

## Sex Dolls - Creepy or Healthy?: Attitudes of Undergraduates

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### Introduction

The use of robots for sex has entered mainstream culture. *Time* magazine reviewed recent television programs (*Humans*, *Westworld*, *Black Mirror*) and asked, “Is it ethical to have sex with a robot?” (D’Addario, 2017). This question suggests that the use of a life-like robot for sex is questionable and creepy rather than an alternative masturbatory activity. This study provides data on attitudes of undergraduates toward the use of robots for sex and suggests a more positive view.

The concept of sex dolls (also referred to as love dolls) dates back to the 17<sup>th</sup> century and can be seen in Mughal paintings in India. Sex dolls were sold commercially through catalogues in Paris as early as 1908 (Bloch, 1910/2015). Sex doll advertisements in the United States first appeared in 1968 in pornographic magazines, when selling sexual devices through the mail became legal (Beck, 2014).

The early sex dolls of the 20<sup>th</sup> century were largely blow up dolls made with thin plastic or rubber. In 1996, Abyss Creations developed a life-size sex doll that resembles the face, skin, and figure of a real woman. Although the doll’s initial function was to serve as a sex partner, some owners have used the RealDoll for non-sexual purposes. For example, the movie *Lars and the Real Doll* featured the RealDoll as a girlfriend whom the owner introduced to family/friends, took to parties, etc. Another sex doll, Flexidoll (<http://www.flexidolls.com/tour/>), is the latest version of sex dolls promoted as being “beautiful and boneless”, capable of contorting their body into any position desired by the consumer.

The primary motivation for having a sex doll is to aid one’s sexual pleasure via masturbation. When another human is not available, a sex doll may be a satisfactory alternative to interpersonal sexual activity (Burr-Miller and Aoki, 2013). However, owning and using a sex doll is stigmatized and viewed as evidence that one is unable to attract a real sexual partner. Such stigmatization may lessen over time. David Levy (2007), author of *Love & Sex with Robots*, predicted that by 2050 robots will evolve to “make themselves romantically attractive and sexually desirable to humans.”

Scholars have raised concerns about using sex dolls that resemble humans. One fear is that using human-like alternatives may only further demean some shy young men with inadequate interpersonal competence (Hughes-d’Aeth, 2013). In addition, the use of sex dolls who are obedient and always available for pleasure may further objectify and exploit women.

## **Review of Literature**

One of the most comprehensive studies about sex dolls was conducted by Valverde (2012) who wrote her master's thesis on "the modern sex doll-owner." She interviewed Abyss Creation's founder Matt McMullen who revealed that his company ships ten dolls a week, (90% female dolls and 10% male dolls), each costing at least \$5,000. "There are 11 different body types and 31 faces to choose from. In addition, there are 30 styles and shades of nipples; skin and lip type; hair and eye color; pubic hair (trimmed, natural, full, shaved); eyebrows (fake, human hair); removable tattoos, piercings etc." (Gurley, 2015). The newer humanoid sex robot versions talk, respond to questions, have movement and simulate a real woman. See <http://www.nytimes.com/video/technology/100000003731634/the-uncanny-lover.html> to observe an example of a female sex doll who talks. As might be expected, members of the sex doll community often wish to remain anonymous for fear of judgment, persecution, and psychiatric labeling. However, as part of Valverde's study, some sex doll owners were willing to respond to questions about sex doll use through an anonymous questionnaire.

Valverde (2012) collected her data via an online survey from 61 members of an "online doll-owner community forum." Of those who completed the survey, 88% were male (12% female) and almost 90% (87%) were heterosexual. The average age of the sex doll owner was 43 with ages ranging from 20 to 69. Slightly less than three fourths (71%) of the respondents were single. with 65% earning between \$30,000 and \$90,000 annually. The primary purpose of owning a doll, reported by 70% of the respondents, was for sex. Indeed, 41% of the doll owners said that the doll was their primary sex partner. Thirty percent of doll owners said that the primary purpose was for companionship; 17% used the doll for sex with a partner. Doll ownership/use was not without negative feelings - over a third (37%) reported that they felt shame, guilt or embarrassment.

## **Purpose of the Study**

The purpose of this paper was to identify social psychological variables related to the acceptance/use of a sex doll and humanoid robot in the context of physical and emotional intimacy. How are gender, religion, and sexual values (independent variables) related to sex doll acceptance and use (dependent variable)?

## **Methods and Sample**

A 34-item survey was approved by the Institutional Review Board at a large southeastern university in the USA. An email including an Internet link to the survey was sent to undergraduates in the sexuality/marriage/family courses of the first author. No incentives for participation in the survey were provided. The survey included Likert type questions, which asked students about their being open to using a sex doll or humanoid robot in the context of interpersonal sex. The term "sex doll" was defined as a sex toy with features resembling a human partner and unable to interact or communicate. The term humanoid robot was defined as a machine with an appearance resembling a real human;

humanoid robots can interact and communicate with humans if they are programmed to do so.

The survey included two questions about sex dolls: understanding (“I can understand how someone would prefer having sex with a life-like sex doll”) and openness (“I am open to the idea of having a sex doll for personal use”). Six questions were about the use of a humanoid robot: *Falling in Love* (“I think it is possible to fall in love with a humanoid robot”), *No Headache* (“Humanoid robot would never have a ‘headache’.”), *Marriage* (“I think people should be able to marry their humanoid robots”), *Sexual Need* (“I think the development of humanoid robots to meet sexual needs is a good idea”), *Stigmatization* (“The use of humanoid robots for having sex is stigmatized”) and *Intimacy* (“I could develop feelings of intimacy for a humanoid robot”). Demographic questions regarding gender, race, religious commitment, etc. preceded questions about robot acceptance and use.

A total of 345 respondents completed the survey. The majority of respondents (81%) were female, white (70% white, 15% black, 8% Latino, 3% Biracial, 3% Asian and 1% other) and heterosexual (90%). Almost three-fourths (72%) were either first or second year undergraduates. Almost half (48%) were emotionally involved in a committed or engaged relationship, 37% were not seeing anyone/not involved, and 14% were casually dating different people.

The data were analyzed by SPSS (version 21) statistical software.

## **Findings**

The respondents varied in terms of how they felt about their acceptance and use of a sex doll. The majority of the respondents were not in favor of the use of a sex doll. Over two thirds (68%) could not understand how anyone could think of having sex with a doll, less than one in five (17%) strongly agreed or agreed that they “could understand how someone would prefer having sex with a life-like sex doll over a human” and 15% were neutral about the idea.

When the respondents were asked if they personally would be open to having sex with a doll, 8% said yes, 13% were neutral and 79% strongly disagreed or disagreed. Only one male of the 345 respondents reported having had sex with a doll.

Regarding perceptions of stigma for having sex with a sex doll, almost a third (32%) strongly agreed or agreed that there was a stigma, 41% were neutral about the existence of a stigma and 28% strongly disagreed or disagreed that there was a stigma. Finally, concerning the development of humanoid robots to meet sexual needs being a good idea, 11% thought it was a good idea, 14% were neutral and 76% thought it was a bad idea. Analysis of the data included identifying the variables of gender, religious and sexual values (independent variables) in relation to sex robot acceptance (dependent variable).

## Gender Differences

When asked to rate the statement “I am open to the idea of having a sex doll for personal use”, men ( $M= 2.09$ ,  $SD= 1.11$ ) were significantly more open to having a sex doll ( $p < .01$ ) than women ( $M=1.70$ ,  $SD= 0.95$ ). When respondents were asked if they could develop feelings of intimacy for a humanoid robot, men ( $M= 1.67$ ,  $SD=0.89$ ) were significantly more accepting ( $p < .05$ ) than women ( $M=1.39$ ,  $SD=0.74$ ). Table 1 illustrates dependent variables by gender.

Table 1: Dependent Variables: Means and Standard Deviation

		<i>M</i>	<i>SD</i>	<i>p</i>
Sex Doll Preference “I can understand how someone would prefer having sex with a life-like sex doll over a human.”	Men	2.31	1.30	n.s.
	Women	2.05	1.13	
Open to Sex Doll “I am open to the idea of having a sex doll for personal use.”	Men	2.09	1.11	$p < .01$
	Women	1.70	0.95	
In Love with Robot “I think it is possible to fall in love with a humanoid robot.”	Men	2.02	1.19	n.s.
	Women	2.15	1.13	
Robot: No “headache” “A humanoid robot would never have a "headache" and would always be available for sex	Men	3.05	1.41	n.s.
	Women	2.73	1.28	
Marry Robots “I think people should be able to marry their humanoid robots if they want to”	Men	1.98	1.15	n.s.
	Women	1.75	1.03	
Robots for Sex Need “I think the development of humanoid robots to meet sexual needs is a good idea.”	Men	2.19	1.13	n.s.
	Women	1.98	1.04	
Robot Stigmatization “The use of “humanoid robots for having sex is stigmatized.”	Men	3.02	1.34	n.s.
	Women	3.08	1.32	
Robot Intimacy “Feeling I could develop feelings of intimacy for a humanoid robot.”	Men	1.67	0.89	$p < .05$
	Women	1.39	0.74	

Note: n.s. (not significant)

## Religion

Participants identified themselves as being in one of three religious groups: religious, spiritual but not religious, or neither. While respondents did not identify their specific religious background, most students at this southeastern university were from predominately Christian backgrounds. Those who identified as being religious were far less accepting than those who were either spiritual or not religious. These findings support the research of Jeremy Hsu (2014) who found that religious fundamentalists tended to view humanoid robots as being more “creepy overall.” The explanation for a religious association with a negative

view of robots is that robots are counter to the belief that a Supreme Being made humans. The Judeo-Christian monotheistic doctrine states that only God can give life, and human substitutes are to be shunned (Kim and Kim, 2013).

### Sexual Value

Respondents self-identified their sexual value as absolutist (sexual intercourse before marriage is wrong, 13.2%), relativist (sexual intercourse justified if the person is in love, 56.8%) or hedonist (do what feels good, 30%). Compared to relativists and hedonists, absolutists were significantly ( $p < .001$ ) more likely to hold negative views regarding sex robots. Table 2 illustrates dependent variables by sexual values.

Table 2: Means, Standard Deviation, ANOVA and Post Hoc Comparisons by Sexual Value

<i>Variable</i>		<i>M</i>	<i>SD</i>	<i>F</i>	<i>Post Hoc Comparison</i>
Sex Doll Preference	Absolutism (A)	1.63	1.09	6.21**	A < H **
	Relativism (R)	2.06	1.12		
	Hedonism (H)	2.38	1.21		
Open to Sex Doll	Absolutism (A)	1.56	0.95	3.71*	A < H *
	Relativism (R)	1.72	0.94		
	Hedonism (H)	2	1.08		
In Love with Robot	Absolutism (A)	2.07	1.06	n.s.	n.s.
	Relativism (R)	2.04	1.13		
	Hedonism (H)	2.31	1.21		
Robot: No "headache"	Absolutism (A)	2.41	1.34	3.51*	A < H *
	Relativism (R)	2.77	1.29		
	Hedonism (H)	3.04	1.27		
Marry Robots	Absolutism (A)	1.39	0.73	8.09***	A < H** R < H*
	Relativism (R)	1.73	0.97		
	Hedonism (H)	2.12	1.22		
Robots for Sex	Absolutism (A)	1.51	0.81	7.29***	A < H *** A < R*
	Relativism (R)	2.01	1.05		
	Hedonism (H)	2.26	1.12		
Robot Stigmatize	Absolutism (A)	2.85	1.42	4.28*	R < H*
	Relativism (R)	2.94	1.26		
	Hedonism (H)	3.4	1.35		
Robot Intimacy	Absolutism (A)	1.41	0.77	n.s.	n.s.
	Relativism (R)	1.41	0.74		
	Hedonism (H)	1.54	0.84		

Note: \*  $p < .05$ ; \*\*  $p < .01$ , \*\*\*  $p < .001$

## Discussion

Results from this study revealed that the majority of respondents could not understand how anyone could have sex with a “life like” sex doll rather than a human. This response is not surprising, as the use of sex dolls or robots is stigmatized by mainstream culture in the U.S. Sex dolls or robots are thought of as a non-human, silicone form devoid of love, warmth, and intimacy. In effect, the use of robots for sex is stigmatized since there is the cultural belief that humans should prefer “the real thing.”

## Implications

There are two implications of the data. First, low acceptance (8%) for sex doll use by these undergraduates reflects the culture in which the behavior occurs. U.S. culture dictates the social scripts operative in regard to how sex dolls will be viewed - negatively, dolls are not credible objects for sex.

Second, in spite of the negative cultural view of sex dolls as a masturbatory aid, they might be reconsidered as a credible alternative. In the spirit of positive sexuality, with diversity as one of its primary tenets, sex dolls (like vibrators) are used in private by the individual to enhance sexual pleasure. The researchers suggest this is not creepy but healthy sexuality.

The idea of sex dolls being used for one’s sexual pleasure (a basic human need) is already recognized in Japan as some companies rent sex dolls and rooms to customers. Alternatively, a customer may rent a doll for the night or weekend and take it home. Sounds like the person is looking forward to a sex positive evening!

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Journal of Public Health and Epidemiology. Full Length Research Paper. Knowledge, attitudes and behaviors of premarital sex among bedsit-living students in Hue City, Vietnam. Nguyen Thi Thanh Nhan. 1,2.Â The study aimed to explore knowledge, attitudes and behaviors of premarital sex and its associated factors among bedsit-living students. A community-based cross-sectional study was conducted in Hue city, Vietnam in 2015. Multi-stage cluster sampling was used to recruit students. â€¢ Sexual health websites aim to act as interventions by providing sexual health information and increasing teenagers' sexual health knowledge. â€¢ Sexual health websites aimed at teenagers typically provide interactive advice in accessible, nontechnical language. â€¢ However, reviews have found that the majority of sexual health websites contain inaccurate or outdated information.Â â€¢ The model has been used to examine a range of substance use attitudes and behaviors, but has to date focused predominantly on alcohol and tobacco. View chapter Purchase book. Read full chapter. The aim of this study is to assess knowledge, attitude, and practice regarding unsafe sexual behavior among Egyptian drug abusers. Methods . This cross-sectional study was conducted in 2008 in the Freedom Drugs and HIV Program on 410 drug abusers in Egypt. Included respondents were subanalyzed by gender, age, education, and intravenous drug usage. Results .Â Before formulating public health policies for the prevention of HIV, it is critical to obtain information about the prevalent knowledge, attitude, and practice regarding HIV, other STIs, and sexuality in the target community. Few studies on KAP regarding HIV have been reported from Egypt to address the increased risk of HIV infection [8, 9] associated with acquisition of other STIs in addicts. Objectives: To assess the knowledge, attitudes and use of the female condom among undergraduates of Kigali Health Institute. Methods: A descriptive study was carried out between May and June 2010. The sample was randomly selected from the students of Kigali Health Institute. A questionnaire based study was conducted involving 429 students. It captured the sample characteristics, their knowledge, attitudes and use of the female condom. The data were entered and analysed in SPSS 16.0. Results: About 79% of the students were aware of the female condom, but only 24% knew how to use it.