# The Impact of Embarrassment on Condom Purchase Behaviour

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It is widely known that proper condom usage is an effective way to protect against the human immunodeficiency virus (HIV) and many other sexually transmitted diseases (STDs). While potential barriers to condom use (e.g., reduced pleasure of the sex act, the use and influence of alcohol)<sup>2,3</sup> have been found to be important in reducing condom usage and have been the subject of an increasing body of research, we focus here on barriers to condom purchase, which have only begun to be explored. In particular, we concentrate on felt purchasing embarrassment and its potential inhibiting effect on condom buying behaviour.

Embarrassment has been conceptualized as a self-presentational difficulty resulting from a concern with observable behaviour and a desire to conform with or please others. Research by Miller<sup>5</sup> has supported a link between embarrassment and possible negative social evaluation. Situations that embarrassed people included those in which the person revealed some "normative deficiency" in the eyes of at least some others, and ones in which the person was forced to reveal publicly something they wanted to keep private. Both would seem to fit the condom purchase situation.

The purchase of a condom carries with it the possibly embarrassing attribution that

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the person will be having, or wants to have, sex. As one respondent said in a recent study, "Sex to a lot of people is still a dirty word that makes purchasing condoms dirty (p. 58)." Previous research investigating the association between condom usage and embarrassment has identified the purchase of condoms as being potentially embarrassing. Helwig-Larsen and Collins show that the potential embarrassment in condom usage is distinct from the potential embarrassment in purchase, and point to the possible barrier of purchase embarrassment in condom use.

In this study our focus is on the purchasing behaviour consequences of condom purchase embarrassment. If purchase embarrassment affects purchase behaviour, what aspects of purchase behaviour does it affect? We concentrate on two central aspects: how frequently the person purchases condoms and how many they purchase on each purchase occasion.

## **METHODS**

The surveyed sample (males=93, females=37) was recruited at the University of British Columbia. Eligible respondents were sexually active, had previously purchased condoms, and were without a steady sexual partner (single). The sample included only individuals who had at least some experience purchasing condoms, so judgements regarding embarrassment would be "real" and not "hypothetical."

Potential respondents were informed of the purpose of the investigation and were solicited for their participation. Of those eligible, 95% agreed to participate. To ensure comfort and privacy, respondents were given the survey instrument, and then left to complete the anonymous questionnaire privately and place it in a sealed envelope before returning it. Respondents received compensation of five dollars for their participation.

The primary independent variable of interest was the felt embarrassment of the respondent when purchasing condoms. Using a scale similar to Miller's four-point scale to measure intensity of embarrassment, respondents were asked to indicate how embarrassed they felt about purchasing condoms (not at all embarrassed (1), slightly embarrassed (2), somewhat embarrassed (3), and very embarrassed (4)). The background variables utilized included assessments of sexual behaviour (number of partners in past year) and other factors (i.e., gender, age, residency status (at home vs. away from home)) that in previous research have been found to be related to condom usage and acquisition.

The dependent variables used in the study focused on the condom purchasing behaviour of the respondent. The frequency of condom purchase was measured by the following five category scale (frequency measure): more than once a month (5), about once every 3 months (4), about once every 6 months (3), about once a year (2), and less often than once a year (1). As a second measure of purchasing frequency behaviour, respondents were also asked to estimate when they had last purchased condoms (last purchase measure). After each of the frequency and last purchase questions, respondents were asked to specify the number of condoms they purchased. For both of the dependent variables related to amount purchased, respondents chose from quantity categories of 1, 2, 3, 6, and 12 condoms. Finally, the respondents were asked if they had ever used a vending machine to purchase condoms.

TABLE I
<b>Ratings of Felt Embarrassment when</b>
Purchasing Condoms

	Males (n = 93) %	Females (n = 37) %
Very embarrassed	7	3
Somewhat embarrassed	26	27
Slightly embarrassed	33	30
Not at all embarrassed	34	41

Note: Columns do not add to 100% due to

#### **RESULTS**

The results for purchase embarrassment are contained in Table I. Only 34% of males and 41% of females expressed no embarrassment when making a condom purchase. There was no significant difference in the percentage of males and females embarrassed ( $\chi^2 = 1.09$ , p > 0.10).

Next, we present the regression results linking our main predictor, purchase embarrassment, and each of the criterion variables. Gender, age, number of sexual partners in the past year, and residency status, also served as predictors in each regression to control statistically for their effects. None of the background predictor variables were significantly correlated with purchase embarrassment.

Ordinal regression was done for the five categories of response for the measure of purchase frequency. As can be seen in the first column of Table II, the coefficient for embarrassment is significant (p < 0.001). This result indicates that people who felt embarrassed when purchasing condoms purchased less often. A gender effect with females purchasing less often (p < 0.05) was also found. Sixty-two percent of males versus 40% of females purchased at least once every 6 months.

An examination of the data for the time since last purchase measure revealed that while most people had purchased within the last year, there were some who had not purchased in a number of years. Therefore, a logarithmic transformation was used to normalize the data before the regression was run for last purchase. Ordinary least squares regression results (see column 2 of Table II) indicated that those who were more embarrassed purchased less recently, that is, there was a greater time since the

TABLE II
<b>Regression Results - Beta Weights and t-statistics (in parentheses)</b>

	Criterion Variables				
Predictor Variables‡	Purchase	Last	Purchase	Vending	
	Frequency	Purchase	Amount	Machine†	
Embarrassment	-0.38*	0.14***	-0.26**	0.36****	
Gender	(-3.09)	(1.71)	(-2.78)	(1.83)	
	-0.43***	0.25**	-0.09	-0.61	
Age	(-2.06)	(2.98)	(-0.93)	(1.37)	
	-0.08	0.17***	0.02	0.01	
Residence	(-1.47)	(1.95)	(0.25)	(0.02)	
	-0.19	0.09	0.14	0.87	
Partners in Past Year	(-0.81)	(1.11)	(1.54)	(1.52)	
	0.29****	-0.27**	-0.01	0.40	
	(1.87)	(-3.10)	(-0.02)	(1.63)	

- p < 0.001, \*\* p < 0.01, \*\*\* p < 0.05, \*\*\*\* p < 0.10Wald t-statistics (logistic regression)
- Subsequent analysis involving interactions revealed no significant interaction effects

last purchase (coefficient for embarrassment: p < 0.05). The effects of gender (males purchasing more recently), age (younger people purchasing more recently), and number of partners in the past year (a higher number of partners purchasing more recently) were significant.

People were asked how many condoms they typically purchased and how many they purchased in their most recent purchase. Overall, 82% of male and 86% of female respondents said they typically purchased 6 or 12 condoms. This mirrored the amount they purchased in their most recent purchase, with 78% of male and 83% of female respondents purchasing 6 or 12. A significant correlation (r = 0.75) was obtained for these two measures, thus, they were combined. An ordinary least squares regression was utilized to test the effect of purchase embarrassment on this summary measure, and as can be seen in the third column of Table II, the coefficient for embarrassment was significant (p < 0.01). Those who were more embarrassed purchased fewer condoms when they made a purchase. None of the other variables were found to be significant predictors.

Logistic regression was used to analyze the data for whether or not the respondent had ever purchased from a vending machine (see column 4 of Table II). The coefficient for purchase embarrassment did provide marginal support (p < 0.10) for the idea that people who were more embarrassed to purchase condoms, were more likely to have ever used a vending machine. The coefficients for the background variables were not significant.

#### **CONCLUSIONS**

While Wilson and West<sup>8</sup> have suggested that condoms have become a more acceptable product today because of the AIDS crisis, the results of this study suggest that young people still feel embarrassed about purchasing condoms, and this has an effect on their purchase behaviour. Consistent with expectations, people who reported being more embarrassed purchasing condoms, purchased less often and less recently, and purchased fewer when they did purchase. They also showed some tendency to purchase from vending machines.

The present study was conducted with individuals who had previously purchased condoms. Despite their familiarity and experience with condoms, they still reported feelings of embarrassment. For individuals who have not yet purchased condoms, it would seem reasonable to predict a potentially higher level of embarrassment in condom purchase. The barrier of embarrassment may be a formidable obstacle preventing initial purchase. If you don't have condoms, you can't use them. While this study focused on university students, future research should investigate the generalizability of these findings in other populations.

Generally, interventions should be conducted to reduce the embarrassing stigma of condom acquisition and help make condoms more publicly acceptable.9 However, as long as embarrassment remains an issue, it would be reasonable to expect that if a person's sense of privacy could be protected, purchase embarrassment would be less of a barrier in the acquisition of condoms. Amass et al.10 found that four times as many free condoms were taken when condoms were made available in a private as opposed to a public setting. To circumvent the potentially embarrassing interaction with cashiers and other shoppers, condoms could be more widely sold through vending machines. Similar to postage stamps, wellknown, branded condoms could be distributed in vending machines in drugstores. One potential approach to dealing with these issues is to employ a direct response methodology through the World Wide Web (WWW). Not only would such an approach make condom purchasing private, thereby overcoming purchase embarrassment issues, but the graphical and visual capabilities of the WWW provide the ability to demonstrate important features of condoms to buyers.

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#### **REFERENCES**

- Solomon M, DeJong W. Preventing AIDS and other STDs through condom promotion: A patient education intervention. Am J Public Health 1989;79:453-58.
- Bernard J, Herbert Y, DeMan A, Farrar D. Attitude of French Canadian students towards use of condoms: A structural analysis. Psych Reports 1989;65:851-54.
- Ramsum DL, Marion SA, Mathias RG. Changes in university students' AIDS-related knowledge, attitudes, and behaviours, 1988 and 1992. Can J Public Health 1993;84:275-78.

- Edelmann RJ, McCusker G. Introversion, neuroticism, empathy, and embarrassability. *Personal and Individ Diff* 1986;7:133-40.
- Miller R. On the nature of embarrassability: Shyness, social evaluation, and social skill. I Personal 1995;63:316-39.
- Mendelson S. Condoms: A marketing dilemma. Supermarket Business 1995;50:57-58.
- Hélwig-Larsen M, Collins BE. The UCLA multidimensional condom attitudes scale: Documenting the complex determinants of condom use in college students. *Health Psych* 1994;13:224-37.
- Wilson A, West C. Permissive marketing: The effect of the AIDS crisis on marketing practices and messages. Bus Strat Rev 1992;Summer:91-109.
- Wagman LM. Condomania: A public education intervention. Can J Public Health 1993;84:62-65.
- Amass L, Bickel WK, Higgins ST, et al. The taking of free condoms in a drug abuse treatment clinic: The effects of location and posters. Am J Public Health 1993;83:1466-68.

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