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Original article

Adaptation of the contraceptive self-efficacy scale for heterosexual Mexican men and women of reproductive age

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ABSTRACT

Aim: Development of a Spanish Version Contraceptive Self-efficacy Scale for use among heterosexual Mexican populations of reproductive age inclusive of 18–35 years.
Background: Methods of family planning have decreased in Mexico which may lead to an increase in unintended pregnancies. Contraceptive self-efficacy is considered a predictor and precursor for use of family planning methods.
Methods: Cross-sectional, descriptive study design was used to assess contraceptive self-efficacy among a heterosexual Mexican population (N = 160) of reproductive age (18–35 years). Adaptation of a Spanish Version Contraceptive Self-efficacy scale was conducted prior to instrument administration.
Results: Exploratory and confirmatory factorial analyses identified seven factors with a variance of 72.812%. The adapted scale had a Cronbach alpha of 0.771. A significant correlation between the Spanish Version Contraceptive Self-efficacy Scale and the use of family planning methods was identified.
Conclusions: The Spanish Version Contraceptive Self-efficacy scale has an acceptable Cronbach alpha. Exploratory factor analysis identified 7 components. A positive correlation between self-reported contraceptive self-efficacy and family planning method use was identified. This scale may be used among heterosexual Mexican men and women of reproductive age. The factor analysis (7 factors versus 4 factors for the original scale) identified a discrepancy for interpretation of the Spanish versus English language versions. Interpretation of findings obtained via the Spanish versión among heterosexual Mexican men and women of reproductive age require interpretation based upon these differences identified in these analyses.

1. Introduction

Mexico has recently implemented multiple strategies to increase the use of family planning methods (FPM) and thus reduce the incidence of unwanted pregnancies. Success however has not been achieved as the use of FPM in Mexico among heterosexual men and women has actually decreased during this time (ENADID, 2014). Among married women of childbearing age, the last National Survey on Demographic Dynamics conducted by the National Institute of Geographical Statistics and Informatics in 2009 found that 9.8% (1.7 million) of these women reported using FPM (WHO, 2015, CONAPO, 2015, ENADID, 2014, Guttmacher Institute, 2013).

The use of FPM among men such as vasectomy, male condom or traditional methods (rhythm and interrupted intercourse) actually decreased from 2009 to 2014 from 19.2% to 16.8% (Prendes, Aparicio, Reyes, & Lescay, 2001). Faced with this reality, the need arises for health professionals to investigate factors such as self-efficacy that influence heterosexual Mexican men or women of reproductive age to decide to use FPM.

Self-efficacy is understood as a predictor of human behavior. Bandura defined self-efficacy as the person's self-confidence to carry out a specific activity or goal (Pender et al., 2015). As such, self-efficacy is recognized as a key factor for family planning as well as a precursor to generate a favorable contraceptive attitude and a predictor of FPM adherence (Muhindo, Nankumbi, Groves, & Chenault, 2015, Peyman et al., 2009 and Heinrich, 1993). Other findings indicate that women

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perceive an inability to use any FPM (Ong, Temple-Smith, Wong, McNamee, & Fairley, 2012).

There are no instruments to assess contraceptive self-efficacy in heterosexual Mexican populations. Levinson (1995) developed an English-language contraceptive self-efficacy scale to measure perceptions of ability to take responsibility for sexual and contraceptive behaviors across a variety of situations among sexually active adolescent women. The instrument consists of 18 items, answered with a Likert scale with options ranging from 1 = not completely true for me, to 5 = completely true for me. In order to obtain the final score, it is required that the value of items 2, 5, 6, 8, 9, 11, 12, 14 and 15 be reversed, so that the high final scores refer to a higher self-efficacy for the practice of contraception.

This instrument has been translated and used among Chinese, French, Brazilian and Canadian women, as well as in Latin American, American and European men (Cronbach Alpha > 0.73). Although this scale was adapted by Gomez et al., (1996) for use among a Spanish population, it is not available in Spanish. The present study aim was to adapt the Spanish Version Contraceptive Self-efficacy Scale for use among heterosexual Mexican men and woman of reproductive age inclusive of 18 to 35 years.

Adaptation of the Spanish Version Contraceptive Self-efficacy Scale provides the opportunity to assess contraceptive self-efficacy for a Mexican population as a predictor of contraceptive behavior, to guide the creation of strategies to promote the use of FPM. This process may facilitate a reduction in deaths of women and children as an outcome of unintended pregnancies (Akintade, Pengpid & Peltzer, 2011).

2. Methods

This descriptive, cross-sectional study was conducted in Guanajuato, Mexico. The study was reviewed and approved by the ethics committees of the Autonomous University of Nuevo León and the Health Secretariat of Guanajuato. Participants provided informed consent, participation was voluntary and confidentiality of their responses was assured.

2.1. Instrument adaptation process

Adaptation of the Spanish Version Contraceptive Self-efficacy Scale was carried out in four stages following the methodology proposed by Ramada-Rodilla, Serra-Pujadas, and Delclós-Clanchet (2013). This methodology includes the following stages: 1) initial review of the scale, 2) translation and re-translation of the scale, 3) pilot test and 4) validation of the scale. The first stage consisted of a thorough review of the original instrument with two bilingual experts concerning human sexuality. One of the experts knew the objectives of the present study and the other did not, in order to facilitate the understanding of each item, its purpose and its way of measuring the construct. In the second stage four bilingual experts, two native English-speaking experts from the United States and two native Spanish-speaking experts from Mexico, performed the translation and re-translation of the instrument, providing recommendations to improve the instrument and its understanding by potential participants. Modifications were made via comparisons of translations to prevent compromise of the semantics or original conceptualization of the scale.

In the third stage, the quality and applicability of the translation was assessed through a pilot study in a second level hospital in Mexico in areas such as the emergency waiting room, external consultation and postpartum rooms. The second level of medical care in Mexico includes the hospital configuration, but also offers FPM through an external consultation service. This sample consisted of 160 heterosexual men and women of reproductive age from 18 to 35 years of age, using systematic sampling, choosing the first participant in a random manner and from there every third potential participant that met the selection criteria. The age range was chosen based on reports of Mexico's highest fertility rates as reported by the National Health and Nutrition Survey of 2012 (ENSANUT, 2012).

Participants were approached in these areas by the principal investigator and were given a description of the purpose of the study and then asked for their verbal consent. Once potential participants were identified, they responded to the selection criteria and were asked to voluntarily sign a written informed consent. Regarding the selection criteria, potential participants were asked their age and gender. They were

Table 1
Sociodemographic characteristics.

Variable	Mín.	Máx.	M	SD
Age	18	35	27.73	5.354
Scholarship	1	12	5.73	3.580
Monthly income	0	$ 26,000	$ 6336.18	$ 6520.388
Relationship time	0	22	5.05	5.560
No. of children	0	4	1.29	1.102
No. sexual partners	1	10	2.19	1.730
			f	%
No. previous use of FPM.			82	51.3%
No. current use of FPM.			60	37.5%
No. intention to use FPM.			45	28.1%

Table 2
Principal components analysis.

	Inicial	Extracción
1. Me siento responsable de lo que pasa sexualmente con mi pareja…I am responsible for what happens sexually with my partner	1.000	0.670
2. No le puedo decir cómo me siento sexualmente… I can't tell how I feel sexually …	1.000	0.558
3. Cuando tengo relaciones sexuales (RS), las puedo disfrutar… When I have sexual relations, I can enjoy them …	1.000	0.753
4. Puedo decir fácilmente que No… I can easily say No …	1.000	0.732
5. Yo tampoco puedo hablar de las RS, que están pasando… I can't talk about sexual relations	1.000	0.670
6. Cuando pienso en el significado, no puedo tener RS… When I think of the meaning of sex, I cannot have sexual relations	1.000	0.685
7. Puedo para las RS fácilmente aunque estemos excitados… I can NOT have sexual relation even though we are very excited	1.000	0.758
8. Puedo tener RS incluso si no estuviéramos protegidos… I would have sexual relations even if we were not protected …	1.000	0.668
9. A veces solo hago lo que quiere sexualmente, porque yo no… Sometimes I just do what my partner wants, because I don't …	1.000	0.728
10. Pudiera decirle que quiero tener RS, con él/ella…I could tell a partner that I want to have sexual relations …	1.000	0.630
11. No podría continuar usando MPF, si mis padres pudieran enterarse…I wouldn't continue to use contraception if my parents might find out …	1.000	0.705
12. No podría ir a la farmacia y preguntar por algún MPF…I can't go to the pharmacy and ask about family planning methods …	1.000	0.764
13. Puedo preguntar si tiene protección o decirle que yo No…I can ask my partner about protection or say that I do not have it …	1.000	0.859
14. Me puedo dar tiempo para colocarme algún MPF…I can take the time to get a form of contraception	1.000	0.871
15. Le puedo decir con facilidad que estoy usando un MPFI can easily say that I am using contraception	1.000	0.838
16. Puedo parar antes de la penetración, sino puedo hablar de protección…I can stop before penetration and ask about using protection	1.000	0.773
17. Hay momentos en los que puedo hablar de MPF. pero no lo hago…There are times when I should talk about contraception but I don't	1.000	0.657
18. Termino teniendo relaciones porque no se como detenerlo(a).Sometimes end up having sex because can't stop it …	1.000	0.790