

# International Segmentation of the Sex Toy Market

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## **Abstract**

*This paper explores the motivations of sex toy users across the world. There a global and extremely fast-growing market for such items, and yet a paucity of academic research to understand it and profit from it. In an initial attempt to provide directions for effective segmentation, four segments are distinguished and described, along with significant differences in terms of motivations behind decision-making. Based on a study conducted in a French company selling online products, the analysis of data contributes to our understanding of the nature and characteristics of sex toy buyers, and eventually recommends strategies for successful marketing strategies and other future developments.*

**Keywords:** Sex toys; online shopping; motivations; segmentation

## **1. Sex toy use**

What are sex toys for? Uses vary according to people's situations and aspirations. Toys can help improve sexual performance (copulation may last longer for example), shorten or extend foreplay, satisfy a partner who needs more time to climax than his/her partner(s), or even make a long-distance relationship more bearable (Powers 2011: 24). For example the manager of Pink Visual planned the distribution of one thousand Internet-connected sex toys for wives of soldiers based in Afghanistan (Segan 2012). Some people will use sex toys to

avoid contracting sexually transmitted diseases (Rajak 2011: 25). Even when it comes to masturbation, motivations differ –people seek to have an orgasm, fantasize, relax, fall asleep, wake up or simply feel connected to their own bodies (Taormino 2009: 22). After all in the United States for example, only 30% of women have orgasm through intercourse, and 10% have never had an orgasm (Powers 2011: 6). This is a shame since the clitoris is the only organ, on either male or female bodies, whose sole function is pleasure (Powers 2011: 17; Venning and Cavanah 2003: 17). So for women who do not masturbate or have trouble reaching orgasm, therapists recommend sex toys (Taormino 2009: 22).

Sex education at school does not focus on pleasure; yet sex does make people happy (Venning and Cavanah 2003: v; 15), and knowing one's body prevents frustrations. Self-knowledge is the key to sexual well-being –when people ask Taormino (2009: 23) for tips on becoming a better lover, she merely advises to masturbate. And it works –women increasingly view sexual gratification as a right, thereby becoming less inhibited and looking for new experiences and the “right” partners (Winks and Semans 2002: 134). While there is nothing wrong with masturbation, the taboo has not completely died out –individuals who are comfortable with the idea of buying sex toys to share with their partners become embarrassed when their intention is solo use; and vibrators are still marketed as massage tools, with illustrations showing models running massagers up and down their aching necks, calves or cheeks (Winks and Semans 2002: 87, 275).

## **2. Sex toy market**

The reputation of sex shops has recently improved. The rather gloomy corners where an exclusively male clientele would shop behind dark windows have been replaced, according to Taormino (2009: 9-10), by brighter, more glamorous and inviting stores where knowledgeable salespeople are happy to give recommendations to couples and female customers. In other words retailers help bringing sex toys from the “shady back street to shiny high streets” (Comella 2010: 296). These high-street sex shops promote a shameless attitude toward sex, while online shops provide the opportunity, should shoppers feel embarrassed, for discreet and anonymous purchases (Keesling 2005: 168). Pagett (2007: 6) even offers instructions on how to make your own sex toys, stating that “even a trip to the local grocery store can bear fruit (and vegetables!) for the DIY sex-toy enthusiast”. For sex toys may include dildos and vibrators as well as other objects such as candles, carrots, boiled eggs or cucumbers (Zeidenstein 2004: 303). Confirmed users will know the kind of stimulation they are after, whether clitoral, G-spot or anal (Powers 2011: 6).

In recent years, technological innovations have improved sex toy quality, and a plethora of new products are made in China, Taiwan, Korea and Hong Kong (Winks and Semans 2002: 276). An article from the *China Economic Review* (Anon 2011) reports that despite the Chinese ban on pornography, China has become the largest seller of sex toys globally. The most important innovations are in materials (cyberskin dildos, silicone and glycerin-free lubes), in design (high-end chrome and acrylic butt plugs and dildos) and in function (remote-control vibrators, fukuoku finger vibes, etc.) (Newman 2004: 280). Keesling (2005: 169) recommends certain features for a female item: first, the toy should be shaped like a realistic penis, about the size of your partner's penis; second, it should have a suction base; third, it

should be flexible enough to be bent into a gooseneck and stimulate the G-spot; fourth, it should vibrate at both high and low setting.

Vibrators have been particularly successful, adding new sensations and experimental ways of enjoying oneself. They were originally used as a therapy for hysteria –patients were prescribed clitoral orgasms as treatment (Hvistendahl 2009). “The best sex I have ever had”, Eva Longoria once said, “was with my vibrator” (West 2008: 103-4). An early episode of *Sex and the City* shows one “innocent” protagonist, Charlotte, become addicted to the Rabbit –a candy-coloured vibrator. The Rabbit was sold out in the US the very next day. Sex toys, George (2004) concludes, were going “mainstream”. By early 2008, the fastest growth in the U.S adult industry had become the women’s market for sex toys and pornography (Comella 2010: 293). In Great Britain, after the publication of E.L. James’ *Fifty Shades of Grey*, the industry has grown to 10% from 5% annually. Sex toys branded with “Fifty Shades of Grey” and launched in time for Christmas contributed to this success (Fletcher 2012).

### 3. Rationale for this research

In a study that covers the sex toys market across more than 2000 cities across the world, Parker (2009) found that the top 15 markets are –in decreasing order of sales –New York, Paris, Los Angeles, Chicago, Shanghai, Beijing, London, Tokyo, Chongqing, Guangzhou, Houston, Chengdu, Seoul, Berlin and Philadelphia. At the 2077<sup>th</sup> position is Tokelau in New Zealand, with a population of 1,400 spread on three coral atolls. Nevertheless, a cursory search in academic databases will indicate that research on sex toys is scarce. In one of the rare academic papers on the subject, Cameron (2004) suggests that the Internet make sexual toys, fetishes, escorts and pornography in general routine activities. “Anyone with a credit card and modest abilities in using a search engine can access porn images and buy sex toys”, he points out, adding that people will also receive pop-up advertising while searching for other things. But of course this word “anyone” obliterates the identity or motivation of sex toy buyers. In an attempt to address the general paucity of scholarly knowledge about sex toys, this paper looks at Internet sales of these items and draws conclusions on the segmentation of what has become a world market.

### 4. Methodology

I spent three months working as a sales manager for *Jouissance* (a fictitious name), a French company that ships sex toys worldwide. Customers order online from the company’s website, which requires basic registration details and invites them to leave feedback on their purchases. Data were collected from over five hundred customers located in France, Italy, Thailand, India, Brazil, Argentina, Japan, Taiwan and Australia. A five-part questionnaire was used –part 1 and 2 gathered demographic details; part 3 sought information on the main purpose of purchase and on previous experiences with sex toys; part 4 evaluated the importance of instructions and complimentary gifts or bonuses in choosing toys; finally part 5 evaluated the risks perceived in purchasing intimate items online. The draft questionnaire was inspected by a sexologist and six scholars. Pilot testing was subsequently conducted via a survey of 50 university students, after which few revisions were made. The reliability of this questionnaire was checked with Cronbach's alpha coefficient, whose value of 0.946 suggested it was overall reliable and ready to go. Data collection occurred between 3<sup>rd</sup>

October 2011 and 28<sup>th</sup> December 2011. 526 surveys were completed in total, which included 122 traditional questionnaires and 404 online surveys. All respondents were told that their data would remain anonymous, and they provided informed consent. Data were analyzed using SPSS, with specific reference to descriptive patterns, Pearson's Chi-square, ANOVA and cluster analysis.

## 5. Findings

There were more women (71.3%) than men in the sample. The majority of participants (88%) was under 50 years old. They came from Asia (41%), Europe (33%), Oceania (15%), and South America (11%). Participants were asked to identify the main motivation for their purchase on a Likert scale ranging from "for personal use only" at one end to "for use with my partner(s) only" at the other. They were also asked when they decided to purchase one or more sex toys. The results of both questions are summarized in Table 1.

Table 1 indicates that a large minority of more than 30% of respondents described their purchase as being mostly or only for personal use, while around 20% stated that they would only or mostly use sex toys with their partner(s). In addition, almost 60% did not make the decision to buy a sex toy until after they connected to the *Jouissance* website. Chi-square analysis reveals significant differences between groups. Those who use sex toys with their partner(s) tend to decide they will purchase them before they connect to the website, whereas those who see sex toys as masturbatory aids are more likely to have made the decision while they were visiting the website.

Four market segments can be identified by combining the main motivation and time frame dimensions, as shown below:

Time frame	Purpose	Couple/group use	Individual use
Decision before seeing the website		Entertainer	Loner
Decision when seeing the website		Explorer	Wild ranger

The *entertainer* is someone who made the decision to buy one or more sex toys prior to visiting the *Jouissance* website, and who also identified couple/group use as the main reason, or as equally important a reason as personal use. This segment represents 27.8% of the cases in this study. The *explorer*, representing 40.9% of respondents, also identified couple/group use as a main or equally important trip motive, but did not make the purchase until discovering what the website had to offer. The *loner* identified private masturbation as the main reason to purchase a sex toy and planned to acquire one, or more than one, before connecting to the internet. This segment represents 32.9% of our sample. Finally, the *wild ranger* (46.6% of our sample) bought one or more sex toys primarily or mainly for personal use and only decided to order once on the webpage.

No significant differences were noted in relation to the age ( $X^2 = 12.022$ ,  $p = .415$ ), education level ( $X^2 = 11.561$ ,  $p = .123$ ), or income ( $X^2 = 14.331$ ,  $p = .046$ ) between these four segments. However, differences were observed across gender ( $X^2 = 15.224$ ,  $p = .002$ ) and origin

( $X^2 = 31.434, p < .001$ ). Women were disproportionately represented in the *entertainer* group (71.4%) while men were over-represented in the *explorer* and *wild ranger* cohorts (57.7% and 54.2%, respectively). Customers from Asia and Oceania were most likely to belong to the *entertainer* group (65.5%). Sexual behaviours differed across segments, particularly in relation to the likelihood of engaging in group sex ( $X^2 = 29.024, p < .001$ ), identifying dildos as the main climax providers ( $X^2 = 15.729, p = .002$ ), and in the average duration of lovemaking ( $F = 4.036, p = .001$ ). About 35% of *loners* and *wild rangers* had more than four sexual partners in the last decade. In contrast, fewer than 16% of *entertainers* and *explorers* switched partners over the last 10 years, and they appeared to have more stable and conservative practices. *Entertainers* and *loners* were over-represented in the sample of respondents from Italy (55.3% and 59.2%, respectively) while the *explorers* and *wild rangers* were over-represented in Thailand (58.7% and 63.4%, respectively) ( $X^2 = 11.423, p = .004$ ). To understand the role that design and technical attributes play in the choice of a sex toy, participants were asked to rank four attributes used in making the decision to purchase, in order of importance. Two of the attributes related to shape and colour, and two related to movement and speed. The two design attributes, shape and colour, garnered 26% and 17% respectively. Table 2 features the “design attribute” group –respondents who identified shape and colour as their top two choices, in either order. The “technical attribute” group prioritised ease of use and functionality (multi-speed options, intensity of vibrations, washability and suitability for lubrication, battery charger vs power supply, etc.). The “mixed attribute” group consisted of those respondents who identified one design and one technical attribute as their top two choices. Significant differences were observed in the ranking of attributes across the four segments. The *loner* group stands out as particularly keen on getting mixed attributes (56.6%), whereas *explorers* favour technical attributes. *Wild rangers* and *entertainers* are less predictable in their choices.

The findings so far suggest that the sex toy market is diverse. Long-term partners are most likely to make a purchase for technical features, even if the final decision to purchase is not made until after they connect to the website. More unstable partners, however, are more likely to buy a sex toy primarily for design. However table 3 reveals significant differences between the types of practices sought and the type of buyer. The *entertainer* is more likely than members of other groups to indulge in voyeurism, fetishism, or games inspired by mainstream pornography. The *explorer* is, proportionately, much less predictable. The *loners* and *wild rangers* were most likely to use sex toys for private masturbation.

Respondents were then asked to identify, among a list of 10 motivational factors, which ones were important in their purchase. The factors included: (1) to improve the fantasy-making process of masturbation (means orientation); (2) to enhance climax intensity (outcome orientation); (3) to use in role-playing games (play orientation); (4) to discover new practices and feelings (test orientation); (5) to facilitate G-spot stimulation and/or prostate massage (technical orientation); (6) to use in group sex, orgies and bisexual parties (convenience orientation); (7) to offer as a gift (altruistic orientation); (8) to use in representation such as contemporary art (artistic orientation); (9) to provide relief when a long-term partner is gone (therapeutic orientation); (10) to shoot amateur pornography/home-made videos (creative and/or commercial orientation). The most frequently cited reasons were: to improve masturbation (398 cases or 75.7% of respondents), and to facilitate vaginal and/or anal

stimulation (376 cases, 71.5%). Significant differences were noted in six variables: to improve masturbation ( $X^2 = 79.478$ ,  $p < .001$ ), to discover new practices and feelings ( $X^2 = 9.556$ ,  $p = .007$ ), to offer as a gift ( $X^2 = 14.557$ ,  $p = .019$ ), to use in group sex ( $X^2 = 13.436$ ,  $p < .001$ ), to provide relief ( $X^2 = 14.169$ ,  $p = .014$ ), and to shoot amateur porn ( $X^2 = 10.422$ ,  $p = .026$ ).

A two-step cluster analysis yielded a five-motivation cluster solution, as shown in Table 4. The *explorer* group expressed the most divergent motives, perhaps as a reflection of the uncertainty they felt about their sexual practices. The *loner* category was most likely to be included in motive clusters that reflected the desire to climax as strongly as they could; gifts and artistic representations were not, most of the time, relevant. And unsurprisingly the *wild ranger* was over-represented in the motivational cluster that excluded pleasure-seeking practices strictly speaking.

Finally, participants were asked to rate the importance of a range of items that could influence their decision to purchase sex toys on a 5-point Likert scale. The scale descriptors ranged from 5 (extremely important) to 1 (not at all important). The findings are ranked by the mean scores of the *entertainer* segment.

The *explorer* segment was the most cautious, as indicated by a mean score of 4.0 or higher on 8 of the 10 variables. They were also the only group that did not rate any variable below the mid-point (3.0). Perhaps because the *entertainer* and *loner* groups were more confident of the quality they would receive, their ratings were lower. The *wild ranger* was the least selective, with only one variable, "Quality of material", receiving a mean score of 4.0 or above. Tukey post-hoc tests revealed that the *wild ranger* segment was the least like the other groups, as members placed lower importance on most of the variables tested. Differences were most notable between them and the *entertainer* and *explorer* groups (statistically significant differences of the mean scores on 8 and 7 variables, respectively), with fewer differences (four) noted between them and the *loner* cohort. Significant differences were noted between the *entertainer* and *explorer* groups, with respect to the importance of international accreditation, and recommendations from sex specialists.

## 6. Discussion and conclusion

This study identified four types of sex toy users, based on main motivation and time frame. Previous research has often portrayed all sex toy users as part of a homogenous group who are assumed to plan their purchases. The addition of the "time frame" dimension challenges these assumptions. The *entertainer* and *loner* segments match these traditional categorizations. However, the *explorer* and *wild ranger* segments did not make their final decision to purchase until they connected to the *Jouissance* website. The profile, sexual behaviours and motivations varied significantly across these four groups. This study has a number of implications for both sex toy marketing and product development. First, onanism and sexual games were integral motives in most clusters, and it was significant for the majority of respondents. The marketing approach required will certainly depend on the origin of users, but one can already recommend that the size of the *entertainer* market be rethought. This market is most likely to be comprised of stable couples –the promotion of sexual guidance should therefore be an effective approach.

The study also identifies two major challenges and opportunities for both sex toy providers and marketers in the sex industry. The first relates to how to convert the *explorer* into an *entertainer*. This person has probably considered buying sex toys before connecting to the website, but may have reservations about the quality of the products she will receive. While not tested explicitly, there is no doubt that many potential explorers decide to give up online buying, representing a missed market opportunity. International accreditations and recommendations from experts can be essential here, along with web promotion highlighting how hygienic and fun products are. Sexy marketing can then reinforce this positive image by promoting high-tech features and safe uses, along with other signals of quality. These strategies can help convert this potential market into an actual market.

The second opportunity and challenge is regarding the *wild ranger* market. Marketers must convince members of this group to substitute other activities for sex. Targeted promotions outside sex shops can be effective here. Finally, this research offers insights into product development. Masturbation and sexual games are the two most popular activities, but few people will connect to sex toy websites to receive them. Sexy promotion may then represent the most cost-effective way to reach the market. Online shopping has the potential to be a significant and sustainable activity for many years to come. However, a more sophisticated understanding of who sex toy users are, why they order online, and when they make the decision to purchase is required to recognize that the market is differentiated. This study provides a starting point in segmenting the sex toy user market.

## Tables

**Table 1: Purpose of purchase, including time frame (n = 526)**

	For personal use only	Mostly for personal use	Equally for personal use and use with my partner(s)	Mostly for use with my partner(s)	For use with my partner(s) only	Totals for time frame
Decided before connecting to the website	25	43	105	31	10	<b>214 (40.7%)</b>
Decided while browsing the website	21	76	148	48	19	<b>312 (59.3%)</b>
<b>Total purpose for of purchase</b>	<b>46 (8.7%)</b>	<b>119 (22.6%)</b>	<b>253 (48.1%)</b>	<b>79 (15.1%)</b>	<b>29 (5.5%)</b>	

$$X^2 = 44.236, p < .001.$$

**Table 2: Importance of design or technical attributes in choosing a sex toy**

	Entertainer	Explorer	Loner	Wild ranger
Design attributes	49 (33.6%)	67 (31.1%)	42 (24.3%)	104 (42.4%)
Mixed attributes	50 (34.2%)	48 (22.3%)	98 (56.6%)	79 (32.2%)
Technical attributes	47 (32.2%)	100 (46.5%)	33 (19.1%)	62 (25.3%)
Total	146 (100.0%)	215 (100.0%)	173 (100.0%)	245(100.0%)

$$X^2 = 24.523, p < .001.$$

**Table 3: Type of practice sought by sex toy user (2-step cluster analysis)**

	Entertainer	Explorer	Loner	Wild ranger	Cluster size
SM and dominatrix games	7 5.5%	9 14.8%	13 16.4%	5 7.3%	34
Games inspired by mainstream pornography	21 38.6%	16 18.5%	19 8.2%	4 4.9%	60
Voyeur and fetishist games	18 14.5%	7 11.1%	5 3.3%	18 4.9%	48
Private masturbation	24 17.2%	13 14.8%	38 55.7%	7 41.5%	82

$$X^2 = 93.551, p < .001.$$

**Table 4: Factors influencing purchase on the *Jouissance* website**

Motivational Cluster	Means orientation	Outcome and technical orientations	Play and test orientations	Technical and convenience orientations	Other orientations	<i>n</i>
<i>Buyer type</i>						
Entertainer	72 (49.3%)	24 (16.4%)	33 (22.6%)	10 (6.9%)	7 (4.8%)	146
Explorer	50 (23.3%)	62 (28.8%)	44 (20.5%)	27 (12.6%)	32 (14.9%)	215
Loner	23 (13.3%)	56 (32.4%)	40 (23.1%)	18 (10.4%)	36 (20.8%)	173
Wild ranger	30 (12.2%)	89 (36.3%)	68 (27.8%)	31 (12.7%)	27 (11.0%)	245
<b>Cluster size</b>	<b>175</b>	<b>231</b>	<b>185</b>	<b>86</b>	<b>102</b>	

$$X^2 = 104.445, p < .001.$$

**Table 5: Factors influencing purchase**

Variable	Entertainer	Explorer	Loner	Wild ranger	F	p
Quality of material (silicone, elastomer, glass, metal, etc.)	4.32	4.51	4.45	4.13	8.061	<0.001
Quality of extras (free lube, condoms, etc.)	4.81	4.13	4.22	3.87	8.956	<0.001
Quality of instructions	4.52	4.41	4.32	3.79	8.012	<0.001
Reputation of provider	4.46	4.29	4.31	3.71	9.823	<0.001
Cost of sex toy	4.12	4.08	4.31	3.64	1.995	0.093
Confidentiality	4.12	4.04	3.88	3.61	4.741	0.004
International accreditation	4.03	4.13	3.84	3.62	4.423	0.002
Recommendation from family and friends	3.56	4.06	3.67	3.23	5.014	0.003
Comments from other uses (e.g. on sex blogs)	3.69	3.89	3.63	2.87	6.434	<0.001
Recommendations from sex specialists	2.78	3.65	2.74	2.68	3.986	0.006

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