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## INVESTIGACIÓN/RESEARCH

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### SEXUAL, EMOTIONAL AND PHYSICAL VARIABLES ASSOCIATED WITH SEXUAL RESPONSE IN WOMEN

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#### ABSTRACT

The aim of this study was to determine the sociodemographic, physical and emotional variables related to sexual satisfaction. Data were collected from women from October 2014 to April 2015. Participants included 300 women aged 18-50 years who live in Xalapa, Veracruz, Mexico, who filled out an online questionnaire, the Index of Sexual Satisfaction was calculated and evaluated. The statistic analysis to find the relationship among variables was performed using a Chi-square test. The results show that 59.3% of women are sexually satisfied and 40.6% are not sexually satisfied. The relationship of variables between sexual satisfaction and demographic variables (marital status) physical variables (presence and frequency of different types of orgasms) and emotional variables (type of sexual activity and prejudice about sex) was determined. This study provides important data regarding satisfaction and sexual desire of women in Xalapa, Mexico.

#### KEYWORDS:

Sexual Satisfaction - Sexual Desire - Orgasm - Prejudice

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# VARIABLES SEXUALES, EMOCIONALES Y FÍSICAS ASOCIADAS A LA RESPUESTA SEXUAL EN MUJERES

## RESUMEN

El objetivo de este estudio fue determinar la relación de variables sociodemográficas, físicas y emocionales con la satisfacción sexual. Los datos fueron recabados de octubre de 2014 a abril de 2015. La muestra fue de 300 mujeres de 18 a 50 años que vivieran en la comunidad de Xalapa, Veracruz, México y respondieran un cuestionario en línea y al Índice de Satisfacción Sexual. El análisis estadístico para encontrar la relación entre variables se realizó mediante la prueba estadística de independencia chi-cuadrada de Pearson. Los resultados muestran que el 59.3 % de las mujeres se encuentra sexualmente satisfechas y el 40.6 % no satisfechas. Se determinó la asociación de variables entre la satisfacción sexual y variables sociodemográficas (estado civil) variables físicas (presencia y frecuencia de diferentes tipos de orgasmos) y variables emocionales (tipo de actividad sexual y prejuicio ante el sexo). El presente trabajo aporta datos relevantes en relación a la satisfacción y el deseo sexual de mujeres de Xalapa, Ver., México

## PALABRAS CLAVE

Satisfacción Sexual - Deseo Sexual - Orgasmo - Prejuicio

## 1. INTRODUCTION

There are few studies about the sociocultural mechanisms underlying desire and sexual satisfaction. The women from Veracruz are at high risk for the association of negative factors to sexuality such as teenage pregnancy, cervical cancer, plus a high incidence of sexual and emotional abuse.

Sexuality should be considered in a multidimensional way, considering biological, psychological, social and neurobiological sex factors. In various animal species, sexual behavior patterns are fully defined and determined by physiological processes, for example, males of many species are always ready to mate, while females depend largely on hormonal cycles that can last days or months, this makes sexual behavior in nonhuman animals to be often intended for reproduction. Human sexuality refers to a dimension that is present in all human beings and includes various contexts such as sex, gender, sex and gender identity, sexual orientation, eroticism, training, strengthening and keeping emotional attachment, love, procreation. The expression or sexuality can be expressed in beliefs, attitudes, activities, practices, values, roles, fantasies, ways of thinking and it will be determined by the interaction of cultural, ethical, religious, neurobiological, psychological, genetic and socioeconomic factors. Although sexuality encompasses all aspects mentioned above, it is not necessary for all dimensions to be present in each individual and their development will depends on the fundamental satisfaction of everyone.

Sexual satisfaction is defined as: "An emotional response that arises from the evaluation of the positive and negative aspects related to sexual intercourse itself." It has been associated with several variables such as life satisfaction in general and

satisfaction with interpersonal relations, the state of psychological wellbeing, physical health, level of education, sexual assertiveness, openness to different sexual experiences as well as considering sexuality as an important aspect of life. On the other hand, there are also negative associations between sexual satisfaction and emotional disorders such as social anxiety, depression and alexithymia. Religion is an ideological and cultural aspect very important in Mexico, different studies associate high-religiosity features with high sexual inhibition, so the high prevalence of religious practices is associated with a greater number of feelings of guilt and shame for sexual behavior.

Due to lack of understanding of human sexual response, there was a need to systematize and model the different phases that underlie sexual response, within these phases are orgasm, which consists of an initial spasm followed by a series of rhythmic muscle contractions in the orgasmic platform. Orgasm arises, with a sense of momentary suspension, followed by an intense feeling in the clitoris, extending throughout the pelvis. This phase varies in intensity and can entail liquid emission. Finally, it ends with characteristic sensations of palpitations in the pelvis. Various (physical, genetic and emotional) factors influence orgasmic capacity and sexual satisfaction. Orgasm, however, remains the most easily quantifiable index of satisfaction during sex. All people are able to have an orgasm, although many achieve it on a recurring basis and other women never. Studies in the United States indicate that from 4 to 10% of women have never had an orgasm, other studies indicate that women are orgasmic from 40 to 80% of the time regardless of the method of stimulation.

As mentioned above, there are several aspects that can affect sexual behavior in women; within them we can consider that the culture in which we develop can dictate positions in favor or against sexuality within the psychological constructs related to these stances we can find erotophilia (readiness to respond positively to sexual stimuli) and erotophobia (avoidance of sexual stimuli and negative response to them). There are studies showing that women who have negative attitudes toward sexuality are more liable not to take precaution to use condoms, which would be related to a higher prevalence of unwanted pregnancy and transmission of diseases.

Overall, these variables have shown to influence sexual satisfaction so this study considered the following variables that could influence 1) sociodemographic characteristics, 2) sexual activity, 3) ideas about sex (prejudice) 4) orgasm.

Based on the above, the hypothesis of this study was as follows, sociodemographic factors contribute to satisfaction and sexual desire in women in the community of Xalapa. The overall objective was to determine the relationship of sexuality-biased sociodemographic variables, sexual activity and presence and frequency of different types of orgasm, all the above related to sexual satisfaction, to achieve this it was necessary to identify the sociodemographic conditions of adult women living in the community of Xalapa, Veracruz, Mexico, in addition to determining sexual satisfaction by the Sexual Satisfaction Index.

## 2. METHODOLOGY

We used a sample of 300 voluntary female participants aged 18-50 years and meeting the following inclusion criteria: being a woman, currently living in the community of Xalapa, accepting informed consent, concluding and completing the online questionnaire, having had previous sexual intercourse, the exclusion criteria for participants were: not having internet access, being underage, never having sex, not having accepted informed consent and not having the necessary score on the instrument of sincerity.

### *Instruments*

Informed consent that explains what the research study is about and the purposes for which the collected data are used, emphasizing that the survey does not disclose any personal data.

Sociodemographic questionnaire containing data on sociodemographic background, sexual response, sexual desire and activation, the qualities of orgasm, emotions linked to sexuality.

Sincerity questionnaire. The sincerity subscale of the research personality questionnaire (CIP) of Escotet was used. This questionnaire consists of 20 items assessing degree of sincerity with which each of the questions was answered. Each item was assigned one point, with zero and affirmative answer to those items with a negative answer. In order to validate this study, it was necessary to reverse the values of items 9, 15 and 19, this means that if the respondent answered yes to any of the above items, their value will be zero and vice versa. This assessment has proved to be reliable. Scores can range from 0 to 20, the higher the values, the greater the reliability of the completed questionnaire. Less than 12 measured values should be ruled out since they fail to meet the minimum score to be considered reliable (not sincere).

Sexual satisfaction Index. The Spanish version published in Crooks and Baur (2000) was used. This questionnaire is designed to measure the degree of satisfaction you have in the sexual intercourse with your partner. The sexual satisfaction index has 25 items that can be classified from 1 to 5, with 1 being (rarely or never), 2 (rarely), 3 (sometimes), 4 (most of the time) and 5 (always or all the time). Items 1, 2, 3, 9, 10, 12, 16, 17, 19, 21, 22 and 23 must be qualified in reverse. After these positive items have been classified in reverse, if there are no skipped answers, the score is obtained by adding the individual rating of each item and subtracting 25. This evaluation has shown to be valid and reliable. Scores can range from 0 to 100; the highest score indicates greater sexual dissatisfaction. A score of 30 or more is indicative of personal dissatisfaction in sexual intercourse.

### *Procedure*

A descriptive correlational cross-sectional study was performed. The questionnaire was applied in October 2014 through April 2015 and was created by applying online Google Forms (Google Inc), and was released with some targeting criteria (being a woman, living in Xalapa, being over 18 years old) by a page posted in Facebook social network (Facebook © 2015) in addition to mass distribution of printed cards. All participants filled out the questionnaire online, prior to the questionnaire,

participants had to read and agree to an informed consent in which the participant had to indicate whether she wanted or not to answer after knowing the purpose of the piece of research and the content of the questionnaire, at no time identifying data were requested during the implementation of the instruments. Data were handled with strict confidentiality and adherence to the ethical standards of the Federal Law on Protection of Personal Data Held by Private Parties D.O.F. as of July 5, 2010 and the Regulation of the Federal Law on Protection of Personal Data Held by Private Parties. D.O.F. as of December 21, 2011.

### Results

The summary of the responses is presented in Table 1.

	No.	%		No.	%		No.	%
<b>AGE</b>			<b>SEXUAL CULTURE</b>			<b>HOW OFTEN DO YOU DRINK ALCOHOL?</b>		
15 to 18	1	0%	Heterosexual	248	82%	Never	63	21%
18 to 25	136	45%	Bisexual	25	8%	Less than 1 time x week	204	68%
26 to 30	55	18%	Gay / Lesbian	9	3%	1-2 days / week	28	9%
31 to 35	57	19%	Transgender	0	0%	3-4 days / week	7	2%
36 to 40	30	10%	polyamorous	4	1%	<b>HOW OFTEN CONSUME MARIJUANA?</b>		
41 to 45	23	8%	Asexual	1	0%	Never	238	87%
46 to 50	3	1%	I do not answer	17	6%	Once / month	27	10%
<b>RELIGION</b>			<b>BASICALLY, THROUGH MEANS WHAT YOUR SEXUAL EDUCATION RECEIVES?</b>			More than once a month	4	2%
extremely important	7	2%	Parents	120	40%	1 time / week	1	0%
Less important	33	11%	brothers	8	3%	2-7 times per week	5	2%
Important	98	32%	friends	70	23%	<b>HAVE YOU EVER TRIED ILLEGAL SUBSTANCES OTHER THAN MARIJUANA?</b>		
Poco importante	103	34%	teachers	180	59%	Cocaine	19	7%
Nothing important	64	21%	Magazines, books	149	49%	hallucinogens nat./hongos	10	4%
<b>BIRTHPLACE</b>			Others	48	16%	Ecstasy	7	2%
City	250	83%	I did not receive information	9	3%	amphetamines		
small town	53	18%	<b>CIVIL STATUS:</b>			LSD	8	3%
<b>EDUCATION LEVEL</b>			Single	72	24%	LSD	8	3%
Any	0	0%	Dating a person	107	35%	Heroin	0	0%
Primary	1	0%						

High school	6	2%	Dating more than one person	20	7%	tranquilizers	12	4%
Baccalaureate or technical	93	31%	compromised	11	4%	steroid	1	0%
University	147	48%	Widow	1	0%	I have not tried	246	85%
master's degree	47	16%	married	48	16%	<b>DO YOU CURRENTLY SEXUALLY ACTIVE?</b>		
Doctorate	10	3%	Free Union	45	15%	If	256	84%
<b>EMPLOYEE PAID EMPLOYMENT</b>			<b>HE HAS CHILDREN?</b>			Do not	48	16%
Yes, full time.	99	33%	If	110	36%	<b>ON AVERAGE, HOW MANY TIMES A WEEK THINKS ABOUT SEX?</b>		
No, currently unemployed.	40	13%	Do not	194	64%	0	6	2%
Yes, part time.	64	22%	<b>DO YOU TAKE ANY MEDICATION RECURRENTLY?</b>			1 to 4	137	48%
No, retired.	0	0%	If	50	17%	5 and 8	75	26%
No, student	79	27%	Do not	254	84%	9 or more	69	24%
No, housewife	16	5%	<b>DO YOU HAVE HISTORY OF CHILDHOOD ABUSE?</b>			<b>ON AVERAGE, HOW MANY TIMES A WEEK MASTURBATES?</b>		
<b>PRACTICAL HIGH-RISK BEHAVIOR</b>			Sexual	27	37%	0	95	33%
Unprotected sex	100	33%	Physical	12	16%	1 to 4	160	56%
Sex with unknown individuals	12	4%	Emotional	35	47%	5 and 9	24	8%
I do not participate	192	63%				9 or more	6	2%

### 3. ANALYSIS AND DISCUSSION

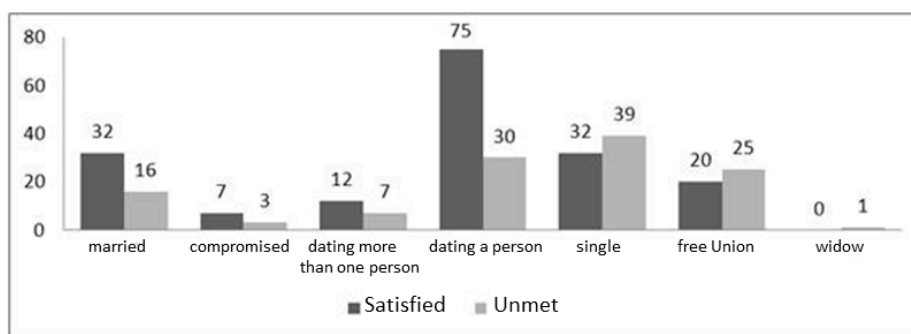
#### Statistical analysis

Data were analyzed by using the statistical software-IBM-SPSS-Statistics Version 21. The relationships among categorical random variables were analyzed through the test of independence chi-square of Pearson.

According to the Sexual Satisfaction Index (SSI), 59.3% of women were found to be satisfied and 40.6% dissatisfied.

No statistically significant relationship between satisfaction and the following socioeconomic and demographic variables were found: religiosity, social class, place of origin, schooling, alcohol consumption, sexual education, occupation, high-risk sexual behavior and sexual culture.

A statistically significant relationship between sexual satisfaction and marital status was found ( $\chi^2 = 19.628$ ,  $p = 0.0032$ ); the groups that stand out are married, engaged, dating one or more than one person where there is a higher proportion of satisfied women as compared to a ratio of less than 50% of satisfied women in the groups made up of single women, living in free union and widows (Figure 1).



**Figure 1.** Sexual satisfaction and marital status of surveyed women  
Source: Made by the author

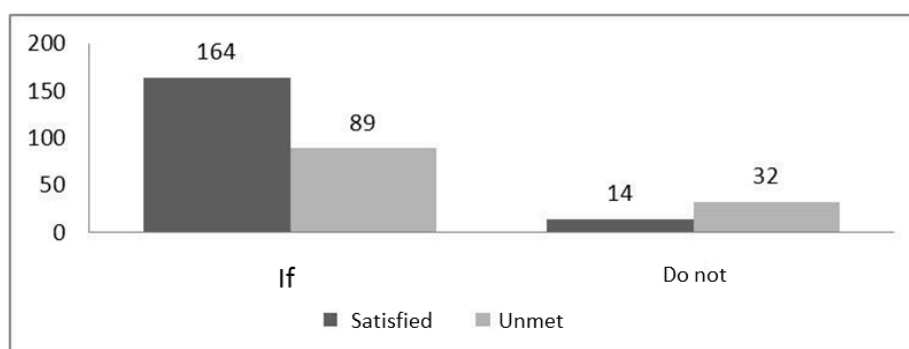
The variables corresponding to the sexual activity of those surveyed women who showed statistically significant relationships with sexual satisfaction are as follows:

i) **Currently sexually active** ( $\chi^2 = 19,105, p = .001$ ), where 65% of sexually active women are satisfied as compared to 32% of satisfaction in sexually inactive women (Figure 2);

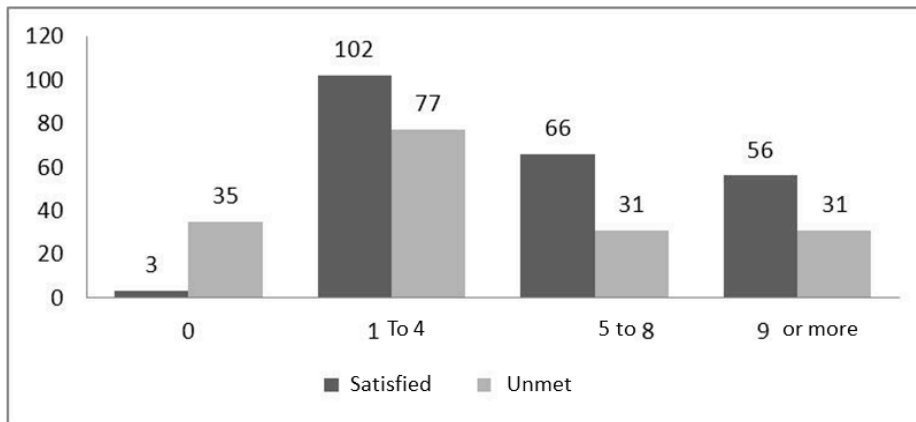
ii) **Number of times per week in which you think about sex** ( $\chi^2 = 12.155, p = 0.0069$ ) where the groups of women who think about sex is from 1 to 4 times, 5-8 and more than nine times a week have a percentage of satisfied women of 57%, 68% and 64%, respectively, as compared to only 8% of satisfied women in the group corresponding to women who do not think about sex (Figure 3);

iii) **Number of times you want have sex** ( $\chi^2 = 7.74, p = .05$ ), only 10% of women who do not want to have sex are satisfied as compared to 58%, 70% and 60% of satisfied women in those groups who want sex from 1 to 4, 5-8 and more than nine times a week (Figure 4).

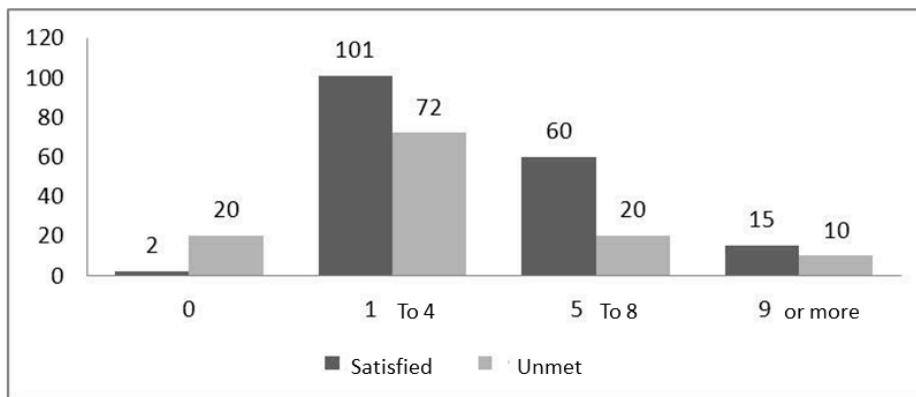
iv) **Number of times you are involved in other forms of sex game** ( $\chi^2 = 11,358, p = .009$ ) Half of women who say they do not get involved in sex games are satisfied, in contrast with 75% and 100% of satisfied women in those groups of women who are involved in some sex game and from 1 to 4 times and 5 or more times per week, respectively (Figure 5).



**Figure 2.** Satisfaction and current sexual activity  
Source: Made by the author



**Figure 3.** Sexual satisfaction and number of times that you think about sex in the week  
Source: Made by the author



**Figure 4.** Sexual satisfaction and number of times per week you want to have sex  
Source: Made by the author.



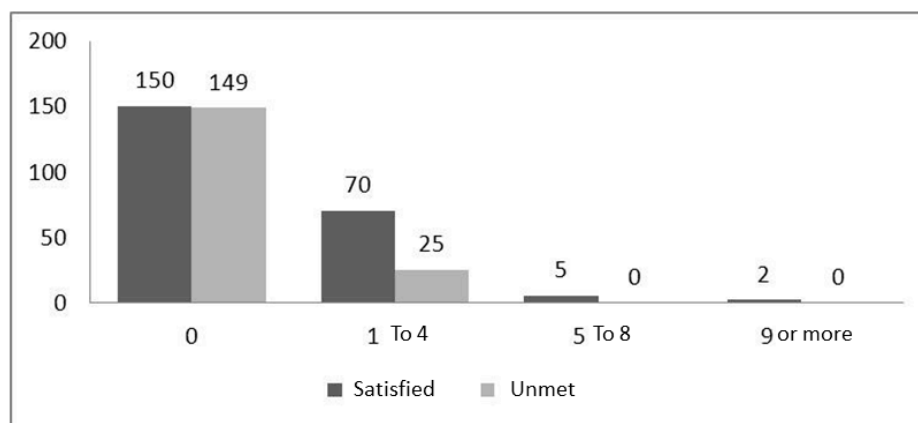


**Figure 5.** Sexual satisfaction and number of times you are involved in other forms of sex game

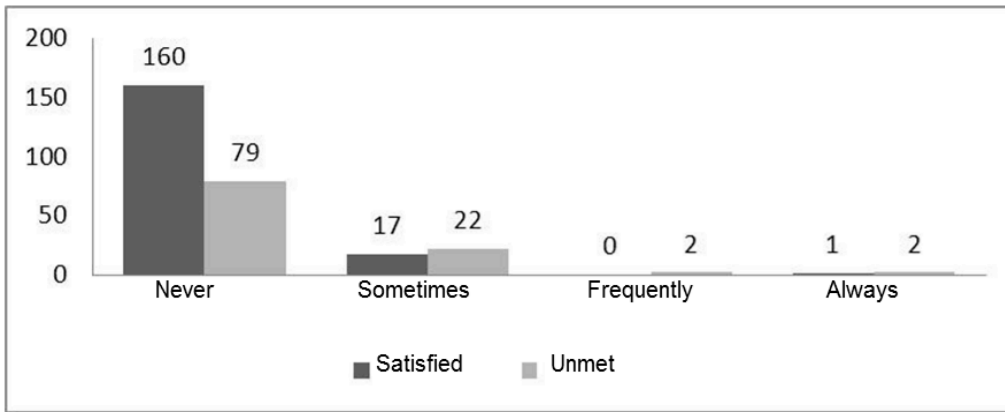
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The variables corresponding to prejudice against sexuality that showed a statistically significant relationship with sexual satisfaction were as follows:

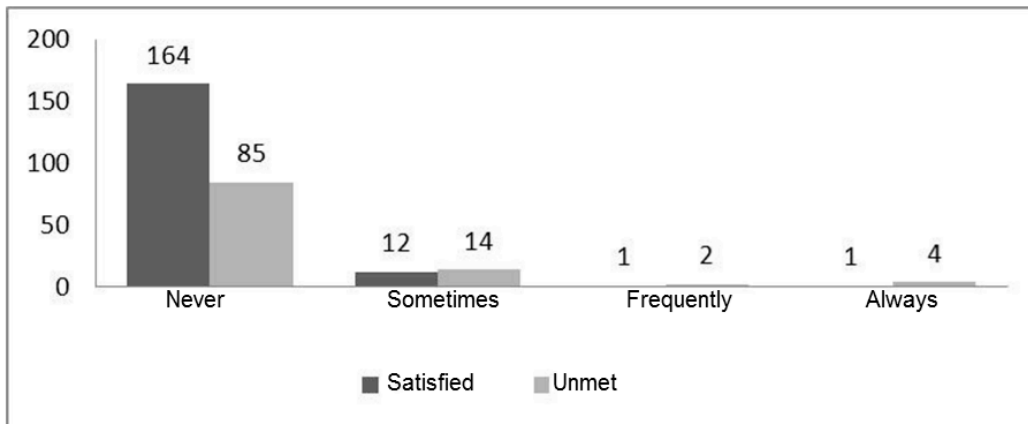
- i) **Approval of premarital sex if you take precaution** ( $\chi^2 = 13,376$ ,  $p = .003$ ), the groups of women who never or sometimes approve of practicing premarital sex have a percentage of 52% and 51 % of sexually satisfied people, respectively; unlike those groups who frequently and always approve of this fact, with respective percentages of 85% and 63% of satisfied women (Figure 6).
- ii) **Thinking about sex gives me anxiety** ( $\chi^2 = 12.492$ ,  $p = .006$ ) (Table 16), in the group who claims not to feel anguish at the thought of sex, sexually satisfied women represent 67% of the individuals as compared to those groups who report that at least occasionally they have felt anguish where the ratio of sexual dissatisfaction is always greater (Figure 7).
- iii) **Masturbation is bad** ( $\chi^2 = 9.128$ ,  $p = .02$ ), two thirds (66%) of women  $\chi$  ( who do not consider masturbation to be something "bad" were sexually satisfied, on the other hand, those who have come to consider it to be a negative practice, at least sometimes, show a higher ratio of dissatisfied women (Figure 8).
- iv) **Sex is a source of pleasure** ( $\chi^2 = 18,298$ ,  $p = .0004$ ), with respect to this variable, the groups who consider that it is almost always and always a source of pleasure have a higher ratio of satisfied women (63% and 68% respectively) as opposed to the group that believes that it is only sometimes a source of pleasure, with 26% of satisfied women (Figure 9).



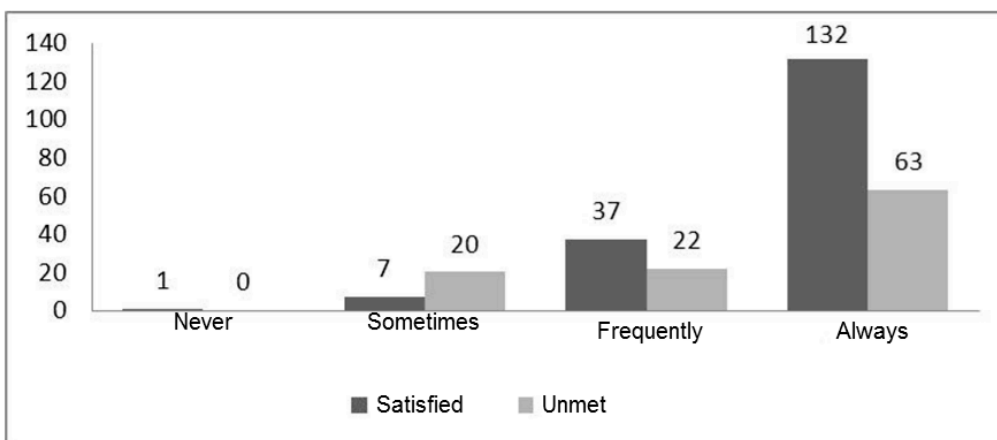
**Figure 6.** Sexual satisfaction and approval of premarital sex, if you take precaution  
Source: Made by the author



**Figure 7.** Sexual satisfaction and "thinking about sex makes me anguished"  
Source: Made by the author



**Figure 8.** Sexual satisfaction and "masturbation is bad."  
Source: Made by the author

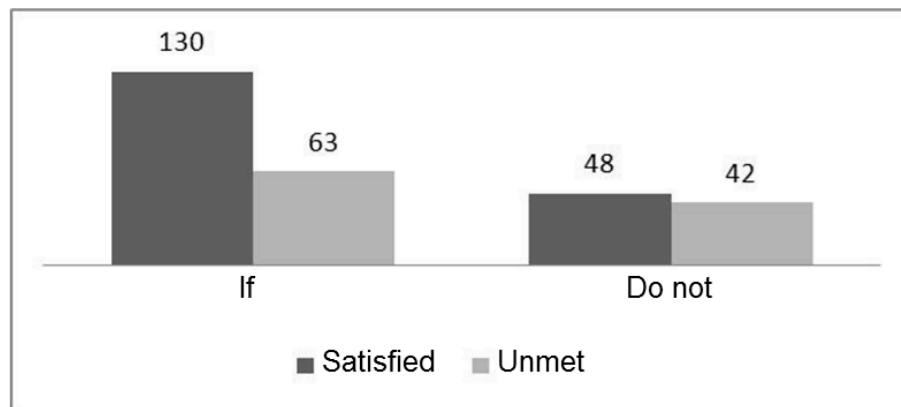


**Figure 9.** Sexual satisfaction and "sex is an important source of pleasure in life."  
Source: Made by the author

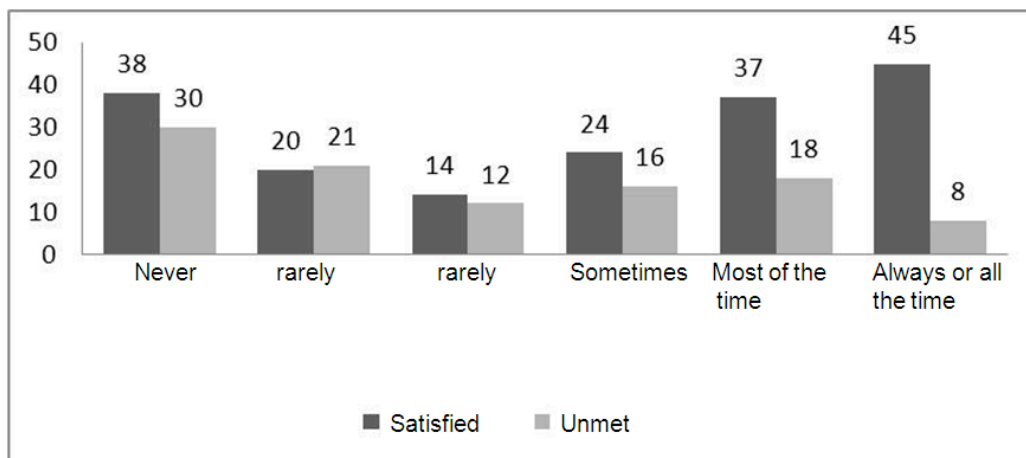
With respect to the types of orgasm reported by surveyed women, 283 questionnaires were completed and 17 were unanswered in this section. Of them, 217 people (77%) report having orgasms by their own manual stimulation, 238 (84%) by manual stimulation by a partner, 193 (68%) by oral stimulation, 248 (88%) by vaginal stimulation and 72 women (25%) by anal stimulation. Deriving from data analysis, a statistically significant relationship was found between sexual satisfaction of women and the groups derived from the questions.

i) **Have you had orgasms through oral stimulation by a partner?** ( $\chi^2 = 5.17$ ,  $p = 0.02$ ), where the percentage of satisfied women in the group that has had this type of orgasm is 67% and in the group where they have not it is 53% (Figure 10).

ii) **How often do you have an orgasm by oral stimulation** ( $\chi^2 = 17.44$ ,  $p = 0.004$ ) (Table 4); out of them, the groups "always or all the time" and "most of the time" stand out for having the highest percentage of satisfied women with 67% and 85%, respectively (Figure 11).



**Figure 10.** Sexual satisfaction and orgasm by oral stimulation  
Source: Made by the author



**Figure 11.** Frequency of orgasm by oral stimulation

Source: Made by the author

A statistically significant relationship with sexual satisfaction was also found for the groups of variables induced by the questions:

i) **Have you had orgasms through vaginal intercourse?** ( $\chi^2 = 6.874$ ,  $p = 0.009$ ), where two-thirds (66%) of women who have had orgasms this way were found to be sexually satisfied as compared to 43% of the group who answered otherwise (Figure 12).

ii) **How often do you have an orgasm through vaginal intercourse?** ( $\chi^2 = 24.37$ ,  $p < 0.001$ ) in this regard, the groups that at least sometimes have an orgasm through vaginal intercourse have a more satisfied women than unsatisfied women, it is observed otherwise in the groups where women never or rarely have an orgasm in this way.

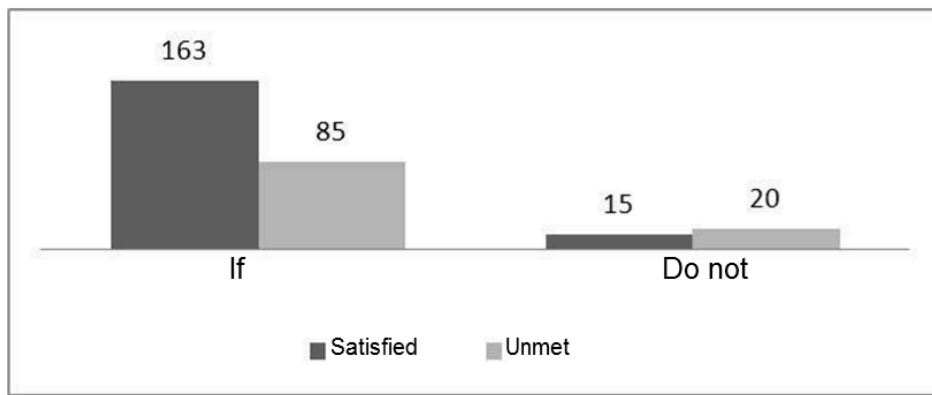


Figure 12. Sexual satisfaction and occurrence of vaginal orgasms through vaginal stimulation

Source: Made by the author

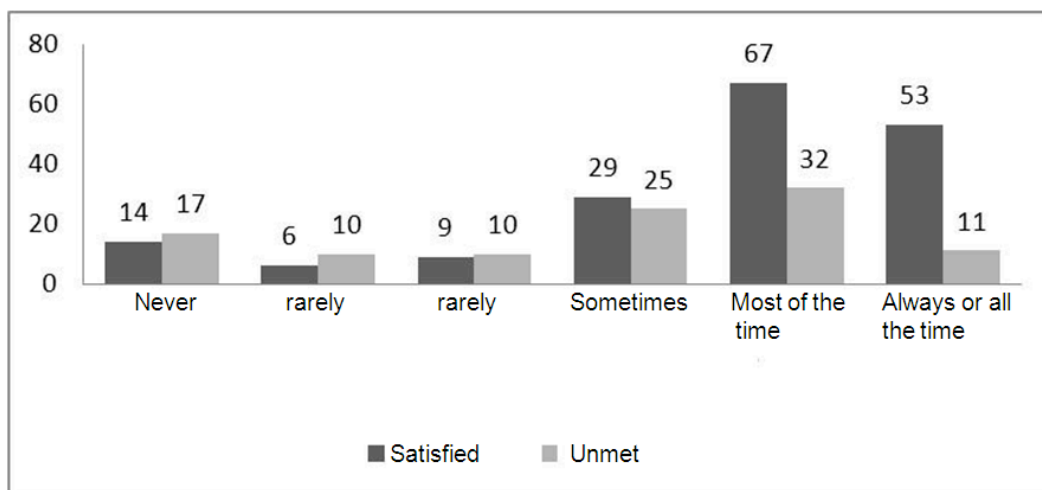
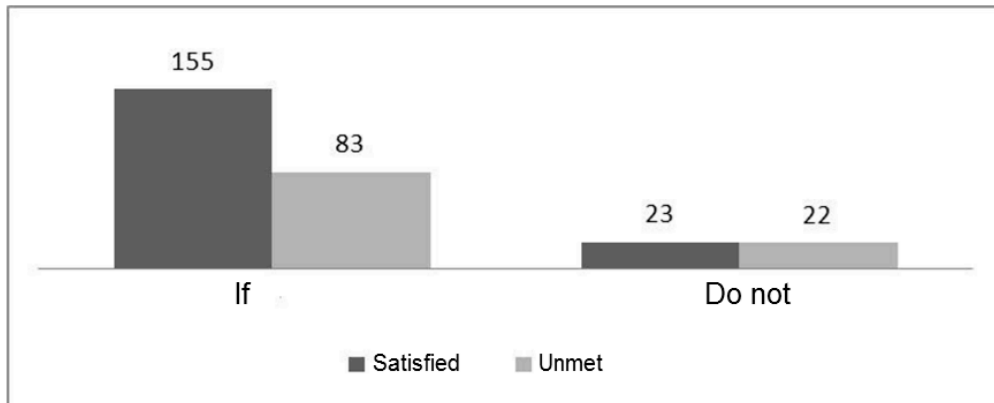


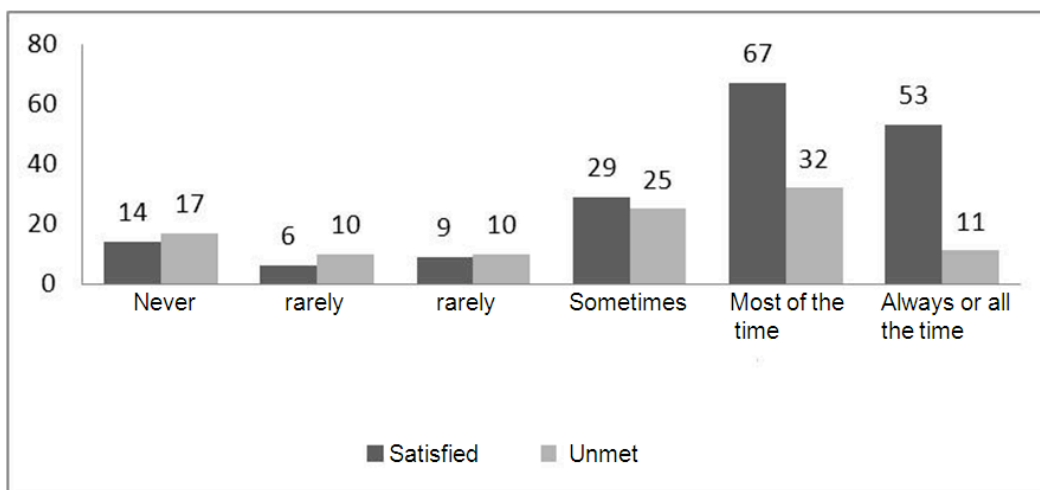
Figure 13. Sexual satisfaction and frequency with which women have an orgasm through vaginal intercourse

Source: Made by the author

No statistically significant relationship was found between satisfaction and having an orgasm through manual stimulation by a partner ( $\chi^2 = 3.185$ ,  $p = 0.07$ ) (Figure 14), although a relationship was discovered regarding how often women have an orgasm ( $\chi^2 = 30.06$ ,  $p < 0.001$ ), where the relevant groups for women who most of the time or always have orgasms this way show the highest percentage of satisfied women (77% and 84%, respectively). No statistically significant relationship was found between satisfaction and having an orgasm through masturbation ( $\chi^2 = 0.020$ ,  $p = 0.89$ ) or through anal stimulation ( $\chi^2 = 0.007$ ,  $p = 0.94$ ), nor in the relationship between these two types of orgasm and how often they occur.



**Figure 14.** Sexual satisfaction and orgasms through manual stimulation by a partner  
Source: Made by the author



**Figure 15.** Sexual satisfaction and frequency of orgasms through manual stimulation by a partner  
Source: Made by the author

## DISCUSSION

According to the Sexual Satisfaction Index (ISS), 59.3% of the population said they were satisfied, while 40.6% said they were dissatisfied.

Sexual satisfaction and sociodemographic variables. The results of our survey found a statistically significant relationship between sexual satisfaction and marital status, in relation to this finding, many factors may be linked to the fact that there is greater satisfaction in married women such as: confidence, emotional health, culture etc. Several studies have found that there is more physical pleasure and emotional satisfaction in a monogamous relationship than in having sex with a partner considered to be the main one but not the only one, and it was more satisfying than having sex with one or more partners within the last twelve months. This may be because one learns what one's partner finds rewarding and exciting. In a sample of 868 nurses living in 15 states, women with many partners expressed they had non-physiological but less psychological sexual satisfaction. One explanation for this may be that women with a partner indicate that their partners often delay their orgasm until women have had their own orgasm. Contrary to other studies. No differences were found in relation to other sociodemographic variables, religiousness, social class, place of origin, schooling, sex education, number of children, occupation, high-risk sexual behavior and sexual culture.

Satisfaction and sexual activity. Significant differences were found in relation to questions such as: are you sexually active now?, 65% of sexually active women are sexually satisfied now, how many times per week do you think about sex?, how many times per week do you want sex?, and how many times a week do you see yourself involved in other forms of sex game?. In this sense, it is outstanding that the largest number of satisfied women who think about (58%) and want to have sex (58%) and who are involved in other forms of sexual game (75%) is 1-4 times per week. Other studies have shown that 9% of women think about sex every day or several times a day, 67% a couple of times per month or a few times a week, and 14% less than once a month. A survey conducted by Research Now in partnership with the anthropologist Helen Fisher and the evolutionary biologist Justin Garcia from Kinsey Institute for Research in Sex, Gender and Reproduction reported that the ideal frequency for men and women with partners is often two or three times a week. This is consistent with the number of times that women want sex in our study. In relation to other forms of sexual game (eg role playing, use of sex toys), most women reported a value of zero times a week implying that women who participated in the study were not attracted to the diversification of the sexual activities they do. Studies concerning sexual fantasies continually report that women continuously fantasize about having a passive role or being dominated.

Prejudice. Many existing theories about sexuality are based on populations living in highly developed countries, where there is predominance of the Anglo-Saxon culture and religions other than the one prevailing in our country, which is Catholic; also, the social strata are more homogeneous and there is equality between men and women, so that addressing an issue such as sexuality in a country like Mexico which is characterized by different cultural roots, wide socioeconomic inequality, big gender inequality and ethnic diversity is a very complex task. The results of this study in relation to the attitude toward sexuality (prejudice) showed that women who believe that masturbation is not bad (66%) and thinking about sex causes them no distress

(67%) are mostly those who are sexually satisfied, while those who believe that sometimes, often and always are the ones mostly sexually dissatisfied. A survey in Cambridge showed that 80% of women regularly masturbate, 16% do not do it regularly and 4% abstained from answering the question, it is worth noting again that cultural differences can influence personal opinion about masturbation. In relation to the approval of having sex before marriage, there is a greater number of women who feel they are sexually satisfied (63%). It is noteworthy that, out of the population that answered the survey, most women ranged 18-35 years, which could have some influence on the perception and acceptance they have in relation to sexuality. A survey by the College of Mexico (2008) shows that 38% of Mexicans disagree with having sex before marriage, while 27% do not consider it bad, this perception changed in Mexico City, where 40% of respondents approve of having sex before marriage and, in the rest of the country, only 20% considers it right.

**Sexual satisfaction and orgasm.** The surveyed women from Veracruz said they had the following rates in relation to different types of orgasm 217 people (77%) said they have had orgasms through manual stimulation by themselves, 238 (84%) through manual stimulation by a partner, 193 (68%) through oral stimulation, 248 (88%) through vaginal stimulation and 72 women (25%) through anal stimulation. Statistically significant relationship was found between the presence and frequency of orgasm through oral stimulation by a partner and vaginal stimulation, a statistically significant relationship was also found in the frequency of manual stimulation by a partner. Regarding the percentage who said they always have an orgasm through oral stimulation (45%), the percentage is similar to that reported in the Hite Report on Female Sexuality where 42% of women had an orgasm regularly during oral stimulation. Regarding the percentage of always having an orgasm through vaginal penetration (53%), the rate is higher than that reported in other studies (48%). The results indicate that the frequency of orgasms was different for each type of sexual stimulation, with more frequency when having sex. These findings support the results from previous studies in which women remarkably prefer to have sex with a partner. No statistically significant relationship was found between the presence and frequency of having an orgasm through masturbation or through anal stimulation.

This study provides important data regarding satisfaction and sexual desire of women in Xalapa, Veracruz. Contrary to previous studies on the subject, we did not find any statistically significant relationship between sexual satisfaction and demographic variables such as religiousness, previous sex education, age, sexual orientation, among others. Importantly, the results cannot be generalized to other populations as they come from a sample with spatial and temporal constraints; however, there are important elements of the association of different variables to sexual satisfaction. Currently studies about sexuality, abuse and relationship with mental health are being conducted.

#### *Ethical responsibilities*

Data were handled with strict confidentiality and adherence to the ethical standards of the Federal Law on Protection of Personal Data Held by Private Parties as of July 5, 2010<sup>25</sup> and the Regulations of the Federal Law on Protection of Personal Data Held by

Private Parties. D.O.F. as of December 21, 2011<sup>26</sup>. The authors declare that this article does not contain any identifying data about respondents.

*Conflict of interests*

The authors declare there is no conflict of interests.

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