Published in final edited form as:

HIV Clin Trials. 2016 September ; 17(5): 212–217. doi:10.1080/15284336.2016.1213487.

Development and Psychometric Evaluation of a Condom Use Self-efficacy Measure in Spanish and English

Brian E. McCabe,

School of Nursing and Health Studies, University of Miami, Coral Gables, Florida, USA

Natasha Schaefer Solle,

Sylvester Cancer Center, University of Miami, Miami, Florida, USA

Karina Gattamorta,

School of Nursing and Health Studies, University of Miami, Coral Gables, Florida, USA

Natalia Villegas,

School of Nursing and Health Studies, University of Miami, Coral Gables, Florida, USA

Rosina Cianelli,

School of Nursing and Health Studies, University of Miami, Coral Gables, Florida, USA

Victoria B. Mitrani, and

School of Nursing and Health Studies, University of Miami, Coral Gables, Florida, USA

Nilda Peragallo

School of Nursing and Health Studies, University of Miami, Coral Gables, Florida, USA

Abstract

Background—Condom self-efficacy is an important construct for HIV/STI prevention and intervention. A psychometrically sound measure of the self-efficacy for using condoms that has been designed for Hispanic women to respond in Spanish or English is needed.

Objectives—The goal of this study was to develop and evaluate a brief self-report measure of condom use self-efficacy.

Methods—We developed a 15-item measure of condom use self-efficacy based on expert knowledge of measurement and HIV/STI prevention with Hispanic women using a translation-back translation approach. Participants were 320 Hispanic women from the Southeastern U.S.

Results—Internal consistency of the full measure was .92. A short form of the instrument with a subset of 5 items also had acceptable internal consistency, $\alpha = .80$, and was significantly correlated with the full scale, $r_s = .93$, $p < .001$. A single latent factor explained 9 – 48% of the variation in these items. Evidence of construct validity of the short form was provided by correlations of the scale with two self-report measures of condom use: $r_s = .34^{**}$ with condom use, $r_s = .37^{**}$ with condom use during vaginal sex.

Conclusions—Either the full measure or the five-item measure could be used in studies where condom use is an important behavioral outcome, such as evaluating prevention interventions, with Hispanic women. Future studies should examine the performance of this measure with other groups, including Hispanic men and members of other ethnic and language groups.

Keywords

HIV/STI; condom use; self-efficacy; Hispanic/Latina; women; psychometrics

Condom use is an effective strategy to reduce the HIV/STI and unwanted pregnancy.^{1, 2} From social learning perspective the probability of using condoms is related to beliefs (self-efficacy) about their ability to control HIV/STI risk.³ The contribution of the theory is building of self-efficacy through rehearsal, role modeling, and support for new behavior.⁴ Self-efficacy is a mechanism of action for many interventions.⁵ A meta-analysis⁶ reported a moderate association ($r = .24$) between condom use self-efficacy and risk reduction.

Hispanic women in the U.S. have unique HIV/STI risks. The incidence of HIV in 2010 was almost four times greater for Hispanic women than non-Hispanic White women (although lower than for African American women, which were 20 times greater than White women), and heterosexual intercourse was the most common mode of transmission.⁷ Factors, including socioeconomic status,⁸ high rates of STI, immigration and acculturation stress,⁹ inequitable gender norms/values (e.g., Machismo and Marianismo),^{10–12} being unaware of a partner's HIV status, substance abuse, mental disorders, and violence experiences,^{13,14} increase risk for Hispanic women. Given the growing numbers of minority women with HIV in the U.S., there has been a call for gender- and culturally-specific HIV prevention.^{15–17} Culturally valid measures are vital to understanding and eliminating disparities of incidence, prevalence, and treatment in Hispanic women.^{5,18} In addition to culturally-appropriate behaviors, item wording and response style should be considered, e.g., an extreme response style in Hispanic samples¹⁹.

There is consensus that self-efficacy measures be tailored to participants,²⁰ but there are few condom self-efficacy measures for Spanish-speaking Hispanic women. One measure, the Condom Use Self-Efficacy Scale²¹ was developed in English for college students, and translated into Spanish for Cuban nursing students.²² This instrument has 28 items on a 5-point scale rating confidence to use condoms correctly and talk about condoms with their sexual partner. Another measure²³ has 10 items on a 5-point scale assessing confidence to use condoms in situations like substance use, pressure from a partner, sexual arousal, and low perceived risk. This measure was developed for youth in a STI clinic and translated into Spanish for Hispanic adults. Eighteen items were added to reflect culturally important domains for a dissertation.²⁴ Only one measure of condom use self-efficacy was developed in English and Spanish for adult U.S. Hispanic women.²⁵ This measure has 7 items on a 4-point scale (e.g., “It would be easy to make my partner(s) use condoms”), and has been used with U.S. Hispanic women^{26,27} and Chilean women.²⁸ The purpose of this study was to develop and test a measure of condom use self-efficacy that will have a high ceiling (i.e., less likely for participants to answer close to the highest possible response point of the scale) and greater response variability for Hispanic women in English and Spanish. The greater

response variability is important when examining mechanism of change in a randomized trial.

Methods

Participants

Participants were 320 Hispanic women in a randomized trial of SEPA (*Salud, Educación, Prevención y Autocuidado*/Health, Education, Prevention and Self-care;²⁶), an HIV prevention intervention, in South Florida. Eligibility criteria were: self-identified Hispanic, 18–50 years old, and sexual activity within the last 3 months. Table 1 shows participants' characteristics. [Table 1 near here] Most women (306, 96%) were born outside the U.S. Average length of time in the U.S. was 8.50 ($SD = 8.25$) years. The majority ($n = 300$, 94%) preferred Spanish, with ($n = 14$, 4%) preferring English, and ($n = 6$, 2%) both Spanish and English. Data from a pre-intervention baseline assessment from all 320 women was used for model fit and examine construct validity, and data from a subset of 123 (77%) women in the delayed-treatment control group who completed a 6-month follow-up were used only to examine test-retest reliability. These women were not exposed to the intervention, which was designed to influence self-efficacy.

Design

Women were from the Florida Department of Health, the Miami Refuge Center (Miami-Dade County, FL), and public places (e.g., churches, clinics, supermarkets). The University of Miami and Florida Department of Health IRBs approved study procedures. Trained bilingual study staff interviewed women in their preferred language (Spanish or English) using a structured interview using a web-based research software system (e-Velos).

Measures

Condom use was assessed in two ways using measures developed for Hispanic women.^{11,25,26} One item asked whether women regularly used a *male condom* in the context of several birth control options. Women also reported *frequency of male condom use* during vaginal sex with their primary sexual partner in the last 30 days.

Condom self-efficacy was a 15-item measure developed for this study. An expert panel in HIV/STI prevention, culturally competent intervention development, and behavioral measurement with Hispanics created items based on theory, research, and clinical experience. The six experts were health care professionals with doctoral degrees and experience in women's health and HIV prevention: a bilingual nurse and doctor of public health with extensive experience with sexual health interventions for Hispanic women; a bilingual psychologist with 30 years working with Hispanic families; a psychologist with over a dozen years of research and measurement with Hispanics; a bilingual doctoral-level nurse midwife with vast work with Hispanic women and Chilean women; a bilingual nurse and midwife with extensive experience with sexual health interventions in English and Spanish; and a doctoral-level expert in evaluation and measurement with experience as a school psychologist in English and Spanish. Each item had a 10-point scale, from 1 (*strongly disagree*) to 10 (*strongly agree*), assessing confidence with each behavior. The

wide 10-point response scale was chosen to encourage response variation as recommended by Marin and colleagues.¹⁹ From a larger pool of items, the panel chose 15 items based on face validity, non-overlap, applicability of wording, importance of behaviors for effective condom use, and equivalence of meaning in Spanish and English (see Table 2). [Table 2 near here]

Analyses

Confirmatory Factor Analysis (CFA) in Mplus 7.2²⁹ tested whether a single latent factor (i.e., an unobserved variable inferred from the model) explained variation in items in English and Spanish. Model fit was evaluated with three indices: χ^2 , CFI (Comparative Fit Index), and RMSEA (Root Mean Square Error of Approximation). A non-significant χ^2 test indicates good fit. The CFI³⁰ values .90 indicated good fit.³¹ RMSEA³¹ values .06 indicated good fit. Model 1 examined all 15 items; Model 2 examined a subset of 5 items. We examined construct validity by testing the correlation (r_s) between both condom self-efficacy scores and condom use. We examined test-retest validity over a six-month period using an intraclass correlation coefficient (ICC;³²) with a two factor mixed effects model and type absolute agreement with data from women who did not participate in the intervention, i.e., they were in the delayed-treatment control group and present at both the baseline and six-month assessments.

Results

Model Fit of 15-item Scale

The model with 15 items loading on a single latent factor (Model 1) had good fit, $\chi^2 (90) = 152.55$, $p = <.001$, CFI = .945, RMSEA = .047. The χ^2 is more responsive to sample size, than CFI and RMSEA, so we interpreted this result as a relatively well-fitting model. All items had significant loadings (i.e., relationships between the latent variable and each observed item), and item-total correlations (i.e., relationships between the total score of the scale and each item in the scale) ranged from .48 – .73 (see Table 3). [Table 3 near here] A single latent factor explained 2–66% of the variation in each item (see Table 3). Internal consistency was acceptable for items in Spanish (Cronbach's $\alpha = .91$) and English ($\alpha = .89$).

Model Fit of 5-item Scale

As a follow-up, we examined skew (i.e., asymmetry of the distribution) of each item using a cutoff of about absolute value of 1 to determine high skew and used the items with low skew to create a shorter version of the scale. All items were negatively skewed, with mean scores in the upper part of the response range (see Table 2). A subset of five items (items 4, 5, 6, 8, and 12) had the lowest skew and means. The model with 5 items loading on a single latent factor (Model 2) had good fit, $\chi^2 (5) = 2.39$, $p = .792$, CFI = 1.000, RMSEA = .000. The CFI and RMSEA values could indicate a saturated model, but the non-significant χ^2 test with 5df suggested these values indicate a well-fitting model. All items had significant loadings; item-total correlations ranged from .46 – .72, (see Table 3). The single latent factor explained 9–48% of the variation in each item. Internal consistency was acceptable for items

in Spanish ($\alpha = .80$) and English ($\alpha = .85$). The 5-item scale score was correlated with the 15-item scale score, $r_s = .93$, $p < .001$.

Construct Validity

The 15-item scale score was correlated with male condom use, $r_s = .35$, $p < .001$, and frequency of condom use, $r_s = .38$, $p < .001$. The 5-item brief scale was correlated with male condom use, $r_s = .34$, $p < .001$, and frequency of condom use, $r_s = .37$, $p < .001$.

Test-Retest Validity

Test-retest reliability was examined for the subset of women in the delayed-treatment control group. These women did not receive the experimental intervention which was designed to improve self-efficacy. The 15-item scale had modest test-retest reliability, ICC = .66, 95% CI [.51, .76], as did the 5-item scale, ICC = .53, 95% CI [.33, .67].

Discussion

Findings supported a single latent factor model explaining each of the 15 items in the full scale, and in the 5-item brief scale. Both the full and brief scales had good internal consistency, and acceptable test-retest reliability. Correlations between total scores and two measures of condom use were evidence of construct validity. Internal consistency of items in Spanish and English were approximately equivalent. These results suggest that either the full scale or the brief, 5-item scale may be used as a measure of condom use self-efficacy for Hispanic women, in either English or Spanish. The development of the scale was intended to create a scale that would have normally distributed responses, i.e., that would avoid skew that is common in measures administered to Hispanic women.¹⁹ The results were mixed in this regard. On one hand, there was less skew than reported in studies that use other measures of condom use self-efficacy.²⁶ However, the mean scores on all items were above five on a 10-point scale. One possibility is that the women in this sample had high self-efficacy. Another possibility is that women had a positive response bias. We suggest that futures studies examine the construct of condom use self-efficacy with multiple methods, including quantitative and qualitative designs, to understand this construct more completely.

The five items on the brief scale had the lowest skew, but also the lowest means, suggesting that these items had the greatest “difficulty.” Understanding what factors influence difficulty on these items would be helpful to develop interventions that focus on partner communication and condom use negotiation and promote favorable attitudes towards condom use. Factors related to the cultural context of Hispanic women could be related to difficulty on these items condom use self-efficacy. *Machismo* is a cultural standard that promotes male dominance in relationships, sexual prowess, risk-taking behaviors. *Marianismo* is a cultural value that encourages women to be sexually passive and to accept male partners’ sexual behaviors and decisions on sexual matters frequently inhibit communication between partners. They may fear that if they are assertive about condom use they will be judged as promiscuous. Negative attitudes towards the use of condoms may explain the overall low rates of condom use in this sample. Such attitudes include the view of condoms as a sign of distrust which interferes with condom negotiation and the

perception that condoms are expensive and/or reduce intimacy and sexual pleasure.^{2, 33} Strategies for prevention should emphasize that even when being mutually faithful is effective as a prevention strategy; it requires the presence of several additional factors, such as healthy bi-directional communication with their sexual partner, mutual trust in their partners, and disclosure of the serological status of both partners. These factors are particularly important given that a common route of HIV transmission among Hispanic women is through heterosexual contact with an infected partner.

There were several limitations to the study that should be considered. The sample was not randomly selected from the general population of Hispanic women in the U.S., so the factor structure may differ in other groups of Hispanic women, although there were multiple nationalities in this sample. Hispanics in the U.S. are a very heterogeneous group with respect to values, beliefs, nations of origin, and other variables including language preferences. Women who consent to participate in randomized trials may have unique characteristics. Future studies should examine the scale with other groups of Hispanic women, and in particular women in other parts of the U.S., and/or those that prefer English to Spanish. We examined test-retest reliability using data from women in the delay-treatment control condition. These women received HIV testing and counseling at each assessment as part of the larger trial, and may have received information about HIV prevention in the course of standard care in the community. They did not receive the experimental intervention or any information from study staff, but could have received information that changed their self-efficacy about condom use outside of study procedures and reduced test-retest reliability. The long time elapsed (six months) was also a limitation of the study design, and may have reduced test-retest reliability. Future studies should examine multiple assessments closer in time. Although internal constancy was similar, we recommend that future work examine differences in item responses between English and Spanish. It should be noted that the Spanish items are in the present tense, but the English are in the conditional tense. Due to the structure of the randomized trial, we were not able to do cognitive interviews to examine the meaning of each item with Hispanic women. Future studies should use cognitive interviews with women completing the scale to explore whether the tense leads to differences in responses or item comprehension across languages. In conclusion, the study described validation of a new 15-item measure of condom use self-efficacy, and a 5-item briefer scale, that can be used with Hispanic women in research or intervention settings.

Acknowledgments

This research was funded by the Center of Excellence for Health Disparities Research: El Centro, National Institute of Minority Health and Health Disparities grant P60MD002266 (Victoria B. Mitrani, Principle Investigator). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the National Institutes of Health.

References

1. Centers for Disease Control and Prevention [CDC]. [Accessed April 27, 2016] Male latex condoms and sexually transmitted diseases Page. <http://www.cdc.gov/condomeffectiveness/latex.htm> Updated February 19, 2016

2. Mayaud P, Manbey D. Approaches to the control of sexually transmitted infections in developing countries: Old problems and modern challenges. *Sexually Transmitted Infections*. 2004; 80:182.doi: 10.1136/sti2002.004101
3. Bandura A. Perceived self-efficacy in the exercise of control over AIDS infection. *Evaluation and Program Planning*. 1990; (13):9–17. DOI: 10.1016/0149-7189(90)90004-G
4. Bandura, A. Self-efficacy in changing societies. New York, NY: Cambridge University Press; 1995.
5. Maibach E, Murphy DA. Self-efficacy in health promotion research and practice: conceptualization and measurement. *Health education research*. 1995; (10):37–50. DOI: 10.1093/her/10.1.37
6. Casey MK, Timmermann L, Allen M, Krahn S, Turkiewicz KL. Response and self-efficacy of condom use: a meta-analysis of this important element of AIDS education and prevention. *Southern Communication Journal*. 2009; (74):57–78. DOI: 10.1080/10417940802335953
7. Center for Disease Control [CDC]. Estimated HIV incidence among adults and adolescents in the United States, 2007–2010. HIV Surveillance Supplemental Report. 17(4) [Accessed April 27, 2016] Page. http://www.cdc.gov/hiv/pdf/statistics_hssr_vol_17_no_4.pdf Updated December 12, 2012.
8. U.S. Census Bureau. State & County Quickfacts Miami-Dade County. Florida: Page. <http://quickfacts.census.gov/qfd/states/12/12086.html> [Accessed December 9, 2010]
9. Shedlin MG, Decena CU, Oliver-Velez D. Initial acculturation and HIV risk among new Hispanic immigrants. *Journal of the National Medical Association*. 2005; (97):32S–7S. [PubMed: 16080455]
10. AUTHOR
11. AUTHOR
12. AUTHOR
13. Campbell JC, Baty ML, Ghandour RM, Stockman JK, Francisco L, Wagman J. The intersection of intimate partner violence against women and HIV/AIDS: a review. *International Journal of Injury Control and Safety Promotion*. 2008; (15):221–31. DOI: 10.1080/17457300802423224 [PubMed: 19051085]
14. The Henry J. Kaiser Family Foundation. [Accessed December 10, 2010] Women and HIV/AIDS in the United States. Page. std/stats08/surv2008-Complete.pdf
15. World Health Organization. [Accessed December 9, 2010] Women and health: today's evidence, tomorrow's agenda. Page. http://whqlibdoc.who.int/hq/2009/WHO_IER_MHI_STM.09.1_eng.pdf. Updated 2009
16. Dworkin SL, Ehrhardt AA. Going beyond “ABC” to include “GEM”: critical reflections on progress in the HIV/AIDS epidemic. *American Journal of Public Health*. 2007; 97:13–8. DOI: 10.2105/AJPH.2005.074591 [PubMed: 17138923]
17. UNESCO. [Accessed December 9, 2010] A cultural approach to HIV/AIDS prevention and care: UNESCO/UNAIDS research project. Page. <http://unesdoc.unesco.org/images/0012/001262/126289e.pdf>
18. Ramirez M, Ford M, Steward A, Teresi J. Measurement issues in health disparities research. *Health Research and Educational Trust*. 2005; 40:1640–1657. DOI: 10.1111/j.1475-6773.2005.00450.x
19. Marin G, Gamba RJ, Marin BV. Extreme Response Style and Acquiescence among Hispanics The Role of Acculturation and Education. *Journal of Cross-cultural Psychology*. 1992; 23:498–509. DOI: 10.1177/0022022192234006
20. Baele J, Dusseldorp E, Maes S. Condom use self-efficacy: Effect on intended and actual condom use in adolescents. *Journal of Adolescent Health*. 2001; 28(5):421–431. DOI: 10.1016/S1054-139X(00)00215-9 [PubMed: 11336873]
21. Brafford LJ, Beck KH. Development and validation of a condom self-efficacy scale for college students. *Journal of American College Health*. 1991; 39:219–225. DOI: 10.1080/07448481.1991.9936238 [PubMed: 1783705]
22. Hernández Cortina A, López Rebolledo M. Adaptación transcultural de la escala para medir autoeficacia en el uso del condón masculino. *Index de Enfermería*. 2011; 20:194–198. <http://dx.doi.org/10.4321/S1132-12962011000200012>.
23. Redding CA, Rossi JS, Armstrong KA, Coviello D, Barron D, Evers K, Prochaska JO. Stages, pros, cons, and efficacy, for condom use in at-risk adolescent females. *Annals of Behavioral Medicine, Proceedings of the Fourth International Congress of behavioral Medicine*. 1996; 18:S191.

24. Gazabon, SA. Development of culturally tailored measures for Hispanics at-risk for HIV. Dissertations and Master's Theses (Campus Access). 2003. Paper AAI3112116. Page. <http://digitalcommons.uri.edu/dissertations/AAI3112116>
25. AUTHOR
26. AUTHOR
27. AUTHOR
28. AUTHOR
29. Muthén, LK.; Muthén, BO. Mplus user's guide. 7. Los Angeles: Author; 2012.
30. Bentler PM. Comparative Fit Indexes in Structural Models. Psychological Bulletin. 1990; 107:238–246. <http://dx.doi.org/10.1037/0033-2909.107.2.238>. [PubMed: 2320703]
31. Hu L, Bentler PM. Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. Structural Equation Modeling. 1999; 6:1–55. DOI: 10.1080/10705519909540118
32. McGraw KO, Wong SP. Forming inferences about some intraclass correlation coefficients. Psychological Methods. 1996; 1:30–46. <http://dx.doi.org/10.1037/1082-989X.1.1.30>.
33. AUTHOR

Table 1Characteristics of Hispanic Women ($N = 320$).

<i>Characteristics</i>	All Baseline ($N = 320$)		Control Group 6 months ($N = 123$)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Age, years	34.79	9.23	36.24	8.99
Education, years	13.73	3.39	13.50	3.38
Time in U.S., years	7.77	7.33	8.13	6.90
Number of Children	1.37	1.21	1.41	1.14
	<i>Mdn</i>	<i>IQR</i>	<i>Mdn</i>	<i>IQR</i>
Monthly Family Income, \$	1500	1055 – 2000	1500	1160 – 2000
	<i>N</i>	%	<i>N</i>	%
Living with Spouse/Partner	219	68	87	71
Employed	91	28	34	28
Birthplace				
Cuba	175	55	67	55
Nicaragua	30	9	14	11
Colombia	29	9	12	10
Honduras	27	8	15	12
Dominican Republic	15	5	2	2
U.S.	14	4	4	3
Venezuela	8	3	3	2
Peru	6	2	2	2

Note. Seven birth nations (Argentina, 2, Bolivia, 1, Ecuador, 1, El Salvador, 3, Guatemala, 3, Mexico, 3, Panama, 2) had less than 1% of respondents in the baseline sample. Years in U.S. refers only to women born outside the U.S. Control group at six months was only used for test-retest reliability.

Table 2

Distribution of Items in Spanish and English.

Spanish Item	English Item	M	SD	Skew
<i>Pienso sobre las relaciones sexuales con su ACTUAL pareja. Por favor evalúe que tan SEGURA se siente de poder realizar lo mencionado en cada una de las siguientes afirmaciones del 1 al 10</i>				
1. Yo puedo hablar sobre condones con mi pareja	I could talk about condoms with my partner	8.95	2.66	-2.35
2. Yo puedo decirle a mi pareja que use un condón	I could tell my partner to use a condom	8.71	2.95	-2.03
3. Yo puedo mantener condones cerca de mi/nuestra cama	I could keep condoms near my/our bed	8.39	3.25	-1.68
4. Yo puedo decirle a mi pareja que no tendremos relaciones sexuales sin condón	I could tell my partner that I would not have sex without a condom	7.52	3.65	-0.99
5. Yo puedo ponerle un condón a mi pareja sin que se rompa o se salga	I could put on a condom on my partner so it wouldn't break or come off	6.63	3.88	-0.50
6. Si mi pareja no quiere usar condones, yo puedo negarme a tener relaciones sexuales	If my partner didn't want to use a condom, I could refuse to have sex	7.64	3.61	-1.09
7. Yo puedo usar condones sin arruinar el momento romántico	I could use condoms without ruining the romantic mood	8.26	3.17	-1.55
8. Yo puedo guardar condones en mi cartera/bolsa	I could keep condoms in my purse/bag	6.16	4.21	-0.28
9. Yo puedo comprar condones sin sentirme avergonzada	I could purchase condoms without feeling embarrassed	8.17	3.38	-1.48
10. Yo puedo tener relaciones sexuales usando un condón y estar sexualmente satisfecha	I could have sex with a condom and be sexually satisfied	8.43	3.02	-1.73
11. Yo puedo preguntarle a mi pareja su historia de infecciones sexualmente transmitidas	I could ask my partner their STI history	8.97	2.55	-2.41
12. Yo puedo parar el contacto sexual (coito), si no he hablado con mi pareja sobre protección	I could stop intercourse, if I haven't discussed the subject of protection	7.65	3.66	-1.08
13. Yo puedo satisfacer a mi pareja si usamos un condón	I could satisfy my partner if we used a condom	8.66	2.92	-1.98
14. Yo puedo preguntarle a mi pareja sobre su historial sexual	I could ask my partner about his sexual history	9.15	2.41	-2.77
15. Yo puedo discutir confortablemente el uso de condones con mis amigos	I could comfortably talk about using condoms with my friends	8.13	3.32	-1.43

Note. Items in **bold** in short scale. Response scale: 1 = *strongly disagree*, 10 = *strongly agree*.

Table 3

Unstandardized Loadings for Indicators in Two Single Factor Models (N = 320).

Item	Model 1					Model 2				
	B	SE	p	R ²	r ^a	B	SE	p	R ²	r
1	0.25	0.06	<.001	.06	.63	--	--	--	--	--
2	0.79	0.03	<.001	.63	.71	--	--	--	--	--
3	0.81	0.02	<.001	.66	.73	--	--	--	--	--
4	0.74	0.03	<.001	.55	.70	0.69	0.06	<.001	.48	.69
5	0.27	0.06	<.001	.07	.52	0.29	0.07	<.001	.09	.47
6	0.36	0.05	<.001	.13	.69	0.44	0.06	<.001	.19	.72
7	0.72	0.03	<.001	.52	.71	--	--	--	--	--
8	0.50	0.05	<.001	.25	.48	0.58	0.06	<.001	.34	.46
9	0.22	0.06	<.001	.05	.51	--	--	--	--	--
10	0.18	0.06	.002	.03	.69	--	--	--	--	--
11	0.38	0.05	<.001	.14	.58	--	--	--	--	--
12	0.39	0.05	<.001	.15	.65	0.37	0.06	<.001	.14	.60
13	0.71	0.03	<.001	.50	.73	--	--	--	--	--
14	0.14	0.06	.016	.02	.61	--	--	--	--	--
15	0.56	0.04	.000	.32	.57	--	--	--	--	--

Note. Model 1 was the full 15-item scale. Model 2 was 5 items with the lowest skew. *B*, the unstandardized loadings refer to the relationship between the unobserved latent variable and each item. *SE* is the standard error associated with this loading, and the p-value shows if the relationship is statistically significant. *R*² is the proportion of variance in the item explained by the latent variable, *r* is the item-total correlation.