Predictors of (Di)Satisfaction in first heterosexual intercourse among Mexican adolescents. The role of own-approval of adolescents' sexual activity.

Introduction

Sexual satisfaction is a sexual right and a key component of a healthy and positive sexuality (Higgins et al, 2011; Sánchez-Fuentes, Santos-Iglesias, & Sierra, 2014). Sexual satisfaction is critical to the development of a life-long healthy sexuality, whose foundations are rooted in adolescence (Impett & Tolman, 2006; Auslander et al, 2007; Stortelder & Ploegmakers-Burg, 2008). The benefits of developing a healthy and satisfactory sexuality from the beginning include not only prevention of infections and unwanted pregnancies among adolescents, but also the possibility of enjoying gratifying physical and emotional experiences throughout their life (Smith & Shaffer, 2013; Higgins et al, 2011; Wight et al., 2008; Vanwesenbeeck, 2011; Moore & Davidson, 1997).

A satisfactory and positive sexual initiation provides young people with an important foundation upon which to develop a healthy and pleasurable sexual life, as well as meaningful relationships throughout their lifetime (Wight et al, 2008). To date, however, very few studies have examined adolescent sexual satisfaction and the factors that help to improve or decrease it. This vacuum might be attributed, at least partially, to the fact that a vast majority of research into adolescent sexuality has been carried out from a perspective of concern for the risks associated with the exercise of sexuality and its potential undesirable consequences, including adolescent pregnancy and sexually transmitted infections.

In general, data on adolescent sexual satisfaction in Mexico is extremely scarce. To the best of our knowledge, no research study has addressed sexual satisfaction at first sex as experienced by Mexican teenagers. In this study, we aim to expand the available data and information on adolescent sexuality by exploring their sexual satisfaction and the factors related to it, with particular interest in the role that self-approval of adolescent sexuality may play. Additionally, we

extend the literature by evaluating sexual satisfaction in a large sample of Mexican adolescents, population scarcely included in any similar research.

To that end, we set two specific objectives: to examine the level of sexual satisfaction with first sexual intercourse and to explore the associations between diverse individual and partner characteristics and adolescent's satisfaction (or dissatisfaction) with their first sexual experience.

Factors associated to Adolescent Sexual Satisfaction

Sexual satisfaction has been defined as one's subjective perception and evaluation of (physical, emotional, relational) aspects of one's sexual life, including the positive and negative dimensions associated with one's sexual relationships (Byers, Demmons, and Lawrance, 1998). Using simpler terms, Peter & Valkenburg (2009) explain adolescent sexual satisfaction relating to the degree of contentment that they find in their sexual life, which may or may not include coital experiences. In any case, it is important to understand that sexual satisfaction is a multidimensional construct that refers to physical, physiological, and emotional aspects.

In that sense, research studies carried out with adults and adolescents to date agree on the pertinence of adopting interpretative frameworks and ecological models that explore sexual satisfaction in a more comprehensive manner. The studies regard sexual satisfaction as a multidimensional process where individual, relational or partner-related, and contextual factors converge (Henderson et al, 2009).

In several countries, data available shows that levels of sexual satisfaction among adolescents and young people are usually rather high (Impett and Tolman, 2006; González-Serrano et al, 2013; Blunt-Vinti et al, 2016). In the United States, in Cincinnati, out of 613 young people aged 14-30, 85% reported feeling satisfied with their sexual relationships (Auslander et al, 2007). Regarding satisfaction with the first sexual intercourse, out of 3,186 university students aged between 18 and 25 in Texas and Wisconsin, 67% reported having had psychological satisfaction and 62%

physiological satisfaction (Higgins et al, 2010). In Spain, a sample of university students in Castilla-La Mancha showed that 81.7% of the men and 85.9% of the women felt satisfied with the quality of their sexual intercourse (Navarro-Bravo et al, 2010).

Yet, some authors have found significant differences in the levels of satisfaction at first sex between female and male adolescents, with women often reporting feeling less satisfied (Higgins et al, 2010; Darling et al, 1992; Smith & Shaffer, 2013). Other studies of adolescents in the United States, Canada, and the Netherlands have found, however, greater sexual satisfaction among women or no significant differences by sex (De Graff et al, 2012; Auslander et al, 2007; Byers et al, 1998). In a study carried out in Mexico City with a sample of 335 freshman and sophomore medical students aged 18-27, 78.5% said that they had an excellent or a good sexual life (González-Serrano et al, 2013).

Previous studies with adults in Finland and young people in the United States have produced further evidence about the relationship between age at sexual debut and sexual satisfaction. In Finland, greater (physical) satisfaction was associated with early sexual initiation (Haavio-Mannila & Kontula, 1997), whereas in the United States, several studies of adolescents found an association between greater satisfaction and late sexual debut (Higgins et al, 2010; Auslander et al, 2007; Sprecher et al, 1995; Else-Quest et al, 2005).

Moreover, earlier research has corroborated an elevated level of sexual satisfaction when adolescents engage in their first sexual intercourse by choice, whereas satisfaction is lower when the first sexual encounter results from partner pressure or external pressure (Higgins et al, 2011; Smith, 2007; Brunell & Webster, 2013). In addition, existing literature on the subject documents the importance of the kind of relationship one has with the intimate partner and the level of satisfaction with sexual intercourse. Evidence suggests that satisfaction is greater when the sexual relationship takes place with a steady partner (a boyfriend or a girlfriend) with whom there are emotional ties

and trust. This holds true for both sexes though it is more evident among women (Stephenson et al, 2011; Higgins et al, 2010; Auslander et al, 2007; Blunt-Vinti, 2016; Sprecher et al, 1995).

In addition, although limited, few research studies have examined together self-esteem and sexual satisfaction, and several studies among undergraduate students have showed that self-esteem is significantly and positively correlated with sexual satisfaction (Walker-Hill, 1998; Reaves & Pollack, 2015). Similar findings have been corroborated among married men and women (Abadjian-Mozian, 2005; Larson et al, 2008; Ménard & Offman, 2009).

As well, diverse authors have found a positive association between the use of contraceptive methods and sexual satisfaction among adolescents, which has been explained by the potential decrease of risks of becoming pregnant or acquiring infections (Auslander et al, 2007; Lameiras-Fernández et al, 2007). Evidence, however, has not been consistent because, although contraception contributes to a more pleasurable experience, it also increases anxiety (Sprecher et al, 1995; Higgins et al, 2010).

Previous research has verified also the existence of lower sexual satisfaction—as well as more sexual dysfunctions—among adults and adolescents that have been victims of sexual abuse during childhood (Loeb et al, 2002; Rellini y Meston, 2007; Davis & Petretic, 2000; Finkelhor et al, 1989). The consequences of child sexual abuse might extend for many years and affect not only sexual satisfaction, but also increase the likelihood of risky sexual behaviors and impact physiological and psychological aspects of sexual well-being (Bensley et al, 2000).

Lastly, previous studies among adult population in Spain and Chile have suggested a significant association between social class and sexual satisfaction: the higher the socioeconomic level, the higher the levels of satisfaction (Castellanos-Torres et al, 2013; Barrientos & Páez, 2006) but among young Norwegian adults such relationship was not validated (Pedersen & Blekesaune, 2003).

Besides the correlates of adolescent sexual satisfaction already explored in the existing literature, and briefly mentioned above, there is an additional element that we want to explore in this study. We consider that a relevant factor that enables adolescents enjoying their first sexual encounter is their own approval of adolescent sex, that is, how valid it is for them that adolescents engage in sexual relationships. Previous research has look at the roles played by parent's approval or peer's approval of sex and adolescent's sexual behavior, but adolescent's own approval of sex has been less explored and requires more attention (Meier, 2003).

For adolescents, their own approval or disapproval of sexual activity may be a deterrent or a catalyst for their sexual initiation. Besides influencing the age at first sexual intercourse, these attitudes may also affect the likelihood of feeling satisfaction during and after the sexual experience (Stephenson & Sullivan, 2009; DeLamater, 1981). In a context like Mexico, where a conservative and moralist view of sexuality prevails (Trueba, 2008) this aspect might be quite important. Nonetheless, we know very little, if not next to nothing, about the role that the own approval or validation by adolescents of their sexual activity plays in the satisfaction that they experience in the first sexual encounter, and we intend to fill this gap in this work.

Our hypothesis is that satisfaction at first sexual intercourse is, presumably, less frequent among youth who have traditional attitudes of censorship and rejection of adolescent sexuality, which hinder the likelihood of developing a fully satisfactory sexual life. Given the burden imposed by social norms on a sexuality that is different for men and women, we also anticipate that female adolescent are more likely to have attitudes of low own-approval of their sexuality than are men.

Data and Methods

a) Data

Data analysis is based on the Survey on Dating, Empowerment, and Sexual and Reproductive Health in Adolescent High School Students in Mexico (ENESSAEP 2014). Data was collected

among 13,427 male and female adolescent high school students, aged 15-20, in three states of Mexico: Morelos, Jalisco and Puebla. A previous study, based on diverse indicators of women's sexual and reproductive health, classifies Morelos as an entity with favorable situation, Jalisco as an entity in an unfavorable situation and Puebla in a very unfavorable situation (Villagómez et al, 2011).

School selection in each state was random and representative, and student selection in each school was random too. School officials authorized the survey and informed all students that their participation would be voluntary and strictly confidential.

For this analysis we only used the subsample of sexually initiated heterosexual teenagers (2457 males and 2047 females); the decision of only working with heterosexual individuals was based on the very small numbers of youth that identify themselves as having had same-sex intercourse.

b) Methods

First, we performed bivariate cross-sectional analysis. Percent distribution of sexual satisfaction was calculated and compared among female and males. Also, the distribution of various sociodemographic, relationship and individual characteristics by sex were explored, and bivariate regression models for each factor and sexual satisfaction were estimated (data not showed). Next, multivariate regression analysis was performed, given that the dependent variable (satisfaction with first sex) has three categories. Setting the intermediate category (pleasant) as the reference allow us to look for associations with a highly positive outcome (very pleasant first sex) as well as with a negative outcome (unpleasant/very unpleasant first sex).

Of particular interest in the present study was the individual variable of own-approval of adolescent sex, not previously analyzed in the existing literature. We introduced an index of approval of adolescent sexual activity as an independent variable, together with a set of socio-demographic, individual and relationship variables in the regression models. We used two multinomial regression models (one for each sex), where the dependent variable was level of satisfaction at sexual debut.

c) Measures

Our analysis included several variables at the individual, partner, and social context levels to account for the satisfaction of teenagers with their first sexual intercourse, which were chosen based on previous literature findings and the availability of these indicators in the used survey.

Sexual Satisfaction

Sexual satisfaction was measured with a single item in the survey: "How pleasant was your first sexual intercourse?", with four possible answers ranging from "very pleasant," to "very unpleasant." Given that only few respondents chose "unpleasant" or "very unpleasant", these two categories were combined into a single one.

Age at first sex

We included age at first sex as a continuous variable, using the answers to the question, "How old were you when you had your sexual intercourse with penetration, that is, coitus?"

Use of contraceptive at first sex

Use of contraceptives at sexual debut is a dichotomous variable, based on the answers (yes or no) to the question, "During your first sexual intercourse, did you or your partner use any method to avoid a pregnancy"?

Main motivations for first sex

Based on the question "Why did you have your first sexual intercourse?" we distinguish two main motives for first sex: by own will (when the answers were "out of curiosity," "because I wanted to," or "I was following my desire") or by fear or some sort of pressure ("my partner talked me into it," "my partner asked it as a proof of love," "because of pressure from my friends or relatives," "because I was forced to," or "because I was afraid of losing my partner if I didn't"). Each of these group of reasons was included as a dichotomous variable; the distinction between them is just for analytical purposes, but it seems evident to us that motivations for sex (or not) are basically multiple and diverse, and that apparently opposed reasons may intervene simultaneously (in fact, the correlation between these two indicators is r=-0.47).

Approval of adolescent sex

The Index of Approval of Adolescent Sex, is based on the answers to three survey statements: a) People my age should wait to be older before having sex; b) It's all right for gals (women) my age to have sex; and c) It's all right for guys (men) my age to have sex. Each of the three statements was evaluated on a 4-point scale ranging from completely agree to completely disagree. We calculated an additive index of own approval (or validation) of sexual relations among adolescents, with values standardized between zero and one, where values closer to 1 indicated greater acceptance of adolescent sex. The Cronbach's alpha for this measure was 0.85.

Self-Esteem

The Rosenberg Self-Esteem Scale was used as an indicator designed to measure self-acceptance and a basic feeling of self-worth (Rosenberg, 1965). Respondents evaluated ten items on 4-point scales ranging from "strongly agree" to "strongly disagree". This Index was also standardized, with values from zero to one, and larger values indicate higher self-esteem. The Cronbach's alpha for this measure was 0.78.

Previous sexual abuse

The indicator of previous sexual abuse is based on two questions: "Has anybody tried to force you to have sexual relationships?" and "How old were you when they tried to force you or they made you have sexual relations for the first time?" When the answer to the first question was "Yes" and

the respondent's age then was lower than the age reported for the first sexual intercourse, the value of the dichotomous indicator was 1 and 0 for any other case.

Partner at first sex

At the relational level, we included an indicator of the relationship that the respondent had with their first intimate partner using the question, "Who did you first have sexual relationships with?" The answers were regrouped into three categories: boyfriend or ex-boyfriend, friend or acquaintance, and others.

Time since first sexual intercourse

We incorporated a categorical variable for time elapsed since the first sexual intercourse; our hypothesis on this regard is that the longer the time since the sexual debut of the respondent, the more likely for the respondent to be able to express certain degree of dissatisfaction with it (if any), given that times increases the likelihood of not being involved any more with first sexual partner and the probability of having had more sexual partners. There are no background tests of this particular factor and its association with sexual satisfaction in the existing literature, and then the findings on this regard will represent the first evidence available.

Finally, at the family and contextual level, we included two indicators: whether the teenager lived with both parents (Yes or No) and the household socioeconomic stratum (Very low, Low, Middle, or High). The latter variable was obtained from combining an index of household assets (like refrigerator, microwave, computer, internet, and car, among others) and the educational level of the head of household; the four strata identified are determined by the quartiles of the indicator obtained. A third indicator about the federal entity of residence (Morelos, Jalisco or Puebla) was initially tested too, but because there were non-significant bivariate associations among the states and sexual satisfaction, this variable was removed from the analysis.

Results

Satisfaction with First Sexual Intercourse

Overall, most adolescents reported feeling satisfied in their first sexual intercourse, nonetheless the percentage of those who had a very pleasant first sex is significantly larger among male adolescents (see Table 1). This variable was highly biased in favor of the "very pleasant" and "pleasant" answers. Therefore, the percentage of adolescents reporting an "unpleasant" first sexual experience is in fact very low, especially among men (4.21%).

	Males	Females	Chi ²
	(n=2457)	(n=2047)	Signif.
Very Pleasant	58.40	42.26	
Pleasant	37.53	43.92	
Unpleasant/ Very Unpleasant	4.07	13.83	193.27
Total	100.00	100.00	0.0000

Table 1. Adolescent's Satisfaction with First Sexual Intercourse.

Souce : ENESSAEP 2014.

Descriptive Statistics for Independent Variables

The characteristics of the adolescents in the sub-sample analyzed, according to the study variables, are summarized in Table 2. In general, female adolescents first had sex at a somewhat later age than men did. Meanwhile males scored higher in the approval of adolescent index as well as in the self-esteem index than females, and these sex differences are significant.

In fact, there are significant differences by sex for most of the variables analyzed. For instance, the first sex partner was much more frequently a boyfriend or an ex-boyfriend for female adolescents than for males (92.35% vs. 65.34%). In addition, the experience of a previous sexual abuse was significantly more common in women than in men (8.78% vs. 2.72%) (see Table 2).

	Males (n=2457)	Females (n=2047)	t-test (sig)
CONTINUOUS VARIABLES			
Age at first sexual intercourse (mean)	14.89	15.65	0.000
Index of Approval of Adolescent Sex (mean)	0.68	0.62	0.000
Index of Self-Esteem (mean)	0.80	0.77	0.000
CATEGORICAL VARIABLES	Males	Females	Chi ² (sig)
Used some contraceptive at first sex			
No	32.22	28.35	
Yes	67.78	71.65	0.004
Partner at first sex			
Boyfriend/Girlfriend or Ex	65.34	92.35	
Friend or Acquaintance	30.53	6.99	
Other	4.13	0.66	0.000
First sex as a result of own will			
No	9.89	9.89	
Yes	90.11	90.18	ns
First sex as a result of other's pressures			
No	85.13	85.06	
Yes	14.87	14.94	ns
Previous sexual abuse			
No	97.28	91.22	
Yes	2.72	8.78	0.000
Lives with both parents			
No	35.84	42.37	
Yes	64.16	57.63	0.000
Socioeconomic stratus			
Very low	29.38	20.64	
Low	26.39	25.87	
Medium	25.77	30.29	
High	18.47	23.2	0.000
Time since first sex			
Less than 3 months	56.80	68.90	
From 3 months to 1 year	30.90	23.49	
More than 1 year	12.29	7.61	0.000

Table 2. Distribution (or mean) of independent variables

Source: ENESSAEP 2014. Author's calculations.

Factors Involved in Male Satisfaction/Dissatisfaction with First Sexual Intercourse

According to the results of the model for male adolescents (Table 3), several variables show significant associations with the likelihood of feeling satisfied or dissatisfied with the first sexual intercourse. In first place, the index of approval of adolescent sex effectively shows a significant association by multiplying the relative risk of a very pleasant first sex by 1.9 for each unit increment in this index.

Reference Category: Pleasant	Very Pleasant		Unpleasant/Very Unpleasant	
	RRR	Sig	RRR	Sig
Age at First Sexual Intercourse	0.9570	n.s.	1.1646	*
Used some contraceptive at first sex	1.0196	n.s.	0.7260	n.s.
Partner at first sex				
Boyfriend/Girlfriend or Ex	1.3738	**	0.5048	**
Friend or Acquaintance (ref)	1		1	
Other	0.6860	n.s.	1.1818	n.s.
First sex as a result of own will	0.8780	n.s.	0.3812	*
First sex as a result of other's pressures	1.4237	*	1.2173	n.s.
Index of Approval of Adolescent Sex	1.8977	**	0.3244	n.s.
Index of Self-esteem	4.7592	***	0.2376	n.s.
Previous sexual abuse	1.0283	n.s.	2.9298	*
Socioeconomic Stratus				
Very low (ref)	1		1	
Low	1.1631	n.s.	0.7241	n.s.
Medium	1.1035	n.s.	0.9157	n.s.
High	1.3955	*	0.8535	n.s.
Lives with both parents	1.2081	*	1.2063	n.s.
Time since first sex				
Less than 3 months	1.7529	* * *	1.3974	n.s.
From 3 months to 1 year (ref)	1		1	
More than 1 year	1.1467	n.s.	2.0703	*
N	2344	ļ		
Log likelihood	-1833.45	5		
Pseudo R ²	0.042	2		

Table 3. Factors associated to Satisfaction with First Sex. Males, Multinomial Regression Model.

Source: ENESSAEP 2014. Author's calculations.

*** p<0.001 ** p<0.01 * p<0.05

Also, self-esteem displays a quite large significant association with sexual satisfaction at first sex, increasing the likelihood of a very pleasant first experience 4.8 times by each unitary increase in the index of self-esteem.

In addition, some other factors appear significantly associated with increased relative risk of having had a very pleasant first sexual experience. Those are: having first sex with a girlfriend or exgirlfriend, living with both parents (rather than with none or only one), a medium or high socioeconomic stratum, less than three months' time since first sex and having and, curiously, having the first sex as a result of other's pressures.

On the other hand, several factors appear significantly associated with an increase in the probability of an unpleasant or very unpleasant first sexual intercourse among men. These factors are age, previous sexual abuse, and an elapsed time of more than a year since first sex. While having first sex with a girlfriend or ex-girlfriend and having first sex as a result of own will decrease the risk of an unpleasant or very unpleasant first sex.

Factors Involved in Female Satisfaction/Dissatisfaction with First Sexual Intercourse

The results show evidence of a positive association between the index of approval of adolescent sex and female adolescent's risk of having a very pleasant first sexual experience. Further, with each unit increment in this index, the probability practically doubled.

Furthermore, female adolescent's self –esteem shows a very strong association with first sex satisfaction, multiplying 3.8 times the relative risk of a very pleasant first sex by each unitary increase in this index.

Three other variables also indicated a positive association with the probability of having had a very pleasant first sexual intercourse: woman's age at sexual debut, having first sex with a boyfriend or ex-boyfriend, and less than three months' time since sexual debut.

Finally, several variables displayed significant associations with the relative risk of female adolescents having had an unpleasant or very unpleasant first sexual intercourse. As risk factors, that increase the likelihood of a first unpleasant experience appear if the female teenage had her sexual debut under pressure and a previous sexual abuse experience. Additionally, two other variables show significant protective roles, decreasing the relative risk of having had an unpleasant first sexual experience: if the respondent had first sex with a boyfriend or an ex-boyfriend and if she had her first sexual encounter by own will.

 Table 4. Factors associated to Satisfaction with First Sex. Females, Multinomial Regression Model.

Reference Category: Pleasant	Very Pleasant		Unpleasant/Very Unpleasant	
	RRR	Sig	RRR	Sig
Age at First Sexual Intercourse	1.0839	*	0.9083	n.s.
Used some contraceptive at first sex	1.0136	n.s.	0.9884	n.s.
Partner at first sex				
Boyfriend/Girlfriend or Ex	1.8302	**	0.3996	***
Friend or Acquaintance (ref)	1		1	
Other	1.6703	n.s.	0.8300	n.s.
First sex as a result of own will	0.9605	n.s.	0.3610	***
First sex as a result of other's pressures	0.9321	n.s.	2.8608	***
Index of Approval of Adolescent Sex	1.9187	*	1.7107	n.s.
Index of Self-esteem	3.7803	**	0.8287	n.s.
Previous sexual abuse	0.7749	n.s.	2.1613	***
Socioeconomic Stratus				
Very low (ref)	1		1	
Low	0.8371	n.s.	0.9006	n.s.
Medium	1.0803	n.s.	1.0754	n.s.
High	0.9157	n.s.	1.0710	n.s.
Lives with both parents	0.9040	n.s.	0.8557	n.s.
Time since first sex				
Less than 3 months	1.5186	***	1.0322	n.s.
From 3 months to 1 year (ref)	1		1	
More than 1 year	1.0019	n.s.	1.2022	n.s.
N	1956			
Log likelihood	-1816.14	1		
Pseudo R ²	0.0693	3		

Source: ENESSAEP 2014. Author's calculations.

*** p<0.001 ** p<0.01 * p<0.05

We found no evidence of significant associations between sexual satisfaction at first sex and use of contraception, socioeconomic stratus, and living with both parents in the sample of female adolescents.

Discussion

This may be the first quantitative study on adolescent sexual satisfaction in Mexico. Moreover, it is probably the first research looking at the association between adolescent's own-approval of sex and sexual satisfaction at first sex anywhere. The results are then relevant and novel.

A high percentage of Mexican adolescents regarded their first sexual experience as very pleasant. When we combined the percentages of pleasant and very pleasant experiences, nearly 96% of male adolescents and 86% of female adolescents reported having had a positive first sexual experience.

This positive assessment of first sex in general, and the fact that male adolescents are relatively more likely to report feeling very satisfied with their first sexual intercourse than females is consistent with some previous research in Mexico and elsewhere (González-Serrano, 2013; Moral de la Rubia, 2011; Higgins et al, 2010; Darling, 1992). Findings like these have been attributed to a double standard that operates in various dimensions of life and is particularly evident in sexuality (Crawford & Popp, 2003 cited by Vasilenko et al, 2011). This double standard encourages and celebrates acquisition of male sexual experience, while censoring and stigmatizing women engaging in sexual activity outside of marriage (Tolman, 2002; Crawford & Popp, 2003).

Among the respondents prevails a moderated attitude of self-approval of adolescent sex; in an index ranged 0 to 1, the mean value of approval of adolescent sex is 0.65, but the data shows that it is significantly higher among male than among female adolescents (0.68 vs 0.62). Such result is again consistent with previous findings in other countries on beliefs and attitudes of adolescents on sexual behavior reporting more sexually permissive beliefs among males (Petersen & Hyde, 2011; Zuo et

al, 2012). Our results represent the first evidence on that sense regarding Mexican adolescents. Furthermore, they suggest that these attitudes of own-approval of adolescent sexuality are associated to female and male adolescents' sexual satisfaction: for each unit increase in this index, both male and female were almost twice as likely to have had a very pleasant first sexual intercourse. The implications of this association are quite relevant and suggest that encouraging a positive view of adolescents with respect to their own sexuality and it's expressions, could be a strategy to develop a healthy and satisfying sexuality for them.

However, the validation of adolescent sex is, to an extent, the result of the influence of contextual social norms and the attitudes toward adolescent sexuality of people close to them, including their parents and friends, which young people consciously or unconsciously adopt or reinterpret (Davis & Friel, 2001; Somers & Paulson, 2000; Stephenson & Sullivan, 2009). Therefore, the task of developing a solid approval and validation of adolescent sexuality could not be successfully achieved in isolation from what today's adults recognize and believe.

A significant finding is the strong association found between adolescent's self-esteem and their probabilities of a highly satisfactory first sex. Among the variables included in the analysis self-esteem stands as the one with the largest impact on the relative probability of a very pleasant first intercourse for both sexes, although somewhat larger for males. This result corroborates previous research documenting positive associations between (sexual) self-esteem and sexual satisfaction (Ménard & Offman, 2009) and points out self-esteem as a pivotal element for a satisfactory adolescent sexuality.

The fact that an older age increases the probability of a very pleasant first sex for females, while the same characteristic increases male adolescent's likelihood of an unpleasant/very unpleasant first experience is likely a reflection of opposite social norms and of differentiated pressures over the sexuality of females and males (Higgins et al, 2011; Tolman, 2002; Vázquez, 2008; Szasz, 1998).

For both male and female teenagers, the results show evidence that having had a first partner with whom they had or had had emotional ties—as opposed to a friend or an acquaintance—significantly increased the likelihood of having experienced a very pleasant first sexual intercourse; this association seems slightly larger for female than for male adolescents. Complementary, the likelihood of having had an unpleasant or a very unpleasant first sexual experience decreased significantly, when the first intimate partner had been a boy/girlfriend or an ex-boy/girlfriend; this decrease was sharper among women.

Previous findings on more sexual satisfaction when sexual encounters involved a formal partner are overwhelmingly supported in the literature (Higgins et al, 2011; Auslander et al, 2007; Blunt-Vinti, 2016), pointing out the relevance of emotional ties and their relative stability in defining the first sexual experience as satisfactory. Further, it is also true that sexual intercourse—when regarded in the context of a relatively formal and stable relationship—helps to relax social censorship (or the fear thereof) of unmarried women, which may help them to have more enjoyable sexual experiences (Stern, 2007; O'Sullivan & Meyer-Bahlburg, 2003; Sprecher, 2002).

In general, the adolescents that had their first sexual intercourse by choice were less likely to report it as unpleasant; on the contrary, when the experience was the result of other's pressure, the risk of regarding it as unpleasant increased. Although we anticipated these results, the corroborating empirical evidence is relevant as well as the fact that these results only held true for the women, not for the men A plausible explanation of this gender difference resides in the meanings and feelings that could be associated to this experience, which at the end could be perceived more valuable by boys and more troubling or objectionable for girls.

In addition, our data illustrates the negative association of previous sexual abuse with satisfaction regarding first sexual intercourse. For both male and female adolescents, such experience significantly increases their likelihood of having had an unpleasant first sexual experience: it was twice as high among women and three times as high among men. While these results are consistent

with those found elsewhere (Loeb et al, 2002; Rellini & Meston, 2007), they constitute new empirical evidence in the case of Mexico. They also suggest the relevance of further research into the impacts of child sexual violence on the various dimensions of adolescent and adult sexuality and the well-being of the general population.

The use of a contraceptive during the first sexual intercourse did not have a significant association with the probability of the adolescents having had very pleasant first sex. This differs from the findings of other studies that have showed a positive association with condom use (Auslander, 2007) but it is in line with others that did not confirm that use of contraception played a significant role in general (Higgins et al, 2011). There might be some difference in the role that contraceptives in general and the condom in particular play on sexual satisfaction that should be explored in future studies.

The regression results also allowed confirming that when the time elapsed since first sexual intercourse was very short (less than 3 months), it was more likely to be regarded as very pleasant experience (with an 83% increase among men and a 46% increase among women) than when the time elapsed had been between 3 months and 1 year. A possible explanation for this could be that the probability that the relationship with the first intimate partner has ended or has deteriorated increases over time, which might lead to a less positive views on the first sexual experience (Blunt-Vinti et al, 2016).

Conclusions

Up to date very few studies have addressed sexual satisfaction among adolescents despite the wellknown relevance of this aspect on the development of a healthy and satisfactory adult sexuality (Tolman & McClelland, 2011, Auslander et al, 2007; Stortelder & Ploegmakers-Burg, 2008). The main contribution of this work was to provide new data on the relationship between ownapproval of adolescent sex and satisfaction at first sex, as reported by Mexican youth. The more the

adolescents approved of exercising their sexuality—an obviously complex aspect that is closely linked to prevailing norms in their immediate social context—, the more likely they were to have experienced a highly satisfactory first sex. This finding carries important implications for the future research agenda on the subject and for public policies designed and promoted in favor of a healthy and satisfactory adolescent sexuality.

It is fair, however, to mention some important limitations of this work. First, since we analyzed cross-sectional data, we are unable to establish relationships of causality between the study variables. Another very important limitation is that we studied sexual initiation limited to first coital intercourse, because the survey did not provide data on other sexual expressions as kissing, genital caressing, or oral sex—often foreplay for intercourse. Future surveys and research should provide a broader perspective of the first sexual encounters. A third limitation of our study is the use of the first coitus as an indicator of sexual debut, which restricted the scope of our work to heterosexual first sex.

Further, the indicator that we used for satisfaction in the first sexual intercourse is based on a single question that do not distinguish between emotional and physical satisfaction. Therefore, we are not able to differentiate between the two or identify and contrast the factors associated with each of them. Given that sexual satisfaction is a construct that is difficult to measure, future research might benefit from using rating scales as indicators to measure it and to distinguish between emotional and physical satisfaction in sexual encounters.

Despite these limitations, our results show significant elements that can support a satisfactory sexual life among adolescents; particularly securing the social recognition and validation of adolescent sexual activity as well as promoting self-esteem of children and youths will strongly facilitate the probability of sexual satisfactory experiences for adolescents, paving their possibilities of a healthy sexual life in the present and future.

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