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Sexual Education and Attitudes Towards Masturbation

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Abstract

The long-standing social stigma surrounding masturbation has led to its prohibition from being included in public school curriculum as a healthy sexual practice. Furthermore, not only is masturbation a healthy sexual practice for the individual, research has demonstrated masturbation to be helpful in treating sexual dysfunctions for couples. Therefore, if the topic of masturbation is included in comprehensive sexual education as a healthy sexual practice, it may promote sexual health among individuals both intra- and interpersonally. The present study recruited from a convenient sample from a medium sized state university in the upper Midwest. Participants completed two surveys, administered through an online data collection platform. The first survey, Attitudes Towards Masturbation, is an established measure with sound reliability and validity, which assessed the participants' comfort and beliefs about masturbation. The second survey was created specifically for this study and assessed the type of sexual education (comprehensive versus abstinence) received at home and in formal school settings. It was predicted that participants who received positive masturbation education (at home or at school) will have more positive attitudes toward masturbation than participants who received negative or no masturbation education. The results of the study indicate that positive messages learned are not correlated with positive attitudes. However, negative messages are associated with negative attitudes towards masturbation.

Introduction

The promotion of sexual health may be hindered by the consequences of viewing masturbation as taboo (Bockting, 2002). Such taboos have been maintained in spite of the fact that masturbation is associated with higher self-esteem, marital and sexual satisfaction, more orgasms, greater sexual desire and arousal (Hurlbert & Whittaker, 1991). Coleman (2002) points out that there are some who believe that it is linked to orgasmic capacity, healthy sexual functioning, and sexual satisfaction in relationships. Masturbation plays a key role in sexual development and “must be appreciated as a complex sociological issue, in need of research examining what masturbation means to different people at different points in their lives” (Tiefer, 1998, p. 10). As many studies have illustrated, masturbation is a means of self-actualization and appreciation (Bockting, 2002; Hurlbert & Whittaker, 1991).

Despite these advantages, promoting safer sex is deemed inappropriate (Bockting, 2002). It appears that many young people have internalized the more prevalent taboos, as evidenced by their tendency to report feeling guilty and fearful of being exposed (Abramson, 1973) and a fear of social censure (Langston, 1973) with regard to their own masturbation. However, Story (1979) found that subjects’ attitudes toward masturbation became increasingly more positive two years following course instruction in human sexuality. Therefore, it is important to evaluate the current attitudes toward masturbation based on previous sexual education in order to gain a better understanding of the possible advantages of masturbation.

Method

Participants

Participants included 342 undergraduate college students from a medium-sized, Midwestern university. Demographically, subjects were predominantly female (77.2%). 22.8%

of participants were male. Subjects were predominantly white (85.1%). These demographics were derived on the basis of students' self-report.

Measures

Attitudes toward masturbation were assessed through the use of the Negative Attitudes Toward Masturbation Inventory (NATMI; Abramson & Mosher, 1975). This 5-point, Likert-type scale consists of 30 statements (10 of which have reversed scoring) about masturbation (anchored by *not at all true* to *extremely true*). Higher scores reflect more positive attitudes, fewer negative beliefs, and less sex guilt. Abramson and Mosher found that factor analysis (using an orthogonal varimax procedure) of college students' responses to this inventory yielded three factors (1, 2, 3) accounting for 31.0%, 6.7%, and 5.7% of the total variance, respectively. Factor 1 (positive attitudes toward masturbation in general) included items such as "Masturbation can provide an outlet for sex fantasies without harming anyone else or endangering oneself." Factor 2 (false beliefs about the harmful nature of masturbation) included statements such as "Masturbation can lead to homosexuality," and this factor clearly seem to represent the cognitive attitudinal component. Factor 3 (personally experienced negative affects associated with masturbation) included items such as "When I masturbate, I am disgusted with myself" and seemed to represent guilt.

Abramson and Mosher (1975) report that the split-half reliability coefficient corrected by the Spearman-Brown prophecy formula was .75; all but the first statement significantly correlated with the total score, with 24 of the 30 statements significantly correlated beyond the .001 level (Presto, Sherman, & Sherman, 1985). Test-retest reliability data were not reported. Abramson and Mosher also report that the total score from the inventory correlated moderately with measures of sex guilt, sex experience, and frequency of masturbation. Although these

measures were not correlated with each of the three factors of the NATMI, the sex-guilt and sex-experience scales have been used in studies that support their construct validity (see Mosher, 1973, 1979). Further, items accounting for two factors of the NATMI (false beliefs and sex guilt) and Mosher's (1979) sex-guilt and sex-myth scales seem well matched (Presto et al., 1985).

The Sexual Education Survey was created for this study in order to assess the type of sexual education (comprehensive versus abstinence) received at home and in school settings. Participants were instructed to endorse the content areas in sexuality they received during formal and informal education through a 39-item assessment. Research team members used a ranking system to decide which items should be deemed as *positive* and which items should be deemed as *negative*. This was accomplished by each individual rating a list of statements from 1 to 5 based on his or her opinion of the degree to which each item was considered a negative statement (1) or a positive statement (5), with (3) considered neutral.

Items that the research team deemed as *positive* (a rating of 4 or 5) included items such as "How to obtain and use birth control/contraception" and "How to make healthy decisions about sex and to adopt healthy sexual behaviors." Items that the research team deemed as *negative* (a rating of 1 or 2) included items such as "How sex will likely lead to negative consequences" and "That early initiation of sexual behavior will make you undesirable to others." Items that the research team deemed as *neutral* (a rating of 3) included items such as "How to get an abortion" and "Risk factors that affect early initiation of sexual activity. The average score of all the research team members was used as the key number in determining whether or not students' responses were positive, negative, or neutral (see Appendix).

Procedures

This study utilized the online data collection platform Qualtrics, which was accessed through SONA system. SONA allows for the tracking of research participation, which allowed participants to receive course extra credit for volunteering in the study. Participants were asked to review a consent form, followed by the completion of the two aforementioned questionnaires (Negative Attitudes Toward Masturbation Inventory and the Sexual Education Survey), and a demographics form. After completing the two questionnaires, participants received an extra credit point, towards one of their undergraduate courses, for participating in the study.

Results

Due to the nature of the hypotheses, a series of multiple linear regression analyses were conducted. First, in order to conduct these data analyses, the positive masturbation attitudes (as identified from the subject matter expert ratings) from the Negative Attitudes Toward Masturbation Inventory were aggregated together to create a “Positive Attitudes” subscale to make interpretation of the data easier and to utilize the subscale as a single dependent variable. With the creation of the subscale, the authors of the study preceded with conducting the following analyses with the use of SPSS.

Hypothesis 1

To test the first hypothesis of the current study (“Students who were taught positive lessons in school regarding sex/sexuality are currently more likely to view masturbation in a positive manner.”), a multiple linear regression was conducted. The 19 positive lessons learned in school about masturbation were used as the predictors, while the positive attitudes toward masturbation scale was used as the criterion. The overall model of this regression was non-significant, where the predictors explained 6.6% of the variance ($R^2 = .07$, $F(19,331) = 1.16$, $p >$

.05). Also, all of the individual predictors used in the model demonstrated non-significance as well.

Alternative hypothesis testing. In addition to the first hypothesis tested, the authors decided to conduct exploratory data analysis using measures of negative lessons learned about masturbation and current negative attitudes toward masturbation because the original hypothesis was not supported. This alternative hypothesis states, “Students who were taught negative lessons in school regarding sex/sexuality are currently more likely to view masturbation in a negative manner.” The remaining ten lessons learned in school that were not used in the original testing of the first hypothesis were negative lessons. These negative lessons were used as predictors in a multiple linear regression to test the alternative first hypothesis, while a “Negative Attitudes” subscale that was created (similar to the creation of the positive attitudes subscale) was used as the criterion. The results of this multiple linear regression demonstrated significance for the overall model, where the predictors explained 8.3% of the variance ($R^2 = .08$, $F(10,327) = 2.88$, $p < .01$). Two of the predictors demonstrated significance as well. The predictor of “It’s most appropriate to abstain from sex until you are married” was significant, $\beta = .16$, $p < .01$. This suggests that this construct predicts that college students who have learned this lesson in school currently view masturbation in a negative manner. Also, the predictor of “Early initiation of sexual behavior will make you undesirable to others” was significant, $\beta = -.20$, $p = .001$. This negative beta weight indicates that this construct predicts current positive views of masturbation amongst students when taught this negative lesson in school.

Hypothesis 2

The second hypothesis (“Students who were taught positive lessons by his or her parents/guardians regarding sex/sexuality are currently more likely to view masturbation in a

positive manner.”) tested utilized a multiple linear regression for data analysis. The 19 positive lessons learned from parents/guardians about masturbation were used as the predictors in the regression analysis, while the positive attitudes toward masturbation scale was used as the criterion. The overall model of the regression was non-significant, where the predictors explained 7% of the variance ($R^2 = .07$, $F(19,331) = 1.23$, $p > .05$). Although the overall model was non-significant, two predictors demonstrated significance. The predictor, “How to obtain and use birth control,” was significant, where $\beta = .17$, $p < .05$. Also, the predictor, “What masturbation is,” was significant as well, where $\beta = .15$, $p < .05$. These significant results suggest that the teaching of positive lessons about birth control and details about masturbation by parents contribute to the prediction of students currently viewing masturbation in a positive manner.

Alternative hypothesis testing. Similar to the first hypothesis, the second hypothesis was also reconstructed to test prediction of current negative views of masturbation. So, this new alternative hypothesis was constructed as follows: “Students who were taught negative lessons by his or her parents/guardians regarding sex/sexuality are currently more likely to view masturbation in a negative manner.” This hypothesis was also tested using a multiple linear regression using the ten negative lessons about masturbation learned from parents as predictors and the negative attitudes subscale used as the criterion. Results demonstrated a non-significant model, where the predictors explained 3.6% of the variance ($R^2 = .04$, $F(10,327) = 1.19$, $p > .05$). The predictor of “I should avoid masturbation” was significant, $\beta = .13$, $p < .05$. This result indicates that this predictor contributes to the overall model and could suggest that this negative lesson learned from parents about masturbation may help to produce current negative views of masturbation amongst college students.

Hypothesis 3

In order to test the third hypothesis, (“Students who received most of their sex/sexuality education (from school and parents/guardians) during high school (grades 9-12) are currently more likely to view masturbation in a positive manner.”), two multiple linear regression analyses was conducted. First, data within SPSS was selected to include only data regarding high school (grades 9-12). The select cases feature in SPSS was used and high school data was included by selecting survey responses of “4: High School (Grades 9-12)” for the question, “In what period did you FIRST receive most of this education?”. Next, a regression analysis was conducted to test the portion of the hypothesis related to sexuality education taught specifically in school. For this regression analysis, the 19 positive lessons learned in school about masturbation were used as predictors and the positive attitudes toward masturbation scale was used as the criterion. The overall model of this regression was non-significant, where the predictors explained 17.9% of the variance ($R^2 = .18$, $F(19,111) = 1.06$, $p > .05$). In addition, all 19 predictors used in the model demonstrated non-significant results as well.

For the second part of this hypothesis regarding sexuality education and parents/guardians, a multiple linear regression was conducted using only data related to high school using only the data in which participants responded with an response of “4: High School (Grades 9-12)” for the item, “In what period did your parents/guardians first start talking to you about sex and sexuality?” This analysis used the 19 positive lessons learned by parents/guardians about masturbation as the predictors in the model and the positive attitudes toward masturbation scale was used as the criterion. The overall model for this regression analysis was significant, where the predictors explained 29.3% of the variance ($R^2 = .29$, $F(19,115) = 2.09$, $p = .01$). The predictor of “How to obtain and use birth control/contraception” was significant, $\beta = .26$, $p < .05$. Also, the predictor of “The name and functions of the reproductive organs of only my sex” was

significant, $\beta = .20, p < .05$. Lastly, the “The name and functions of the reproductive organs of all sexes” predictor was significant, $\beta = -.26, p < .05$. The negative beta weight of this result suggests that “The name and functions of the reproductive organs of all sexes” lesson taught by parents predicts that students are currently *less* likely to view masturbation positively. Although not significant, it is noteworthy to mention that the “Love and sex are not the same thing” predictor was marginally significant, $\beta = .20, p = .05$, suggesting that this lesson taught by parents may have a small impact on contributing to the prediction of current positive views about masturbation amongst college students.

Discussion

Overall, there were mixed findings in this study’s results in relation to the hypotheses tested. In general, there appears to be a weak link of prediction between positive lessons taught about masturbation in school or by parents and current positive views and attitudes toward masturbation. However, the results of this study indicate that if an individual is taught positive lessons about masturbation specifically during high school by parents or guardians, then they are more likely to have positive attitudes toward masturbation at the present. The two positive lessons of “how to obtain and use birth control/contraception” and “the name and functions of the reproductive organs of only my sex” taught by parents and/or guardians during high school were the strongest predictors of college students having current positive attitudes toward masturbation. This may be due to the fact that more conservative sex education programs, such as abstinence-only programs, often do not include as much concrete and comprehensive knowledge about sex, such as human anatomy and other methods of birth control, rather than strictly abstinence. More research should be conducted in this area in order to further compare this finding to attitudes toward masturbation.

Also, due to the finding of non-significant results for the first and second hypotheses of this study, the authors used alternative hypotheses that focused on the negative lessons taught about masturbation in school and by parents and how they may predict current negative attitudes toward masturbation. In these cases, the null hypotheses were rejected and significant results were found. For instance, the results of these two alternative hypotheses suggest that when individuals are taught negative lessons about masturbation while they are in school at a younger age or are taught by parents, these individuals will currently hold negative views of masturbation. Specifically, the lessons of “avoiding masturbation” and “abstaining from sex until marriage” were the strongest negative predictors of current negative attitudes.

Limitations

Although this study provides evidence that the type of lessons learned about masturbation can predict what views college students currently hold about masturbation, the study does have a few limitations. First, the questionnaires completed for this empirical study were only administered to college students from one Midwestern university. In order to gain a better grasp on how these constructs are related, it would be helpful to expand the participant pool to students at other universities and other regional areas to note any substantial differences between groups. Second, the administration of the questions was conducted using an online system where college students received class credit for completing the surveys. This factor may have played a role in how individuals responded and the fact that the surveys were completed on a computer could have made room for error in responding (e.g., a participant accidentally clicking on a different response by accident or by submitting the questionnaire unfinished). Lastly, the demographics of the participants were not diverse, which can be demonstrated as a limitation. For example, the vast majority of participants included in this study were Caucasian Americans, which could have

limited the range of responses that were recorded on the measures used. Also, approximately 80% of the participants in the sample were female. According to empirical literature, females do not do not masturbate as frequently as males. Having the majority of participants as females for this study may have skewed the data due to this reasoning (Pinkerton, Bogart, Cecil, & Abramson, 2003; Smith, Rosenthal, & Reichler, 1996).

In general, the findings of this study have implications for sexuality education taught within school systems and by parents. The authors suggest that it is important for parents to teach their children positive lessons about masturbation, specifically during the children's high school years – a time of significant maturational changes and potential increase in initiation of sexual activity. These positive lessons have been shown to predict positive views for individuals when they become young adults in college. Parents should also focus on the positive lessons of obtaining and using birth control, as well as the name and function of reproductive organs to have the most profound affect on future positive masturbation attitudes. Also, the study suggests that schools and parents alike should refrain from and limit the teaching negative lessons about masturbation and sexuality to children because these lessons predict negative views about masturbation later in life. To conclude, school administrators, teachers, and parents should carefully construct and plan sexuality education programs for children that focus on the positive aspects of masturbation, while avoiding teaching overtly negative or biased lessons in order to foster future healthy and positive attitudes toward masturbation as an adult.

Appendix

Sex Education Assessment
Positive/Negative Key

Please rate the following statements from 1 to 5 based on your opinion of the degree to which each item is considered a **negative statement (1)** or a **positive statement (5)** with **3 considered neutral**. Thanks!

Which of the following are things you were taught about sex/sexuality IN SCHOOL? Please check all that apply.

1. How to obtain and use birth control/contraception **Research Team Rating: 4**
2. How to abstain from sexual intercourse **Research Team Rating: 2**
3. How to prolong virginity **Research Team Rating: 2**
4. How to get an abortion **Research Team Rating: 3**
5. How to get Plan-B pills and/or other emergency contraception **Research Team Rating: 3**
6. How to put a child up for adoption **Research Team Rating: 3**
7. The name and functions of the reproductive organs of only my sex **Research Team Rating: 4**
8. The name and functions of the reproductive organs of all sexes **Research Team Rating: 5**
9. Puberty and its effects on only my life **Research Team Rating: 4**
10. Puberty and its effects on the lives of those of all sexes **Research Team Rating: 5**
11. How to have sex safely to avoid diseases/infections **Research Team Rating: 5**
12. How to practice proper sexual hygiene **Research Team Rating: 5**
13. Risk factors that affect early initiation of sexual activity **Research Team Rating: 3**
14. How sex will likely lead to negative consequences **Research Team Rating: 2**
15. How I or others might experience sexual pleasure without intercourse **Research Team Rating: 4**
16. The stages of sexual response **Research Team Rating: 4**
17. What masturbation is **Research Team Rating: 5**
18. How to masturbate **Research Team Rating: 5**
19. That I should avoid masturbating **Research Team Rating: 1**
20. How to make healthy decisions about sex and to adopt healthy sexual behaviors **Research Team Rating: 5**
21. That it's most appropriate to abstain from sex until you're ready **Research Team Rating: 4**
22. That it's most appropriate to abstain from sex until you're married **Research Team Rating: 2**
23. My religion's role in sex and sexuality **Research Team Rating: 3**
24. Other religions' role(s) in sex and sexuality **Research Team Rating: 4**
25. How to explore my own attitudes and values about sex and sexuality **Research Team Rating: 4**
26. That love and sex are not the same thing **Research Team Rating: 4**
27. How to be a responsible partner in a sexual relationship **Research Team Rating: 3**

28. How peer pressure is related to sex and sexuality **Research Team Rating: 3**
29. That casual sex never has any desirable outcomes **Research Team Rating: 1**
30. Different stages of intimate relationships **Research Team Rating: 4**
31. That early initiation of sexual behavior will make you undesirable to others **Research Team Rating: 1**
32. How to understand and deal with relationship violence **Research Team Rating: 4**
33. An individual's sexual orientation is a personal choice. **Research Team Rating: 3**
34. An individual's sexual orientation is biologically determined. **Research Team Rating: 4**
35. That individuals who undergo gender reconstruction are really just confused. **Research Team Rating: 2**
36. That watching pornography is unhealthy. **Research Team Rating: 2**
37. That teenagers don't have the ability to control sexual urges **Research Team Rating: 2**
38. Not Applicable--I was homeschooled.
39. I was not taught about any of the above at school.

Jannine Ray

My name is Jannine Ray and I attend Minnesota State University, Mankato. I graduated on May 10, 2014 and will begin coursework in the School Psychology Doctoral program in the fall. I was born in Washington but grew up in Woodbury, Minnesota. I completed the undergraduate psychology program in three years, which were infused with research experience on Dr. Eric Sprankle's sexual health research team. I plan on continuing research throughout my professional career. I hold an interest in studying self-development in order to advance skills and abilities, as well as in human resource aspects of psychology. Additionally, my interests lie within areas of exploring the relationships that may or may not exist between specific behaviors and different components of psychology.

Shelby Afflerbach

Shelby Afflerbach is a recent graduate of the Clinical Psychology Master's degree program at Minnesota State University, Mankato. She will continue her education as a doctorate student at Oklahoma State University. Her research interests include topics in the areas of sexual health, forensic psychology, and neuropsychology.

Dr. Eric Sprankle

Dr. Eric Sprankle is an Assistant Professor and clinical psychologist in the Department of Psychology at Minnesota State University, Mankato. He received his doctorate in clinical psychology from Xavier University in 2009, and completed his postdoctoral fellowship at the University of Minnesota Medical School's Program in Human Sexuality in 2011. He is a sex therapist certified by the American Association of Sexuality Educators, Counselors, and

Therapists. Dr. Sprankle's research interests include correlates of sexual compulsivity, and the intersection of genital piercings and sexual health.

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