

DIFFERENCES IN PREDICTORS OF SEXUAL SATISFACTION AND IN SEXUAL SATISFACTION BETWEEN FEMALE AND MALE UNIVERSITY STUDENTS IN SLOVENIA

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SUMMARY

Background: This paper reports on some factors correlated with sexual satisfaction and on differences between female and male university students.

Subjects and methods: A convenience sample of 174 female and 74 male Slovene undergraduate university students was studied.

Results: It has been found that an increased frequency of sexual interaction and agreeableness in sexual interactions increase sexual satisfaction, while a desired frequency of sexual interactions and estimation of a partner's agreeableness in sexual interactions decrease sexual satisfaction. Sex was not found to be an important predictor of sexual satisfaction.

Male students' agreeableness in sexual interaction is significantly higher than that of female students. Male students are significantly more conservative in their attitudes towards abortion and concerning sexual myths. Female students are less satisfied with their sexual life than their male colleagues.

Conclusion: In conclusion, the findings of the study demonstrate that there are some differences in problems with sexuality between both sexes. Female students are in general more dissatisfied. On the basis of the findings of the present research it should be possible to plan interventions for increasing satisfaction with sexuality, specifically for each gender.

Key words: satisfaction – sexuality - university students - gender differences

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INTRODUCTION

There is a lack of knowledge about the sexual behavior of the population in Slovenia. Studies on this topic are scarce and it is not known, for instance, to what degree people are satisfied with their sexuality.

Sexual satisfaction, being such an individual and intimate feeling about oneself, is difficult to study (Simpson & Ganges 1991). In addition, most of the existing literature on sexual satisfaction lacks a definition of the construct.

Although satisfaction is defined as an emotional state produced by achieving some goal (Pedersen & Blekesaune 2003) or a feeling of gratification or accomplishment (Davies et al. 1999), it can be said that sexual satisfaction is an emotional state that occurs with the fulfillment of individual wishes in the area of sexual life. Sexual satisfaction should not be confused with the pleasure of orgasm. According to Levine (1992), sexual satisfaction could be understood as the seventh dimension of one's sexual life (the other six dimensions being: gender, orientation, intention, desire, arousal and orgasm).

Lawrance and Byers (1995) developed the Interpersonal Exchange Model of Sexual Satisfaction, which is based on the social exchange theory (Thibault & Kelley 1952). According to their model, sexual satisfaction is defined as an affective response arising from one's subjective evaluation of the positive and

negative dimensions associated with one's sexual relationship (Byers 2005).

Many factors are commonly associated with sexual satisfaction. One of these is sexual activity and performance, which includes frequency of sexual activity, variety of sexual behaviors, positive attitudes towards sexuality etc. (Darling & Davidson 1991, Hurlbert et al. 1993, Haavio-Maninila & Kontula 1997, Luquis 2000).

There is an obvious lack of scientific evidence on how females and males differ in their perception of sexual satisfaction. We can find different argumentations, for instance Bancroft (1989) emphasizes that conceptualization of sexual problems should be different in men and women. However, there are also arguments that conceptualization of sexual problems is not significantly different in men and women (McConaghy 2004).

Heaven, Fitzpatrick, Craig, Kelly & Sebar (2000), in a sample of undergraduate students, found that men score significantly higher than women on measures of sexual curiosity and sexual excitement, while women scored higher on sexual satisfaction.

Besides sexual activity and performance, satisfaction with sexuality is supposed to be strongly associated with relationship quality, especially for men (Sprecher 2002, Bhugra 2004). On the other hand, there is only limited evidence for the hypothesis that changes in relationship satisfaction lead to changes in sexual satisfaction or vice versa (Byers 2005).

Both males and females who are sexually active but unattached are less satisfied with their sex lives, while committed; long-term relationships seem to be of greater importance for women than for men (Pedersen & Blekesaune 2003).

However, sexual satisfaction and relationship satisfaction usually change concurrently in relation to the quality of intimate communication (Byers 2005). Reciprocal sexual self-disclosure contributes to relationship satisfaction, which in turn leads to greater sexual satisfaction, while on the other hand, own sexual self-disclosure leads to greater partner understanding of sexual likes and dislikes, which leads again to a more favorable balance of sexual rewards and costs and thus to higher sexual satisfaction (Byers 2005). Own sexual self-disclosure is more typical of women, while reciprocal sexual self-disclosure is found in both men and women (Byers 2005).

The students' period of life is one of transition to adult sexual life. Students usually experiment with romantic partnerships, while at the same time gathering knowledge and active experience of sexuality. Therefore we presumed that factors associated with sexual satisfaction, such as sexual activity and performance, would be more important than the quality of the relationship in the sense of duration, intimacy, communication etc. Of course, the quality of the relationship is also important for students, but in a different way than in couples with long-term relationships.

Other factors often associated with satisfaction with sexuality are age and personality characteristics.

The sampled students of the University of Ljubljana, Slovenia were of a similar age; hence in our research age could not be a differentiating factor between groups with different levels of satisfaction with sexuality.

In this study we aimed to predict the general level of sexual satisfaction with predictor variables concerning sexual activity and performance, comprising attitudes towards sexuality, sexual knowledge and sexual experience, and to determine whether male and female students differ in sexual activity and performance and in sexual satisfaction. Specific aspects of sexual satisfaction were not the subject of the present research since those aspects are planned to be published separately.

SUBJECTS AND METHODS

Participants

A convenience sample of 174 female and 74 male Slovene undergraduate university students was studied. Students without partners, those who stated that they had homosexual sexuality and those who did not have sexual intercourse were excluded. Three groups of students from three different faculties, i.e. medicine, psychology and sports, were asked to volunteer for the study after signing informed consent. The sample

approximately represented the gender ratio at these three faculties. Their mean age was 21.63 (SD=2.1). All included respondents experienced sexual intercourse.

Measures

The Golombok – Rust Inventory of Sexual Satisfaction – GRISS (Rust & Golombok 1986), Sexual Interaction Inventory – ISI (Lo Piccolo & Steger 1974) and Sexual Knowledge and Attitude Test – SKAT (Lief & Reed 1972) were applied.

GRISS is a questionnaire for assessing the existence and severity of sexual problems. It contains twelve subscales concerning erectile dysfunction, premature ejaculation, anorgasmia, vaginismus, non-communication, infrequency, male and female avoidance, male and female non-sensuality, and male and female dissatisfaction. There are two versions of the GRISS, one for females and one for males. Each consists of 28 items with a five-point response format. This refers to the frequency of sexual interests and activities which are related to sexual satisfaction/dissatisfaction, on a scale from “never” to “always”. Reliability, based on the test-retest method, ranges from 0.65 to 0.76 and from 0.94 to 0.87 if calculated by the split - half method. In our study Cronbach's alpha was 0.76.

ISI is a questionnaire for assessing sexual activity and behavior consisting of 18 items describing different heterosexual behaviors. Each item comprises the same 6 questions (actual frequency of behavior, desired frequency of behavior, opinion of a particular sexual behavior, what he/she thinks of his/her partner's opinion on a particular behavior, what he/she wants a particular behavior to look like, what he/she wants a particular behavior to look like for his/her partner). The questions have a five-point response format, from “never” to “always”. In our study Cronbach's alpha was 0.96.

SKAT is a three-part questionnaire for the assessment of attitudes towards sexuality (35 items with a five-point response format), knowledge of sexuality (70 items with a two-point format) and sexual behavior (26 items with a different-point format for each item). The authors of SKAT reported four factors of attitudes. The "Heterosexual Relations" (HR) scale measures attitudes toward premarital and extramarital heterosexual encounters. The "Sexual Myths" (SM) scale measures the acceptance or rejection of commonly held sexual misconceptions, taboos, and fallacies. The "Abortion" (A) scale measures views on social, medical, and legal aspects of abortion. The "Masturbatory" (M) scale measures attitudes toward autoerotic stimulation.

In our study Cronbach's alpha coefficients of attitudes scale (SKAT1) ranged from 0.67 (sexual myths) to 0.76 (autoeroticism). Cronbach's alpha of the knowledge part of SKAT was $\alpha=0.63$.

Cronbach's alpha coefficients were first calculated, after which regression analyses (Stepwisemethod) were performed.

Data Analysis

The dependent variable in this model was the overall score of sexual satisfaction (GRISS). Independent (predictor) variables were sexual activity and behavior (ISI 1 to ISI 6), gender, attitudes towards sexuality (four factors – SKAT 1) and sexual knowledge (SKAT 2). The differences in independent variables and in sexual satisfaction (overall score and subscales) between male and female students were then compared with t-test.

RESULTS

The set of predictor (independent) variables in the regression model (stepwise) explained 54% of the variance in students' sexual satisfaction ($R=0.733$, $R^2=0.538$). The model is statistically significant at $p=0.00$ ($F=54.571$).

From Table 1 it can be seen that the predictor variables of frequency of sexual interactions (ISI-1), desired frequency of sexual interactions (ISI-2), agreeableness in sexual interactions (ISI-3), estimation of a partner's agreeableness in sexual interactions (ISI4) and the gender are significant predictors of students' sexual satisfaction (GRISS) ($p<0.05$).

These variables have the relative importance among our set of predictor variables.

It can be seen that an increase in frequency of sexual interaction (ISI-1) and in agreeableness in sexual interactions (ISI-3) decreases the dependent variable score (GRISS), which actually means that sexual satisfaction increases with an increase in these two variables*. And further, being a male student increases

the possibility that the level of sexual satisfaction will be higher.

On the contrary, an increase in the predictor variables of desired frequency of sexual interactions (ISI2) and estimation of a partner's agreeableness in sexual interactions (ISI4) decreases sexual satisfaction.

The T-test showed some significant differences in independent variables between male and female students.

From Table 2 it can be seen that males' agreeableness in sexual interaction (ISI 3) is significantly higher ($t=-2.75$, $p=0.007$) than that of female students, while female students estimate their partners' agreeableness (ISI 4) to be higher than male students ($t=3.39$, $p=0.001$).

Male students are significantly more conservative in their attitudes towards abortion ($t=2.13$, $p=0.034$) and concerning sexual myths ($t=1.99$, $p=0.047$).

In addition, sexual dysfunction between female and male students was compared using the t-test (Table 3). The overall score of sexual dysfunction – GRISS ($t=2.73$, $p=0.007$), dissatisfaction ($t=2.11$, $p=0.038$) and avoidance ($t=5.02$, $p=0.000$) show significant differences between the sexes.

Female students have a higher score on overall sexual satisfaction, which means that they are less satisfied. An analysis of subscales showed that overall dissatisfaction is due to female avoidance and female dissatisfaction in the narrower sense of the word; values on the subscales are higher in female students.

*note that the higher the score on the GRISS questionnaire, the greater the sexual dysfunction

Table 1. Regression coefficients

	B	beta	t	p
constant	61.592		15.60	0.000
agreeableness in sex interactions ISI3	-0.551	-0.610	-7.84	0.000
frequency of sex interactions ISI1	-0.452	-0.638	-9.53	0.000
desired frequency of sex interactions ISI2	0.305	0.370	5.00	0.000
gender	-2.981	-0.131	-2.54	0.012
estimation of part agreeable in sex int ISI4	0.161	0.162	2.33	0.021

R^2 0.5380; F 54.571; sig. 0.000

Table 2. Descriptive statistics of independent variables

	Female		Male		t	p
	Mean	Std. Deviation	Mean	Std. Deviation		
frequency of sex interactions ISI1	48.77	14.60	44.78	15.78	1.86	0.064
desired frequency of sex interactions ISI2	55.84	13.38	57.66	10.26	-1.13	0.262
agreeableness in sex interactions ISI3	77.13	12.27	81.10	8.99	-2.75	0.007
estimation of part agreeable in sex int ISI4	81.82	8.74	76.04	12.79	3.39	0.001
desired agreeableness in sex interact ISI5	83.46	9.49	84.24	8.14	-0.59	0.553
desired partner's agreeable in sex int ISI6	83.85	9.70	84.41	10.25	-0.39	0.693
heterosexual relations	24.78	4.12	23.70	4.01	1.87	0.063
sexual myths	20.32	3.78	19.27	3.64	1.99	0.047
autoeroticism	25.28	4.20	24.39	4.22	1.49	0.137
abortion	23.84	5.55	22.17	5.65	2.13	0.034

Table 3. Descriptive statistics of GRISS questionnaire

	Female		Male		t	p
	Mean	Std. Deviation	Mean	Std. Deviation		
griss sum raw	27.15	10.85	23.16	8.51	2.73	0.007
infrequency	3.19	2.25	3.33	2.19	-0.46	0.650
non-communication	2.40	2.41	1.68	1.68	-0.03	0.975
dissatisfaction	5.78	4.80	3.62	3.62	2.11	0.038
avoidance	2.88	1.20	1.65	1.65	5.02	0.000
non-sensuality	7.59	7.35	1.82	1.82	1.09	0.279

DISCUSSION

Regression analyses showed that some variables concerning sexual activity and performance are important predictors of sexual satisfaction in university students. These factors are those related to the Inventory of sexual interactions (ISI). An increase in the frequency of sexual interaction (ISI 1) and in agreeableness in sexual interactions (ISI – 3) increases sexual satisfaction, while desired frequency of sexual interactions (ISI – 2) and estimation of a partner’s agreeableness in sexual interactions (ISI –4) decreases sexual satisfaction.

A higher frequency of sexual interactions does not necessarily mean that individuals who are sexually more active are also more experienced, but activity in itself could be part of the experience. Hally & Pollack (1993) reported that individuals with a wide variety of sexual experience have higher sexual satisfaction than less experienced individuals. Sexual satisfaction depends on the relation between actual and desired sexual activity. Dunn, Croft & Hackett (2000) reported that men’s sexual dissatisfaction is more often associated with discordance between the desired and real frequency of sexual intercourse. It seems that females have a higher tolerance of sexual abstinence, or perhaps sex is simply a more important part of males’ lives (Bancroft 1989).

Female students estimate their partners’ agreeableness significantly more highly than male students, while on the other hand male students experience more pleasure in sexual activities than female students. This combination of estimation of agreeableness is an important differentiating factor between male and female sexual satisfaction in our research.

Heaven, Fitzpatrick, Craig, Kelly & Sebar (2000), in a sample of undergraduate students, found that women scored more highly on sexual satisfaction. However, in our research female students were less satisfied with their sexual life than male students. Female students scored more highly than their male colleagues on avoidance and dissatisfaction. This statement does not mean that females are dissatisfied in general. Dissatisfaction in its strictest meaning would probably diminish a female’s estimation of her partner’s agreeableness in sexual intercourse as dissatisfied individuals are more likely to report that their partner is dissatisfied with their sex life (Dunn, Croft & Hackett 2000). The same authors reported that men and women

are dissatisfied with their sex life if they perceive their partner to have a sexual problem or to be dissatisfied.

We found that attitudes towards sexuality are not significant predictors of sexual satisfaction. This is opposed to the findings of Long, Rodney & Fehsenfeld (1996) and Davidson, Darling & Norton (1995), who showed that conservatism led to less sexual satisfaction, more guilt feelings and non-relaxed sexuality. Guilt feelings could be further associated with less sexual satisfaction (Cado & Leitenberg 1990). Guilt feelings were not measured in our study, but it seems that conservatism diminishes sexual satisfaction if it triggers guilt feelings.

As mentioned previously, attitudes per se were not significant predictors of sexual satisfaction in our research, but significant differences between female and male students were found in attitudes towards abortion and sexual myths. Male students were found to be more conservative than female students. Haavio-Manilla & Kontula (2003) reported that more equal attitudes towards sexuality between females and males result in better sexual satisfaction. We were unable to confirm that differences in attitudes contribute to differences in sexual satisfaction in our sample of students. It is known that sexual attitudes can be mediated by sexual communication in both males’ and females’ sexual satisfaction (Cupach et. al. 1995). We found that the differences in communication between the sexes (as one of the subscales of sexual satisfaction) are not significant (and not highly expressed).

As mentioned before, attitudes were not found to be significant predictors of sexual satisfaction in our research. The role of attitudes in sexual satisfaction is not consistent. For instance, Moore (1997) reports that sex-positive attitudes increase women’s sexual satisfaction. On the other hand, erotophobic vs. erotophilic attitudes should not affect the degree of sexual satisfaction (Hally & Pollack 1993). However, erotophobic attitudes cannot be understood or be inevitably comparable with conservatism in attitudes.

In our sample female students were more liberal in their attitudes, but still less satisfied.

The limitation of our study lies in the gender ratio of the student sample, which is due to the fact that most faculties of the University of Ljubljana have a preponderance of female students. Further study is needed with the inclusion of a sample of more “male faculty” students.

CONCLUSION

The present research gives some answers concerning the satisfaction with sexuality of the student population. Related to the fact that sexual satisfaction is a frequently reported problem in this population, the results of the study represents a good basis for treatment planning. It is important to know which kinds of problems are expected in the female student population (i.e. communication, avoidance) and in the male student population (infrequency) and which characteristics are predictors of sexual satisfaction.

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