Number	[_   _]		
305	How many of these partners are regular partners—that is to say, people who you have had a sexual relationship with for at least 3 months?	Number	[_   _]		<i>If 0→ Q307</i>
306	<b>IF Q304&gt;1, REFER TO MOST RECENT REGULAR PARTNER.</b>  How often do you use condoms with this regular partner? Would you say it was never, sometimes, often, or always?	Never	1		
		Sometimes	2		
		Often	3		
		Always	4		

N	Questions	Responses	Code	Skip
307	How many casual partners have you had in the past year? By this I mean partners that you did not count as a regular partner (having sex for at least 3 months).	Number	_ _	If 0 → Q311
308	How often do you use condoms with your casual partners? Would you say it was never, sometimes, often, or always?	Never Sometimes Often Always	1 2 3 4	
309	FOR MEN ONLY In the past 12 months have you paid to have sex?	No Yes	0 1	If 0 → Q311
310	FOR MEN ONLY How often do you use condoms when you pay for sex? Would you say it was never, sometimes, often, or always?	Never Sometimes Often Always	1 2 3 4	
311	The last time that you used a condom, what type of partner were you with?	Spouse Regular partner Casual partner Sex worker	1 2 3 4	
312	Why did you use a condom at that time?  <b>(DO NOT SUGGEST AN ANSWER. CIRCLE 1 EACH TIME AN ANSWER IS MENTIONED BY THE RESPONDENT. MULTIPLE RESPONSES POSSIBLE.)</b>	Pregnancy prevention STI prevention HIV/AIDS prevention My partner wanted to Other (_____)	<b>No</b> 0 0 0 0 0 <b>Yes</b> 1 1 1 1 1	
313	Last time you used a condom, what brand did you use?	Y Public sector Don't remember Don't know	1 2 3 4 7 8	

N	Questions	Responses	Code		Skip
			No	Yes	
314	Why did you choose this condom brand? <b>(DO NOT SUGGEST AN ANSWER. CIRCLE 1 EACH TIME AN ANSWER IS MENTIONED BY THE RESPONDENT. MULTIPLE RESPONSES POSSIBLE.)</b>	Free	0	1	
		Affordable	0	1	
		Availability	0	1	
		Quality	0	1	
		Effectiveness	0	1	
		No odor	0	1	
		Sensitive	0	1	
		My partner likes it	0	1	
		Advertisements	0	1	
		Other (_____)	0	1	
Time at the end of the interview		(24-hour clock, hour:minute)	/___/___/:___/___		

## AIDSMARK Condom Study Condom Questionnaire

*(To be used after each set of condoms tested)*

Questions	Responses	Code
Couple identification number		/___/___/___/___/
Gender	Male 1 Female 2	/___/
Condom use status:	Regular condom user Nonuser	1 2
Study group:	Group A Group B	1 2
Interview number:	Interview 1 Interview 2	/___/
Name of the interviewer: _____		/___/___/___/
Date: _____ (day-month-year)		/___/___/___/___/
Time at the beginning of the interview (hour:minute) (24-hour clock)	_____:____	/___/___/___/___/

*I would like to ask you about your experiences using the condoms you tried this past week. The first set of questions is about the circumstances under which you tried the condoms and any problems you may have had.*

N	Questions	Responses	Code		Skip
			No	Yes	
401	Where were you when you tried the three condoms? List all of the places where you used the condoms if there is more than one.	My home that I share with my spouse/partner	0	1	
		My home	0	1	
		My partner's home	0	1	
		Elsewhere: <i>please list</i> _____	0	1	
402	For any of the three condoms you tried, did you drink alcohol in the two hours preceding intercourse?	No Yes	0 1		<b>If 0 → Q404</b>
403	Out of the three times that you tried the condoms, how many times did you drink alcohol beforehand?		1 2 3		
404	Did any of the condoms break or tear while opening the package?	No Yes	0 1		
405	Did all of the condoms appear to be in good condition when you opened the package?	No Yes	0 1		<b>If 1 → Q408</b>
406	How many of the condoms were not in good condition?		1 2 3		
407	Please explain why you say the condoms were not in good condition: _____ _____				
408	Did you use any additional lubricant with any of the condoms?	No Yes	0 1		<b>If 0 → Q411</b>

N	Questions	Responses	Code	Skip
409	What kind of lubricant did you use? _____ _____ _____			
410	Did you use additional lubricant every time you used the condoms or only sometimes (for one, two or all three of the condoms)?	Once Twice Every time	1 2 3	<b>Males</b> → <b>Q414</b>
411	<b>WOMEN ONLY</b> Did you do anything to dry your vagina when you used any of the condoms?	No Yes	0 1	<b>If 0</b> → <b>Q414</b>
412	<b>WOMEN ONLY</b> What did you do to dry your vagina? _____ _____ _____			
413	<b>WOMEN ONLY</b> Did you do this to dry your vagina every time you used the condoms or only sometimes? (for one, two or all three of the condoms)?	Once Twice Every time	1 2 3	
414	Did any of the condoms break during use?	No Yes	0 1	<b>If 0</b> → <b>Q418</b>
415	How many of the condoms broke?		1 2 3	
416	<i>If more than one condom broke, discuss the last one that broke: When did the condom break?</i>  <b>READ OUT CATEGORIES AND STOP WHEN RESPONDENT SAYS "YES" (ONE ANSWER ONLY).</b>	Before putting condom on While putting condom on During vaginal sex During withdrawal from vagina During anal sex During withdrawal from the anus While taking condom off the penis Not sure	1 2 3 4 5 6 7 8	

N	Questions	Responses	Code	Skip
417	What do you think caused the condom to break? _____ _____ _____ _____			
418	Did any of the condoms slip completely off the penis during use?	No Yes	0 1	<b>If 0</b> → <b>Q420</b>
419	How many of the condoms slipped off?		1 2 3	
420	Did you experience genital burning, genital irritation, genital rash, genital itching, genital pain, or any other medical problem while using the condoms?	No Yes	0 1	<b>If 0</b> → <b>Q501</b>
421	Please describe what happened: _____ _____ _____ _____ _____			
422	Did this happen every time you used the condoms or only sometimes? (for one, two, or all three of the condoms used)?	Once Twice Every time	1 2 3	
423	Did this go away when you stopped using the condoms or do you continue to experience this?  <b>IF '1' FILL OUT ADVERSE-EVENT FORM.</b>	No longer feel this Continue to feel this	0 1	

Now I would like to ask you some questions about your opinion of the condom:

N	Questions	Responses	Code	Skip
501	What did you like most about the condoms you tried this past week? <hr/> <hr/> <hr/> <hr/>			
502	What did you like least about the condoms you tried this past week? <hr/> <hr/> <hr/> <hr/>			
503	In comparison to having sex without a condom, would you say that sex with this condom felt the same, almost the same, somewhat different or very different?	<p>The same</p> <p>Almost the same</p> <p>Somewhat different</p> <p>Very different</p>	<p>0</p> <p>1</p> <p>2</p> <p>3</p>	<p><b>If 0 or 1</b></p> <p><b>→</b></p> <p><b>Q505</b></p>
504	How would you say that this condom differs from having sex without a condom? <hr/> <hr/> <hr/> <hr/>			
505	Now I would like you to compare this condom to other condoms you have used in the past—not just to the ones you have used for this study. In comparison to other condoms that you have used in the past, would you say that sex with this condom felt the same, almost the same, somewhat different, or very different?	<p>The same</p> <p>Almost the same</p> <p>Somewhat different</p> <p>Very different</p>	<p>0</p> <p>1</p> <p>2</p> <p>3</p>	<p><b>If 0 or 1</b></p> <p><b>→</b></p> <p><b>Q507</b></p>

N	Questions	Responses	Code	Skip
506	How would you say that this condom differs from other condoms you have used?			
507	Did you think the condoms were easy to put on? Would you say they were very easy, somewhat easy, neither difficult nor easy, somewhat difficult, or very difficult?	Very easy Somewhat easy Neither easy nor difficult Somewhat difficult Very difficult Don't know—partner put on	5 4 3 2 1 8	
508	What did you think of the general appearance of the condom after it was put on? Would you say it was very good, good, OK, poor, or very poor?	Very good Good OK Poor Very poor Don't know—didn't really see	5 4 3 2 1 8	
509	What did you think of the size of the condom? Would you say it was much too small, a little small, the right size, a little too big, or much too big?	Much too small A little small Just right A little big Much too big	1 2 3 4 5	
510	What did you think of the thickness of the condom? Would you say it was much too thick, a little thick, the right thickness, a little too thin, or much too thin?	Much too thick A little too thick Just right A little thin Much too thin	5 4 3 2 1	

N	Questions	Responses	Code	Skip
511	What did you think of the smell of the condom? Would you say it was very pleasant, pleasant, OK, unpleasant, or very unpleasant?	Very pleasant Pleasant OK Unpleasant Very unpleasant Don't know—didn't notice	5 4 3 2 1 8	
512	What did you think of the feel of the lubricant that was on the condom? Would you say it was very good, good, OK, poor, or very poor?	Very good Good OK Poor Very poor Don't know—didn't really feel it	5 4 3 2 1 8	
513	What did you think of the amount of the lubricant that was on the condom? Would you say it was too much, the right amount, or too little?	Too much Just right Too little Don't know	3 2 1 8	
514	What did you think of the general comfort of the condom during intercourse? Would you say it was very good, good, OK, poor, or very poor?	Very good Good OK Poor Very poor	5 4 3 2 1	
515	What did you think of the sensitivity of the condom during intercourse? Would you say it was very good, good, OK, poor, or very poor?	Very good Good OK Poor Very poor	5 4 3 2 1	

N	Questions	Responses	Code	Skip
516	What did you think of the stimulation provided by the condom during intercourse? Would you say it was very good, good, OK, poor, or very poor?	Very good Good OK Poor Very poor Can't say—no added stimulation	5 4 3 2 1 0	
517	How confident do you feel that this condom would protect you from pregnancy and sexually transmitted diseases? Would you say you were very confident, confident, neutral, unsure, or very unsure?	Very confident Confident Neutral Unsure Very unsure	5 4 3 2 1	
518	If you needed to purchase a condom, would you choose this one?	No Yes	0 1	
519	Why or why not? _____ _____ _____			
520	Would you recommend this condom to a friend?	No Yes	0 1	
521	Why or why not? _____ _____ _____			

## AIDSMARK Condom Study Final Questionnaire

Questions	Responses	Code
Couple identification number		/__/_/__/__/_/
Gender	Male 1 Female 2	/__/_/
Condom use status: regular condom user nonuser	1 2	/__/_/
Study group: Group A Group B	1 2	/__/_/
Name of the interviewer: _____		/__/_/__/__/_/
Date: _____ (day-month-year)		/__/_/__/__/_/
Time at the beginning of the interview (hour:minute) (24-hour clock)	_____:_____	/__/_/__/__/_/

*Now that you have tried two types of condoms, I would like you to compare them.*

N	Questions	Responses	Code	Skip
601	I would first like to ask you to compare how easy the condoms were to put on. Would you say that Condom 1 was easier to put on, that Condom 2 was easier to put on, or that they were about the same?	Condom 1 Condom 2 About the same	1 2 0	
602	Which condom do you think is stronger—Condom 1, Condom 2, or were they about the same?	Condom 1 Condom 2 About the same	1 2 0	
603	Which condom do you think is more likely to slip off the penis? Would you say Condom 1, Condom 2 or that they were about the same?	Condom 1 Condom 2 About the same	1 2 0	

N	Questions	Responses	Code	Skip
604	With regard to the amount of lubrication on the condoms, would you say that you prefer Condom 1, prefer Condom 2 or that they were about the same?	Condom 1 Condom 2 About the same	1 2 0	
605	Which condom do you think is more likely to cause problems such as genital burning, itching, etc.—would you say Condom 1, Condom 2 or that they were about the same?	Condom 1 Condom 2 About the same	1 2 0	
606	With regard to the general appearance of the condoms, would you say that you prefer Condom 1, prefer Condom 2 or that they were about the same?	Condom 1 Condom 2 About the same	1 2 0	
607	With regard to the thickness of the condoms, would you say that you prefer Condom 1, prefer Condom 2 or that they were about the same?	Condom 1 Condom 2 About the same	1 2 0	
608	With regard to the size of the condoms, would you say that you prefer Condom 1, prefer Condom 2 or that they were about the same?	Condom 1 Condom 2 About the same	1 2 0	
609	With regard to the smell of the condoms, would you say that you prefer Condom 1, prefer Condom 2 or that they were about the same?	Condom 1 Condom 2 About the same	1 2 0	
610	How different did the condoms feel during intercourse? Would you say that the two condoms were very different, somewhat different, a little bit different, or about the same?	Very different Somewhat different A little different About the same	3 2 1 0	<i>If 0 → Q614</i>
611	In general, could you describe how the condoms were different?  <b>BE SURE TO IDENTIFY WHICH CONDOM IS BEING DESCRIBED.</b> <hr/> <hr/> <hr/>			

N	Questions	Responses	Code	Skip
612	Which of the condoms would you say provided greater sensitivity during intercourse?	Condom 1 Condom 2 About the same	1 2 0	
613	Which of the condoms would you say provided greater stimulation for you during intercourse?	Condom 1 Condom 2 About the same	1 2 0	
614	Which of the condoms would you say is more effective at protection from pregnancy and disease—Condom 1, Condom 2, or would you say they are about the same?	Condom 1 Condom 2 About the same	1 2 0	
615	If you needed to purchase a condom, would you be more likely to purchase Condom 1, Condom 2, either one equally, or neither one?	Condom 1 Condom 2 Neither one Either one	1 2 0 3	
616	If you were recommending a condom to a friend, would you be more likely to recommend Condom 1, Condom 2, neither one, or either one equally?	Condom 1 Condom 2 Neither one Either one	1 2 0 3	

Time at the end of the interview (hour:minute) (24-hour clock)	/ / : :	
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- WP 59 Chapman, Steven, and Amara Robinson. 2004. Determinants of condom use at last sex among youth in Cameroon: Social marketing segment stability over three years.

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