



# UCLA Multidimensional Condom Attitudes Scale

Marie Helweg-Larsen

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## Abstract

Condoms can prevent both pregnancy and sexually transmitted infections, and it is important to know which specific condom attitudes might be associated with lack of condom use. The 25-item UCLA Multidimensional Condom Attitudes Scale (MCAS) was developed to measure condom attitudes among individuals who do or do not have personal experience using condoms. The MCAS has a 5-factor structure: (1) the *reliability and effectiveness* of condoms, (2) the sexual *pleasure* associated with condom use, (3) the *stigma* associated with people proposing or using condoms, (4) the *embarrassment about negotiating and using* of condoms, and (5) the *embarrassment about purchasing* condoms. A

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M. Helweg-Larsen (✉)  
Department of Psychology, Dickinson College, Carlisle, PA, USA  
e-mail: [helwegm@dickinson.edu](mailto:helwegm@dickinson.edu)

smaller subset of items can be used within each factor if 25 items is too many. The MCAS has been translated to more than six languages to date including Chinese, French, and Spanish (Mexican and Columbian). To improve the measurement of condom attitudes, future research should treat condom attitudes as multi-dimensional and consider gendered and cross-cultural approaches to item wording and scale revision.

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### Keywords

Condom attitudes · Condom attitudes scale · Gender differences · Cross-cultural · Scale development

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## Introduction

Around the world, unplanned pregnancy and sexually transmitted diseases are associated with serious health-related problems with large personal and societal costs (Bearak et al., 2020; WHO, 2022). Meta-analytic research shows that condom attitudes are one important predictor of condom use (Sheeran et al., 1999). The 25-item Multidimensional Condom Attitudes Scale (MCAS) assesses five independent factors associated with condom use (Helweg-Larsen & Collins, 1994). They are (1) *reliability and effectiveness* of condoms (i.e., the extent to which people believe condoms are good at protecting against unplanned pregnancy, HIV, and other sexually transmitted diseases), (2) *sexual pleasure* associated with condom use (i.e., the extent to which people think condoms enhance or reduce sexual pleasure), (3) *stigma* associated with condom use (i.e., the extent to which people devalue those who use or propose using condoms), (4) *embarrassment about negotiating and using* of condoms (i.e., how people might feel awkward or embarrassed when they discuss condom use or actually use condoms), and (5) the *embarrassment about purchasing* condoms (i.e., the extent to which obtaining the condoms make people feel awkward or embarrassed). The MCAS was found to be reliable and valid in three studies using ethnically diverse samples of University of California, Los Angeles (UCLA) undergraduates (Helweg-Larsen & Collins, 1994). As of August 2023, Google Scholar shows the original development article has been cited 434 times.

The MCAS has been used with a range of populations, such as HIV positive individuals from urban clinics in California (Milam et al., 2006), Chinese and Filipina American college women (Lam & Barnhart, 2006), sexually active adult cocaine or heroin users (Rosengard et al., 2006), cocaine abusing, opioid-dependent HIV-positive adults (Avants et al., 2000), individuals diagnosed with schizophrenia and mood disorders (Weinhardt et al., 1997), American Indian men who identified as gay/bisexual/two-spirit and heterosexual (Simoni et al., 2006), and pregnant and postpartum adolescents and their male partners (Kershaw et al., 2012; Reid et al., 2013).

## Development of the UCLA Multidimensional Condom Attitudes Scale (MCAS)

The MCAS reliability and validity were established by collecting data from three different samples of ethnically diverse undergraduate students. In Study 1 ( $n = 239$ ), 57% of the men and 41% of the women had engaged in sexual intercourse of which 86% of the men and 94% of the women had used a condom at least once. An exploratory factor analysis (EFA) was carried out separately for men and women, starting with 111 condom attitude items. The EFA revealed a high number of factors with eigenvalues above 1 (22 for men and 16 for women), but the scree plot showed that the likely number of factors was between 4 and 7 factors for both men and women. Five factors were retained based on a parsimonious solution with interpretable factors consistent with previous research on condom attitude domains. A confirmatory factor analysis (CFA) supported a 5-factor solution with 24 items.

In addition, in Study 1, construct validity was shown by correlating sexual experience, intentions to use condoms, and past condom use with the five MCAS factors (see Tables 2 and 3 in Helweg-Larsen & Collins, 1994 for these correlations). Results revealed that participants who had engaged in intercourse (compared to those who had not) were more positive about some MCAS domains (identity stigma, embarrassment about negotiation and use, and embarrassment about purchase), less positive about the pleasure associated with condom use, and did not differ in their beliefs about condom reliability and effectiveness. Furthermore, past condom use was correlated with the MCAS domains of pleasure and embarrassment about purchase but only for men which points to importance of considering gender differences in condom attitudes. Finally, correlations showed that intentions to use condom in the future were correlated with the MCAS domain of embarrassment about negotiation and use for both men and women, which suggests that reducing embarrassment about negotiation and use might be beneficial to both men and women in that it might possibly increase condom use intentions.

In Study 2 ( $n = 181$ ), the key goal was to improve the identity stigma MCAS factor. Based on nine items pertaining to identity stigma (these items had been revealed in Study 1 as possible candidates) a principal factor extraction with varimax extraction revealed five final items. Thus, this 5-item identity stigma domain was based on factor loadings from Study 1 and 2 while also considering item loadings for men and women. In Study 3 ( $n = 426$ ), a CFA replicated the factor structure and showed that a 5-factor multidimensional model had a superior fit compared to a 1-factor unidimensional model.

**Reliability.** As described above, internal consistency (Cronbach's alpha,  $\alpha$ ) was established in three independent samples of undergraduate students (separately for men and women) (Helweg-Larsen & Collins, 1994). The  $\alpha$ -values for men and women for the three studies are shown in Table 1.

**Validity.** Construct validity for the MCAS was established by showing that gender and sexual experience were associated with the five factors of the MCAS (see Table 2 in Helweg-Larsen & Collins, 1994). Furthermore, criterion validity was

**Table 1** Internal consistency for the five MCAS factors in the original development studies

MCAS factor	Men			Women		
	Study 1	Study 2	Study 3	Study 1	Study 2	Study 3
Reliability and effectiveness	0.81	0.75	0.81	0.83	0.84	0.86
Pleasure	0.80	0.77	0.75	0.80	0.74	0.74
Stigma	0.71	0.74	0.67	0.74	0.44	0.62
Embarrassment about negotiation and use	0.86	0.78	0.87	0.86	0.86	0.90
Embarrassment about purchasing condoms	0.94	0.92	0.89	0.92	0.86	0.88

established in that both past and intended condom use were related to the five factors of the MCAS, again showing different patterns for men and women (see table 3 in Helweg-Larsen & Collins, 1994).

**Gender differences.** Research has demonstrated the importance of examining condom attitudes separately for men and women. First, results from the Helweg-Larsen and Collins (1994) studies indicated gender differences on two of the five factors; compared to women, men were less embarrassed about purchasing condoms but more concerned about stigma. Second, the MCAS factors showed different patterns of correlations with criterion variables for men and women. For example, women's past condom use was not correlated with any of the five MCAS factors, whereas men's past condom use was correlated with positive attitudes toward pleasure and lower embarrassment about buying condoms. These findings suggest that researchers might consider analyzing the MCAS results separately for men and women (Helweg-Larsen & Collins, 1994).

## Subsequent Evidence of Psychometric Properties

Subsequent studies have found acceptable Cronbach's alpha values for each of the MCAS five factors. For example, the alpha values in Starosta et al. (2015) were 0.75 (reliability and effectiveness), 0.79 (pleasure), 0.81 (stigma), 0.83 (embarrassment about negotiation and use), and 0.91 (embarrassment about purchase). Maisto et al. (2004) also found similar results ( $\alpha = 0.73, 0.77, 0.72, 0.78, \text{ and } 0.89$  for each of the five factors, respectively).

In addition, the MCAS and its factor structure have been validated in diverse samples. For example, in a sample of low-acculturated Hispanic women in Los Angeles, Unger and Molina (1999) found that in this Spanish language version of the MCAS, the model fit for the 5-factor solution was similar to that of Helweg-Larsen and Collins (1994). Similarly, in a validation study of the English MCAS with a large sample of internet-recruited participants in the United States, Starosta et al. (2015) found that the 5-factor solution showed good fit and had the same factor structure as in Helweg-Larsen and Collins (1994). Furthermore, the 1-factor (unidimensional)

model had a poor fit. Finally, when the models were compared, the 5-factor (multi-dimensional) model had a significantly better fit than the unidimensional model. More recently, Plaza-Vidal et al. (2021) validated the Spanish version of the MCAS (see Appendix for the Spanish MCAS version) among a sample of 1441 young adults from Columbia. Plaza-Vidal et al. (2021) compared fit-indices for four different models and found that the 5-factor model (with related rather than independent factors) had the best fit compared to the other three tested models. The best fit in the final factor model in Study 3 in Helweg-Larsen and Collins (1994) also allowed some (but not all) of the five factors to correlate.

With respect to gender differences, Starosta et al. (2015) conducted differential item functioning analyses and concluded that three items were problematic from a gender bias perspective. These items were “I never know what to say when my partner and I need to talk about condoms or other protection” (#16), “The use of condoms can make sex more stimulating” (#19), and “Men who suggest using a condom are really boring” (#22). Starosta et al. (2015) found that an amended MCAS (without those three items) provided a valid scale with five factors holding similar meaning for men and women. Furthermore, Plaza-Vidal et al. (2021) found that Item #3 (“Women think men who use condoms are jerks”) in the Spanish MCAS version showed gender invariance suggesting that this item did not capture the same meaning for men and women. If the researchers’ purpose is to examine gender differences in condom attitudes, then they might consider rewriting or excluding these four items.

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## Translations of the UCLA Multidimensional Condom Attitudes Scale (MCAS)

The MCAS has been translated to more than six languages to date including Chinese, French, Japanese, Spanish (Mexican and Columbian), Urdu, and Zambian languages. Table 2 shows the languages that the MCAS has been translated to and provides notes as to what sample was studied and any replication of the MCAS factor structure.

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## Cultural Considerations

The translations of the MCAS appear to have been literal translations with wording as close to the original version as possible. However, the translations have not all used methods of back translation or the Beaton et al. (2000) guidelines for cross-cultural adaption of self-report measures. Researchers should carefully check that a translation fits their own language and purpose. For example, it is clear that the Mexican and Columbian translations are not the same (see Appendix) as one would expect based on differences in language and sample.

**Table 2** Overview of different versions of the UCLA Multidimensional Condom Attitudes Scale. For the items in each version, see Appendix

Language	Reference	Notes
Chinese	Choi et al. (2020)	Sample of Chinese young adults. A 6-factor structure was found instead of the MCAS 5-factor structure (the “Pleasure” factor was split into “Excitement” and “Displeasure”).
English*	Helweg-Larsen and Collins (1994)	Sample of United States college students. The MCAS was validated in three studies.
French	Chantal, et al. (2000)	Sample of French college students.
Japanese	Kaneko (2007)	Sample of Japanese women. Only 11 of the 25 MCAS items used.
Spanish	Beachy et al. (2022)	Sample of Spanish-speaking people who use crack cocaine in El Salvador. Used only 8 of the 25 MCAS items used.
	DeSouza et al. (1999)	Sample of Mexican college students. MCAS factor structure was replicated.
	Lechuga and Wiebe (2009)	Sample of English–Spanish bilingual students at a university in a US–Mexico border city.
	Plaza-Vidal et al. (2021)	Sample of young adults from Colombia. MCAS factor structure was replicated.
	Doubova et al. (2017)	Sample of 14–15-year-old Mexican students.
	Unger and Molina (1999)	Sample of Hispanic women. MCAS factor structure was replicated.
	González-Hernández et al. (2020)	Sample of young Colombian adults.
Urdu	Agha and Beaudoin (2012)	Sample of married men aged 15–49 years in urban and rural areas of Pakistan. The five MCAS items pertaining to stigma were not used.
	Agha and Meekers (2010)	Sample of married men aged 15–49 years in urban and rural areas of Pakistan. The five MCAS items pertaining to stigma were not used.
	Beaudoin, et al. (2016)	Sample of married men aged 15–49 years in urban and rural areas of Pakistan.
Zambian languages such as Bemba, Nyanja, and Nsenga	Jones et al. (2005)	Sample of sexually active HIV positive Zambian women and their male partners.

\*First version of the instrument. For the full translations, see the Appendix. The author is unable to provide any assurances about the adequacy or validity of the translations. Please address all enquiries to the authors of the relevant paper

More generally, it is important for researchers to examine what specific condom attitudes might need to be assessed in their specific population. For example, MCAS Item #17 states “It would be embarrassing to be seen buying condoms in a store”, but, in some settings, store purchase of condoms might not be necessary because condoms are available for free in health clinics or can be obtained with little embarrassment via online shipping. Similarly, the identity stigma factor and ways to assess it might change over time and differ by cultural context. For example, the MCAS Item #22 “Men who suggest using a condom are really boring” functioned poorly psychometrically in one analysis in a sample of US adults (Starosta et al., 2015). Researchers might also consider whether the word “geeky” (in MCAS Item #18) or “jerks” (in MCAS Item #3) in the identity stigma factor should be replaced with words better fitting a specific study sample. Researchers are encouraged to report reliability and validity data in their publications so that existing MCAS questions or new questions can be evaluated for future use.

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## Scoring Instructions

The five dimensions of the MCAS cannot be summed to generate a single global score because a 1-factor solution (in which all the items are averaged) is inferior statistically to the 5-factor solution. Thus, it is important that the five factors are averaged separately. If researchers do not have room to use all 25 questions, they may select one or several of the factors that they are particularly interested in and use all five questions in that factor. Another option is to select a few questions from each of the five factors; Table 1 in Helweg-Larsen and Collins (1994) shows factor loadings (separately for men and women) that can guide researchers in the selection of questions. This research shows that important information is lost if questions are added together across the five factors.

The original English MCAS version used a 7-point scale from *strongly disagree* to *strongly agree* (see Appendix for the wording of all seven points) (Helweg-Larsen & Collins, 1994), whereas some subsequent studies have only labelled the endpoints of the 7-point scale or used a 5-point scale. All of these options are acceptable.

It is important that the scale items are prefaced by the following instructions: “Please respond to all questions *even if you are not sexually active or have never used* (or had a partner who used) condoms. In such cases indicate how you *think you would feel* in such a situation. Choose a number on the scale below that best represents your feelings about each statement. There are no right or wrong responses to any of these statements.”

Some of the MCAS items are worded negatively (i.e., indicate a negative attitude toward condoms) and the score must therefore be reversed before adding or averaging the scores; higher scores will then indicate more positive condom attitudes.

The five factors of the MCAS are as follows:

1. *Reliability and effectiveness* of condoms: Reverse score Questions 6 and 14; then add Questions 4, 6, 9, 14, and 20.
2. *Pleasure* associated with condoms: Reverse score Questions 2, 8, 25; then add Questions 2, 8, 15, 19, and 25.

3. *Stigma* associated with condoms: Reverse score Questions 3, 13, 18, 22, and 24; then add Questions 3, 13, 18, 22, and 24.
4. *Embarrassment about negotiation and use* of condoms: Reverse score Questions 1, 7, 16; then add Questions 1, 7, 12, 16, and 21.
5. *Embarrassment about purchasing* condoms: Reverse score Questions 5, 11, 17, 23; then add Questions 5, 10, 11, 17, and 23.

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## Conclusion

Overall, the body of research using the MCAS shows that it is a reliable and valid measure of condom attitudes in a wide range of populations. Because condom attitudes are multidimensional and items cannot meaningfully be added to generate a single global score, it is important that the five factors are examined separately. If the researcher does not have room to use all 25 questions, it is a good idea to either (a) decide a priori which factors are of particular interest and use all five questions in that factor or (b) select a few questions from each of the five factors so that all MCAS factors are represented. To predict or change condom attitudes, it is important to consider the specific dimensions of condom attitudes.

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## Appendix

### Original US/English Language Version

#### Attitudes About Condoms

Please respond to all questions *even if you are not sexually active or have never used* (or had a partner who used) condoms. In such cases indicate how you *think you would feel* in such a situation.

Choose a number on the scale below that best represents your feelings about each statement. There are no right or wrong responses to any of these statements. Write the number that best represents your opinion in the blank beside each question.

1. It is really hard to bring up the issue of using condoms to my partner.
2. Use of a condom is an interruption of foreplay.
3. Women think men who use condoms are jerks.
4. Condoms are an effective method of preventing the spread of AIDS and other sexually transmitted diseases.
5. I always feel really uncomfortable when I buy condoms.
6. Condoms are unreliable.
7. When I suggest using a condom I am almost always embarrassed.
8. Condoms ruin the sex act.
9. I think condoms are an excellent means of contraception.
10. I don't think that buying condoms is awkward.
11. It is very embarrassing to buy condoms.
12. It is easy to suggest to my partner that we use a condom.



13. If a couple is about to have sex and the man suggests using a condom, it is less likely that they will have sex.
14. Condoms do not offer reliable protection.
15. Condoms are a lot of fun.
16. I never know what to say when my partner and I need to talk about condoms or other protection.
17. It would be embarrassing to be seen buying condoms in a store.
18. People who suggest condom use are a little bit geeky.
19. The use of condoms can make sex more stimulating.
20. Condoms are an effective method of birth control.
21. I'm comfortable talking about condoms with my partner.
22. Men who suggest using a condom are really boring.
23. When I need condoms, I often dread having to get them.
24. A woman who suggests using a condom does not trust her partner.
25. Condoms are uncomfortable for both parties.

Strongly disagree	Disagree	Slightly disagree	Neither agree or disagree	Slightly agree	Agree	Strongly agree
1	2	3	4	5	6	7

**Source:** Helweg-Larsen and Collins (1994); **reprinted with the permission of the publisher**

Helweg-Larsen, M., & Collins, B. E. (1994). The UCLA Multidimensional Condom Attitudes Scale: Documenting the complex determinants of condom use in college students. *Health Psychology, 13*(3), 224–237. <https://doi.org/10.1177/0739986399212006>

### Chinese Version

#### UCLA Multidimensional Condom Attitudes Scale (MCAS) 多角度安全套態度量表

Please respond to all questions even if you are not sexually active or have never used (or had a partner who used) condoms. In such cases indicate how you think you would feel in such a situation.

即使您沒有發生過性行為或從未使用過(或曾經使用過), 也請回答所有問題。請指出您在這種情況下的感受。

	Strong disagreement 非常不同意						Strong agreement 非常同意
1. It is really hard to bring up the issue of using condoms to my partner. 向伴侶提出使用安全套真的困難。	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

(continued)

	Strong disagreement 非常不同意						Strong agreement 非常同意
2. Use of a condom is an interruption of foreplay. 使用安全套影響前戲。	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>	<input type="checkbox"/> <sub>6</sub>	<input type="checkbox"/> <sub>7</sub>
3. Women think men who use condoms are jerks. 女性認為使用安全套的 男人是混蛋(衰人)。	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>	<input type="checkbox"/> <sub>6</sub>	<input type="checkbox"/> <sub>7</sub>
4. The condom is a highly satisfactory form of contraception* 安全套是一種令人非常滿意的 避孕方法。	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>	<input type="checkbox"/> <sub>6</sub>	<input type="checkbox"/> <sub>7</sub>
5. I always feel really uncomfortable when I buy condoms. 當購買安全套時,我常感到非常不自在。	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>	<input type="checkbox"/> <sub>6</sub>	<input type="checkbox"/> <sub>7</sub>
6. Condoms are unreliable. 安全套是不可靠的。	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>	<input type="checkbox"/> <sub>6</sub>	<input type="checkbox"/> <sub>7</sub>
7. When I suggest using a condom I am almost always embarrassed. 當我建議使用安全套時,我總是感到尷尬。	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>	<input type="checkbox"/> <sub>6</sub>	<input type="checkbox"/> <sub>7</sub>
8. Condoms ruin the sex act. 安全套會破壞性行為的快感。	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>	<input type="checkbox"/> <sub>6</sub>	<input type="checkbox"/> <sub>7</sub>
9. I think condoms are an excellent means of contraception. 我認為安全套是一種極好的避孕方法。	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>	<input type="checkbox"/> <sub>6</sub>	<input type="checkbox"/> <sub>7</sub>
10. I don't think that buying condoms is awkward. 我不認為購買安全套是尷尬的。	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>	<input type="checkbox"/> <sub>6</sub>	<input type="checkbox"/> <sub>7</sub>
11. It is very embarrassing to buy condoms. 購買安全套十分尷尬。	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>	<input type="checkbox"/> <sub>6</sub>	<input type="checkbox"/> <sub>7</sub>

(continued)

	Strong disagreement 非常不同意						Strong agreement 非常同意
12. It is easy to suggest to my partner that we use a condom. 向伴侶提出使用安全套是容易的。	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
13. If a couple is about to have sex and the man suggests using a condom, it is less likely that they will have sex. 如果男性在性行為前建議使用避孕套, 將會減少發生性行為的機會。	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
14. Condoms do not offer reliable protection. 安全套不能提供可靠的保護。	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
15. Condoms are a lot of fun. 使用安全套是一種樂趣。	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
16. I never know what to say when my partner and I need to talk about condoms or other protection. 當與伴侶談及安全套或其他保護措施, 我感到有口難言。	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
17. It would be embarrassing to be seen buying condoms in a store. 被看到購買安全套是尷尬的。	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
18. People who suggest condom use are a little bit geeky. 建議使用安全套的人有點「宅」。	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7
19. The use of condoms can make sex more stimulating. 使用安全套能令性行為更刺激。	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6	<input type="checkbox"/> 7

(continued)

	Strong disagreement 非常不同意						Strong agreement 非常同意
20. Condoms are an effective method of birth control. 安全套是一種有效的避孕方法。	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>	<input type="checkbox"/> <sub>6</sub>	<input type="checkbox"/> <sub>7</sub>
21. I'm comfortable talking about condoms with my partner. 我對於與伴侶說起安全套感到自在。	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>	<input type="checkbox"/> <sub>6</sub>	<input type="checkbox"/> <sub>7</sub>
22. Men who suggest using a condom are really boring. 建議使用安全套的男人是很無趣的。	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>	<input type="checkbox"/> <sub>6</sub>	<input type="checkbox"/> <sub>7</sub>
23. When I need condoms I often dread having to get them. 當我需要安全套時,我經常為了購買而感到害怕。	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>	<input type="checkbox"/> <sub>6</sub>	<input type="checkbox"/> <sub>7</sub>
24. A woman who suggests using a condom does not trust her partner. 認建議使用安全套的女性不相信他的伴侶。	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>	<input type="checkbox"/> <sub>6</sub>	<input type="checkbox"/> <sub>7</sub>
25. Condoms are uncomfortable for both partners. 安全套會令雙方感到不自在。	<input type="checkbox"/> <sub>1</sub>	<input type="checkbox"/> <sub>2</sub>	<input type="checkbox"/> <sub>3</sub>	<input type="checkbox"/> <sub>4</sub>	<input type="checkbox"/> <sub>5</sub>	<input type="checkbox"/> <sub>6</sub>	<input type="checkbox"/> <sub>7</sub>

**Source:** Choi et al. (2020); reprinted with permission of first author

<sup>a</sup>Note that Question 4 states “The condom is a highly satisfactory form of contraception” whereas the original MCAS item states “Condoms are an effective method of preventing the spread of AIDS and other sexually transmitted diseases”

Choi, E. P. H., Fong, D. Y. T., & Wong, J. Y. H. (2020). The use of the Multidimensional Condom Attitude Scale in Chinese young adults. *Health and Quality of Life Outcomes*, 18(1), 331. <https://doi.org/10.1186/s12955-020-01577-9>

## French Version

### UCLA Multidimensional Condom Attitudes Scale (MCAS)

Veillez répondre à toutes les questions même si vous n’êtes pas sexuellement actif ou si vous n’avez jamais utilisé (ou eu un partenaire qui a utilisé) des condoms. Dans de tels cas, indiquez comment vous pensez que vous vous sentiriez dans une telle situation.

1. Il est vraiment difficile de soulever la question de l'usage du préservatif avec ma/mon partenaire.
2. L'usage d'un préservatif représente une interruption des préliminaires sexuels.
3. Les femmes pensent que les hommes qui utilisent des préservatifs sont des salauds.
4. préservatifs constituent une méthode efficace pour prévenir la propagation du sida et d'autres maladies transmises sexuellement.
5. Je me sens toujours réellement mal à l'aise lorsque j'achète des préservatifs.
6. Les préservatifs ne sont pas fiables.
7. Lorsque je suggère d'utiliser un préservatif, je suis presque toujours embarrassée.
8. Les préservatifs ruinent l'acte sexuel.
9. Le préservatif est une forme de contraception hautement satisfaisante.
10. Je ne pense pas qu'acheter des préservatifs soit malaise.
11. Il est très embarrassant d'acheter des préservatifs.
12. Il est facile de suggérer à mon partenaire que nous utilisions un préservatif.
13. Si un couple est sur le point de faire l'amour et que l'homme suggère d'utiliser un préservatif, il est moins probable qu'ils fassent l'amour.
14. Les préservatifs n'offrent pas une protection fiable
15. Les préservatifs sont très amusants.
16. Je ne sais jamais quoi dire lorsque mon partenaire et moi devons parler de préservatifs ou d'une autre protection.
17. Il serait embarrassant d'être vue en train d'acheter des préservatifs dans un magasin.
18. Les gens qui suggèrent l'usage du préservatif sont quelque peu ridicules.
19. L'usage de préservatifs peut rendre le sexe plus stimulant.
20. Les préservatifs constituent une méthode efficace de contrôle des naissances.
21. Je suis à l'aise lorsque je parle de préservatifs avec mon partenaire.
22. Les hommes qui suggèrent d'utiliser un préservatif sont vraiment ennuyeux.
23. Lorsque j'ai besoin de préservatifs, je redoute souvent le fait de devoir me les procurer.
24. Une femme qui suggère d'utiliser un préservatif ne fait pas confiance à son partenaire.
25. Les préservatifs sont inconfortables pour les deux partenaires.

Pas du tout d'accord					Tout à fait d'accord	
1	2	3	4	5	6	7

**Source:** Chantal et al. (2000); **reprinted with permission of the publisher.**

Chantal, Y., Recorbet, R., Ferland, F., & Fontaine, D. (2000). Towards a multi-dimensional analysis of attitudes about condom use: A trans-cultural validation of the UCLA-MCAS. *Revue Européenne de Psychologie Appliquée*, 50(4), 393–403.

## Spanish Version (Mexican Sample)

### ACTITUDES Sobre el USO de Condón

Por favor responde a todas las preguntas, aún cuando no seas sexualmente activo (a) (no has empezado tu vida sexual, o actualmente no tienes pareja) o que nunca hayas usado condón (o hayas tenido una pareja que lo haya usado). Indica qué piensas que se sentiría estar en una situación como la que se presenta en cada frase. A continuación te presentamos una escala de respuestas, *elige el número de la escala que mejor represente tu opinión*. No hay respuestas correctas o incorrectas.

	Muy en desacuerdo 1	En desa- cuerdo 2	Ligeramente en desa- cuerdo 3	Indeciso 4	Ligeramente de acuerdo 5	De acuerdo 6	Muy de acuerdo 7
1. Es realmente difícil hablar del tema del uso del condón con mi pareja.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. El uso del condón interrumpe el juego sexual entre mi pareja y yo.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Las mujeres piensan que los hombres que usan condón son unos tontos.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. El condón es un método efectivo para prevenir el contagio del SIDA y otras enfermedades de transmisión sexual.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Siempre me siento realmente incómodo (a) cuando voy a comprar condones.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(continued)

	Muy en desacuerdo 1	En desa- cuerdo 2	Ligeramente en desa- cuerdo 3	Indeciso 4	Ligeramente de acuerdo 5	De acuerdo 6	Muy de acuerdo 7
6. Los condones no son confiables	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Casi siempre me da pena cuando yo sugiero usar condón	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Usar condón echa a perder el acto sexual	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Pienso que los condones son excelentes anticonceptivos	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. No pienso que comprar condones sea incómodo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Es muy vergonzoso comprar condones.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Para mí es fácil decirle a mi pareja que usemos un condón	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Si una pareja está a punto de tener sexo, pero el hombre sugiere el uso de un condón, eso disminuye la probabilidad de tener sexo	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14. El condón no ofrece una protección confiable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(continued)

	Muy en desacuerdo 1	En desa- cuerdo 2	Ligeramente en desa- cuerdo 3	Indeciso 4	Ligeramente de acuerdo 5	De acuerdo 6	Muy de acuerdo 7
15. El uso del condón es divertido	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16. Nunca sé que decir cuando mi pareja y yo tenemos que hablar sobre el uso del condón o de otras formas de protección.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17. Sería vergonzoso ser visto comprando condones en una tienda.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18. Las personas que sugieren a sus parejas el uso del condón son anticuadas	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
19. El uso del condón puede hacer que el sexo sea más estimulante.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
20. El condón es un método efectivo para prevenir embarazos	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
21. Me siento a gusto, cuando hablo con mi pareja sobre el condón	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
22. Los hombres que sugieren usar condón, son aburridos.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

(continued)



	Muy en desacuerdo 1	En desa- cuerdo 2	Ligeramente en desa- cuerdo 3	Indeciso 4	Ligeramente de acuerdo 5	De acuerdo 6	Muy de acuerdo 7
23. Cuando necesito condones, a menudo me dan nervios tener que ir a conseguirlos.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
24. Una mujer que sugiere el uso de condón, no confía en su pareja.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
25. El condón es incómodo tanto para mi pareja como para mí.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Source:** Doubova et al. (2017); reprinted with permission of the first author

Doubova, S. V., Martínez-Vega, I. P., Infante-Castañeda, C., & Pérez-Cuevas, R. (2017). Effects of an internet-based educational intervention to prevent high-risk sexual behavior in Mexican adolescents. *Health Education Research*, 32(6), 487–498. <https://doi.org/10.1093/her/cyx074>

### Spanish Version (Colombian Sample)

Cada uno de los enunciados de este cuestionario de opinión expresa un sentimiento o una actitud hacia el uso del condón (Each statement in this questionnaire expresses a feeling or attitude towards condom use).

Marque (X) en que medida esta de acuerdo o en desacuerdo con la actitud expresada en cada enunciado como usted lo percibe (Check (X) to what extent you agree with the attitude expressed in each statement as you perceive it).

	Totalmente en desacuerdo (Strongly disagree)	En desacuerdo (Disagree)	Un poco en desacuerdo (Slightly disagree)	Ni de acuerdo ni en desacuerdo (Neither agree nor disagree)	Un poco de acuerdo (Slightly agree)	De acuerdo (Agree)	Totalmente de acuerdo (Strongly agree)
1. Es muy difícil tocar el tema de usar condón con mi pareja (It is really hard to bring up the issue of using condoms to my partner)	1	2	3	4	5	6	7
2. El uso del condón interrumpe el juego previo (Use of a condom is an interruption of foreplay)	1	2	3	4	5	6	7
3. Las mujeres piensan que los hombres que usan condones son idiotas (Women think men who use condoms are jerks)	1	2	3	4	5	6	7
4. El condón es un método efectivo para prevenir la transmisión del SIDA y otras infecciones de transmisión sexual (Condoms are an effective method of preventing the spread of AIDS and other sexually transmitted diseases)	1	2	3	4	5	6	7
5. Siempre me siento incomodo/a cuando compro condones (I always feel really uncomfortable when I buy condoms)	1	2	3	4	5	6	7
6. Los condones no son confiables* (Condoms are unreliable)	1	2	3	4	5	6	7

7. Cuando sugiero usar un condón casi siempre me da pena (When I suggest using a condom I am almost always embarrassed)	1	2	3	4	5	6	7
8. Los condones arruinan el acto sexual* (Condoms ruin the sex act)	1	2	3	4	5	6	7
9. Creo que los condones son un excelente método anticonceptivo (I think condoms are an excellent means of contraception)	1	2	3	4	5	6	7
10. No creo que comprar condones sea raro (I don't think that buying condoms is awkward)	1	2	3	4	5	6	7
11. Comprar condones es muy vergonzoso* (It is very embarrassing to buy condoms)	1	2	3	4	5	6	7
12. Es fácil sugerirle a mi pareja que usemos condón (It is easy to suggest to my partner that we use a condom)	1	2	3	4	5	6	7
13. Si una pareja esta a punto de tener sexo y el hombre sugiere usar condón es menos probable que tengan sexo (If a couple is about to have sex and the man suggests using a condom, it is less likely that they will have sex)	1	2	3	4	5	6	7
14. Los condones no ofrecen una protección confiable (Condoms do not offer reliable protection)	1	2	3	4	5	6	7
15. Los condones son muy divertidos (Condoms are a lot of fun)	1	2	3	4	5	6	7
16. Nunca se que decir cuando mi pareja y yo tenemos que hablar sobre condones u otro tipo de protección (I never know what to say when my partner and I need to talk about condoms or other protection)	1	2	3	4	5	6	7

(continued)

	Totalmente en desacuerdo (Strongly disagree)	En desacuerdo (Disagree)	Un poco en desacuerdo (Slightly disagree)	Ni de acuerdo ni en desacuerdo (Neither agree nor disagree)	Un poco de acuerdo (Slightly agree)	De acuerdo (Agree)	Totalmente de acuerdo (Strongly agree)
17. Seria vergonzoso que me vieran comprando condones en una tienda (It would be embarrassing to be seen buying condoms in a store)	1	2	3	4	5	6	7
18. La gente que sugiere el uso del condón es un poco nona (People who suggest condom use are a little bit geeky)	1	2	3	4	5	6	7
19. El usar condón puede hacer que el sexo sea mas estimulante (The use of condoms can make sex more stimulating)	1	2	3	4	5	6	7
20. Los condones son un método anticonceptivo efectivo (Condoms are an effective method of birth control)	1	2	3	4	5	6	7
21. Me siento cómodo/a hablando de condones con mi pareja (I'm comfortable talking about condoms with my partner)	1	2	3	4	5	6	7
22. Los hombres que sugieren usar condón son muy aburridos (Men who suggest using a condom are really boring)	1	2	3	4	5	6	7
23. Cuando necesito condones, con frecuencia me da miedo conseguirlos (When I need condoms, I often dread having to get them)	1	2	3	4	5	6	7

24. Una mujer que sugiere usar condón no confía en su pareja (A woman who suggests using a condom does not trust her partner)	1	2	3	4	5	6	7
25. Los condones son incómodos para ambos (Condoms are uncomfortable for both parties)	1	2	3	4	5	6	7

**Source: Plaza-Vidal et al. (2021); reprinted with permission of the publisher**

Plaza-Vidal, R., Ibegon-Parra, M., & Vallejo-Medina, P. (2021). Spanish translation, adaptation, and validation of the Multidimensional Condom Attitudes Scale with young Colombian men and women. *Archives of Sexual Behavior*, 50(6), 2729–2740. <https://doi.org/10.1007/s10508-020-01759-y>

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