

Vibrator Use Among Heterosexual Men Varies by Partnership Status: Results From a Nationally Representative Study in the United States

MICHAEL REECE, DEBBY HERBENICK, and BRIAN DODGE

Center for Sexual Health Promotion, Indiana University, Bloomington, Indiana, USA

STEPHANIE A. SANDERS

*The Kinsey Institute for Research in Sex, Gender, and Reproduction, Indiana University,
Bloomington, Indiana, USA*

ANNAHITA GHASSEMI

Church & Dwight Co., Inc., Princeton, New Jersey, USA

J. DENNIS FORTENBERRY

Center for Sexual Health Promotion, Indiana University, Bloomington, Indiana, USA

This nationally representative study documents that vibrator use among heterosexually identified men in the United States is common, with 43.8% reporting use of a vibrator at some point in their lives, with most vibrator use by heterosexual men occurring within the context of sexual interactions with a female partner. Approximately 94% of male vibrator users reported that they had used a vibrator during sexual play with a partner, and 82% reported that they had used a vibrator during sexual intercourse. These data support the work of therapists and educators who often make recommendations for the incorporation of vibrators into partnered relationships.

The majority of research related to the use of vibrators, to date, has focused on their use for therapeutic means such as anorgasmia, female sexual arousal disorder, and erectile dysfunction (Cameron, Rosen, & Swindle, 2005; Nelson, Ahmed, Valenzuela, Parker, & Mulhall, 2007; Rowland, den

Address correspondence to Michael Reece, Center for Sexual Health Promotion, Indiana University, Bloomington, IN 47405, USA. E-mail: mireece@indiana.edu

Ouden, & Slob, 2008), although vibrators are commonly used for sexual pleasure, enhancement, or novelty (Herbenick, Reece, Sanders, Dodge, Ghassemi, & Fortenberry, 2009; Reece, Herbenick, Sanders, Dodge, Ghassemi, & Fortenberry, 2009). Research related to the use of vibrators outside of a therapeutic context has been more limited, particularly in terms of studies that have documented the situational and relational contexts in which they are used. In particular, studies in this area have rarely focused on men's use of vibrators except as partners of women who have used them (Davis, Blank, Lin, & Bonillas, 1996).

Although vibrators were first designed for therapeutic use, they soon evolved into devices that were often shaped like phalluses or sold as back massagers. Contemporary vibrators are manufactured in a wide range of shapes, sizes, and textures, and some are marketed specifically as couple's vibrators that are intended for use during sexual interactions. Other products, such as vibrating rings, have recently been marketed specifically for male (or partnered) sexual pleasure or enhancement. They are also widely available through adult bookstores, in-home sex toy parties, the Internet, and large mainstream consumer product retail stores (Curtis, 2004; Leiblum, 2001; Loe, 1999; Reece, Herbenick, & Sherwood-Puzzello, 2004). As vibrators have become more mainstream, research related to their use has shown increases in the prevalence of use, and researchers have been more attentive to assessing the extent to which they are used by both men and women in either solo or partnered sex (Herbenick, Reece, Sanders, Dodge, Ghassemi, & Fortenberry, 2010; Herbenick, Reece, Sanders, *et al.*, 2009; Reece *et al.*, 2009).

Early data about the prevalence and characteristics of vibrator use were varied. Kinsey and colleagues (1953) reported rare vibrator use among women. Descriptions of vibrator use by men appeared in Hite's (1976) study of male sexuality in which small numbers of men described their use of vibrators.

Data from the 1992 National Health and Social Life Survey indicated that about 20% of men between the ages of 18 and 59 years found using a vibrator or dildo to be "somewhat" or "very" appealing, but only 2% indicated that they had purchased such a product during the past 12 months (Michael, Gagnon, Laumann, & Kolata, 1994). A nationally representative survey conducted in Australia showed that 12% of men reported having used some sex toy in the previous year (Richters, Grulich, deVisser, Smith, & Rissel, 2003) and a random-digit dial survey in Seattle, Washington, found that 20.3% of men reported having used a sexual enhancement product (defined as "vibrators, beads and balls, dildos, pumps, extenders, or rings") during a typical 4-week period (Foxman, Aral, & Holmes, 2006).

Most recently, nationally representative studies of those individuals between the ages of 18 and 60 years in the U.S. population revealed that vibrator use is common, with 52.5% of women and 44.8% of men reporting having

ever used a vibrator (Herbenick, Reece, Sanders, et al., 2009; Reece et al., 2009). In these studies, the extent to which those with a history of vibrator use reported that they had used a vibrator with a sexual partner was high, with 81% of female users and 91% of male users reporting partnered vibrator use.

Although these studies highlighted that vibrator use within the context of partnered sexual interactions is common, a better understanding of the manner in which vibrators are incorporated into male-female partnerships is needed, particularly given that some heterosexual women continue to have concerns about the extent to which their partner will be accepting of the introduction of a vibrator into the couple's solo or partnered sexual repertoires (Fisher et al., 2010; Herbenick & Reece, 2009; Herbenick, Reece, & Hollub, 2009). Concerns about using a vibrator with a partner may be a barrier to couples' openness to clinicians' recommendations of vibrator use for a range of sexual conditions (e.g., erectile dysfunction, orgasm difficulty, arousal challenges).

Therefore, the purpose of this study was to document, among a nationally representative sample of the U.S. population, the prevalence and other characteristics of vibrator use by heterosexually identified men and to explore the extent to which their vibrator use and its associated factors vary by their partnership status.

METHODS

During April 2008, data were collected from a population-based cross sectional survey of 1,047 men between the ages of 18 and 60 years in the U.S. via an existing research panel from Knowledge Networks (Menlo Park, California). Research panels accessed through Knowledge Networks were established on the basis of random digit dialing methods with a nonzero probability selection of U.S. households with a telephone; panels are regularly adjusted according to cell phone trends and demographic shifts in U.S. Census data. All data were collected by Knowledge Networks via the Internet; all participants in a given Knowledge Networks panel are provided with access to the Internet and hardware if needed. Researchers have used Knowledge Networks for multiple health-related studies, substantiating the validity of such methods for obtaining data from nationally representative samples of the U.S. population (Baker, Wagner, Singer, & Bundorf, 2003; Heiss, McFadden, & Winter, 2006; Herbenick et al., 2009; Holman et al., 2008; Reece et al., 2009; Silver, Holman, McIntosh, Poulin, & Gil-Rivas, 2002).

A total of 1,900 male panel members were invited to participate in the study. These individuals received an e-mail indicating that this was a study related to sexual health and sexual behavior. Up to three e-mail reminders

and one telephone reminder were sent to panel members. Of those invited to participate, 1,219 (64.2%) responded to the recruitment message, with 1,047 of those (85.9%) consenting to participate and completing the study instrument. This resulted in a response rate of 55.1%. Data in this study are limited to the 985 men who identified their sexual orientation as "heterosexual" (94.9% of men who responded to the question about their sexual orientation) given that the purpose of this study was to assess the extent to which vibrators are used by men within the context of male-female dyads and the characteristics of such use.

Participants completed a comprehensive range of items related to sociodemographics, partnership status, sexual behaviors, vibrator use and other vibrator-related measures, and sexual function. Sociodemographic measures included those related to age, gender, ethnicity, geographic location, marital and relationship status, household income, parental status, religiosity, and political orientation. We assessed sociodemographic characteristics using standard items collected on all participants in Knowledge Networks research panels. Regarding partnership status, men were asked to describe their current partnership status (e.g., "single and not dating," "single but dating someone," "in a relationship not living together," "in a relationship living together," "married living together," and "married not living together").

Men were asked to respond to questions about their partners and behaviors for partnered sexual activities and self-masturbation during the 4 weeks before the study. Regarding vibrator use, men were asked to describe the extent to which they had used vibrators and the nature of their use, for partnered and solo sexual activities during the past month, past year, and lifetime. Specifically, for these time periods, men reported whether they had used vibrators while masturbating alone, during sexual play with a partner, and during sexual intercourse with a partner. Men who had used vibrators in their lifetime also responded to measures related to their reasons for starting to use vibrators, those related to their level of comfort using vibrators both alone and with female sexual partners, and those related to their patterns of purchasing or otherwise accessing vibrators. Items related to vibrator use were developed specifically for this study (Herbenick et al., 2009; Reece et al., 2009).

Men were asked to complete the International Index of Erectile Function (Rosen et al., 1997), a 15-item measure with established reliability and validity that has been widely used to assess five domains of male sexual functioning: (a) erectile function, (b) orgasmic function, (c) sexual desire, (d) intercourse satisfaction, and (e) overall satisfaction (Cameron et al., 2005; Ferguson, Nelson, Brandes, & Shindel, 2008; Rosen, Cappelleri, & Gendrano, 2002; Nelson et al., 2008; Shindel, Ferguson, Nelson, & Brandes, 2008).

All study protocols were approved by the institutional review board at Indiana University, Bloomington.

RESULTS

Participant Characteristics

Given the nationally representative nature of the study and the use of post-stratification data weights during all analyses, the characteristics of participants were consistent with the most recent updates to the U.S. Census used by Knowledge Networks for the purpose of establishing data weights. Table 1 provides a detailed overview of participants' characteristics.

Partnership Status

The largest proportion of participants were married (47.3%, $n = 466$), with the majority of married men (97.9%) reporting that they were living with their spouse at the time of the study. Slightly more than one-fifth of men (21.2%, $n = 209$) described themselves as being single and not dating anyone at the time of the study. Another 11.2% ($n = 110$) reported that they were single but dating someone. The remaining 20.3% of men ($n = 200$) described themselves as being in a relationship, with slightly more than half (58%, $n = 116$) reporting that they lived with their partner.

For some subsequent analyses in this article, men who were single and not dating anyone were categorized as "single," those who indicated that they were dating someone and those who described themselves as being in a relationship were categorized as "partnered," and those who indicated they were married were categorized as "married."

Of the 775 partnered men (dating someone, being in a relationship, or being married), 98.8% ($n = 766$) indicated that their current partner or partners were exclusively women. Although 100% of the men in this sample described themselves as heterosexual, it was the case that 1.2% ($n = 9$) indicated that their partner(s) over the past 4 weeks had included other men.

There were some differences with regard to the age of men across partnership categories, with the mean age of married men being slightly older ($M = 41.7$ years, $SD = 10.3$ years) than men in both the partnered category ($M = 37.9$ years, $SD = 13.3$ years) and the single category ($M = 36.6$ years, $SD = 13.9$ years), $F(2, 985) = 15.6, p = .000$.

Masturbation and Sexual Intercourse

Heterosexual men provided data related to the frequency with which they had masturbated within the past 4 weeks and also the number of times that they had attempted sexual intercourse. Approximately one-third of men (32.0%, $n = 316$) reported no masturbation during the past 4 weeks; 20.9% ($n = 206$) reported masturbating less than once per week, 31.4% ($n = 309$)

TABLE 1. Participant Characteristics

Participant Characteristics	Weighted (<i>N</i> = 985) %	<i>n</i>
Age		
18–24	15.3	150
25–34	21.2	209
35–44	26.8	264
45–54	22.8	225
55–60	13.9	137
Ethnicity		
White, Non-Hispanic	68.5	675
Black, Non-Hispanic	10.6	105
Hispanic	14.4	142
Other, Non-Hispanic	6.5	64
Education		
Bachelors Degree or Higher	11.4	112
Some College	32.4	319
High School Graduate	27.9	275
Less than High School	28.4	279
Self-Reported Relationship Status		
Married and Living Together	46.3	456
Married but Not Living Together	1.0	10
Single Not Dating Anyone	21.2	209
Single But Dating Someone	11.2	110
In Relationship, Living Together	11.8	116
In Relationship, Not Living Together	8.5	84
Geographic Region of U.S.		
Northeast	18.7	184
Midwest	21.6	213
South	35.9	354
West	23.8	234
MSA Status		
Metropolitan Area	83.7	825
Non-Metropolitan Area	16.3	160
Annual Household Income		
Less than \$25,000	22.5	222
\$25,000–\$49,999	25.1	247
\$50,000–\$74,999	19.9	197
Over \$75,000	32.5	320
Children Under 18 in Household		
No	67.7	667
Yes	32.3	318
Social Ideology (<i>n</i> = 983)		
Liberal	24.9	245
Moderate	37.0	364
Conservative	38.1	375
Religious Service Attendance (<i>n</i> = 844)		
Never	16.1	136
Once Per Year or Less	23.0	194
Few Times Per Year	19.1	161
Once or Twice Per Month	8.5	71
Weekly	22.5	190
More than Once Per Week	10.8	91

between 1–3 times per week, 10.3% ($n = 102$) most days of the week, and 4.5% ($n = 45$) on a daily basis. Although the proportions of men who masturbated 1–3 times per week or less than once per week were not significantly different across relationship categories, more frequent masturbation (most days of the week or daily) was more likely to be reported by men who were single (20.3%) or partnered (17.4%) than men who were married (11.0%).

Given that the measure related to sexual intercourse frequency was a component of the overall assessment of sexual function, we assessed attempts at sexual intercourse, rather than actual intercourse events. Of the men who reported sexual activity within the 4-week period before the study ($n = 866$, 87.9%), 77.2% ($n = 668$) had attempted sexual intercourse at least one time, with 33.6% ($n = 292$) reporting 1–4 attempts, 27.0% ($n = 234$) reporting 5–10 attempts, and 16.4% ($n = 142$) reporting more than 10 attempts. Most men, 89.1%, reported that they “almost always or always” were able to penetrate their female partner. Men in partnerships reported significantly more attempts at intercourse than single men, with only 22.1% ($n = 36$) of single men reporting at least one sexual intercourse attempt in the past 4 weeks compared with 85.8% ($n = 242$) of partnered men and 91.2% ($n = 392$) of married men, $\chi^2(10, 869) = 3.48, p = .000$.

Vibrator Use

Among heterosexually identified men, the proportion in this nationally representative sample who reported having used a vibrator at some point in their lives was 43.8% ($n = 423$). Of these men with a history of vibrator use, 22.3% had used a vibrator within the past month ($n = 94$), 32.6% within the past year ($n = 138$), and 45.0% ($n = 190$) at some point more than 1 year ago. With regard to the specific sexual situations during which men had incorporated vibrators, among those with a history of use, the majority reported having used a vibrator during sexual interactions with others, including partnered sexual play or foreplay (93.6%, $n = 396$) and sexual intercourse (82.4%, $n = 348$). One-third of male vibrator users (33.3%, $n = 141$) reported having used a vibrator during masturbation alone. Approximately one-fourth of users, 24.9% ($n = 109$) reported having used a vibrator during all three sexual situations (partnered play, intercourse, and solo masturbation). A small proportion (5.5%, $n = 109$) reported having only ever used a vibrator during masturbation while alone, indicating that the majority of vibrator use by heterosexual men occurs during sexual interactions with others (e.g., during foreplay, sexual play, or vaginal intercourse).

Men who had ever used vibrators were more likely to report being employed full time ($p < .01$) and to be between 30 and 44 years of age ($p < .001$); however, the mean ages of men within each of the primary vibrator

use categories (i.e., past month, past year, >1 year ago, and never) were not statistically different. Men who identified their political orientation as conservative ($p < .01$) or who were less likely to report attending religious services on a weekly basis ($p < .001$) were less likely to have a history of vibrator use.

Vibrator Use and Relationship Status

When men in the sample were compared by partnership status, reports of having used vibrators in the past were significantly higher among men who were in a partnership (49.5%) or married (46.6%) than men who were single and not currently dating (29.1%), $\chi^2(6, 965) = 49.4, p = .000$. When compared by the specific nature of their current relationship status, findings indicate that sizeable proportions of men who were single at the time of the study reported having used a vibrator at some point in the past (e.g., 23.3% had used more than 1 year ago). However, men in partnerships, particularly men who reported living with a spouse or partner, reported higher rates of vibrator use within the recent past. Table 2 provides an overview of the history and of vibrator use by specific partnership categories.

Similar trends were evident when the specific sexual situations within which men had used vibrators were considered by partnership category. Men in partnerships or who were married were more likely to report a history of vibrator use during partnered play or foreplay (48.7% and 42.7%, respectively) than single men (24.6%), $\chi^2(2, 969) = 31.3, p = .000$. This was also the case with vibrator use during intercourse, with 43.0% of men in partnerships and 38.0% of married men reporting such use compared with 21.3% of single men, $\chi^2(2, 969) = 26.9, p < .001$. We detected no significant differences between partnership categories with regard to the proportion of men who reported having used a vibrator during masturbation, which was reported by 15.5% of single men, 14.4% of married men, and 14.0% of men in partnerships.

Given that partnered men were slightly older than single men and, more generally, men who were married were slightly older than unmarried men, rates of vibrator use within partnership categories were further examined by age. Among single men, those in the 35–44-year age group reported higher rates of having ever used a vibrator during masturbation (6.3%) than did younger (3.4%) or older men (1.4–4.3%), $\chi^2(3, 207) = 11.1, p = .011$. However, among men in partnerships, those older than 45 years of age reported a history of vibrator use during masturbation (8.8%) higher than did those men who were younger than 45 years (0.3–3.6%), $\chi^2(3, 306) = 22.5, p = .000$. Rates of vibrator use during masturbation among married men did not vary by age.

TABLE 2. Vibrator Use History, by Current Relationship Status ($N = 965$)

	Single, not dating ($n = 206$)		Single, dating partner ($n = 109$)		In a relationship, not living together ($n = 82$)		In a relationship, living together ($n = 115$)		Married, living together ($n = 443$)		Married, not living together ($n = 10$)	
	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%	<i>n</i>
Past month	1.5	3	2.8	3	19.5	16	14.8	17	12.4	55	0.0	0
Past year	4.4	9	12.8	14	18.3	15	22.6	26	16.5	73	20.0	2
1+ year ago	23.3	48	24.8	27	19.5	16	14.8	17	18.1	80	10.0	1
Never	70.9	146	59.6	65	42.7	35	47.8	55	53.0	235	70.0	7

TABLE 3. Recency of Vibrator Use During Specific Sexual Acts of Men with Past History of Vibrator Use by Partnership Category ($N = 423$)

	Single, Not Dating		Partnered		Married	
	%	n	%	n	%	n
Used Vibrator While Masturbating Alone ($n = 419$)						
Past month	5.0	3	4.6	7	1.4	3
Past year	5.0	3	9.2	14	9.6	20
1 + year ago	41.7	25	14.5	22	20.1	42
Never	48.3	29	70.4	107	68.9	144
Used Vibrator During Sexual Play with Partner ($n = 422$)						
Past month	1.7	1	19.7	30	23.9	50
Past year	11.7	7	33.6	51	33.0	69
1 + year ago	71.7	43	45.4	69	36.3	76
Never	15.0	9	0.7	1	7.7	16
Used Vibrator During Sexual Intercourse						
Past month	1.6	1	15.8	24	22.0	46
Past year	11.3	7	34.9	53	31.6	66
1 + year ago	59.7	37	36.8	56	29.2	61
Never	27.4	17	12.5	19	17.2	36

With regard to vibrator use during both partnered sexual play and sexual intercourse, there were no differences by age among single men, but among both partnered and married men, rates of vibrator use history varied by age. Among partnered men, those older than 45 years of age were more likely to report vibrator use during sexual play (20.1%) than younger men (3.9–15.3%), $\chi^2(3, 308) = 40.8, p = .000$, and also more likely to have used vibrators during intercourse (18.0% vs. 3.9–12.4%), $\chi^2(3, 306) = 25.7, p = .000$. Among married men, higher rates of use during partnered sexual play were more likely to be reported by men in the 35–44-year age group (17.8%) than by younger men (1.1–11.0%) or older men (13.0%), $\chi^2(3, 455) = 9.9, p = .019$. The same was true for vibrator use during sexual intercourse; among married men, past use was higher among the 35–44-year age (15.2%) than younger (1.1–10.4%) or older men (11.5%), $\chi^2(3, 454) = 8.5, p = .038$.

When considering the behaviors only of men who had ever used vibrators, the extent to which vibrator use is influenced by partnership status and whether men live with their partners becomes more evident, particularly with regard to incorporating vibrators into sexual play or intercourse. Among men who have used vibrators in the past ($n = 423$), those in partnerships report higher rates of use within the past month and past year than single men, and this trend is further enhanced among men who report living with a partner. Table 3 provides an overview of the extent to which men with a history of vibrator use have used vibrators during certain sexual situations within the recent past, compared by specific partnership characteristics.

TABLE 4. Reasons for Using Vibrators Among Men with History of Use ($N = 400$)

Reason for Use	By Relationship Category									
	All Users		Single ($n = 51$)		Partnership ($n = 151$)		Married ($n = 198$)		χ^2	p
	$N = 400$	n	%	n	%	n	%	n		
For Fun	66.2	265	37.3	19	74.2	134	67.7	134	23.6	0.000
To Spice Up My Sex Life	52.4	209	39.2	20	54.0	81	54.5	108	4.07	0.130
Curiosity	47.0	188	33.3	17	43.7	66	53.0	105	7.37	0.025
To Make Orgasm Easier for My Partner	40.5	162	35.3	18	37.1	56	44.4	88	2.6	0.275
My Partner Wanted To	31.6	123	33.3	17	44.0	66	21.7	43	19.7	0.000
To Make Orgasm Easier for Myself	5.0	20	0.0	0	11.3	17	1.5	3	n/a*	

* = cell sizes too small for analysis.

Reasons for Using Vibrators

Men who had reported ever using a vibrator were asked to describe the reasons that they had started to use vibrators during sexual activities, with the most frequently reported reasons being “for fun” (66.2%, $n = 265$), “to spice up my sex life” (52.4%, $n = 209$), and “curiosity” (47.0%, $n = 188$). A large proportion of men (40.5%, $n = 162$) reported that they had started using vibrators to help further enhance their female partner’s pleasure for achieving an orgasm. Approximately one-third (31.6%, $n = 123$) reported that their initiation of vibrator use was associated with their partners’ desire to do so.

Table 4 provides an overview of the reasons that men reported as reasons for starting vibrator use, both for the overall sample of vibrator using men and by partnership status. When reasons for the initiation of vibrator use were assessed by partnership status, partnered and married men were more likely than single men to indicate that they had started to use them “for fun” and out of “curiosity.” Partnered men were more likely than married men or single men to indicate that their vibrator use was associated with their partner’s desires related to vibrator use.

Comfort Using Vibrators

All men, regardless of vibrator use history, were asked to describe their level of comfort with the notion of using vibrators by themselves and with a sexual partner. Among men who reported having never used a vibrator and

who chose to rate their comfort ($n = 536$), 14.8% ($n = 80$) indicated that they would be “very” or “somewhat” comfortable using a vibrator alone yet 32.7% ($n = 180$) reported that they would be very or somewhat comfortable using a vibrator with a sexual partner. Men who had used a vibrator in the past reported higher levels of comfort than men who had not used a vibrator, with 39.4% of vibrator users ($n = 159$) indicating that they would be “very” or “somewhat” comfortable using a vibrator alone and 87.6% ($n = 362$) endorsing the same level of comfort for using a vibrator with a sexual partner.

Sexual Function Scores and Vibrator Use

While adjusting for age within each partnership category, we compared men’s self-reported scores on each domain of the International Index of Erectile Function according to their history of vibrator use. Table 4 provides an overview of these comparisons.

ERECTILE FUNCTION

Among both single men and married men, those with a history of vibrator use scored themselves higher on the erectile function domain of the International Index of Erectile Function than did men who had not used vibrators in the past. Scores for the erectile function domain of the International Index of Erectile Function among partnered men were not statistically different based on those men’s history of vibrator use.

INTERCOURSE SATISFACTION

On the intercourse satisfaction domain, only married men varied according to their history of vibrator use, with vibrator users scoring themselves significantly higher.

ORGASMIC FUNCTION

Within all three partnership categories, men with a history of vibrator use self-reported higher scores.

SEXUAL DESIRE

Partnered men, according to their history of vibrator use, did not vary on the sexual desire domain. Single men and married men with a history of

TABLE 5. IIEF Scores by Partnership Category and History of Vibrator Use ($N = 723$)

Partnership Category	Mean IIEF Domain Scores								
	Single			Partnered			Married		
Vibrator Use History	Used (<i>n</i> = 16)	Never Used (<i>n</i> = 31)	<i>p</i>	Used (<i>n</i> = 132)	Never Used (<i>n</i> = 144)	<i>p</i>	Used (<i>n</i> = 187)	Never Used (<i>n</i> = 213)	<i>p</i>
Sexual Function Domains									
Erectile function (range 1–30)	15.79	13.1	<0.001	21.35	21.46	0.126	22.76	21.89	<0.001
Intercourse satisfaction (range 0–15)	2.96	1.93	0.096	10.6	10.17	0.478	11.3	10.51	<0.001
Orgasmic function (range 0–10)	7.73	4.84	<0.001	8.82	7.98	0.008	9.32	8.94	<0.001
Sexual desire (range 2–10)	7.51	5.86	<0.001	7.75	7.83	0.299	7.8	7.64	<0.001
Overall satisfaction (range 2–10)	7.03	5.81	<0.001	7.48	8.26	0.01	7.41	7.84	0.017

vibrator use scored themselves higher on this domain when compared with men within their partnership category who had never used a vibrator.

OVERALL SATISFACTION

While a past history of vibrator use was associated with higher scores on this domain for single men when compared with those who had not used a vibrator, the findings were different among both partnered and married men. For partnered and married men, scores on this domain were higher for men without a history of vibrator use than for men who had used vibrators in the past.

Men's Access to Vibrators

Men with a history of vibrator use were asked to describe the ways in which they had accessed or purchased vibrators. Although 59.9% ($n = 254$) of men with a history of vibrator use reported having purchased a vibrator for a sexual partner, only 13.0% of these men ($n = 55$) reported having purchased a vibrator for themselves. Slightly fewer, 11.8% ($n = 50$), had been given a vibrator by a sexual partner, and 3.1% ($n = 13$) had been given a vibrator by a friend. When examined by partnership category, there were no statistically significant differences by relationship status with regard to men having purchased a vibrator for themselves. Although more married men with a history of use reported having been given a vibrator by a sexual partner (15.2%, $n = 32$), this was not statistically different from the proportion of single men (6.6%) and partnered men (9.2%) who reported the same. Married men (64.0%, $n = 135$) and partnered men (65.8%, $n = 100$) with a history of vibrator use were more likely to report purchasing a vibrator for a sexual partner than single men (31.1%, $n = 19$), $\chi^2(2, 424) = 24.7, p = .000$.

Partner's Vibrator Use and Men's Perceptions

Partnered and married men with a history of vibrator use were asked whether their partner uses a vibrator while alone and whether their partner's solo use of vibrators was something that they liked or disliked. Slightly more than one-fourth (27.8%, $n = 100$) of male users indicated that they did not know whether their partner used a vibrator while alone, and 31.9% ($n = 115$) reported that their partner did not use a vibrator while alone. Of the remaining 40.3% ($n = 145$) reporting that their partner did use a vibrator while alone, the largest proportion (50.3%, $n = 73$) stated that they "strongly liked" that she used a vibrator while alone, and 38.6% ($n = 56$) stated that they "somewhat liked" her solo use of vibrators. Only 11% ($n = 16$) of men who had used vibrators and who knew that their partner used a vibrator

alone reported that they either “strongly disliked” or “somewhat disliked” her solo use.

DISCUSSION

The purpose of this study was to document, among a nationally representative sample of the U.S. population, the nature of vibrator use by heterosexually identified men, particularly the extent to which characteristics related to men’s vibrator use vary by partnership status. The findings indicate that vibrator use among heterosexually identified men in the United States is common, with 43.8% reporting that they had used a vibrator at some point in their lives. Although approximately one-third of men who had used a vibrator in the past reported having masturbated with a vibrator, these findings document that most vibrator use by heterosexual men occurs within the context of sexual interactions with a female partner, with approximately 94% of users reporting that they had used a vibrator during sexual play with a partner and 82% reporting that they had used a vibrator during sexual intercourse.

Consistent with data reported by Reece et al. (2009), these data suggest important relations between vibrator use and men’s scores on a measure of sexual function. Although there were differences on the basis of one’s relationship status, patterns indicated that men with a history of vibrator use reported higher scores on the International Index of Erectile Function domains for erectile function, intercourse satisfaction, orgasmic function, and sexual desire. Given this, it was interesting that men without a history of vibrator use scored higher on overall satisfaction. As discussed later, men reported that they started to use a vibrator mostly to enhance sexual pleasure or to enhance a female partner’s ability to reach orgasm. This finding may be related to a general level of overall sexual satisfaction among the general population or that men who have never incorporated a product such as a vibrator have simply not felt the need to enhance the sexual experience. Even men who may not feel the need to address any issues of function, yet who would want to incorporate a product for fun, may be intimidated by the notion of using a vibrator simply have never considered doing so.

These findings also make clear the relations between having a partner and a man’s likelihood of using a vibrator. Men with partners reported rates of vibrator use that were significantly higher than the rates reported by single men. Although the patterns of increased vibrator use among men in relationships indicate that there are important relational factors that influence the extent to which vibrators are incorporated into sexual interactions between men and women, the results of this study also highlight the need for future work in this area. One of the parameters of the study is that we measured only men’s current (i.e., at time of study) partnership status. Although the

data clearly indicate that men who were partnered at the time of the study reported more (and more recent) vibrator use with partners, it is not possible to assess the extent to which use among partnered men was unique to their current partnership or part of a history of use with past partners as well. Also, some single men without a current dating partner indicated a history of vibrator use with partners, but these data did not allow for insights into the characteristics of the partners with whom they had used vibrators.

The study findings also suggest that the incorporation of vibrators into the sexual interactions of couples is associated with a desire to enhance their playfulness and pleasure. Most men who had used a vibrator indicated that they started to do so "for fun" and "to spice up" their sex life. Although approximately one-third of men reported that they had started to use a vibrator at the request of their partner, a significant number of men reported that they had initiated the use of a vibrator to further enhance their partner's sexual pleasure from orgasm. It is unknown whether the need to help a partner achieve sexual pleasure from orgasm was expressed by a man's partner or perceived by the man himself. These findings collectively suggest that vibrators may play an important role in the pleasure-related aspects of sexual interactions between men and women, whether those aspects are related to supporting a woman's experience of pleasure or simply introducing a playful method for reinvigorating the sexual lives of a couple.

Strengths and Limitations

This study had several strengths. The use of nationally representative sampling and poststratification data weights allowed for the establishment of population estimates for vibrator use among heterosexual men, something that has not previously been available in the scientific literature. The facilitator of data collection, Knowledge Networks, also has established secure and confidential processes for the collection of sensitive data with its panel members, perhaps resulting in fewer concerns by participants about participating in a study related to relationships and sexual behavior.

The limitations of this study offer insights into future research in this area now that it has been documented that vibrator use among heterosexual men is common. This study did not include measures related to how men may actually be using vibrators on their own bodies and their partners' bodies.

Although the study indicates that sizeable proportions of men (regardless of past vibrator use) are comfortable using vibrators, these data do not allow for a full understanding of the intrapersonal or interpersonal factors that influence such comfort. The same is true for understanding how men and women may introduce the prospect of using a vibrator during sexual interactions.

Given the cross-sectional nature of these data, it is also not possible to determine the full nature of the relation between sexual function and vibrator use. Causal relations between these factors cannot be examined in this study, yet these data provide the impetus for the further exploration of these issues using more experimentally oriented and/or event-specific designs.

Implications for Therapists and Educators

The extent to which men expressed comfort using vibrators with a partner has important implications for therapists, educators, and other sexual health professionals. Even among men who had never used a vibrator, approximately one-third reported that they would be "somewhat" or "very" comfortable doing so with a partner. Recent innovations have brought to the mainstream marketplace a broader range of vibrating products that are specifically designed for sexual interactions between partners. These innovations have resulted in a diversity of vibrating products, such as those that simultaneously deliver vibrations to both partners and those that can be worn by a male partner during intercourse (e.g., vibrating rings), and those that are smaller, more discreet, and variable in vibration frequency and amplitude.

For therapists and educators working with dyads and making recommendations for the incorporation of vibrators into partnered relationships, it would be important that they become familiar with the evolving nature of both the range of vibrators in the marketplace and the venues from which these products are accessible. For example, it is now the case that vibrators are available via the Internet, in-home toy parties, traditional sex-oriented retail spaces, and more recently via large mainstream consumer product retail stores. This increased availability of vibrators supports a professional's ability to make appropriate recommendations on the basis of a particular individual's level of comfort with a vibrator purchase. Also, the range of venues that sell vibrators and other sex toys offers the opportunity for consumers and professionals alike to more easily stay current on the trends in product manufacturing and the particular characteristics of vibrating products (e.g., size, shape, sound, texture, speed).

The fact that men now commonly use vibrators, products which have long been described as being used primarily by women, may suggest an increasing overlap in gendered aspects of sexual pleasure. Therapists might find it helpful to encourage their clients to reconsider traditional ideas of gendered sexualities through the use of sexual enhancement products such as vibrators.

ACKNOWLEDGEMENTS

This study was funded by Church & Dwight Co., Inc.

REFERENCES

Baker, L., Wagner, T. H., Singer, S., & Bundorf, M. K. (2003). Use of the Internet and e-mail for health care information: Results from a national survey. *Journal of the American Medical Association*, 289, 2400–2406.

Cameron, A., Rosen, R. C., & Swindle, R. W. (2005). Sexual and relationship characteristics among an Internet-based sample of U.S. men with and without erectile dysfunction. *Journal of Sex & Marital Therapy*, 31, 229–242.

Curtis, D. (2004). Commodities and sexual subjectivities: A look at capitalism and its desires. *Cultural Anthropology*, 19, 95–121.

Davis, C. M., Blank, J., Lin, H.-Y., & Bonillas, C. (1996). Characteristics of vibrator use among women. *Journal of Sex Research*, 33, 313–320.

Ferguson, G. G., Nelson, C. J., Brandes, S. B., & Shindel, A. W. (2008). The sexual lives of residents and fellows in graduate medical education programs: a single institution survey. *Journal of Sexual Medicine*, 5, 2756–2765.

Fisher, C. M., Herbenick, D., Reece, M., Dodge, B., Satinsky, S., & Fischtein, D. (2010). Exploring sexuality education opportunities at in-home sex toy parties in the United States. *Sex Education*, 10(2), 131–144.

Foxman, B., Aral, S. O., & Holmes, K. K. (2006). Common use in the general population of sexual enrichment aids and drugs to enhance sexual experience. *Sexually Transmitted Diseases*, 33, 156–162.

Heiss, F., McFadden, D., & Winter, J. (2006). Who failed to enroll in Medicare Part D, and why? early results. *Health Affairs*, 25, 344–354.

Herbenick, D., & Reece, M. (2009). In-home sex toy party facilitators as sex educators: what questions are they asked and what makes them more ‘askable’? *American Journal of Sexuality Education*, 4(2), 178–193.

Herbenick, D., Reece, M., & Hollub, A. (2009). Inside the ordering room: Characteristics of women’s in-home sex toy parties, facilitators and sexual communication. *Sexual Health*, 6, 318–327.

Herbenick, D., Reece, M., Sanders, S. A., Dodge, B., Ghassemi, A., & Fortenberry, J. D. (2009). Prevalence and characteristics of vibrator use by women in the United States: Results from a nationally representative study. *Journal of Sexual Medicine*, 6, 1857–1866.

Herbenick, D., Reece, M., Sanders, S. A., Dodge, B., Ghassemi, A., & Fortenberry, J. D. (2010). Women’s vibrator use in sexual partnerships: Results from a nationally representative survey in the United States. *Journal of Sex & Marital Therapy*, 36, 49–65.

Hite, S. (1976). *The Hite report*. New York: Macmillan.

Holman, E. A., Silver, R. C., Poulin, M., Andersen, J., Gil-Rivas, V., & McIntosh, D. N. (2008). Terrorism, acute stress, and cardiovascular health: A 3-year national study following the September 11th attacks. *Archives of General Psychiatry*, 65, 73–80.

Kinsey, A. C., Pomeroy, W. B., Martin, C. E., & Gebhard, P. H. (1953). *Sexual behavior in the human female*. Philadelphia: Saunders.

Leiblum, S. (2001). Women, sex and the Internet. *Sexual and Relationship Therapy*, 16, 389–404.

Loe, M. (1999). Feminism for sale: Case study of a pro-sex feminist business. *Gender & Society*, 13, 705–732.

Michael, R. T., Gagnon, J., Laumann, E., & Kolata, G. (1994). *Sex in America: a definitive survey*. Boston: Little, Brown.

Nelson, C. J., Ahmed, A., Valenzuela, R., Parker, M., & Mulhall, J. P. (2007). Assessment of penile vibratory stimulation as a management strategy in men with secondary retarded orgasm. *Urology*, 69(3), 552–555.

Nelson, C. J., Shindel, A. W., Naughton, C. K., Ohebshalom, M., Mulhall, J. P. (2008). Prevalence and predictors of sexual problems, relationship stress, and depression in female partners of infertile couples. *Journal of Sexual Medicine*, 5, 1907–1914.

Reece, M., Herbenick, D., & Sherwood-Puzzello, C. (2004). Sexual health promotion and adult retail stores. *Journal of Sex Research*, 41, 173–180.

Reece, M., Herbenick, D., Sanders, S. A., Dodge, B., Ghassemi, A., & Fortenberry, J. D. (2009). Prevalence and characteristics of vibrator use by men in the United States. *Journal of Sexual Medicine*, 6, 1867–1874.

Richters, J., Grulich, A. E., deVisser, R. O., Smith, A. M. A., & Rissel, C. E. (2003). Autoerotic, esoteric and other sexual practices engaged in by a representative sample of adults. *Australian and New Zealand Journal of Public Health*, 27, 180–190.

Rosen, R. C., Cappelleri, J. C., & Gendrano, N. (2002). The International Index of Erectile Function (IIEF): A state-of-the-science review. *International Journal of Impotence Research*, 14, 226–244.

Rosen, R. C., Riley, A., Wagner, G., Osterloh, I. H., Kirkpatrick, J., & Mishra, A. (1997). The International Index of Erectile Function (IIEF): A multidimensional scale for assessment of erectile dysfunction. *Urology*, 49, 822–830.

Rowland, D. L., den Ouden, A. H., & Slob, A. K. (2008). The use of vibrotactile stimulation for determining sexual potency in the laboratory in men with erectile problems: Methodological considerations. *International Journal of Impotence Research*, 6, 153–161.

Shindel, A. W., Ferguson, G. G., Nelson, C. J., & Brandes, S. B. (2008). The sexual lives of medical students: A single institution survey. *Journal of Sexual Medicine*, 5, 796–803.

Silver, R. C., Holman, E. A., McIntosh, D. N., Poulin, M., & Gil-Rivas, V. (2002). Nationwide longitudinal study of psychological responses to September 11. *Journal of the American Medical Association*, 288, 1235.

Copyright of Journal of Sex & Marital Therapy is the property of Routledge and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.