#### **ORIGINAL PAPER**



# Perceived Consequences of First Intercourse Among Mexican Adolescents and Associated Psychosocial Variables

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#### **Abstract**

To expand our understanding of first sexual experiences among adolescents in Latin America, this study examined associations between several psychosocial correlates (gender, religiosity, age at first intercourse, and type of relationship with sexual partner, as well as benevolent and hostile sexism attitudes) and perceived consequences of first sexual intercourse in a sample of Mexican adolescents. Findings indicate that male participants and adolescents who had their first intercourse at older ages (16 or older) reported more positive consequences, whereas girls, and religious adolescents reported more negative consequences. When examining the link between sexist attitudes and perceived consequences by gender, findings may indicate that these attitudes were better predictors among male adolescents. Specifically, boys who endorsed more hostile sexism reported having felt rush, felt that they enhanced their reputation, and worried that their partner wanted more commitment. Moreover, boys who endorsed more benevolent sexism reported feeling cheered up, worried about pregnancy, and that their partner wanted more commitment. In contrast, benevolent sexism was associated with only one consequence (worry about pregnancy) among girls. This study expands our understanding of Mexican adolescent sexual experiences and the link between sexist attitudes and perceived consequences of first intercourse.

**Keywords** First intercourse · Consequences of sex · Mexican adolescents · Ambivalent sexism

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#### Introduction

During adolescence, individuals experience important physical and psychological changes. The decision to engage in sexual intercourse is one important aspect during this period (Iordanescu et al. 2015). Public health professionals and policy makers have attached considerable importance to first intercourse considering it a significant event in sexual development (Carpenter 2001). A positive first sexual experience is associated with subsequent physical and emotional satisfaction. In contrast, a negative first sexual experience may result in poor self-image and well-being (Lara and Abdo 2016). Despite extensive research examining adolescent sexual behavior and first sexual intercourse, we know little about how adolescents perceive their first sexual experience, especially in more traditional societies such as Mexico.

Adolescent sexual behavior, including the first sexual intercourse and its consequences, is influenced by the cultural context where individuals interact with others and develop (Uribe et al. 2008). It is important, therefore, to consider cultural contexts when studying adolescents' sexual debut (Udell et al. 2010) and its consequences. Empirical evidence indicates that both individual and sociocultural factors, as well as specific events, shape perceived positive and negative consequences of first sexual intercourse among adolescents living in North America and other parts of the world (Wight et al. 2008), but we do not have a good understanding of how these consequences are shaped in Mexican adolescents. Thus, we focused on understanding gender differences in positive and negative perceived consequences of first sexual intercourse, as well as, other individual (age at first intercourse), sociocultural (religiosity), and event-specific (type of relationship with sexual partner) differences in the prevalence of these consequences. Moreover, because adolescence may be an important time for the development of sexist attitudes, and previous studies have found a link between sexist attitudes and romantic relationships (Glick and Fiske 2001; Montañés et al. 2015), we examined how sexist attitudes influence on these perceived consequences.

# Gender Differences in Positive and Negative Perceived Consequences of First Sexual Intercourse

Gender differences in sexual behavior report, and sexual motives, are generally influenced by the different social roles prescribed to men and women (Lefkowitz and Vasilenko 2014). Traditional societies socialize individuals to endorse a sexual double standard where men and women follow different social norms or scripts in terms of sexual activity. Men are expected not only to sexually dominate women, but also to always desire and need to engage in sexual activity (Eaton and Matamala 2014). In contrast, women are expected to have low sexual desire; for them, sexual activity is closely tied to emotional intimacy (Dworkin and O'Sullivan 2007). Moreover, girls, compared to boys, are socialized to consider committed relationships as more important (Pedersen and Blekesaune 2003).



Studies conducted in different countries and age groups support these scripts. For instance, Romanian adolescents are socialized to believe that boys cannot control their sex drive but girls can (Iordanescu et al. 2015). Moreover, even in less traditional countries such as the U.S., women still perceive a double-standard with regards to the acceptability of permissive sexual behavior (Kreager et al. 2016). In contrast, men may be likely to over-report this kind of behavior. For instance, men who feel that they have less than the "typical" amount of sexual experience may feel that their status or masculine identity is threatened, and might be more likely to exaggerate their expertise (Dallos and Dallos 1997). Some researchers argue that heterosexual gender-role expectations for women and men are becoming more equal; however, in most societies, including Mexico, traditional gender values continue to shape sexual scripts expectations (Eaton and Rose 2011; Sánchez et al. 2012; Cubillas-Rodríguez et al. 2016).

Gender differences in first intercourse experiences are better explained when we can understand how men and women give meaning to these experiences (Tsui and Nicoladis 2004). A U.S. study among an ethnically diverse sample of college students indicated that more women than men reported psychological satisfaction (Higgins et al. 2010). In other U.S. and Canadian studies, boys, compared to girls, reported more pleasure and being more physically satisfied after their first intercourse (Higgins et al. 2010; Tsui and Nicoladis 2004). U.K. studies indicate that girls felt regret over the first intercourse more than boys did (Wellings et al. 2001); however, Canadian studies indicate men and women report similar low levels of regret (Tsui and Nicoladis 2004).

Motives for having sex also vary by gender (Morrison-Beedy et al. 2017), and follow gender norms. A qualitative Mexican study indicated that girls were more likely to consider love as a motive to have sex, whereas boys were more likely to consider biological needs, pleasure, and the need to have a direct experience with sex (Uribe et al. 2008). In line with the sexual double standard, the cited author concluded that men may view sexual debut as a behavior that is allowed, has social value, and may even be promoted by mass media. Moreover, among Mexican male adolescents, initiating sexual activity at an early age is considered a social norm and is seen as an achievement of acceptance; therefore, it is common that male adolescents imitate others who have already started their sexual life to be approved by their peers (Rivera and López 2017).

A recent quantitative study conducted with Mexican adolescents (Vasilenko et al. 2015) indicated that both boys and girls were likely to report mixed feelings about their first sexual intercourse. The most commonly reported positive perceived consequences were feeling physically satisfied, feeling intimate or closer to partner, and feeling better or cheered up. The most commonly reported negative perceived consequences were worry about pregnancy, sexually transmitted diseases and HIV. Researchers also reported some gender differences. Boys, compared to girls, were more likely to report sex had enhanced their reputation and to be worried that their partner wanted more commitment. Girls, compared to boys, were more likely to report that things moved too fast, that they experienced pain, were worried that their parents would find them out, and felt close to their partner.



Several studies conducted in North America and other parts of the world (Higgins et al. 2010; Wellings et al. 2001; Uribe et al. 2008) have consistently shown that girls report more negative consequences and boys more positive ones, which can be explained by the sexual double standard that adolescents learn through the sexual script.

## Other Factors Associated with Perceived Consequences of First Sexual Intercourse

Because adolescents identify themselves and the others socially and morally through sexuality (Plummer 1995), researchers have examined the impact of religiosity in adolescent sexuality, but findings are not consistent. Some authors have reported that being religious is associated with feeling more regret about the sexual experience (Wight et al. 2008), and with a later timing of first intercourse (Espinosa-Hernández et al. 2015; Rivera et al. 2016), while others have reported that religious affiliation is not associated with positive or negative perceived consequences of first intercourse (Vasilenko et al. 2015). Differences in findings may reflect differences in constructs measured.

An individual factor that may shape perceived consequences is age at first intercourse. A recent study showed that Mexican adolescents report an average age of 16 at first sexual intercourse (Rivera et al. 2016). Based on nationally representative samples, researchers have concluded that adolescents in Mexico are deciding to engage in sexual intercourse at earlier ages compared to older generations (Gutiérrez et al. 2016). Despite this decrease in age, Mexican adolescents who have sex at younger ages may still report more negative than positive consequences. In a U.K. study, it was shown that younger adolescents, compared to older adolescents, reported feeling more regret at first intercourse (Wight et al. 2008).

Adolescents may also report different consequences when experiencing first sexual intercourse depending on the type of partner relationship. Having sex with a boyfriend or girlfriend, as opposed to a casual partner, has been associated with lower levels of regret (Wight et al. 2008). In contrast, having sex with a casual partner has been related to negative experiences, and fewer positive perceived consequences (Vasilenko et al. 2015; Wight et al. 2008).

The Ecological Systems framework emphasizes the importance of understanding environmental influences of child development at different levels. These systems include a wide variety of setting, from microsystems or environments the child experiences on a daily basis, to the macrosystem, which includes the broader cultural context (Bronfenbrenner and Ceci 1994). Raffaelli et al. (2012) adapted this framework to emphasize the importance of individual (e.g., attitudes, gender), event-related (e.g., romantic involvement), and sociocultural (e.g., sources of sexual information and messages) factors in Latino adolescent sexuality. Thus, guided by empirical evidence (Vasilenko et al. 2015; Wight et al. 2008) and the Ecological systems framework (Bronfenbrenner and Ceci 1994; Raffaelli et al. 2012, we examined how factors representing different systems including religiosity, age at first intercourse, and relationship with sexual partner may be associated with positive and negative



perceived consequences of the first intercourse in Mexico, an understudied cultural context.

# **Sexism and Perceived Consequences of First Sexual Intercourse**

Sexism had typically been conceptualized as a reflection of hostility towards women. Contrary to this traditional view, Glick and Fiske (1996, 1997, 2001) developed a theory formulated as ambivalence towards women and includes both unfavorable and favorable beliefs about them. The Ambivalent Sexism theory postulates that sexism is composed of two dimensions, the "hostile sexism" (HS) and the "benevolent sexism" (BS). The HS expresses a negative evaluation of women and misogynistic attitudes; it encompasses feelings of hostile antipathy. The BS, although positive in tone, still deems women stereotypically and expects them to remain in restricted roles; it involves feelings of benevolent paternalism (e.g., women are delicate and need to be protected). Both types of sexism work together to maintain gender inequality.

Glick and Hilt (2000) posit that the initiation of heterosexual romantic relationships during adolescence represents an important period in the development of hostile and benevolent sexist attitudes. Because male dominance promotes HS and heterosexual romantic relationships promote BS (Glick and Fiske 2001), as boys develop through adolescence, HS will remain unchanged; BS, on the other hand, will increase as boys accommodate their attitudes to engage in heterosexual romantic relationships (Glick and Hilt 2000). In contrast, girls may be socialized to endorse benevolently sexist romantic ideals from an early age (Glick and Hilt 2000); in addition, BS may still increase when girls engage in a romantic relationship. Empirical evidence supports these claims. Spanish female and male adolescents reported higher levels of benevolent sexism when romantic relationships became more salient (Montañés et al. 2015). In another study also conducted in Spain, it was found that female and male adolescents prefer partners endorsing sexist beliefs. Young women who endorse both hostile and benevolent sexist beliefs may be seen as more attractive to young men, and in turn, young women prefer young men who endorse complementary BS, especially after their first experiences in romantic relationships (Montañés et al. 2013).

We do not know how these attitudes may be linked to perceived consequences of first sexual intercourse, but we deem these attitudes may shape what boys and girls learn and consider appropriate regarding sexuality in the context of romantic relationships. Therefore, we examined the associations between adolescents' ambivalent sexism (both hostile and benevolent) and positive and negative perceived consequences of their first intercourse.

In summary, the present study had three objectives. The first one was to examine gender differences in positive and negative perceived consequences of first sexual intercourse. The second was to examine how perceived consequences of first intercourse vary depending on religiosity, age at first intercourse, and type of relationship with sexual partner. The third objective was to examine associations between hostile and benevolent sexism and perceived consequences.



#### Method

# **Participants**

The sample was composed of students from a public, mixed-gender and non-religious high school in the city of Xalapa, Mexico (capital of the state of Veracruz), with a predominantly Catholic population. The school is in a neighborhood characterized by residents of middle and lower socioeconomic status.

The total number of students attending this high school was 396; 135 (34%) of them did not accept to participate (20% of the male and 14% of the female students) and 25 participated only in the pilot study. From the 236 who were included, 126 were later excluded because they reported they had not had vaginal sex yet, and six because they did not complete all the survey. Thus, there were 104 participants who constituted the sub-sample whose data were analyzed. In this sub-sample there were 55 male and 49 female students, with an average age of 17.05 years (SD=.89, range 15–19). Most participants declared themselves as Catholics (84%); their sociodemographic characteristics are shown in Table 1.

#### Measures

Participants were initially asked to give some general demographic information, including how religious did they consider themselves (Non-religious, a little religious, or very religious). They were also asked whether they had had vaginal sex, defined as "sex in which the penis penetrates the vagina". Students who reported they had had vaginal sex were asked their age at first intercourse, and if they were

**Table 1** Sample characteristics (n=104)

	n	Percent
Gender		
Men	55	53
Women	49	47
Religiosity		
Very religious	46	44
Non-religious or a little religious	58	56
Relationship status with sexual partner		
Romantic	73	70
Casual	31	30
Grade		
10th	15	14
11th	46	44
12th	43	41
Age at first intercourse		
12-15 years	54	52
16-18 years	50	48



in a romantic relationship with their first sexual partner (boyfriend or girlfriend) or their sexual debut was with a casual partner. Only this sexually active sub-sample completed the questionnaire about the perceived consequences of their first intercourse.

To measure perceived consequences of their first intercourse, participants answered a questionnaire developed by Vasilenko et al. (2012) (CFI), which has been used with Mexican adolescents before (Vasilenko et al. 2015). Students were asked to check "yes" or "no" to seven positive and twelve negative consequences of their first intercourse. The CFI had been translated into Spanish and adapted to Mexican population previously (Vasilenko et al. 2015). Its reliability in the current study was .84 using the split-half method (Guttman coefficient).

To measure ambivalent sexism we used the Spanish version of the Ambivalent Sexism Inventory (ASI) for Adolescents (de Lemus et al. 2008). It is a 20-item measure rated on a 6-point Likert-type scale (0=disagree strongly, 5=agree strongly), where higher scores represent greater sexist attitudes. The ASI is composed of two subscales: Hostile Sexism (e.g., "Boys should exert control over who their girlfriends interact with"), and Benevolent Sexism (e.g., "Girls should be cherished and protected by boys"). Cronbach's alpha in the current study was .86 for boys (.78 for HS and .78 for BS) and .80 for girls (.72 for HS and .74 for BS). Scores were normally distributed (as determined by the Kolmogorov–Smirnov test).

#### **Procedure**

The study was approved by the institutional review board of Universidad Veracruzana. An appointment was set up with the principal of the high school to explain the objective of the study. Once the principal approved the study, the conditions under which researchers could conduct the study were established. The project was explained to teachers, who asked all students if they wanted to be part of a research project about sexuality. Teachers stressed that participation was voluntary, that there would be no reprisals for not participating, that the results would be used exclusively for the research project, and that their information would remain anonymous. Participants were not compensated. Teachers sent parents whose children agreed to participate a document explaining the nature of the study and asking their consent for their children's participation. All parents gave their consent.

First, the survey was piloted with 25 students who were invited to discuss any aspect they considered difficult to understand, and we eliminated one CFI's item (i.e., "Worry that another partner could find out") that caused confusion. Then, two female researchers collected data at the high school between March and May 2017. When researchers arrived at the school, the students were in a designated classroom in which the survey would take place. To assure privacy, students were seated in a way they were unable to see each other's responses.

Participants were told they could withdraw from the study at any point if they decided not to complete the survey. They were also reminded that the information they were going to provide was anonymous and they were instructed not to put their names on the survey forms. The researchers explained how to complete the



questionnaires, and additional aid was provided if needed. The questionnaires were completed in 20 min approximately. After the data were analyzed, we returned to the school to give the directive board feedback concerning the main results of the study.

## **Plan of Analysis**

Each CFI's perceived consequence was coded with 1 (when the consequence was experienced) or 0 (not experienced). Then, both all positive and all negative consequences were added, and independent t tests were conducted to examine mean differences by the following variables: gender, religiosity (strongly vs. weakly or no religious), type of relationship with the sexual partner (romantic relationship vs. casual partner), and age at first intercourse (15 years or less vs. 16 years or more). We established this age cutoff because, in a previous study, Gayet and Gutiérrez (2014) reviewed several nationally representative samples, as well as the literature about the age of sexual debut in Mexico, and concluded that early sexual initiation is considered when the first intercourse occurs before age of 16. In all cases, the size effect was calculated using Cohen's d test.

In order to determine any association between each of the individual CFI's items and the same four variables described above, Fisher's exact tests and odd radios were conducted. Finally, logistic regression analyses were conducted to test whether hostile and benevolent sexism were associated with each of the perceived consequences of the first intercourse. In each analysis, we controlled for religiosity and age at first intercourse.

#### Results

### **Perceived Consequences of First Intercourse**

As it can be seen in Table 2, male students were more likely to report positive consequences, while females were more likely to report negative consequences. Regarding religiosity, participants who were strongly religious reported more negative consequences than their peers did, but there was not a significant difference when positive consequences were compared. Concerning age at first intercourse, the group of participants that had their first intercourse later was more likely to report positive consequences, but there was not a significant difference when negative consequences were compared. Finally, there were not significant differences when comparing both positive and negative consequences according to type of relationship with sexual partner.

Table 3 shows the associations between each of the CFI's items and the same four variables described above. Significant gender differences were found for eight CFI's items. There were more male students than female students who felt physically satisfied, who felt that sex had enhanced their reputation, who felt that they avoided annoying their partner, and who were worried that their partner wanted more commitment. On the other hand, there were more female students



**Table 2** Mean (and SD) of negative and positive perceived consequences of the first intercourse

	Negatives		Positives		
	M	SD	M	SD	
Gender					
Men	3.55	2.07	4.51	2.65	
Women	4.51	2.66	3.86	1.51	
	t = 2.08, $p = .04$ Cohen's $d = .40$		t=2.47, p=.01 Cohen's $d=.30$		
Religiosity					
Non-religious or a little religious	3.34	2.33	4.26	1.51	
Very religious	4.83	2.25	4.17	1.40	
	t = 3.27, p =	.01 Cohen's $d = .06$	n.s		
Age at first intercourse					
15 or less years	4.19	2.59	3.93	1.50	
16 or more years	3.80	2.18	4.54	1.34	
	n.s.		t=2.19, p=.03 Cohen's $d=.42$		
Relationship status with the partner					
Boyfriend/girlfriend	4.00	2.48	4.30	1.53	
Casual partner	4.00	2.25	4.03	1.25	
	n.s.		n.s.		

Results are presented by gender, religiosity, age at first intercourse, and type of relationship with the sexual partner

who experienced discomfort or pain, who were worried their parents may find them out, who felt they harmed their reputation, but also who felt more intimate to their partner.

When comparing the perceived consequences according to religiosity, there were significant differences on three CFI's items. Participants who were strongly religious were the most likely to be worried that their parents may find them out, to not enjoy the experience, and to feel they went against their morals or ethics.

Regarding the age at first intercourse, participants were divided into two groups: those who were 16 or more years old, and those who were 15 or less. The oldest students, compared with the youngest, were more likely to state that they felt better or cheered up, and also that they felt more attractive or better about themselves. On the contrary, the youngest participants were more likely to wish they had not had sex. There was not a significant difference when comparing male and female participants' age at first intercourse.

Concerning the type of relationship with sexual partner, 38.2% of the boys (n=21), and 20.5% of the girls (n=10) had their first intercourse with a casual partner (p=.04, OR=.69, CI=.49-.97). Comparing the consequences of the first intercourse depending on the type of relationship, there was only one significant



Table 3 Number and percentage of students reporting positive and negative perceived consequences of their first sexual intercourse

	n	%	n	%	p	OR	CI
	Gender						
	Men		Women				
Positive consequences							
Feel intimate to partner	34	62	40	82	.03	.555	.31–.99
Feel physically satisfied	51	93	36	77	.03	1.77	1.19-2.63
Feel you enhanced your reputation	16	29	3	6	.004	3.42	1.19–9.86
Feel you avoided annoying or angering your partner	32	58	15	31	.006	1.87	1.17-2.99
Negative consequences							
Experience any discomfort or pain	9	16	19	39	.01	.58	.3985
Worry your parents may find out	23	42	33	69	.01	.54	.3387
Feel you harmed your reputation	3	6	15	31	.001	.47	.3466
Worry your partner wants more commitment	20	36	8	16	.03	1.88	1.01–3.51
	Religiosit	y					
	Strongly		Non-religio weakly	ous or			
Negative consequences							
Worry your parents may find out	30	67	26	45	.03	.59	.3797
Not enjoy it	11	24	4	7	.02	.54	.3680
Feel you went against your morals or ethics	16	35	8	14	.01	.56	.37–.83
	Age at first intercourse						
	15 or less		16 or more				
Positive consequences							
Feel better or cheered up	37	69	44	88	.01	.48	.2398
Feel attractive or better about yourself	20	38	29	58	.04	.65	.4499
Negative consequences							
Wish you had not had sex	13	24	4	8	.03	2.22	.92-5.36
	Relationship with sexual partner						
	Romantic	:	Casual				
Positive consequences							
Feel intimate to partner	58	80	16	52	.008	2.31	1.31-4.06

Results are presented by gender, religiosity, age at first intercourse, and type of relationship with the sexual partner

Only significant data at p < .05 are presented

OR odds ratio

difference: those participants who were in romantic relationships with their sexual partners were more likely to feel more intimate to partner than were their peers whose partner was another person.



# **Ambivalent Sexism and Consequences of First Intercourse**

The score of HS for the full sample was M=2.84 SD=.89, and of BS was M=3.52 SD=.91. Boys were more likely than girls to report higher HS scores: M=3.12 SD=.92 and M=2.52 SD=.73 respectively (t=3.79, p<.0001; Cohen test=.72). There were not significant differences between the BS scores of boys and girls: M=3.62 SD=.96 and M=3.42 SD=.86 respectively.

Logistic regression analyses were conducted independently for male and for female students because previous studies have shown differences in ambivalent sexism between male and female respondents (Chrisler et al. 2013). Because there were too few participants whose first sexual partner was a casual partner, we did not carry out any statistical analysis with them.

#### Male Students

The highest scores of BS were associated with higher likelihood of having felt cheered up, worry about pregnancy, and worry that their partner wanted more commitment. Moreover, HS were associated with higher likelihood of having felt they enhanced their reputation, having felt rush, and being worried that their partner wanted more commitment. These results were significant above and beyond religiosity and age at first intercourse (Table 4).

**Table 4** Ambivalent sexism as predictor of positive and negative perceived consequences of first sexual intercourse in adolescents in a romantic relationship

	Gender					
	Male students		Femal	e students		
	Wald	OR (95% CI) <sup>a</sup>	Wald	OR (95% CI)a		
Benevolent sexism						
Feel better or cheered upb	4.27	7.82 (1.11–55.10)				
Worry about pregnancy <sup>c</sup>	5.07	5.47 (1.25-24.04)	5.82	7.70 (1.47–40.37)		
Worry your partner wants more commitment <sup>c</sup>	3.98	10.63 (1.04–108.41)				
Hostile sexism						
Feel you enhanced your reputation <sup>b</sup>	4.23	7.12 (1.10-46.25)				
Feel a thrill or rush <sup>b</sup>	3.80	15.11 (.99–231.59)				
Worry your partner wants more commitment <sup>c</sup>	3.96	21.26 (1.05–431.31)				

Only significant data at p < .05 are presented

<sup>&</sup>lt;sup>c</sup>Positive consequence



<sup>&</sup>lt;sup>a</sup>Odds ratio (95% confidence interval)

<sup>&</sup>lt;sup>b</sup>Negative consequence

#### **Female Students**

The highest scores of BS were associated with higher likelihood of worrying about pregnancy above and beyond religiosity and age at first intercourse (Table 4).

#### Discussion

This study examined positive and negative perceived consequences of first sexual intercourse among adolescents living in Mexico. The fact that 34% of the students who were invited to participate in the study did not accept may indicate that sexuality is still a taboo issue in our society. Guided by the Ecological Systems framework, emphasizing the importance of understanding sociocultural, individual, and event-related factors (Bronfenbrenner and Ceci 1994; Raffaelli et al. 2012), we examined how these consequences vary depending on gender, religiosity, age at first intercourse, and type of relationship with sexual partner. Moreover, we also examined associations between ambivalent sexism and perceived consequences in the context of gender and relationship status.

In line with previous international research (Higgins et al. 2010; Wellings et al. 2001; Uribe et al. 2008), more boys reported positive consequences, whereas more girls reported negative consequences. When focusing on specific items, we found some similarities but also some differences comparing our results with those of a previous study conducted in Mexico using the same consequences scale (Vasilenko et al. 2015). Differences across studies may reflect regional or age differences, given that Vasilenko and colleagues collected data in another city with a sample younger than the one used in this study. However, in general, both studies, along with other studies conducted in Mexico (Rivera and López 2017; Uribe et al. 2008) suggest that, at least in some ways, Mexican adolescents are still socialized to endorse a sexual double standard where men and women follow different social norms or scripts in terms of sexual activity.

Comparing specific items by gender, we found that more boys, compared to girls, felt that sex had enhanced their reputation after their first intercourse, which in a *machista* society could be interpreted as believing that having had their sexual debut, boys would reaffirm their virility. By contrast, girls, compared to boys, felt they harmed their reputation, which may also be a consequence of the construction of the gender role regarding sexuality that prevails in Mexico. It is common that Mexican women experience their sexuality with guilt (Espinosa-Hernández et al. 2016), which is consistent with another of our findings in the sense that there were more girls, compared to boys, who were worried that their parents may find out they had had their first intercourse.

Although boys reported more positive and less negative consequences than girls did, they were more worried that their partner wanted more commitment (negative consequence), whereas girls felt more intimate to partner (positive consequence). This finding is not surprising, because sexual activity is closely tied to emotional intimacy for women (Dworkin and O'Sullivan 2007) and women tend to consider love as an important motive to initiate their sexual life (Uribe et al. 2008).



The second objective of this study was to examine how consequences of first intercourse vary depending on religiosity, age at first intercourse, and type of relationship with sexual partner. We first focused on religiosity differences in consequences. In general, adolescents who were strongly religious reported more negative consequences than their peers did, but there was not a significant difference when positive consequences were compared. Our findings may further explain why previous studies have found that being religious is associated with feeling more regret about the sexual experience (Wight et al. 2008), and with a later timing of first intercourse (Espinosa-Hernández et al. 2015; Rivera et al. 2016). Specifically, we found that highly religious adolescents reported that sexual activity was against their morals or ethics, that they were worried their parents may find them out, and that they did not enjoy the experience. Another study conducted in Mexico did not find religious affiliation differences for negative consequences of first intercourse (Vasilenko et al. 2015), which may indicate that our religiosity measure was better at capturing differences across students.

Concerning differences in perceived consequences by age at first intercourse, our findings indicate that adolescents who had their first intercourse at older ages (16 or older) were more likely to report positive consequences. In line with studies conducted in the U.S. indicating that adolescents who engage in intercourse late compared to their peers report less risk behavior (Zimmer-Gembeck and Helfand 2008), Mexican adolescents who have sex around the average age (16 or older; Rivera et al. 2016) may perceive this experience as normative and, therefore, report more positive consequences. Similar to studies conducted in the U.K. (Wight et al. 2008), the youngest participants reported wishing they had not had sex.

Few differences emerged when examining perceived consequences by type of sexual partner. Previous studies have found that having sex with a casual partner was associated with more negative experiences and fewer positive consequences (Vasilenko et al. 2015; Wight et al. 2008). In this study, we only found one difference: adolescents in a romantic relationship with their sexual partner were more likely to feel intimate to their partner than were those in a relationship with a non-romantic partner. Adolescents in romantic relationships may be more likely to associate feelings of emotional intimacy with sexual intercourse.

The third objective was to examine how hostile and benevolent sexism influence on positive and negative perceived consequences. When examining BS -which considers women in somewhat stereotypical ways but is positive in tone (Glick and Fiske 1996), there was a link between sexism and perceived consequences of first intercourse among boys in a romantic relationship with their sexual partner. It is not surprising due to the fact that previous studies indicate that BS is linked to romantic relationship experience among both boys and girls (de Lemus et al. 2010; Montañés et al. 2015). Findings among girls in a romantic relationship with their sexual partner showed that BS was associated with more likelihood of being worried about pregnancy. In male students, BS was associated with positive consequences such as having felt cheered up, but also negative ones such as worry about pregnancy and worry that the sexual partner wanted more commitment. Adolescents who endorse BS may still expect women to remain in restricted roles and to be protected and cared by men, which could explain, at



least in part, that a boy with high levels of benevolent sexist attitudes worries about his partner wants more commitment. In accordance with benevolent sexist attitudes, if a girl would get pregnant, she should be protected by her partner even if he were too young to take care of a baby and of a young mother, which could explain the worried about pregnancy.

We also examined HS, which encompasses a negative evaluation of women and misogynistic attitudes (Glick and Fiske 1996), but there were significant results only in male participants. HS predicted worry that the sexual partner wanted more commitment, but also having felt they enhanced their reputation and having felt rush. These findings may be explained by previous studies indicating that, in Mexico, men's sexual debut is viewed as an experience with social value, and therefore it may be promoted by male peers as a way to be accepted in the peer group (Uribe et al. 2008, Rivera and López 2017).

Some limitations of the present study should be taken into consideration. First, this study is cross-sectional, so causality in the links examined cannot be established. Second, this study was conducted in only one high school; future studies should examine predictors of sexual consequences longitudinally in a more representative sample. Moreover, students were living in an urban area, representing a particular segment of Mexican society, which may reflect selection bias and thus reduce generalizability. People who live in rural areas may have different practices in several issues related to reproductive health (Guarneros 2011). Third, since only participants who had had first intercourse with an opposite-sex partner were included, it is important that future studies include a comparative group of adolescents who have had first intercourse with a same-sex partner. Fourth, we examined the link between sexism attitudes and consequences separate by gender, and it was not possible to analyze this association among students who were not in romantic relationships. It would be important to examine both gender and sexual partner characteristics as moderators in future studies with a larger sample. Finally, it is important that in future studies gender role attitudes are also explored, to be able to have a better understanding of reasons why sexist attitudes are associated with consequences of first intercourse.

Despite such limitations, guided by the Ecological systems framework (Bronfenbrenner and Ceci 1994; Raffaelli et al. 2012), this study examined some sociocultural, individual, and event -related factors related to Mexican adolescents' consequences of first sexual intercourse, and emphasizes the importance of assessing environmental factors at different levels. Our findings indicate that individual and sociocultural factors such as gender, religiosity, and BS and HS attitudes may play an important role in adolescents' understanding of their sexual experiences. Moreover, we examined these links in Mexico, an understudied cultural context where Latinos are the ethnic majority, and therefore constantly exposed to sexual double standard messages from the Mexican society, including the Catholic Church. Furthermore, as far as we know, this is the first study identifying a link between sexism attitudes and sexual consequences. Overall findings highlight the need to take into account the cultural context to design effective programs about sexual health directed to adolescents.



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## **Compliance with Ethical Standards**

**Conflict of interest** The authors declare they have no conflict of interest.

**Human and Animal Rights** All procedures performed in this study were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments.

**Informed Consent** Informed consent was obtained from all participants included in the study and from their parents.

#### References

- Bronfenbrenner, U., & Ceci, S. J. (1994). Nature–nurture reconceptualized in developmental perspective: A bioecological model. *Psychological Review*, 101(4), 568–586.
- Carpenter, L. M. (2001). The ambiguity of "having sex": The subjective experience of virginity loss in the United States. *Journal of Sex Research*, 38(2), 127–139.
- Chrisler, J. C., Gorman, J. A., Marván, M. L., & Johnston-Robledo, I. (2013). Ambivalent sexism and attitudes toward women in different stages of reproductive life: A semantic, cross-cultural approach. *Health Care for Women International*, 35(6), 634–657.
- Cubillas-Rodríguez, M. J., Valdez, A. E., Domínguez-Ibáñez, S. E., Román, Pérez R., Hernández, Montaño A., & Zapata-Salazar, J. (2016). Creencias sobre estereotipos de género de jóvenes universitarios del norte de México. *Diversitas: Perspectivas en Psicología*, 12(2), 217–230.
- Dallos, S., & Dallos, R. (1997). Couples, sex and power: The politics of desire. Philadelphia: Open University Press.
- de Lemus, S., Castillo, M., Moya, M., Padilla, J. L., & Ryan, E. (2008). Elaboración y validación del Inventario de Sexismo Ambivalente para adolescentes. *International Journal of Clinical and Health Psychology*, 8(2), 537–562.
- de Lemus, S., Moya, M., & Glick, P. (2010). When contact correlates with prejudice: Adolescents' romantic relationship experience predicts greater benevolent sexism in boys and hostile sexism in girls. *Sex Roles*, 63(3–4), 214–225.
- Dworkin, S. L., & O'Sullivan, L. F. (2007). "It's less work for us and it shows us she has good taste": Masculinity, sexual initiation, and contemporary sexual scripts. In M. Kimmel (Ed.), *The sexual self* (pp. 105–121). Nashville, TN: Vanderbilt University Press.
- Eaton, A. A., & Matamala, A. (2014). The relationship between heteronormative beliefs and verbal sexual coercion in college students. *Archives of Sexual Behavior*, 43(7), 1443–1457.
- Eaton, A. A., & Rose, S. (2011). Has dating become more egalitarian? A 35-year review using sex roles. Sex Roles, 64(11–12), 843–862.
- Espinosa-Hernández, G., Bissell-Havran, J., & Nunn, A. (2015). The role of religiousness and gender in sexuality among Mexican adolescents. *The Journal of Sex Research*, 52(8), 887–897.
- Espinosa-Hernández, G., Vasilenko, S. A., & Bámaca-Colbert, M. Y. (2016). Sexual behaviors in Mexico: The role of values and gender across adolescence. *Journal of Research on Adolescence*, 26(3), 603–609
- Gayet, C., & Gutiérrez, J. P. (2014). Calendario de inicio sexual en México. Comparación entre encuestas nacionales y tendencias en el tiempo. Salud Publica de México, 56, 638–647.
- Glick, P., & Fiske, S. T. (1996). The Ambivalent Sexism Inventory: Differentiating Hostile and Benevolent Sexism. *Journal of Personality and Social Psychology*, 70, 491–512.
- Glick, P., & Fiske, S. T. (1997). Hostile and benevolent sexism: Measuring ambivalent sexist attitudes toward women. *Psychology of Women Quarterly*, 21, 119–135.
- Glick, P., & Fiske, S. T. (2001). An ambivalent alliance: Hostile and benevolent sexism as complementary justifications for gender inequality. *American Psychologist*, 56(2), 109.



- Glick, P., & Hilt, L. (2000). From combative children to ambivalent adults: The development of gender prejudice. In T. Eckes & M. Trautner (Eds.), *Developmental social psychology of gender* (pp. 243–272). Mahwah: Erlbaum.
- Guarneros, N. (2011). *Prácticas en salud reproductiva: Estudio en una comunidad indígena* [Practices in reproductive health: A study in an indigenous community]. Doctoral Thesis, Universidad Autónoma del Estado de Morelos.
- Gutiérrez, J. P., García-Saisó, S., Espinosa-de la Peña, R., & Balandrán, D. A. (2016). Desigualdad en indicadores de comportamientos de riesgo en adolescentes en México: Análisis de dos encuestas de salud. Salud Publica México, 58, 657–665.
- Higgins, J. A., Trussell, J., Moore, N. B., & Davidson, J. K. (2010). Virginity lost, satisfaction gained? Physiological and psychological sexual satisfaction at heterosexual debut. *Journal of Sex Research*, 47(4), 384–394.
- Iordanescu, E., Iordanescu, C., & Draghici, A. (2015). Time and gender influence in sexual behavior of Romanian adolescents. *Procedia-Social and Behavioral Sciences*, 187, 757–761.
- Kreager, D. A., Staff, J., Gauthier, R., Lefkowitz, E. S., & Feinberg, M. E. (2016). The double standard at sexual debut: Gender, sexual behavior and adolescent peer acceptance. Sex Roles, 75(7–8), 377–392.
- Lara, L. A., & Abdo, C. H. (2016). Age at time of initial sexual intercourse and health of adolescent girls. *Journal of Pediatric and Adolescent Gynecology*, 29(5), 417–423.
- Lefkowitz, E. S., & Vasilenko, S. A. (2014). Healthy sex and sexual health: New directions for studying outcomes of sexual health. New Directions for Child and Adolescent Development, 144, 87–98.
- Montañés, P., Lemus, S. D., Moya, M., Bohner, G., & Megías, J. L. (2013). How attractive are sexist intimates to adolescents? The influence of sexist beliefs and relationship experience. *Psychology of Women Quarterly*, 37(4), 494–506.
- Montañés, P., Megías, J. L., De Lemus, S., & Moya, M. (2015). Influence of early romantic relationships on adolescents' sexism/Sexismo en la adolescencia: influencia de las primeras relaciones de pareja. *Revista de Psicología Social*, 30(2), 219–240.
- Morrison-Beedy, D., Grove, L., Ji, M., & Baker, E. (2017). Understanding the "why" for high-risk behavior: Adolescent girls' motivations for sex. *Journal of the Association of Nurses in AIDS Care*, 28(6), 877–887.
- Pedersen, W., & Blekesaune, M. (2003). Sexual satisfaction in young adulthood: Cohabitation, committed dating or unattached life? *Acta Sociologica*, 46(3), 179–193.
- Plummer, K. (1995). Telling sexual stories: Power, change and social worlds. London: Routledge.
- Raffaelli, M., Kang, H., & Guarini, T. (2012). Exploring the immigrant paradox in adolescent sexuality: An ecological perspective. In C. Garcia Coll & A. Marks (Eds.), *Is becoming an American a developmental risk?* (pp. 109–134). Washington, DC: APA.
- Rivera, L., Leyva-López, A., García-Guerra, A., de Castro, F., González-Hernández, D., & de los Santos, L. M. (2016). Inicio de relaciones sexuales con penetración y factores asociados en chicos y chicas de México de 14–19 años de edad con escolarización en centros públicos. *Gaceta Sanitaria*, 30(1), 24–30.
- Rivera, D. G., & López, E. L. (2017). La Influencia de los Pares y la Familia en el Inicio de la Actividad Sexual en Adolescentes. *Augusto Guzzo Revista Acadêmica*, 1(19), 39–53.
- Sánchez, D. T., Phelan, J. E., Moss-Racusin, C. A., & Good, J. J. (2012). The gender role motivation model of women's sexually submissive behavior and satisfaction in heterosexual couples. *Personality and Social Psychology Bulletin*, 38(4), 528–539.
- Tsui, L., & Nicoladis, E. (2004). Losing it: Similarities and differences in first intercourse experiences of men and women. The Canadian Journal of Human Sexuality, 13(2), 95–106.
- Udell, W., Sandfort, T., Reitz, E., Bos, H., & Dekovic, M. (2010). The relationship between early sexual debut and psychosocial outcomes: A longitudinal study of Dutch adolescents. *Archives of Sexual Behavior*, 39(5), 1133–1145.
- Uribe, J., Covarrubias, K., & Andrade, P. (2008). La cultura sexual de los adolescentes colimenses. Aspectos característicos de la cultura local. Estudios sobre las Culturas Contemporáneas, 28, 62–95.
- Vasilenko, S., Espinosa- Hernández, G., & Halgunseth, L. (2015). Positive and negative perceived consequences of first intercourse among middle and high school students in Puebla, México. Culture, Health & Sexuality, 18(5), 582–596.
- Vasilenko, S. A., Lefkowitz, E. S., & Maggs, J. L. (2012). Short-term positive and negative consequences of sex based on daily reports among college students. *Journal of Sex Research*, 49(6), 558–569.



Wellings, K., Nanchahal, K., Macdowall, W., McManus, S., Erens, B., Mercer, C. H., et al. (2001). Sexual behaviour in Britain: Early heterosexual experience. *The Lancet*, 358(9296), 1843–1850.

- Wight, D., Parkes, A., Allen, E., Bonell, C., & Henderson, M. (2008). The quality of young people's heterosexual relationships: A longitudinal analysis of characteristics shaping subjective experience. *Perspectives on Sexual and Reproductive Health*, 40(4), 226–237.
- Zimmer-Gembeck, M. J., & Helfand, M. (2008). Ten years of longitudinal research on U.S. adolescent sexual behavior: Developmental correlates of sexual intercourse, and the importance of age, gender and ethnic background. *Developmental Review*, 28, 153–224. https://doi.org/10.1016/j.dr.2007.06.001.

