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Asunto: Carta de Aceptación

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Presente

Por medio del presente se le informa que después de pasar por un arbitraje estricto doble ciego su capítulo en idioma inglés titulado: "**Adaptation and Validity of the Safe Sex Behavior Questionnaire (SSBQ) for Migrant Population**", incluido en el Libro: **Validation of instruments for the investigation of sexuality in vulnerable groups**, bajo la coordinación de Lubia del Carmen Castillo Arcos y Martha Ofelia Valle Solís, fue ACEPTADO para su publicación durante el año 2020 por la Editorial Nova Science Publishers, la cual cuenta con circulación y reconocimiento a nivel internacional y esta indexada en Scopus.

ATENTAMENTE

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RESEARCH METHODOLOGY AND DATA ANALYSIS

Validation of Instruments for the Investigation of Sexuality in Vulnerable Groups

Lubia del Carmen Castillo Arcos
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VALIDATION OF INSTRUMENTS FOR THE INVESTIGATION OF SEXUALITY IN VULNERABLE GROUPS

LUBIA DEL CARMEN CASTILLO ARCOS
EDITOR

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Chapter 4

ADAPTATION AND VALIDITY OF THE SAFE SEX BEHAVIOR QUESTIONNAIRE (SSBQ) FOR MIGRANT POPULATION

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ABSTRACT

The US-Mexico border has received large migratory groups from the center and south of the country, as well as from Central American countries. Migrants are considered a vulnerable group to HIV acquisition as they report high rates of high-risk sexual behavior. It is necessary to have empirical indicators specialized in this population and adapted to its cultural context that allows us to know important aspects of its behavior, such as sexual nature. This work aimed is to test the reliability and validity of the Safer Sex Behavior Questionnaire (SSBQ) adapted for the migrant population. We use focal groups and a sample of 311 migrants for the adaptation translation and back-translation of the questionnaire. The modified questionnaire presented a Cronbach's Alpha of 0.76, the Kaiser-Meyer-Olkin (KMO) sample adequacy = 0.738, Bartlett's sphericity test (X^2 = 1635.544; gl = 276, $p < 0.000$), and factor analysis with varimax rotation for five factors resulted in good scores and explained 46.97% of the total variance. Therefore, it can be concluded that the adaptation of the questionnaire for the migrant population is valid and reliable.

Keywords: migrants, sexual behavior, reliability and validity

INTRODUCTION

The border between Mexico and the United States has received large migratory groups from the center and south of the country, as well as from Central American countries. (Leyva et al., 2015). According to El Colegio de la Frontera Norte (COLEF 2016) only in the first quarter of 2016, about 21,000 people traveled from the south to cross into the United States (US). Migrants are considered a vulnerable group in many ways, due to inadequate conditions such as social segregation, and extreme poverty (Caballero-Hoyos et al., 2013). This situation tends to bring health-related problems, particularly those related to sexuality, and migration is closely related to risk factors for contracting the Human Immunodeficiency Virus (HIV) (Ghimire et al., 2019).

The poor conditions of their travel and the dangers they suffer from being in a place alien to them causes that the migrant population tries to survive to obtain money, food, a place to sleep, even clothes, or some other goods, this increases the probability of engaging in high-risk sexual behaviors that facilitate the acquisition of HIV (García-Vega et al., 2012). The conditions in which the migrants are, their little or no accessibility to preventive health services, and their high mobility cause high rates of risky sexual behavior (Zhang et al., 2017). Among the main reported high-risk sexual behaviors are sex with multiple partners, casual partners, sex with sex workers, sex under the influence of drugs, and inconsistent condom use (Pan et al., 2013; Paudel and Rakesh 2013; Wang et al., 2013; Wang et al., 2014).

In spite of the evident problem of migrants in the border area and the high prevalence of HIV in the border region of Mexico (Zapata, González and Rangel 2014), few studies have been carried out in Mexico on this population about sexual behavior risk. The reason could be by the lack of measurement instruments focused on them. Also, this is a population with very peculiar characteristics, and it is necessary to have specialized empirical indicators adapted to their cultural context that allow us to know important aspects of them, such as sexual behavior. For this reason, the objective of this work was to test the reliability and validity of the safe sexual behavior questionnaire (SSBQ) adapted for the migrant population.

METHODS

Participants

The main population was migrants in a border city in the northeastern US-Mexico border, and the sample consisted of 311 Mexican and Central American migrants. We use random sampling and look for the migrants in the shelter where they were located. After a previous agreement with the shelter manager, we give a control number to each migrant according to their registration, and participants were randomly selected.

Before starting with the data collection, we ask about whether they had already started their sexual life because the instrument requires that the participant has had sexual experience at least once. If the migrant met these

criteria, we asked if he wanted to participate in the study. If he accepted, we take him to a private place and give him the questionnaire along with a form of personal data. For this study, we observed the provisions of the Helsinki declaration for medical research in humans.

Instrument

The instrument is called Safe Sexual Behavior Questionnaire (SSBQ) (Dilorio et al., 1992). This instrument consists of 24 items on sexual behavior, separated into five different factors: a) risk behaviors; b) assertiveness; c) condom; d) fluids; and e) anal sex/homosexual practices. Response options are on a Likert scale with four response options; 1 = Never; 2 = Sometimes; 3 = Most of the time or 4 = Always. This instrument was designed to measure the frequency of use of safer sex practices. Higher means indicate safer sex; this instrument has shown good internal consistency and has reported Cronbach's Alphas of .91 (Appendix A).

Subsequently, we send this version to experts who made some adjustments to the document. Once the observations were attached, we carried out a back-translation to the original language of the questionnaire. This back-translation allowed us to verify the congruence with the initial survey and to obtain a final version after the comparison. Subsequently, we send the review to an expert judgment who added changes they considered necessary, to perform a back-translation (to translate back into its original language a document that has already translated). Finally, we contacted the target population when the congruence with the original instrument was reviewed, and the final version of the instrument was obtained.

Analysis Strategy

We use an electronic device to capture the data. The information was saved on the device and subsequently uploaded to the app platform in which only the principal investigator had the password to enter. After capturing all

the questionnaires, the data was downloaded to a database in the Statistical Package for the Social Sciences (SPSS) version 24.0 format.

We recode the responses at the database of the items in a negative sense, and this allowed us to get more reliable means. After the recode, we calculate the average of the variables, did the normality test, and make the correlation analysis of the items. For the psychometric analysis, we use Bartlett's sphericity test for the construct validity and exploratory factor analysis with varimax rotation, and finally, an internal consistency analysis with the Cronbach Alpha statistics.

Results

First, we performed a descriptive analysis to verify the values of the means of the items above the average. Only items 2 and 23 presented low mean values; however, both are above the estimated (Table 1).

Subsequently, we use the Kolmogorov-Smirnov statistic with Lilliefors correction for a normality test of the items of the instrument. We find that none of the items had a normal distribution. Each of them presented statistical significance ($p < 0.05$); the details can be observed in Table 2.

Once the normality test results were obtained, a correlation analysis was performed; this analysis allowed us to observe how related the instrument items are to each other. Values with statistical significance could be observed from ($r^s = 0.654$, $p < 0.01$) between items 9 and 10; ($r^s = 0.585$, $p < 0.01$) between items 16 and 21; and ($r^s = 0.535$, $p < 0.01$) between items 1 and 2, to mention the highest values. Also, we found that many of the items were not correlated to each other; generally, correlations can be summarized as follows: a) presented correlation with more than half of the items (3, 5, 8, 9, 12, 14, 15, 18); b) presented correlation with half of the items (1, 2, 4, 6, 10, 11, 16, 17, 19, 24); c) presented correlation with less than half of the items (13, 21, 23); and d) presented very few correlations (7, 20, 22).

Table 1. Means of instrument items

item	M	item	M
1	2.37	13	3.00
2	2.01	14	2.97
3	2.69	15	2.24
4	3.43	16	3.52
5	3.36	17	3.82
6	2.42	18	2.33
7	3.43	19	3.48
8	2.80	20	3.49
9	2.87	21	3.36
10	2.85	22	3.84
11	2.85	23	3.15
12	3.22	24	3.51

Note: M = Means.

Table 2. Instrument's items normality test

item	D[a]	p	item	D[a]	p
1	.243	.000	13	.321	.000
2	.324	.000	14	.333	.000
3	.285	.000	15	.250	.000
4	.450	.000	16	.424	.000
5	.424	.000	17	.501	.000
6	.278	.000	18	.249	.000
7	.391	.000	19	.386	.000
8	.292	.000	20	.476	.000
9	.289	.000	21	.350	.000
10	.274	.000	22	.399	.000
11	.306	.000	23	.512	.000
12	.292	.000	24	.360	.000

Note: D[a] = Lilliefors-corrected Kolmogorov-Smirnov.

Table 3. Exploratory factor analysis with varimax rotation for the instrument's items. Items Factors

Item	Factors				
	1	2	3	4	5
9	**.740**	.301	-.052	-.055	.030
10	**.740**	.216	-.059	.036	.127
14	**.663**	.125	.011	-.032	.170
11	**.650**	.146	-.074	.079	-.096
12	**.561**	-.179	.223	.126	.008
6	.079	**.758**	.064	-.029	.019
2	.144	**.736**	-.087	.112	.061
1	.096	**.722**	-.066	.059	.169
8	.279	**.427**	.122	.038	-.025
3	.152	**.400**	.224	.329	.119
21	-.059	-.081	**.697**	.201	-.181
19	.097	.013	**.660**	-.044	.149
24	.076	.072	**.623**	-.040	.144
17	-.156	.127	**.544**	.012	-.027
16	.081	-.156	**.492**	.410	-.350
13	.139	-.002	**.474**	.093	-.389
23	-.018	-.030	**.439**	-.105	.194
22	-.003	-.005	-.019	**.740**	.018
20	-.036	.027	-.123	**.666**	.200
18	.120	.196	.104	**.493**	.038
4	.107	.157	.098	.275	**.648**
5	.115	.325	.146	.191	**.640**
15*	.398	.386	.011	.260	**-.401**
7*	.248	-.268	.068	.036	**.337**

Note: *Low score components for any factor.

Subsequently, construct validity was performed, Kaiser-Meyer-Olkin measure of sampling adequacy was used (KMO) = 0.738, Bartlett's test of sphericity (X^2 = 1635.544; gl = 276, $p < 0.000$). We also performed an exploratory factor analysis with varimax rotation for five fixed factors corresponding to the five original scale factors. In the first factor, the items 9, 10, 11, 12 and 14 were grouped; in the second factor, the items 1, 2, 3, 6

APPENDIX A

Safe Sex Behavior Questionnaire

1. I ask my partner whom I will have sexual relationships about his/her sexual life.
   A = Never B = Sometimes C = Often D = Always.
2. I ask my partner whom I will have sexual relationships if he/she has participated in bisexual/homosexual sex.
   A = Never B = Sometimes C = Often D = Always.
3. I do not have sexual relationships when I do not know about the sexual life of my partner.
   A = Never B = Sometimes C = Often D = Always.
4. I ask my partner to examine in search for scorer, ulcers, cuts, and injuries in his/her genital area.
   A = Never B = Sometimes C = Often D = Always.
5. I give my opinion when I do not agree with the information about safe sex practices given by my partner.
   A = Never B = Sometimes C = Often D = Always.
6. I ask my partner whom I will have sexual relationships if he/she has used intravenous drugs.
   A = Never B = Sometimes C = Often D = Always.
7. It is difficult for me to talk about sexual topics with my sexual partners.
   A = Never B = Sometimes C = Often D = Always.
8. I start the safe sex topic with my partners whom I will have sexual relationships.
   A = Never B = Sometimes C = Often D = Always.
9. I insist on the use of a condom when I have sexual relationships.
   A = Never B = Sometimes C = Often D = Always.
10. I stop the play before sex (like touching, kissing, etc.) to put on a condom.
    A = Never B = Sometimes C = Often D = Always.

11. If I know when meeting with someone, we will have sex, I carry a condom.
    A = Never B = Sometimes C = Often D = Always.
12. I go on with the flow of the moment; I have sexual relationships without using a condom.
    A = Never B = Sometimes C = Often D = Always.
13. I have oral sex without protection barriers, like a condom or a latex cover.
    A = Never B = Sometimes C = Often D = Always.
14. If I know when meeting with someone, we will have sex, I have in mind to practice safe sex.
    A = Never B = Sometimes C = Often D = Always.
15. If my partner insists on having sexual relationships without condom, I deny having it without one.
    A = Never B = Sometimes C = Often D = Always.
16. I have anal sexual relationships without a condom.
    A = Never B = Sometimes C = Often D = Always.
17. I use cocaine or other drugs before or during sexual relationships.
    A = Never B = Sometimes C = Often D = Always.
18. I avoid the direct contact with semen or vaginal fluids of my partner.
    A = Never B = Sometimes C = Often D = Always.
19. I have sexual relationships on the first date without knowing the sexual life of my partner.
    A = Never B = Sometimes C = Often D = Always.
20. I avoid sexual relationships when I have sores or irritation in my genital area.
    A = Never B = Sometimes C = Often D = Always.
21. I practice anal sex.
    A = Never B = Sometimes C = Often D = Always.
22. I avoid having direct contact with the blood of my sexual partner.
    A = Never B = Sometimes C = Often D = Always.
23. I have sexual relationships with a person that I know is bisexual or homosexual.
    A = Never B = Sometimes C = Often D = Always.

24. I drink alcoholic drinks before or during sexual relationships.
A = Never B = Sometimes C = Often D = Always.

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Chapter 5

ADAPTATION AND EXPLORATORY FACTOR ANALYSIS OF THE QUESTIONNAIRE ERRORS/PROBLEMS IN THE MALE CONDOM USE (CUES)

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ABSTRACT

In México, the Human Immunodeficiency Virus (HIV) is contracted mainly in youth since it presents a rate of 3.3 cases per 100.000 young people between 15 and 29 years of age, in this sense the development of new prevention technologies such as HIV vaccines and microbicides continue to advance, but condoms continue to be the main means of prevention, currently there are few instruments that help measure errors and problems in the use of the male condom.

The objective of the present study was to determine the factorial structure of the adaptation of the questionnaire errors/problems in the use of the male condom (CUES) in 143 young users of a non-governmental organization dedicated to the diagnosis and prevention of HIV in the city of Monterrey Nuevo León, México, for which a calculation of Bartlett and Kaiser-Meier Olkin (KMO) sphericity coefficients was conducted, using a Varimax rotation calculation between items, in addition to determining internal consistency using Cronbach's alpha. The results indicated that the condom use error/problem questionnaire (CUES) reported a Barlett sphericity statistic with $X2 = 965.8$ df = 120 $p < 0.001$ that suggests a high linear correlation between the items analyzed and an adequacy test of KMO of 0.83 referring to a high correlation and sample adequacy. Cronbach's alphas reported greater adjustment between factors than in their global score. It is suggested to continue analyzing the CUES towards a confirmatory analysis to determine the adjustment in order to confirm the number of factors to achieve an acceptable validity in the Mexican population.

INTRODUCTION

In México, HIV is acquired mainly in youth between the ages of 15 and 29, because the percentage of HIV/AIDS in the young population is 30% of the total registered cases. National statistics show that the main means of HIV transmission is through the sexual route in 95.2% of cases according to the National Center for the Prevention and Control of HIV and AIDS (CENSIDA 2017). Young people start sexual relations from the age of 17, recent studies in México have reported that the use of condoms the 46% of men mentioned that they do not like to use any contraceptive method and

38% of the women reported not agreeing to use them, which leads to risky sexual behavior (Folch et al. 2015; Isaac Uribe Alvarado et al. 2015).

In this sense, risky sexual behavior refers to the individual's exposure to a situation that can cause harm to their health or to the health of another person, especially through the possibility of acquiring a sexually transmitted infection (STI), or generate an unwanted pregnancy situation (García-Vega et al. 2012). According to the Joint United Nations Program on HIV/AIDS (UNAIDS) it is vitally important to reliably measure errors and problems in condom use in young people since condom use is currently the best strategy to counteract HIV infection, it is important to know if young people use condoms, but it is even more important if we can quantify if they do it correctly and consistently, since only in this way can actions that impact errors and problems be carried out, that young people present when using a condom (UNAIDS 2015).

In this order of ideas in Europe a sexually active person acquires approximately 16 condoms per year, while in México only four condoms per person have been quantified, the main reason why Mexicans do not like to use the condom is due to the belief that it "does not feel the same" and this is found empirically because condom preferences are more inclined towards those of thin or sensitive type as they are called by the same manufacturers as reported by the Federal Consumer Office (PROFECO 2011; CDC 2015).

In some studies it is clear that some of the main mistakes in young people to use the male condom is the slippage and rupture of the same (Coyle et al. 2012; Tarkang 2013). In addition it has been reported that young people experience changes in condom adjustment, pleasure, decreased libido, even some studies reported that young people have a low self-efficacy in the use and negotiation of condom (Oppong Asante, Osafo, and Doku 2016). It is worth mentioning that knowledge is a necessary condition when performing the correct placement of the condom to have a protection at 99% or close to this percentage (Benavides Torres et al. 2013; PROFECO 2011).

The situation of condom use in México is relevant because HIV has been identified as being concentrated in vulnerable groups composed of: Men who have sex with men, transgender people living with HIV, injecting drug users and sexual workers. All of these groups have a risk condition that is

the inconsistency in condom use (CENSIDA 2017). In the face of this situation the literature reports an important development of models that provide a theoretical framework to predict, prescribe and explain the use of the condom, even the same risky sexual behavior in the young population, however, from the perspective of measurement there is an obvious lack in scales that help to reliably measure and affordably the use of condoms in young people. These models are the theory of planned behavior, social cognitive theory and the information-motivation-Behavior Skills (Espada et al. 2016; Glanz, Rimer, and Viswanath 2008).

Therefore, in response to the HIV/AIDS problem in young people, international and national agencies promote actions such as the Global Strategy Project of the Health Sector against HIV (González 2016), which clearly proposes to combat the problem since prevention, however there are few scales to be able to reliably measure the errors and problems in the use of the condom in young people (Eggers et al. 2016) so the objective of this study was to determine the factorial structure of adaptation (CUES) in a sample of young users from a non-governmental organization (NGO) in Monterrey Nuevo León, México, which is primarily engaged in HIV screening services through rapid testing.

Methods

Design

With a quantitative approach to a cross-sectional descriptive study design was conducted an exploratory factorial analysis study of an adapted instrument is presented, this study was approved by the ethics committee of the School of Nursing of the Universidad Autónoma de Nuevo León with number 19CEI024201141127, The study was carried out in an NGO mainly dedicated to HIV screening through the rapid test.

Participants

The sampling was a simple random with 143 men calculated with the statistical program Epidat 3.1 for Windows, the procedure for the selection was made based on random numbers determined by the same program, the inclusion criteria were: voluntarily go to apply for the rapid HIV test, men between 18 and 25 years old and young people who do not live with their sexual partner, all participants were given informed written consent and were made to respect their rights as provided by the general health law in health research, in care Chapter I, on the ethical aspects of human research (SSA 1987).

Instrument

The CUES (Crosby et al. 2015; Fisher 2011) which contains sixteen items with four response options ranging from never to three times, which are graded from 0 to 3, as a result, scores can be quantified between 0 and 48. Scores are handled dimensionally, without a cut-off point, the higher the errors and problems in condom use. Three reverse-rated items to avoid bias in responses to the same pattern. This data was considered so that it did not affect the analysis of the instrument, the adaptation to the place where the scale was used and the Mexican context consisted of two bilingual persons separately performing the translation into Spanish, subsequently and through a priori meetings some discrepancies were agreed mainly by the population of interest in the NGO, these differences were resolved and it was observed that the instrument achieved a equivalence to the english version (see appendix).

Statistical Analysis

A factor analysis (domain number) was conducted by exploratory analysis of the core components. Bartlett's sphericity coefficient calculation

dequacy test of 0.83 that refers to a high correlation

2. Measures of explained variance

s of loads squared		extraction amounts of loads squared		
nce	% accumulated	Total	% variance	% Accumulated
	37.447	2.736	17.103	17.103
	48.210	2.633	16.454	33.557
	57.063	2.604	16.277	49.834
	63.664	2.213	13.829	63.664

trix of significant correlations with CUES
Varimax rotation technique

	Factor I	Factor II
times you used a condom during sex, did you ide up and have to turn it around?	0.685	0.476
times you used a condom, didn't you break	0.704	-0.067
times you used a condom during intercourse, ntercourse?	0.576	0.266
times you used a condom during intercourse, out when you were removing your penis from m?	0.595	0.112
nes that they used a condom during sex, did you problem with the way in which this adjusts or	0.613	0.189
e times you used a condom during sex, do you e your erection while placing it?	.0241	0.710
e times you used a condom during sex, did you out a water-based lubricant, such as jelly or	0.228	0.745
ee times you used a condom during sex, do you ed lubricant, such as vaseline jelly or baby oil,	0.339	0.561
ee times you used a condom during sex, do you se your erection after the relationship had started ndom?	-0.046	0.596
ee times you used a condom during sex, did you or a problem with the way it felt?	0.008	0.657

In Table 2, Factor 1 reached its own value of 5.99 and accounted for 37.44% of the variance. For its part, factor II showed its own value of 1.72 which explained 42.21% of the variance. Subsequently, an orthogonal rotation of factors was performed with the varimax procedure, so that the interpretation of the factors is facilitated by identifying variables that have high loads on the same factor, which can be interpreted in terms of variables that have loads above r = .560

Table 3, a reduction of data was performed to identify the appropriate variables for each factor, which shows the correlations of each component with technique varimax, from which a total of 10 variables were obtained that enter each of the two factors. CUES reported an overall Cronbach alpha coefficient of 0.68; factor I was called errors (consisting of items 2,12,13,14 and 15) and reported an alpha of 0.73; while factor II was called problems (consisting of items 5,6,7,8 and 16) reported an alpha of 0.80. Indicating an acceptable correlation between items.

Table 4. Matrix of non-significant correlations with CUES varimax rotation technique

No	Item	Factor I	Factor II
1	During the last three times you used a condom for intercourse: penis-vagina or penis-anus, do you verify that the condom has no visible damage to the packaging before opening it?	.095	.044
3	During the last three times you used a condom during sexual intercourse, did you left space on the tip of the condom when it is placed?	-0.68	.053
4	During the last three times you used a condom during sex, do you squeeze the air after you put it on?	.056	.029
9	During the last three times you used a condom during sex, is the condom in contact with nails, jewelry, objects that can pierce them, or uses your teeth at any time before or during sexual intercourse?	-.159	-.134
10	During the last three times you used a condom during sexual intercourse, begins to have sex without a condom and then used later and continued the sexual relationship?	.020	-.021
11	For the last time you used a condom for sexual intercourse, have you start having sex with him and then remove it and continues to have sex without a condom?	.094	-.149

In Table 4. It is observed that the reduction of variables composed of items 1, 3, 4, 9, 10 and 11, did not report coefficients with adequate factorial load using the varimax rotation technique.

In Table 5, Cronbach alpha values are displayed if the item is omitted, as outstanding data it was found that some of the items that did not result with significant factorial load greater than .050 as items 1.2 and 3, when these items were omitted the alpha value of Cronbach was greater than 0.64 which may suggest that exploratory factorial reduction may present a better fit in the CUES.

Table 5. Item, correlation with total corrected score and Cronbach Alpha from CUES

Item	α if the item is omitted	Correlation ítem score	Average	ED
1	0.73	-0.12	2.30	1.120
2	0.65	0.48	0.69	1.076
3	0.74	-0.15	2.27	1.102
4	0.74	-0.13	2.23	1.185
5	0.63	0.59	0.50	0.879
6	0.65	0.41	0.43	0.835
7	0.63	0.60	0.39	0.831
8	0.65	0.50	0.36	0.756
9	0.66	0.42	0.27	0.702
10	0.65	0.52	0.24	0.556
11	0.65	0.49	0.28	0.621
12	0.66	0.39	0.21	0.542
13	0.65	0.64	0.18	0.512
14	0.66	0.36	0.27	0.630
15	0.66	0.38	0.24	0.593
16	0.68	0.24	0.34	0.742

DISCUSSION

A characteristic feature to highlight in this study is that the participants were young people of high risk in the face of HIV and this can be explained by the characteristics and context where the recruitment of the same was carried out as mentioned by national agencies in Mexico the highest proportion of cases with HIV/AIDS are concentrated in high-risk population such as men who have sex with men and workers of commercial sex among

others (CENSIDA 2017). Studies such as Eggers et al. (2016). Mention an added value in this idea of the importance of studies similar to this addressing populations that actually have the problem that is intended to be studied, this study included participants with real problems in terms of problems and errors in condom use and as an irrefutable fact is that they have voluntarily applied for the HIV quick test, this act was able to ensure that participants have come to the NGO due to the perception of HIV risk due to a conflicted situation with condom use.

In addition to conducting exploratory analyses with key populations or that actually have the problem being studied, it is necessary to base the studies focus on theoretical models for their development, as Mentioned by Espada et al. (2016). A position for future studies is to include qualitative approaches to first identify knowledge needs or identify needs in the face of condom use in target populations.

With respect to the reliability criteria of this exploratory factor analysis of the CUES, the sample for this study is considered to have been correct due to general recommendations for this type of studies (Hair 2014), even though the sample size is not greater than 200 subjects, this study is consistent with what was found by other authors where they refer that samples greater than 100 subjects for exploratory analysis are an adequate approximation to identify the most prevalent factors in instrument or scale analysis (Winter, Dodou, and Wieringa 2009).

CUES reported good internal consistency and a bifactorial structure that explains 48.21% of the variance in young users of an NGO in the Metropolitan area of the city of Monterrey, Nuevo León. The factorial solution shown in this study is mostly acceptable in factors I and II which, compared to its overall structure, may even explain the value of the internal consistency determined with the alpha values of Cronbach since factor I obtained a value of 0.73 and for factor II a value of 0.80 because overall the scale reported a value of O.68.

One weakness of this study is that the observations are only eigth cases per variable with respect to the size of the sample and according to the 16 items of the CUES however a strength could be that the result of the factors in the CUES obtained values well defined where items 2,12,13,14 and 15

correspond to the error dimension and items 5,6,7,8 and 16 correspond to the problem dimension, this was consistent with what was mentioned by MacCallum et al. (2001).

Conclusion

In this study, exploratory factorial analysis was appropriate to achieve the objective of this study. Therefore it can be said that the CUES was adapted appropriately to the place where it was used because the CUES finally reported a good fit in two dimensions which are the errors and problems in the use of the condom, it can be concluded that the values in factors I and II obtained a better internal consistency confirmed by the results of Cronbach alpha, so for future studies it is recommended to consider the reduction of factors found in this study and consider a substantial increase in the sample so that it is continue with a confirmation factorial analysis of the CUES.

Appendix: Condom Use Errors/Problems Survey Men (CUES) Crosby et al. 2015

1. During the last three times you used a condom for intercourse: penis-vagina or penis-anus, do you verify that the condom has no visible damage to the packaging before opening it? ___ no

if yes, did you do it on 1 occasion, on 2 occasions, or on all 3 occasions?

___ I did it on 1 occasion ___ I did it on 2 occasions ___ I did it on all 3 occasions

2. During the last three times you used a condom during sex, did you put it on the wrong side up and have to turn it around? ___ no

___ if yes, did you do it on 1 occasion, on 2 occasions, or on all 3 occasions? ___ I did it on 1 occasion ___ I did it on 2 occasions ___ I did it on 3 occasions

3. During the last three times you used a condom during sexual intercourse, did you left space on the tip of the condom when it is placed?

___ no

___ if yes, did you do it on 1 occasion, on 2 occasions, or on all 3 occasions? ___ I did it on 1 occasion ___ I did it on 2 occasions ___ I did it on 3 occasions

4. During the last three times you used a condom during sex, do you squeeze the air after you put it on? ___ no

___ if yes, did you do it on 1 occasion, on 2 occasions, or on all 3 occasions? ___ I did it on 1 occasion ___ I did it on 2 occasions ___ I did it on 3 occasions

5. During the last three times you used a condom during sex, do you lose or begin to lose your erection while placing it? ___ no

___ if yes, did you do it on 1 occasion, on 2 occasions, or on all 3 occasions

___ I did it on 1 occasion ___ I did it on 2 occasions ___ I did it on 3 occasions

6. During the last three times you used a condom during sex, did you use a condom without a water-based lubricant, such as jelly or spermicide cream? ___ no

___ if yes, did you do it on 1 occasion, on 2 occasions, or on all 3 occasions? ___ I did it on 1 occasion ___ I did it on 2 occasions ___ I did it on 3 occasions

7. During the last three times you used a condom during sex, do you also use an oil-based lubricant, such as vaseline jelly or baby oil, with the condom? ___ no

___ if yes, did you do it on 1 occasion, on 2 occasions, or on all 3 occasions? ___ I did it on 1 occasion ___ I did it on 2 occasions ___ I did it on 3 occasions

8. During the last three times you used a condom during sex, do you lose or begin to lose your erection after the relationship had started while using the condom? ___ no

___ if yes, did you do it on 1 occasion, on 2 occasions, or on all 3 occasions? ___ I did it on 1 occasion ___ I did it on 2 occasions ___ I did it on 3 occasions

9. During the last three times you used a condom during sex, is the condom in contact with nails, jewelry, objects that can pierce them, or uses your teeth at any time before or during sexual intercourse? ___ no

___ if yes, did you do it on 1 occasion, on 2 occasions, or on all 3 occasions? ___ I did it on 1 occasion ___ I did it on 2 occasions ___ I did it on 3 occasions

10. During the last three times you used a condom during sexual intercourse, begins to have sex without a condom and then used later and continued the sexual relationship? ___ no

___ if yes, did you do it on 1 occasion, on 2 occasions, or on all 3 occasions? ___ I did it on 1 occasion ___ I did it on 2 occasions ___ I did it on 3 occasions

11. For the last time you used a condom for sexual intercourse, have you start having sex with him and then remove it and continues to have sex without a condom? ___ no

___ if yes, did you do it on 1 occasion, on 2 occasions, or on all 3 occasions? ___ I did it on 1 occasion ___ I did it on 2 occasions ___ I did it on 3 occasions

12. During the last three times you used a condom, didn't you break during intercourse?

___ no

___ if yes, did it do it on 1 occasion, on 2 occasions, or on all 3 occasions? ___ it did it on 1 occasion ___ it did it on 2 occasions ___ it did it on 3 occasions

13. During the last three times you used a condom during intercourse, did you slip during intercourse? ___ no

___ if yes, did it do it on 1 occasion, on 2 occasions, or on all 3 occasions? ___ it did it on 1 occasion ___ it did it on 2 occasions ___ it did it on 3 occasions

14. During the last three times you used a condom during intercourse, did the condom slip out when you were removing your penis from vagina/anus or rectum? ___ no

___ if yes, did it do it on 1 occasion, on 2 occasions, or on all 3 occasions? ___ it did it on 1 occasion ___ it did it on 2 occasions ___ it did it on 3 occasions

15. For the last three times that they used a condom during sex, did you know if you have a problem with the way in which this adjusts or fits ___ no

___ if yes, did I on 1 occasion, on 2 occasions, or on all 3 occasions? ___ I did on 1 occasion ___ I did on 2 occasions ___ I did on 3 occasions

16. During the last three times you used a condom during sex, did you or your partner have a problem with the way it felt? ___ no

___ if yes, did it happen on 1 occasion, on 2 occasions, or on all 3 occasions? ___ it happened on 1 occasion ___ it happened on 2 occasions ___ it happened on 3 occasions.

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Chapter 14

TRANSLATION AND ADAPTATION OF AN INSTRUMENT TO MEASURE SEXUAL ATTITUDES IN MIGRANTS

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ABSTRACT

HIV is a health problem in Latin American countries and in Mexico since there is a high migration to the United States. Due to their vulnerable situation, migrants engage in risky sexual behaviors that put them at risk of HIV infection. Favourable attitudes towards sex are significantly associated with sexual behaviour. However, to date there is no Spanish-language instrument that has been contextualized for use with the migrant population, so the aim of this study is to develop a Spanish-language version of an instrument to measure sexual attitudes in migrants through the process of translation and cultural adaptation by Chávez and Canino

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(2005). In the factor analysis, the first factor explains 18.57% of the total variance, the second factor explains 14.0% of the total variance and the third factor explains 11.22% of the total variance. Cronbach's Alpha was .84. The methodology used for the translation and adaptation of this instrument was adequate.

Keywords: sexual attitudes, migrants, HIV, validity, fidelity

INTRODUCTION

An estimated 1.6 million people are living with HIV in Latin America, 75% of whom are concentrated in five countries in the region: Brazil, Mexico, Colombia, Venezuela and Argentina. During the last ten years the prevalence of HIV infection in adults (15-49 years) in Latin America has remained stable (about 0.4%). In countries that border Mexico, such as Belize, the reported prevalence is higher at 1.5%. In 2013, 5,087 new cases of HIV and 5,449 of AIDS were detected in Mexico, and as of September 30, 2014, 2,894 HIV cases and 2,785 AIDS cases had been reported. This makes a total of 172,254 from 1983 to 2014. The border states alone account for 43,679 cases, or more than 25% of the total from 1983 to 2014, with the border state of Tamaulipas in Mexico accounting for 4,034, or almost 10% (Centro Nacional para la Prevención y Control del VIH/SIDA [CENSIDA], 2015).

In the United States, there are an estimated 20 million cases of Sexual Trasmited Diseases (STDs) each year (Centers for Disease Control and Prevention, 2013). One possible cause of these infections is migration. Mexico has an important and complex dynamic of population mobility toward the United States: it is a receiving, transit and origin country for migrants (Consejo Nacional de Población [CONAPO], 2009). Since the beginning of the epidemic, HIV infection was linked to population movements. Epidemiology suggested that the increased spread of this infection was related to the number of mobile populations, as well as the diversity of migratory routes in different regions of the world (CONAPO, 2009). The causes of undocumented migration in Mexico and Central

America to the United States are linked to poverty, lack of opportunities and conditions of structural violence in the countries of origin, in addition to conditions such as corruption of authorities, human trafficking, trafficking of undocumented migrants, kidnapping, violence, robbery, extortion and mass executions, in this context a clear situation of vulnerability is determined (Instituto Nacional de Salud Pública, 2016).

Migration to the United States is influenced by many economic, social and cultural factors that have kept it a major phenomenon in recent years and that have recently contributed to an increase in it at the beginning of the 21st century (Magis-Rodríguez, Lemp, Hernández, Sanchez, Estrada, & Bravo-García, 2009). In recent years, Mexico has become a transit territory for thousands of migrants, especially from Central America, who enter through the southern border and move around the country with the intention of reaching the United States.

The conditions in which migrants transit through Mexico make them vulnerable to abuse, often leading them to engage in sexual behaviour considered risky, such as having sex with strangers for money. This, combined with the impossibility or difficulty of accessing health services, not only makes them vulnerable but also a source of infection for the spread of HIV or STDs.

There are many sociocultural, economic and political factors, both in countries of origin and destination, that influence the risk of immigrants to contract HIV infection. These factors include separation from spouses, families and known social and cultural norms; language barriers; poverty; substandard living conditions; and exploitation at work, including sexual violence (Programa Conjunto de las Naciones Unidad sobre el VIH/SIDA, 2008). Other determinants of the vulnerability of these groups include poor access to health-care services, difficulty in exercising and defending their rights, weak social support networks and poverty that characterizes both origin and transit. It also recognizes the difficulty of addressing the issue of migration in different priority areas such as sexual and reproductive health, violence, HIV/AIDS, human rights and discrimination (INSP, 2016).

One of the strategies to decrease HIV/AIDS in this population is through information that helps to improve attitudes related to the disease (Wang, et

al., 2018). Several studies mention that condom use can be promoted among migrants (Shen, et al., 2019) with more egalitarian attitudes (Ramirez-Ortiz, et al., 2018) and fewer attitudes of HIV/AIDS-related stigma (Yang, et al., 2015). Huang et al. (2011) conducted a study on 1,879 sex workers clients, aiming to estimate the prevalence of STIs among male in China. It found that only 15.3 percent of them reported that it was okay to have sex outside of marriage compared to 6.3 percent of non-clients ($p < .05$). In addition, 38.5% of clients compared to 6.8% of non-clients ($p < .001$) reported that it was okay to have sex for pleasure.

Li et al., (2009) conducted research with 2,821 young migrant workers to assess the prevalence of sexual behaviors and correlations among adolescents of migrant workers in China. They found that among all adolescents, compared to males, females showed higher scores in attitude towards sexual behaviors (15.05 vs 14.01, $t = - 2.32$, $p < .05$) for adolescent migrant workers; (14.73 vs 13.82, $t = - 8.15$, $p < .01$) for adolescent general residents.

According to the above, it can be said that unfavorable attitudes toward sex are significantly associated with resorting to risky sexual behaviors. However, to date there is no Spanish-language instrument that has been contextualized for use with the Spanish-speaking migrant population, so the objective of this study is to develop the Spanish version of an instrument to measure sexual attitudes in migrants through the process of translation and cultural adaptation.

Translation and Adaptation Process

The first step in this process was to derive the concept from the most abstract to the most concrete. Figure 1 shows how the concept of sexual attitudes was derived from the concept of attitudes. Sexual attitude, which is the affective belief about the sexual behavior of the migrant, includes permissivity, communion and mediation. Once the concept had been defined, the next step was to select an instrument that was suitable for measuring it.

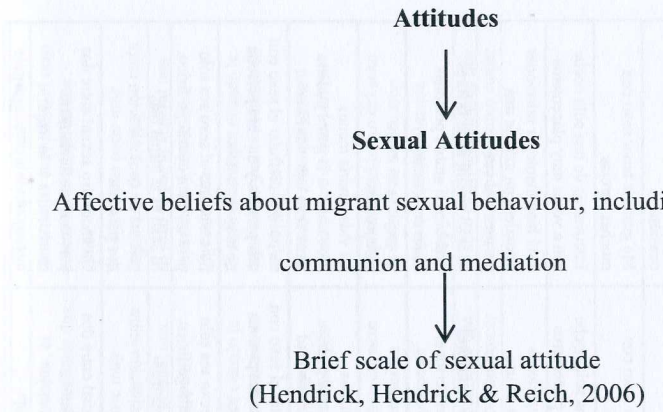

Figura 1. Abstract to Concrete.

METHODS

The Short Sexual Attitude Scale was selected (Hendrick & Reich, 2006). This scale has 23 items divided into 4 subscales, permissivity, communion, mediation and birth control, of which only the first three were considered. Therefore, the instrument includes 20 items with answers in a 5-point likert scale, 1 = Very much agree to 5 = Very much disagree, an example is, it is okay to have casual/ second-hand sex. The results have been analyzed by means, which if low represent more sexual attitudes. The subscales have presented Cronbach's Alphas of Permissivity = .93, Communion = .71 and Mediation .77.

The methodology of Chávez and Canino (2005) was used to translate and adapt the instruments. The methodology consists of a series of systematic steps that manage to adapt the instrument to a specific cultural context given the range of differences that can be found. The first step was to have the instrument translated by a professional translator. Once the translation was acquired, the bilingual committee reviewed the instrument and it was subsequently revised by the multi-national bilingual committee of the University of California, San Diego.

Table 1. Translation and adaptation process

Original	Backtraslation	After Focus Group	Final	Final revised by committee
1.-I do not need to be committed to a person to have sex with him/her	I need to be engaged/committed to a person to have sex with her/him	No necesito estar comprometido(a) con una persona para tener relaciones sexuales con él/ella	No necesito estar comprometido(a) con una persona para tener relaciones sexuales con él/ella	No necesito estar comprometido(a) con una persona para tener relaciones sexuales con él/ella
2.-Casual sex is acceptable	It's okay to have casual sex	Está bien tener sexo de ocasión	Está bien tener sexo casual	Está bien tener sexo casual/de ocasión
3.-I would like to have sex with many partners	I would love to have sex with many partners	Me gustaría tener sexo con muchas parejas	Me gustaría tener sexo con muchas parejas	Me gustaría tener sexo con muchas parejas
4.-One-night stands are sometimes very enjoyable	One night stands are sometimes very pleasant	Encuentros de una sola noche son a veces muy placenteros	Encuentros de una sola noche son a veces muy placenteros	Encuentros de una sola noche son a veces muy placenteros
5.-It is okay to have ongoing sexual relationships with more than one person at a time	It's okay to have sex with more than one person at the same time	Está bien tener relaciones sexuales con más de una persona al mismo tiempo	Está bien tener relaciones sexuales con más de una persona al mismo tiempo	Está bien mantener relaciones sexuales con más de una persona a la vez
6.-Sex as a simple exchange of favors is okay if both people agree to it	Sex as an exchange of favors is okay as long as people engage agree to it	El sexo a cambio de favores está bien si ambas personas están de acuerdo	El sexo a cambio de favores está bien si ambas personas están de acuerdo	El sexo a cambio de favores está bien si ambas personas están de acuerdo
7.-The best sex is with no strings attached	Best sex has no restrictions	El mejor sexo es sin restricciones	El mejor sexo es sin restricciones	El mejor sexo es sin compromiso
8.-Life would have fewer problems if people could have sex more freely	Life would be of less problems if people could have sex more freely	La vida tendría menos problemas si la gente pudiera tener sexo con más libertad	La vida tendría menos problemas si la gente pudiera tener sexo con más libertad	La vida tendría menos problemas si la gente pudiera tener sexo con más libertad
9.-It is possible to enjoy sex with a person and not like that person very much	It is possible to enjoy sex with a person you don't like very much	Es posible disfrutar el sexo con una persona y que esa persona no te guste mucho.	Es posible disfrutar el sexo con una persona y que esa persona no te guste mucho.	Es posible disfrutar el sexo con una persona y que esa persona no te guste mucho.
10.-It is okay for sex to be just good physical release	It's okay for sex to be just a good physical release	Está bien que el sexo sea sólo para un buen desahogo físico.	Está bien que el sexo sea sólo para un buen desahogo físico.	Está bien que el sexo sea sólo para un buen desahogo físico.
11.-Sex is the closest form of communication between two people	Sex is the closest form of communication between two individuals	El sexo es la forma más cercana de comunicación entre dos personas	El sexo es la forma más cercana de comunicación entre dos personas	El sexo es la forma más cercana de comunicación entre dos personas
12.-A sexual encounter between two people deeply in love is the ultimate human interaction	A sexual encounter between two individuals deeply in love is the ultimate human interaction	Un encuentro sexual entre dos personas profundamente enamoradas es la mejor interacción humana	Un encuentro sexual entre dos personas profundamente enamoradas es la mejor interacción humana	Un encuentro sexual entre dos personas profundamente enamoradas es la mejor interacción humana
13.-At its best, sex seems to be the merging of two souls	At best instance, sex seems to be the merging of two souls	En el mejor de los casos, el sexo parece ser la unión de dos almas	En el mejor de los casos, el sexo parece ser la unión de dos almas	En su mejor expresión, el sexo parece ser la unión de dos almas
14.-Sex is a very important part of life	Sex is one of the most important parts of life	El sexo es una parte muy importante de la vida	El sexo es una parte muy importante de la vida	El sexo es una parte muy importante de la vida
15.-Sex is usually an intensive, almost overwhelming experience	Sex is generally an overwhelming experience, almost extraordinary	El sexo es por lo general una experiencia intensa, casi extraordinaria	El sexo es por lo general una experiencia intensa, casi extraordinaria	El sexo es por lo general una experiencia intensa, casi impresionante
16.-Sex is best when you let yourself go and focus on your own pleasure	Sex is the best when you let yourself go and focus on your own pleasure	El sexo es lo mejor cuando te dejas llevar y te concentras en tu propio placer	El sexo es lo mejor cuando te dejas llevar y te concentras en tu propio placer	El sexo es lo mejor cuando te dejas llevar y te concentras en tu propio placer
17.-Sex is primarily the taking of pleasure from another person	Sex is mainly about taking pleasure of someone else	El sexo es principalmente tomar placer de otra persona	El sexo es principalmente tomar placer de otra persona	El sexo es principalmente tomar placer de otra persona
18.-The main purpose of sex is to enjoy oneself	The main purpose of sex is to enjoy oneself	El principal objetivo del sexo es disfrutar de uno mismo	El principal objetivo del sexo es disfrutar de uno mismo	El principal objetivo del sexo es disfrutar de uno mismo
19.-Sex is primarily physical	Sex is mainly physical	El sexo es principalmente físico	El sexo es principalmente físico	El sexo es principalmente físico
20.-Sex is primarily a bodily function, like eating	Sex is mainly a bodily function, like eating	El sexo es principalmente una función corporal, como comer	El sexo es principalmente una función corporal, como comer	El sexo es principalmente una función corporal, como comer

Once the adjustments suggested by the committees were made, focus groups were held with migrants with characteristics similar to those of the study population (migrants of both sexes, those who have already initiated their sexual life, those over 18 years of age and those who have lived in the locality where they were surveyed for less than two years). In total, three focal groups were carried out with 6 to 8 people, each of the subjects was given a set of instruments and a pencil, while the interviewer went through the questions one by one and asked if they were understandable, in case they were not understandable for any of them, the meaning of the question was explained and they were invited to write it in a simpler or understandable way, taking care not to lose the context and meaning of the question. Once the participant gave a choice about the possible wording or change of words, the rest of the participants were asked if it was suitable for them too. If it was not suitable for them as a whole, the question was written until an agreement was reached among the group. The facilitator took note of each of the focus group observations.

After the suggestions of the focal groups were gathered, they were reviewed again by committee and the changes considered most relevant were added. Next making the changes to the instrument, it was sent back to a translator with a graduate degree in Spanish/English Interpretation and Translation Arts (back translation) and both English versions of the instrument were revised. In the following table you can see the process mentioned.

Data Analysis

A psychometric analysis was performed, for internal consistency Cronbach's Alpha was used, Bartlett's sphericity test was used for construct validity and exploratory factor analysis with varimax rotation.

Results

The instrument was applied to migrants from the cities of Matamoros and Reynosa, Tamaulipas, Mexico, the sample consisted of 311 participants. The sample consisted of 311 participants. 88.4% were male, 45.0% were single, the mean age was 33.43 (SD = 10.06) and the years of study were 8.09 (SD = 3.56).

Descriptive Statistics

The permissivity subscale presents a higher average than 60, this indicates a lower permissive sexual attitude in the participants (M = 63.31, SD = 24.11), followed by sexual attitude mediation (M = 51.12, SD = 28.79) and finally communion (M = 25.68, SD = 23.35).

Psychometric Properties of the Instrument

Through confirmatory factor analysis with varimax rotation, the load of the items and the relevance with the original scales were verified, with the objective of obtaining construct validity. Likewise, internal consistency analysis was performed for the whole scale and their subscales using Cronbach's Alpha (Table 4).

Table 2. Measures of central tendency and dispersion of facilitators and inhibitors

Variable	*M*	*Mdn*	*DE*	*Variance*	*Min*	*Max*
Sexual attitude						
Permissivity	63.31	65.00	24.11	*581.54	7.50	0.100
Communion	25.68	20.00	23.35	*545.61	0.00	0.100
Mediation	51.12	50.00	28.79	*829.38	0.00	0.100

Note: n = 301; Mdn = Median; SD = Standard deviation

The extraction was carried out with three fixed factors corresponding to the three subscales used: permissivity, communion and mediation. In the following table it is observed that the factors show a load according to the order of the original subscale with some slight variations, in the case of the item 11, this is loaded with the items of the mediation subscale, however it belongs to the communion subscale. In this analysis the first factor explains 18.57% of the total variance, the second factor explains 14.0% of the total variance and the third factor explains 11.22% of the total variance (Table 3).

Table 3. Confirmatory factor analysis with varimax rotation: short scale of sexual attitude

Ítems	Permissivity	Mediation	Communion	Extraction
5	**.726**	.032	- .004	.529
3	**.671**	.105	.187	.496
2	**.670**	.213	- .021	.495
7	**.617**	.088	.027	.389
4	**.596**	.308	.049	.453
9	**.541**	.072	.038	.299
6	**.538**	.163	.061	.320
1	**.514**	.058	- .017	.268
10	**.487**	.357	.085	.372
8	**.413**	.297	.146	.280
18	.092	**.761**	.004	.587
19	.157	**.723**	.085	.555
16	.058	**.716**	.232	.570
20	.180	**.522**	.057	.309
17	.354	**.485**	-.043	.362
11	.180	**.470**	.324	.358
13	- .073	.041	**.757**	.580
14	.178	.039	**.695**	.516
12	- .072	.174	**.687**	.507
15	.164	.116	**.687**	.512
% variance	18.57*	14.00*	11.22*	
% cumulative	18.57*	32.57*	43.79*	

Note: n = 301; * item located on a different scale than the original

Table 4. Internal consistency of instrument and subscales

Instrument	No. Items	α
Sexual attitude	20	.84
Permissivity*	10	.81
Communion*	05	.67
Mediation*	05	.72

Nota: n = 311; α = Alpha de Cronbach; * Subescalas

Finally, an internal consistency analysis was performed with Cronbach's Alpha statistic with a score of 0.84. However, the Alphas of the subscales were obtained separately and it was observed that the consistency was marginally reduced, the details can be seen in the following Table.

DISCUSSION

It was also found that migrants presented negative beliefs about certain sexual behaviors that are considered to be risky, such as having multiple sexual partners, casual partners, and general sexual licentiousness (sexual permissiveness). They were also found to believe that the practice of sexual behaviors, which involve feelings of love, where their main characteristic is the union of two people with feelings of mutual love (sexual attitude communion) or with beliefs about sexual relations being the means to a certain end, usually to obtain pleasure for oneself or another person and thus physically enjoy sexual contact (sexual attitude mediation).

Wang, Muessig, Li, and Zhang (2014) in their study mention that the perception of sexual risk is influenced by exposure to new sexual attitudes in urban areas, i.e., rural migrants upon entering urban areas change their position towards sexuality for a more open one, and this makes them less perceptive towards the risk of contracting HIV. This finding is very similar to that of the present study, since in both cases it can be observed that as long as migrants lean towards a permissive or more open sexual attitude

towards various sexual behaviours considered to be risky, they will be less able to warn that what they are doing may generate problems that directly impact their sexual health.

Solorio, Forehand, and Somoni (2013) conducted a study with Latino men who have sex with men immigrants to examine their beliefs and attitudes toward HIV testing, including their perceived barriers and facilitators associated with testing. They found that those migrants who did not get tested for HIV tended to have more open sexual attitudes, such as having more than one sexual partner.

CONCLUSION

The methodology used for the translation and adaptation of this instrument was appropriate. It is suggested that the instrument be used in other populations, to make it known and useful in future studies aimed at researching responsible sexuality. It is recommended to continue using this scale in different contexts and with populations with similar sexual vulnerability and risk characteristics.

APPENDIX

Escala Breve de Actitud Sexual

(Subescalas de permisividad, comunión y mediación)

Seleccione la respuesta que considere correcta de acuerdo a lo que se pregunta. Elija sólo una respuesta por pregunta

Pregunta	1. Muy de acuerdo	2. Moderadamente de acuerdo	3. Ni de acuerdo ni en desacuerdo	4. Moderadamente en desacuerdo	5. Totalmente en desacuerdo
1. No necesito estar comprometido(a) con una persona para tener relaciones sexuales con él/ ella					
2. Está bien tener sexo casual/de ocasión					
3. Me gustaría tener sexo con muchas parejas					
4. Encuentros de una sola noche son a veces muy placenteros					
5. Está bien mantener relaciones sexuales con más de una persona a la vez					
6. El sexo a cambio de favores está bien si ambas personas están de acuerdo					
7. El mejor sexo es sin compromiso					
8. La vida tendría menos problemas si la gente pudiera tener sexo con más libertad					
9. Es posible disfrutar el sexo con una persona y que esa persona no te guste mucho					
10. Está bien que el sexo sea sólo para un buen desahogo físico.					
11. El sexo es la forma más cercana de comunicación entre dos personas					
12. Un encuentro sexual entre dos personas profundamente enamoradas es la mejor interacción humana					
13. En su mejor expresión, el sexo parece ser la unión de dos almas					
14. El sexo es una parte muy importante de la vida					
15. El sexo es por lo general una experiencia intensa, casi impresionante					
16. El sexo es lo mejor cuando te dejas llevar y te concentras en tu propio placer					
17. El sexo es principalmente tomar placer de otra persona					
18. El principal objetivo del sexo es disfrutar de uno mismo					
19. El sexo es principalmente físico					
20. El sexo es principalmente una función corporal, como comer					

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