

RESEARCH ON SEX APPEAL AND PRODUCT DESIGN

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ABSTRACT

In the past, the word sexy was used in a negative way implying impurity and obscenity. Recently, however, the immoral connotations of sexy have changed into a more positive meaning of sexual charm or appeal. The purpose of this research is to clarify the relationship between the sex appeal and sexiness of product design and how it relates to our preference or liking of the product. Therefore, we conducted two experiments to help clarify and quantify the terms. In the experiments, the subjects were asked to evaluate some product designs on the following areas: Level of a Human Theme or Motif, Level of Sexual Appeal, Level of Sexiness and Level of Personal Preference or like. As a result, our data shows the following: 1) The sex appeal and sexiness of a product affects how people view the product. 2) The reduction of sex appeal and sexiness of the female body reduces the perceived sexiness of the product. 3) A correlation exists between the strength of sex appeal and sexiness; in a limited area, increased sex appeal leads to increased sexiness. 4) The subjects showed that men and women have different preferences as the levels of the sex appeal and sexiness of women's breasts change. 5) In general, as the sex appeal and sexiness increased, the preference for that product design decreased. For women, however, as the product design increased in sex appeal and sexiness preference also increased, especially in the case of the cup most suggestive of physical sex.

Keywords: Sexy, Sex Appeal, Product Design

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1. RESEARCH BACKGROUND AND OBJECTIVES

In the past, the word sexy was used in a negative way implying impurity and obscenity. Recently, however, the immoral connotations of sexy have changed into a more positive meaning of sexual charm or appeal [1]. The meanings of sexy and sexiness have changed through time and culture.

There is a growing trend for designers to use the human form as an inspiration for product design, with special emphasis on the sexiness of the design. (Figure 1) Although sexiness in product design is widespread and accepted there is still no agreement as to from what point a product becomes sexy. There is also no agreement on what level of sexiness is the most acceptable or desirable.

Our research hopes to clarify how to visually express sexual appeal, sexy and sexiness and how they relate to and affect product design.



Figure 1: Sexiness in Product Design

2. RESEARCH METHODS

In order to clarify what people think most to be sexy and how sexual appeal and sexiness relate to one another, we will define the terms, drawing from past research and literature and then do two experiments to help clarify and quantify the terms. The results are discussed in Section 4.

3. THEORETICAL BACKGROUND

3.1. Previous Research

The concept and expression of sexual appeal has been an important element of design. Lee and others have written about how parts of the body arouse sexual stimulation and affect design [2]. And in the advertising world, Kim has written about how sexual expression in advertising is used to reinforce messages and is a strategic component of sales and marketing [3]. However, even with all of the products being produced today, there still is no authoritative research clarifying how sexual appeal affects design.

3.2. Sensitivity and Sexual Appeal

The word sensitivity has many meanings and is used in a variety of ways. The dictionary defines it as 1.) the ability to feel something deeply; 2.) the ability to react to stimuli [4]. Kant, the philosopher, divides sensitivity into reason and understanding and defines the ability to receive stimuli as a component of understanding and thus, sensitivity [5].

According to Harada's research, academic sensitivity is defined as: 1.) That which is subjective and cannot be explained; 2.) That which builds on the innate through experience or knowledge and is acknowledged; 3.) The interaction between the instinctual and intellectual; 4.) The intuitive ability to assign value to beauty and comfort and; 5.) The ability to visualize and imagine [6]. All previous examples all stem from external stimuli and the ability to recognize, internalize and affect change in mood or attitude. For the purposes of our research, sensitivity will be defined as "the ability to intuitively respond to external stimuli." Sexiness as it relates to sex appeal can also be seen as an intuitive response to external stimuli.

The term sexy as defined by the dictionary is of sex, having sexual appeal and attraction [7]. Lee's research also lists erotic and sexual as subordinate concepts of sexy [2].

The expression sexy cannot be thought of as separate from eroticism. Although the modern usage of eroticism is one of physical, or sexual love, the original meaning of eroticism comes from the Greek word eros and is a comprehensive concept encompassing both physical and spiritual love. The definition and concept of erotic, however, is one that suggests sexual intercourse.

According to Wildman, eroticism is just one facet of sexuality and that sexuality is not just the simple concept of sexual desire or sexual love. Sexuality is more complicated and includes behavior, tendencies, mentality, physical urges and sexual appeal. He goes further to say that the concept and meaning of sexuality is complex and also involves human emotions, thoughts, behavior, values, beliefs and how one places him or herself existentially and that all play a part in sexuality [8]. Sexuality, sex appeal, is then not just a biological, physical concept but one that includes the mental, spiritual aspects as well.

Sight, smell and touch are just a few of the stimuli that can elicit feelings of sexual appeal. There are many more but for the purposes of our research, we have focused on just visual stimuli and how it affects one's perceptions, feelings of sex appeal.

In his research, Lee discovered that in a survey of men and women separately, when asked about 14 body parts (excluding genitals) and what was the most sexually stimulating, for men it was women's breasts and for women it was men's chests. However, when the results were calculated and compared as a group, both men and women found women's breasts to be far more sexually stimulating than men's chests [2].

4. EXPERIMENT

4.1. Experiment Methodology

In order to clarify more clearly sexual appeal, we did two experiments. We narrowed the test field to those with design experience. 27 test subjects were chosen (14 male, 13 female) and limited the age group to between 18 and 23 years old.

4.1.1. Experiment 1 Methodology

The test subjects were shown random pictures of two groups of products (one recognized as having sexual expression and one without). The subjects were then asked to evaluate and

score each product from a scale of 1 to 5 on the following areas: Level of a Human Theme or Motif, Level of Sexual Appeal, Level of Sexiness and Level of Personal Preference or Like. (Figure 2)

4.1.2. Experiment 2 Methodology

To find at what point a product has sex appeal, the subjects were shown cups ranging from the simple and progressing towards more obvious hints of female breasts. This methodology was based previous research concluding that women’s breasts had the most sex appeal [2]. The subjects were asked to evaluate the cups on the same areas as Experiment 1. In order to get more detailed results, subjects were asked to score from a 7-choice list: Strongly Like, Like, Somewhat Like, No Preference, Somewhat Dislike, Dislike, Strongly Dislike. (Figure 3) They were then asked to write about their impressions on each product.



Figure 2: Images Used for Experiment 1

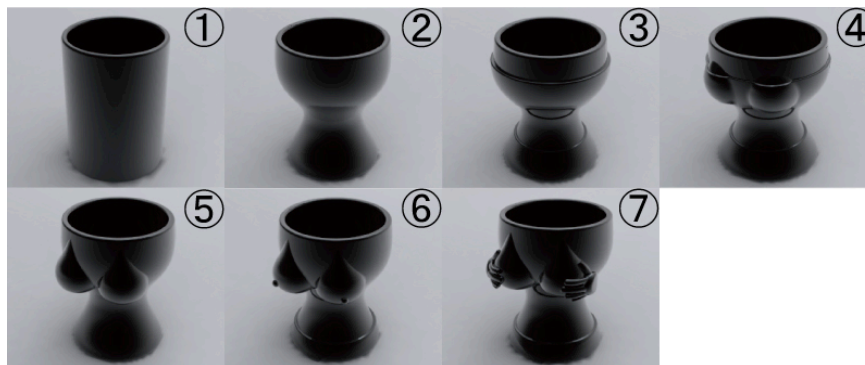


Figure 3: Images Used for Experiment 2

4.2. Experiment Results and Summary

4.2.1. Experiment 1 Results and Summary

Three people (students and professors from Hakodate Future University) chose the product for Experiment 1 subjectively. The average scores for whether the products had / lacked sexual appeal were 0.833 as having sexual appeal and -1.751 as lacking sexual appeal. There was a stark difference between the two averages and thus clear evidence of what products have or do not have sexual appeal. (Table 1, Figure 4)

The average scores for human motif or theme was 1.584 for having the quality and -1.537 for not having the quality. The difference in scores is significant.

The correlation between sexual appeal and human motif or theme was $r=0.87$, $p<0.01$. From these results we can extrapolate that for product design, products that have sex appeal do so because they use human motif or theme as a base for design. However, for both subject groups, excluding the one product (the mouse), even though the score was high for sex appeal, this did not lead to a higher score for liking the product. The data shows that as a product achieves more sex appeal, this alone is not a concrete indicator for whether a person likes the product.

For this experiment we emphasized the human motif or theme and perhaps emphasized it too much. The experiment also used the polar extremes of human motif or theme and sexual appeal which led to sexual appeal as being looked upon more in terms of physical sexuality and or obscenity. Because of this, we could not effectively gauge the level and degree to which the subjects liked the products. To get clearer results on this issue, Experiment 2 uses a seven-level gradual scale.

Table 1: Results (Level of Sexual Appeal)

Level of Sex Appeal	Mouse	Table	Perfume	Guitar	Average
Having Sex Appeal	0.963	1.148	0.222	1	0.833
Lacking Sex Appeal	-1.815	-1.93	-1.741	-1.519	-1.751
Correlation	$p<0.01$	$p<0.01$	$p<0.01$	$p<0.01$	$p<0.01$

Table 2: Results(Level of Human Motif or Theme)

Human Motif	Mouse	Table	Perfume	Guitar	Average
Having Sex Appeal	1.593	1.704	1.444	1.593	1.584
Lacking Sex Appeal	-1.778	-1.667	-1.482	-1.222	-1.537
Correlation	$p<0.01$	$p<0.01$	$p<0.01$	$p<0.01$	$p<0.01$

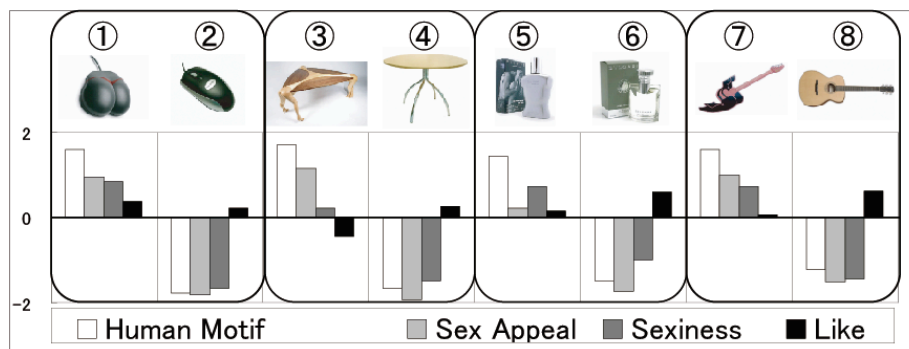


Figure 4: Results for Experiment 1

4.2.2. Experiment 2 Results and Summary

Experiment 2 used a seven-level gradual scale from strongly dislike to strongly like and results were analyzed by sex and as a group. Our results showed that the stronger the human motif or theme was (in this case of a woman's breasts), sexiness increased accordingly. However, the correlation factor between these two was $r=0.98$, $p<0.01$. Even though the level and degree of the female body rose, there were instances when the sexual appeal level fell (Figure 5, Number 7). Some impressions for cup number 7 were funny, I'd like to buy this

and fun. Using your hand to cover up the breasts on cup number 7, the lower score for sexual appeal and its strength in terms of being an erotic design, we can why this cup would score highest on sexiness.

The results showed that, excluding cup 7, the higher the sex appeal score was the lower the subjects liked it and the higher the sex appeal score was, sexiness rose too.

Cup number 3 had the lowest scores for sex appeal and sexiness. The cup had a straight line that was supposed to suggest a woman’s panty line. We imagine that the image was not strong enough or that the subjects did not know what the line meant. However, starting with cup number 4, there is a noticeable jump in sex appeal and sexiness. We concluded that this is because of the sudden presence of shapes that closely resemble a woman’s breasts.

Picture 6 shows the results based on sex. The data shows that for women, the higher the human motif or theme, especially as it relates the female body, the higher the sexiness score and it was the most preferred, liked cup. Cup 7 was especially outstanding in this regard. Men, however, preferred the cups with the least sex appeal and the data shows their preferences go from least to most sexual appeal. We discovered that the level of sex appeal affects how men and women like the product differently.

Pictures 7 and 8 show the results grouped by sex. Men had a positive preference for cups 1,2 and 3; were neutral about cup 4; and felt negatively about cups 7, 6 and 7. It is notable that as the score went up for the remaining categories, their positive preference scores went down. Women had a positive preference for cups 1 and 7; a neutral opinion on cups 2 and 3; and a negative preference for cups 4, 5 and 6. Unlike the men, women did not have the same inverse correlation between positive preference and the other categories. Surprisingly, they liked the cup (number 7) they thought had the most sex appeal and sexiness. The data suggests that there is a difference in how men and women relate sex appeal and sexiness with personal preference.

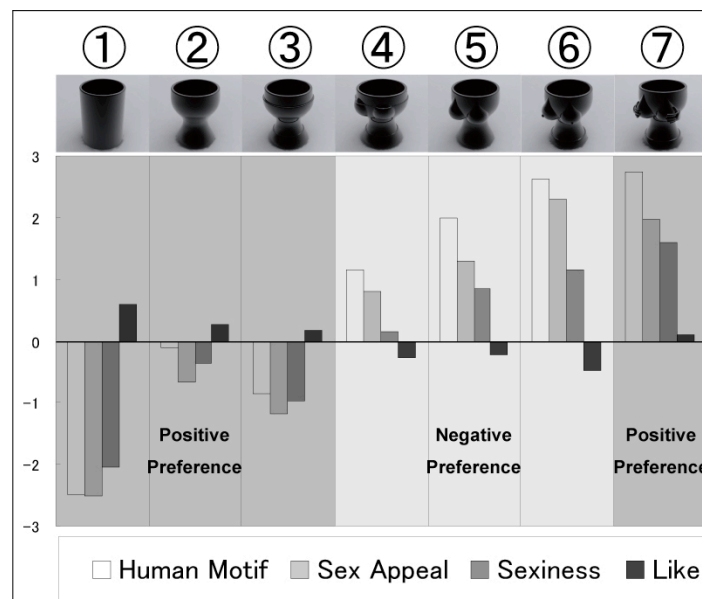


Figure 5: Experiment 2 Results

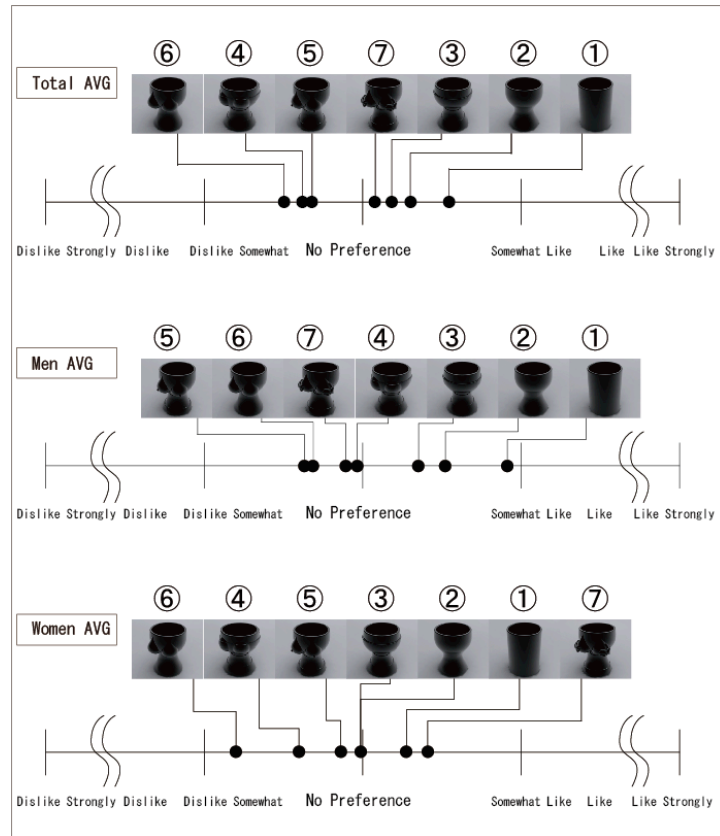


Figure 6: Experiment 2 Like / Dislike Results

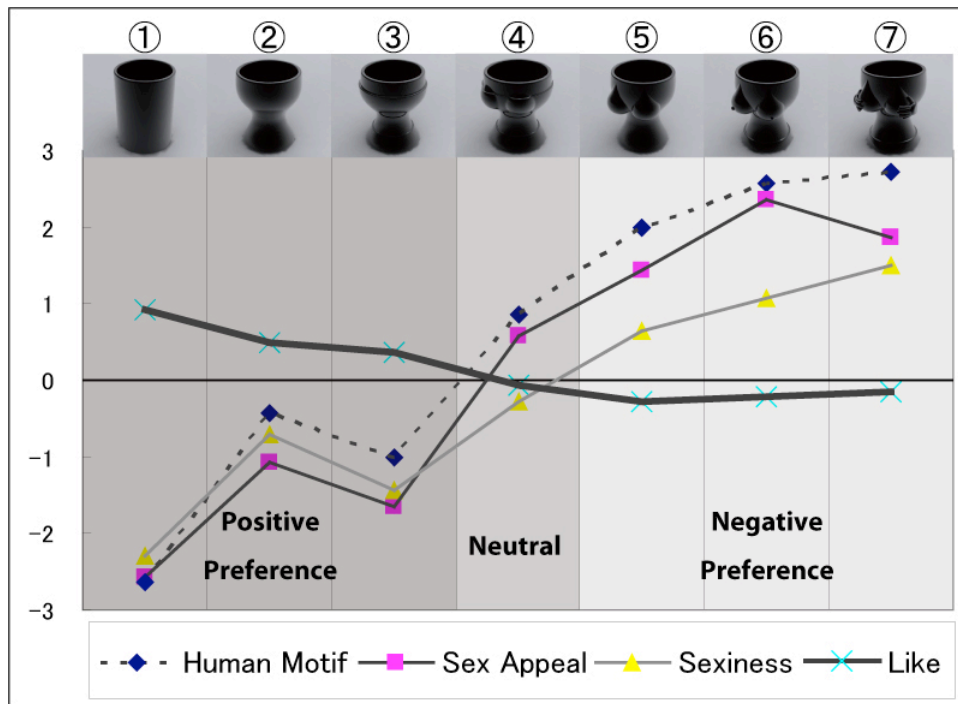


Figure 7: Men's Results

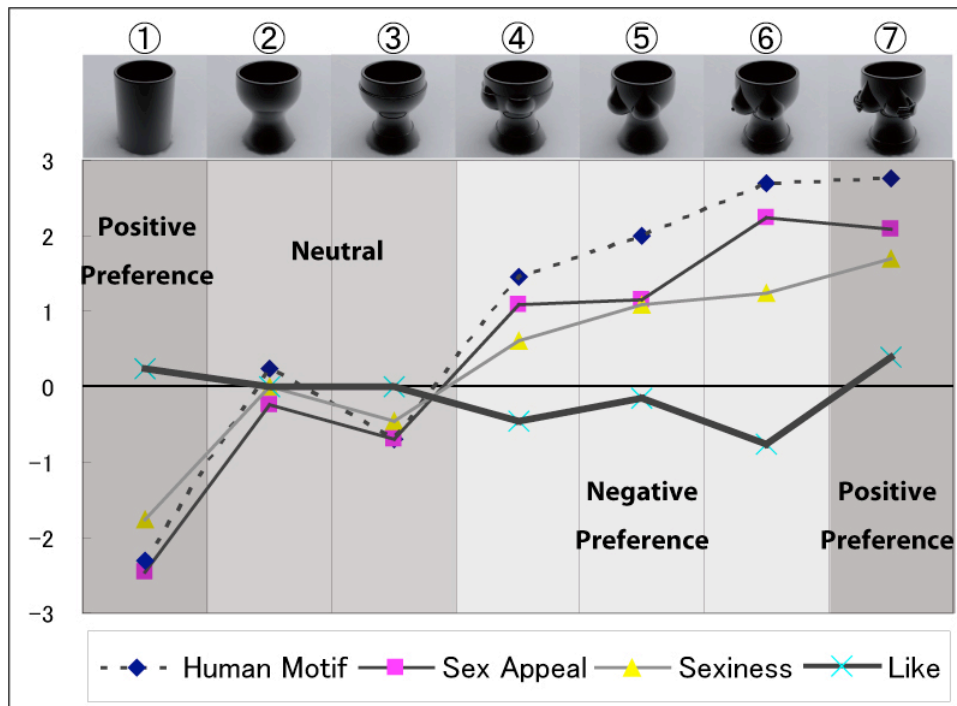


Figure 8: Women's Results

5. CONCLUSION

The purpose of our research was to empirically analyze the sexual appeal and sexiness as it relates to product design and how it affects our preferences. Our data shows the following:

1. The sex appeal and sexiness of a product affects how people view the product.
2. The reduction of sex appeal and sexiness of the female body reduces the perceived sexiness of the product.
3. A correlation exists between the strength of sex appeal and sexiness; in a limited area, increased sex appeal leads to increased sexiness.
4. The subjects showed that men and women have different preferences as the levels of the sex appeal and sexiness of women's breasts change.
5. In general, as the sex appeal and sexiness increased, the preference for that product design decreased. For women, however, as the product design increased in sex appeal and sexiness preference also increased, especially in the case of the cup most suggestive of physical sex.

6. NEXT STEPS

The purpose of our experiment was to clarify the relationship between the sex appeal and sexiness of product design and how it relates to our preference or liking of the product. Although there were some solid results, more investigation is needed. One example is to change the line of the cup to more fully emphasize and express the line of woman's panties;

the line should be more curved and not straight as in our experiment. Another experiment is necessary using the male body as a model. And finally, our experiment used only sight as the test variable. Further experiments need to be done using all five senses. We would like to do further experiments using the five senses to get a clearer picture, firmer evidence as to the relation between the sex appeal and sexiness of product design and how it affects our preferences for that product.

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