# Vibration Nation? Gender Differences in Sexual Behavior and Orgasmic Function <br> Jessica Skocik <br> CRIM250W 005 <br> April Woolnough <br> April 20, 2011 

## Abstract

## Gender Differences in Sexual Activity and Orgasmic Function

This research examines the relationship between perceived gender specific sexual behaviors such as buying x-rated videos and vibrators and male and female orgasmic function. The data comes from the Laumann and colleagues' 1992 National Life and Social Health Survey. The survey was conducted using personal interviews and self-administered questionnaires with 1511 men and 1921 women. Three hypotheses are tested examining the relationship between gender and purchase of vibrators, gender and purchase or rental of x-rated videos, and vibrator use and orgasmic function. Findings show that women are more likely to purchase vibrators, men are more likely to purchase or rent x-rated videos and men and women who purchase vibrators are less likely to always have an orgasm. Social and political implications of these results are discussed.

Key Words: x-rated videos, orgasm, vibrator, gender

## Literature Review

If we are honest with ourselves, we would all agree that sex is by far one of the most interesting topics of research and discussion available to us. But there is not an ample amount of research on sexual attitudes and behavior. One of the major purposes of research on sex is to break down the gender stereotypes that are associated with certain types of sexual behaviors and practices. Stereotypes such as the prevalence of male pornography consumption and female vibrator use are central in much of the existing research about sexual practices. Previous study has addressed the concern that vibrator use among women would render them unable to experience pleasure when having vaginal intercourse (Herbenick, Reece, Sanders, Dodge, Ghassemi, and Fortenberry, 2009:1858). Another assumption is that men do not utilize vibrators unless engaging in sexual activity with a partner, but there is actually very little scientific knowledge about the prevalence of vibrator use among males (Reece, Herbenick, Sanders, Dodge, Ghassemi, and Fortenberry, 2009:1867). Stereotypes also exist surrounding the differences in pornography use between men and women. Early survey data supported the contention that women are less likely than men to enjoy sexually explicit material manifested in Xrated videos; however, more recent research has begun to break down this widely held belief (Quackenbush, Strassberg, and Turner, 1995:23). Much of the existing research about sexual practices has sought to draw conclusions about sex from a representative number of people in the United States. To put it simply, researchers are interested in sex research because we simply don't know enough about it. I am particularly interested in male and female sexual practices (such as the use of vibrators and Xrated media) and the effects that those practices have on sexual function in heterosexual monogamous relationships.

Women's sexual function as it relates to vibrator use is of special interest to researchers, because claims have been made both in support of and against vibrator usage as a positive experience for women. Herbenick and colleagues (2009) studied the prevalence of vibrator use among women and
the implications of that usage for sexual function in a nationally representative study of 2,056 women. Researchers found that vibrator use is common among women and is also associated with positive sexual function in areas of desire, arousal, lubrication, and orgasm (Herbenick et al. 2009:1863). These findings serve to debunk the myth that vibrator usage is associated with negative partnered sexual experiences. These results are consistent with research conducted over ten years earlier by Davis, Blank, Lin, and Bonillas (1996) who found that most women who reported using vibrators reported being consistently orgasmic. To collect data for the study, Davis and colleagues (1996) sent out 700 anonymous questionnaires to the most recent purchasers of a vibrator from a sexuality store. Two hundred and two questionnaires were returned; these results cannot be generalized, because the sample is too small. However, women who returned surveys reported that vibrator use actually made sexual experiences both with and without a partner more enjoyable (Davis, Blank, Lin, and Bonillas, 1996:316). This research directly relates to stereotypical beliefs about seemingly gender-specific sexual practices and the effects that certain patterns of behavior have on sexual function. These findings, however, only apply to women's use of vibrators.

It may come as a surprise that vibrator use by men is common in the United States. Reece and colleagues (2009) collected data about the prevalence of male vibrator usage from a nationally representative sample of 1,047 men. Researchers found that $45 \%$ of men in the United States engage in vibrator use. The difference between vibrator use among men and vibrator use among women, however, is that men are more likely to use vibrators when engaging in sexual interactions with a female partner as opposed to self-masturbation (Reece et al., 2009:1872). This information accounts for the fact that women may be more likely than men to use vibrators, but there are men who do in fact use them. Gender differences in sexual activity are not only found in regard to vibrator use. One of the largest gender differences in sexual practices is discrepancies in male and female pornography consumption.

It has been assumed that men are more involved in pornography consumption than women. Mosher and Maclan (1994) conducted a study that supported such claims using a sample of 200 male and 195 female undergraduate students. Women reported being generally less sexually aroused by viewing videos with content intended for both men and women, however, both men and women were responsive to videos intended for female audiences and directed by females (Mosher and Maclan, 1994:110). This has implications regarding whether or not women would be more apt to purchase pornographic material if it depicted scenes that they were interested in viewing, and thus breaking the stereotype that men are the only participants in pornography consumption. Not only should the intended audience of explicit videos be taken into consideration, but the effect of the content of the videos themselves on viewer enjoyment should also be addressed. Quackenbush, Strassberg, and Turner (1995) conducted a study of 164 college students to determine if manipulating the themes of explicit videos would have any effect on arousal for men and women. The researchers found that the romantically themed videos, those depicting love and affection, were significantly more arousing for both men and women than videos without romantic themes (Quackenbush, Strassberg, and Turner 1995:30). The implications of the findings are that men and women would purchase pornography at the same rates if all explicit videos had themes of romance and love as opposed to themes only surrounding male pleasure and satisfaction. Although some of the generally held conceptions about gender differences in sexual practices are founded upon common trends, there is still room for further research.

To address such differences between men and women's sex lives is not a simple task. However, it is possible to examine this issue through three hypotheses tested in this paper. Using respondents from the Laumann et al. 1992 National Health and Social Life Survey, I hypothesized that women are more likely than men to buy vibrators. Support for this hypothesis can be found in Herbenick, Reece, Sanders, Dodge, Ghassemi, and Fortenberry's (2009) co-occurring studies regarding
the prevalence of male and female vibrator use. Comparing the results of the similar studies, it becomes clear that women are more likely to use vibrators for self-masturbation, foreplay, and sexual intercourse than men, and thus should be more likely to purchase them for their personal use. Previous research addresses male sexual practices as well, such as frequency and type of pornography consumption. My second hypothesis is that men are more likely than women to buy or rent X-rated videos. The literature supports this hypothesis, because results from both Mosher and Maclan's (1994) study discussing men and women's responses to x-rated material and Quackenbush, Strassberg, and Turner's(1995) discussion regarding gender effects on themes in explicit videos indicated that men are more likely to become aroused by sexually explicit material than women despite its themes or intended audience. My third hypothesis is, controlling for gender, those who have bought vibrators are less likely to always have an orgasm than respondents who have not bought vibrators. Previous research may not support this hypothesis. However, much of the research that exists about sex was done with college students or people who are known to use sexual toys, such as Davis, Blank, Lin, and Bonillas's (1996) sample of women taken from known vibrator purchasers. I still expect to support this hypothesis, because I am interested in the practices of the sample of people who range from ages 18-60 and did not all report using vibrators

## Methods Section

In an attempt to collect detailed information about the sexual experiences and ideologies of a comprehensive sample of adults in the United States, Laumann, Gagnon, Michael, and Michaels (1992) conducted the 1992 National Health and Social Life Survey (NHSL). Researchers used survey data by means of conducting both personal interviews and self-administered questionnaires using a multistage area probability sample (an extensive cluster sample done in stages). The two samples that were collected included a cross-sectional sample and an oversample. An oversample was used in order to
increase the number of Black and Hispanic respondents participating in the study. Laumann and colleagues (1992) sought data from 4,369 eligible respondents with an overall response rate of $78.6 \%$.

In order to ascertain a sexual profile of adults in the United States, researchers asked questions about sexual practices, sexual attitudes, demographic characteristics, sexual victimization, levels of satisfaction and physical health. These questions were asked in the context of the two most recent sexual partners the respondents had in the 12 months preceding the survey. Although the number of variables this study examines is large, the number of respondents, and demographic characteristics of the sample make the results easy to generalize to the population of the United States. The data from the Laumann et al. (1992) study examines sexual behavior that is natural yet still inherently taboo. And perhaps more importantly, the data have opened the door for further research to explore these issues.

Laumann and colleagues examined myriad demographic characteristics including age, race, marital status, and education level. In the NHSL survey, $25 \%$ of respondents were between the ages of 18 and $28,25 \%$ of respondents were between the ages of 29 and $35,25 \%$ of respondents were between the ages of 36 and 44 , and $25 \%$ of respondents were between the ages of 45 and 60 . In this study, $75.9 \%$ of respondents were White, $16.1 \%$ were Black, $4.7 \%$ reported being Hispanic, $2.0 \%$ were Asian/Pacific Islander, and $1.3 \%$ was Alaskan/Native American. Respondents reported current marital status as well, $81.5 \%$ were currently married, $28.5 \%$ of respondents were never married, $13.9 \%$ were divorced, and $2.2 \%$ were widowed. Respondents were also queried about the level of education they had received, $14.8 \%$ of respondents reporting had less than a $12^{\text {th }}$ grade education, $29.5 \%$ were high school graduates, $32.7 \%$ had some school after high school or vocational school, $15.9 \%$ were college graduates, and $7 \%$ had more than an undergraduate degree. These demographic variables provide an overview of the participants in the study. I will examine gender differences in sexual behaviors among these same respondents.

One variable used in my hypotheses required recoding prior to analysis. Orgasmic function can be described by using many more categories than just "always" and "not always," so this particular variable was recoded. The original frequencies for orgasmic function included the following categories: always (46.3\%), usually (34.4\%), sometimes (14.2\%), rarely (2.6\%), and never (2.3\%). The recoded categories are "always having an orgasm" (46.4\%) and "not always having an orgasm (53.6\%). This recoding will make it simpler to determine whether or not there is a relationship between vibrator usage and frequency of orgasm which is one of the main purposes of this paper.

Gender of the respondent is both an independent and a control variable in this paper (44\% male and $56 \%$ female). The second independent variable examined in this paper is whether the respondent had ever purchased any vibrators or dildos ( $2 \%$ yes and $98 \%$ no). For consistency and simplicity "vibrators" will be used to describe this independent variable throughout. The first dependent variable examined in this paper is orgasmic function and was recoded into categories of "always" and "not always. This variable was examined based on the question, "How often did the respondent have an orgasm" and coded always (46.4\%) vs. not always (53.6\%) The second dependent variable in this paper is purchase or rental of x-rated videos, based on the question, "Did the respondent buy or rent x-rated videos," with $16.3 \%$ of respondents reporting that they had and $83.7 \%$ reporting that they had not. The final dependent variable examines purchase of any vibrators by inquiring, "Did the respondent purchase any vibrators," with $2 \%$ reporting that they had and $98 \%$ reporting that they had not. Respondents were also questioned about sexual practices with any kind of sex toy, but I chose to only examine vibrator use in order to narrow down the discussion to seemingly gender specific sex toys assumed to be related to orgasmic function.

## Findings Section

Table 1 (page 14) shows the relationship between gender and purchase of vibrators. Overwhelmingly, most of the respondents (98\%) reported not having bought vibrators. However, findings indicate that $2.2 \%$ of women reported purchasing vibrators compared to $1.7 \%$ of men. In conjunction with my hypothesis, a greater percentage of women said they had bought vibrators than men. Despite the differences between men and women's purchase of vibrators, the relationship between gender and purchase of vibrators is not statistically significant at the .05 level.

Table 2 (page 15) shows the relationship between gender and purchase or rental of x-rated videos. Independent of gender, the majority of respondents (83.7\%) reported not having bought or rented x-rated videos. However, findings illustrate that a greater percentage of men (23.3\%) than women (10.7\%) reported purchasing or renting x-rated videos. This finding supports my hypothesis that men are more likely than women to purchase or rent x-rated videos. The relationship between gender and purchase or rental of x-rated is statistically significant at the .05 level.

Table 3 (page 16) shows the relationship between the purchase of vibrators and having an orgasm, controlling for gender. In concurrence with my initial hypothesis, those who have bought vibrators are indeed less likely to always have an orgasm than those who have not bought vibrators. All women who bought vibrators reported not always having an orgasm and none of the women who had bought vibrators reported always having an orgasm. The relationship between purchase of vibrators and frequency of experiencing orgasms is not statistically significant for women at the .05 level. This relationship for men is a bit more complex. Of male respondents who have bought vibrators, 44.4\% reported always having an orgasm whereas $55.6 \%$ of men who have bought any vibrators reported not always having an orgasm. For men, the relationship between purchase of vibrators and frequency of experiencing orgasms is statistically significant at the .05 level.

## Discussion and Conclusion

This research focuses on the relationship between gender and prevalence of sexual practices. My first hypothesis is that women are more likely than men to buy vibrators. This hypothesis was supported by my research as I found that more women purchased vibrators than men. However this relationship was not statistically significant. This result occurred because although women purchased more vibrators than men, the vast majority of respondents reported not purchasing any vibrators. However, Herbenick et al.'s (2009) study, which found that vibrator use among women in the U.S. is quite common among a nationally representative sample of women, concurs with my result. The difference between how men and women use vibrators could account for the higher frequency of female purchasers, as Reece et al. (2009) found that men are more likely to use vibrators when engaging in sexual interactions with a female partner as opposed to self-masturbation. My second hypothesis is that men are more likely than women to buy or rent x-rated videos. This hypothesis was supported; men rent or purchase more $x$-rated videos than women. This coincides with research done by Mosher and Maclan (1994) who found that in general, women were less sexually aroused than men when viewing x-rated videos. Further, Quackenbush et al. (1995) found men and women both responded favorably to $x$-rated videos that had romantic themes such as love and affection. My third hypothesis is controlling for gender, respondents who have bought vibrators are less likely to always have an orgasm than respondents who have not bought vibrators. This hypothesis was supported; when gender is controlled for, respondents who had purchased vibrators were in fact less likely to always have an orgasm. This hypothesis proved to be a bit more complex, because the relationship between vibrator use and frequency of orgasm was statistically significant for men but not statistically significant for women. This result could have occurred, because if men purchase vibrators for their partners, they may not have as much partner sex as men who have not bought vibrators for their partners. Women could also become so accustomed to using a vibrator or dildo during self-masturbation that achieving
orgasm during partner sex is much more difficult. Much of the research done on this topic, however does not support my hypothesis. According to Herbenick et al. (2009), vibrator use was not only common among women but was associated with positive sexual function especially in areas of orgasm and arousal. Davis et al. (2006) came to a similar conclusion; most of the women in the study using vibrators reported being consistently orgasmic, but this non-probability sample used respondents who had recently purchased vibrators from an online sex toy store and could therefore be biased.

The strength of this research study lies in its large sample size. With a probability sample of over four thousand respondents, the results of this study can be generalized to the population of the United States. A weakness of this research study is that cross tabulation may be too general of a method for examining variables about sexual behavior. Cross tabulation does not account for causality in relationships and thus does not account for the presence of spurious variables in relationships. The first step I would take to improve this research would be to investigate possible spurious variables such as marital status, number of sexual partners, and masturbation patterns for men and women. To achieve generalizability of results, I would look for more and different sources that were done with probability sampling, because much of the research I found in this area was based on non-probability sampling and could thus not be generalized to the population. Further research on the topic of gender specific sexual behaviors and their effects on sexual function should address medical implications associated with vibrator use and what type of audiences $x$-rated videos are directed towards. The importance of this research lies in its subject matter. Further research in the areas of male and female specific sexual practices would have profound implications for heterosexual couples. Socially, the stigmatization of sex toy use could be eliminated if the public knew the positive effects that can come from using them. This research could also have profound implications for the adult pornography industry. If $x$-rated videos centered on themes that were appealing to both men and women, the industry would be much more successful and not a cause for controversy in heterosexual relationships.

The present research addressed the prevalence of gender specific sexual behaviors. With the results of this research, the "taboo" that surrounds sexual behaviors can be eliminated and the differences between what society thinks about sex and what is actually true about sex can be better understood. This research is essential because of the implications it will have for heterosexual relationships. Men and women can enjoy sex with each other more if they understand what is pleasurable for their partner. Men and women could both enjoy x-rated material if themes are directed towards both genders. The relationship between gender and sexual behaviors is complex but could be better understood through further research. With further inquiry into this complicated relationship, all sexual behaviors can be a positive experience for both men and women.

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Table 1: Cross tabulation showing the relationship between gender and purchase of vibrators

|  |  |  | Gender of Respondent |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Male | Female |  |
| Did respondent buy any vibrators | Yes | Count | 26 | 42 | 68 |
|  |  | \% within gender of respondent | 1.7\% | 2.2\% | 2.0\% |
|  | No | Count | 1476 | 1867 | 3343 |
|  |  | \% within gender of respondent | 98.3\% | 97.8\% | 98.0\% |
| Total |  | Count | 1502 | 1909 | 3411 |
|  |  | \% within gender of respondent | 100.0\% | 100.0\% | 100.0\% |

Table 2: Cross tabulation showing the relationship between gender and purchase or rental of $x$ rated videos

|  |  |  | Gender of Respondent |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Male | Female |  |
| Did respondent buy or rent x-rated videos | Yes | Count | 351 | 204 | 555 |
|  |  | \% within gender of respondent | 23.3\% | 10.7\% | 16.3\% |
|  | No | Count | 1153 | 1706 | 2859 |
|  |  | \% within gender of respondent | 76.7\% | 89.3\% | 83.7\% |
| Total |  | Count | 1504 | 1910 | 3414 |
|  |  | \% within gender of respondent | 100.0\% | 100.0\% | 100.0\% |

Table 3: Cross tabulation showing the relationship between purchase of vibrators and always having an orgasm, controlling for gender of the respondent.

| Gender | Orgasmic Function |  | Did respondent buy any vibrators |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Yes | No |  |
|  |  |  |  |  |  |
| Male | Not always having an orgasm | Count | 5 | 135 | 140 |
|  |  | \% within buying any | 55.6\% | 25.3\% | 25.8\% |
|  | Always having an orgasm | Count ----- vibrators | 4 | 398 | 402 |
|  |  | $\%$ within buying any vibrators | 44.4\% | 74.7\% | 74.2\% |
| Total |  | Count | 9 | 533 | 542 |
|  |  | \% within buying any vibrators | 100.0\% | 100.0\% | 100.0\% |
| Female | Not always having an orgasm | Count | 9 | 562 | 571 |
|  |  | \% within buying any vibrators | 100.0\% | 72.4\% | 72.7\% |
|  | Always having an orgasm | Count | 0 | 214 | 214 |
|  |  | \% within buying any vibrators | .0\% | 27.6\% | 27.3\% |
| Total |  | Count | 9 | 776 | 785 |
|  |  | \% within buying any vibrators | 100.0\% | 100.0\% | 100.0\% |

