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How is commercial gender categorization of perfumes related to consumers' preference of fragrances?

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Abstract

On the commercial market, most perfumes are categorized as either feminine or masculine, although the odour quality of feminine and masculine odours are overlapping and constitute a dimension rather than two separate clusters of odours. Earlier research has shown that typical perfume consumers tend to prefer perfumes positioned in the middle of this gender-dimension. The current study investigates the preference of perfumes from the middle of the gender-dimension while these are applied on human skin. The blindfolded participants indicated if they wanted to use the fragrance and if they wanted their partner to use the perfume, and tried to guess the gender of the person each perfume was applied. Results show that the gender of the human did not affect the preference. Moreover, the preference did not differ between female and male participants, indicating that the commercial gender categorization is less important to the perfume consumers. Consequently, the commercial gender categories do not seem to be sufficient for all perfumes. Instead, the categorization of perfumes could be according to other aspects, e.g. according to odour quality.

Keywords: perfumes; perfume preference; odour preference; gender categorization

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1. Introduction

On the commercial market, most perfumes are categorized as either feminine or masculine. Earlier studies have shown that gender is one main feature people use while judging and evaluating the perceived odour of fragrances (Jellink, 1993; Zarzo, 2008; Zarzo and Stanton, 2009), and that heterosexual men and women have different odour preferences of a partner (cf. Bigelow, 1993; Milinski and Wedekind, 2001).

Perfumes are commercially categorized as ”feminine”, ”masculine” or ”unisex”, where the perfumes categorized as ”unisex” are a minority (Sczesny and Stahlberg, 2002). Perfumes categorized as ”feminine” are often described as ”flowery” or ”fruity”, while perfumes categorized as ”masculine” are described as ”spicy” or ”tangy”.

In the research on perfumes, the fragrances chosen as stimuli have primarily been found in the extremes of the gender-dimension: For example, Sczesny and Stahlberg (2002) showed how individuals who had applied a typical masculine perfume were seen as more competent than individuals who had applied a typical feminine perfume. Fiore (1992) showed that individuals wearing a typical feminine perfume were been described as less masculine than someone not wearing a typical feminine perfume. Freyberg and Ahren (2011) showed how adolescent girls felt more satisfied about their everyday life while wearing their own favourite perfume instead of an alternative feminine perfume.

However, Lindqvist (2012) has shown that naive participants (that is, participants with no training in judging and evaluating perfumes, e.g. typical perfume consumers) preferred odours found in the middle of the gender-dimension of overlapping feminine and masculine odours also identified in earlier research (see e.g. Zarzo, 2008; Zarzo and Stanton, 2009). That is, typical perfume consumers seemed to prefer “unisex” odours, both concerning themselves and their partners. In that specific study, the perfumes were presented to the participants in glass bottles. Cortez-Pereira *et al* (2009) showed that sensory analysis of odours applied on the human skin is very sensitive. Also, it is suggested that perfumes and human skin blend and creates a unique odour (cf. Lenochová et al., 2012). Therefore, the same judgments as in the earlier study are now made when the perfumes are applied on humans.

In this experiment, blindfolded participants judge preference of two different perfumes (one categorized as feminine and one categorized as masculine) found in the middle of the gender-dimension of perfumes and applied on one woman and one man.

2. Materials and Methods

2.1. Participants

Seventeen undergraduates (nine women and eight men) between 20 and 30 years completed the experiment. The participants in this study were “naive”, i.e. they were not trained in judging the odour of perfumes. Since sexuality may influence odour preference and gender associations of perfumes (cf. Martins et al., 2005), the participants in this study were heterosexual.

2.2. Stimulus Materials

Two different perfumes were selected as stimuli: Dior Higher Energy (categorized as “masculine”) and Dalí Laguna (categorized as “feminine”). They were selected from a set of 12 different perfumes in a previous study (see Lindqvist, 2012). Among the 12 perfumes used as stimuli materials in the previous study, these two had very high pleasantness values in the previous study.

2.3. Procedure

In the experiment, 1 ml of each perfume was applied on one wrist of (a) one woman, and (b) one man. That is, both Perfume 1 and Perfume 2 were applied both on one wrist each of the woman and one wrist each of the man. The woman and the man were both 30 years old, had washed their wrists with non-perfumed soap, and did not use any perfume or perfumed shampoo etc. at the time for the experiment.

The blindfolded participants were presented to one perfume/wrist at a time. Since they were blindfolded during the experiment, it was not possible for them to see if the perfumes were applied on a woman or on a man while sniffing them. Their task was to answer the following questions for each perfume/sniff:

1. Would you like to use this fragrance yourself?
2. Would you like your partner to use this fragrance (if you have/had one)?
3. Do you think the fragrance is applied on a woman or on a man?

3. Results and Discussion

There was no significant relationship between gender of the participants and the answers on Question 1 (Would you like to use this fragrance yourself?) or Question 2 (Would you like your partner to use this fragrance?) for none of the two perfumes. Because of this, all data was collapsed across gender of participants, and the participants are in further analysis treated as one group.

3.1. Preference

There was no significant difference in the results from Question 1 (Would you like to use this fragrance yourself?) for the feminine perfume applied on a woman (71 % wanted to use the perfume) and applied on a man (60 % wanted to use the perfume). There was no significant difference in the results from question 1 (Would you like to use this fragrance yourself?) for the masculine perfume applied on a woman (29 % wanted to use the perfume) or applied on a man (31 % wanted to use the perfume).

There was no significant difference in the results from Question 2 (Would you like your partner to use this fragrance?) for the feminine perfume applied on a woman (77 % wanted their partner to use the perfume) and applied on a man (70 % wanted their partner to use the perfume). There was no significant difference in the results Question 2 neither for the masculine perfume applied on a woman nor applied on a man (41 % wanted their partner to use the perfumes in both cases).

These results indicate that the perfume preference is independent of the human gender of the person that the perfume is applied on.

There was a significant strong correlation between the answers from Question 1 (Would you like to use this fragrance yourself?) and Question 2 (Would you like your partner to use this fragrance?) (r_s = 0.622, p = 0.000), indicating that if the participants would like to use a perfume themselves, they would also like their (presumptive) partner to use the very same perfume.

These results are remarkably since they indicate that women and men like the very same perfumes, both for themselves as well as for their partners. In earlier studies, gender differences concerning these kinds of judgments have primarily focused on perfumes being in the extremes of the gender-dimension, i.e. perfumes being perceived as extremely feminine or extremely masculine. While choosing perfumes that individuals like the most as stimuli (cf. Lindqvist, 2012), as in this study, the stimuli suddenly consist of perfumes in the middle of the gender-dimension. Therefore, these results imply that for a large amount

of perfumes, it is not motivated to divide them into "feminine" and "masculine" odours, since there is no difference in preference between women and men.

Table 1. The percentage of the participants guessing the correct human gender each perfume

Human Gender	Feminine perfume	Masculine perfume
female	41	65
male	71	50

3.2. Identifying Gender of Human

Table 1 shows the percentage of correct answers for Question 3 in the experiment, e.g. the percentage of the participants that succeeded in guessing if the perfumes were applied on a woman or on man. As shown in Table 1, the percentage of correct guessing was between 40 and 71 percent.

There was a higher percentage making a correct guess for the two perfumes applied on the "wrong" gender (i.e. the feminine perfume on a man, and the masculine perfume on a woman). However, the difference between the guesses of the feminine perfume applied on the woman and applied on the man was relatively small and not significant, nor was the difference between the guesses of the masculine perfume applied on the woman and on the man. These results show the difficulty in identifying the human gender that the perfumes were applied on, indicating that the human gender the perfumes were applied on did not affect the perception of the perfumes.

4. Conclusions

These are the main findings:

- There was no effect of human gender in the experiment: The participants could not identify if the perfumes were applied on a woman or on a man, and the preference seemed to be independent of the gender of the person that the perfumes were applied on.

  Since it is claimed that the individual's body odour and the perfume blend and creates a unique odour (cf. Lenochová, et al., 2012), the results in this study indicate that the quality of this blended new odour is independent of the gender of the human skin. That is, e.g. the masculine odour did not seem to be perceived as more masculine when applied on a man (and vice versa). If so – the participants would have been more successful in guessing the gender of the human. The same reasoning is valid for the feminine perfume applied on a woman.

- There were no differences concerning the answers from Question 1 and Question 2 between female and male participants in the experiment, indicating that the perfume preference is independent of gender, consistent with the findings in Lindqvist (2012). This is notably, since the odour preference concerning oneself and one's partner "should" differ between women and men according to earlier findings (see Bigelow, 1993; Milinski and Wedekind, 2001).

  When the stimuli consist of perfumes that typical consumers seem to like the most, the stimuli are perceived as neither particularly feminine nor particularly masculine. Also, women and men seem to like these perfumes both for themselves as well as for their partner. This is remarkable, since it indicates that the dividing of perfumes into "feminine" and "masculine" odours does not seem to be

sufficient. Consequently, the commercial gender categories do not seem to be sufficient for all perfumes. Instead, the categorization of perfumes could be according to other aspects, e.g. according to odour quality.

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