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Gender differences in consumer decision making for perfume

Abstract

Understanding which factors influence consumers' purchase decisions is crucial for a company's success. This paper reviews the theoretical and empirical research in the field of gender-specific decision making and broadens the understanding of how scent and flacon influence men's and women's perfume purchase intentions. The experimental survey consists of 160 male and female students rating their purchase preferences on a seven-point scale by evaluating unisex perfumes. The findings reveal that scent dominates men's and women's choice for a perfume. Gender-related differences are shown in design preferences as women attach more importance to the flacon design. The results imply that the design of the flacon should not be neglected because it serves an eye-catcher and a decision criterion for both genders. Future research needs to focus on other influencing determinants such as brand and price.

Keywords consumer behaviour, gender, perfume

Introduction

In recent years, research in the field of consumer behaviour has increasingly focused on gender aspects and found that men and women are diverse in terms of shopping preferences, behaviour and decision making. A branch that has become more interested in these gender differences is the perfume industry. This industry is characterized by an intense competition. On the one hand the consumer demand is stagnating, the market is highly fragmented, new products are permanent launched and need to be established. On the other hand the perfume market generates high margins and offers new potential because men increasingly shop for personal care products (Datamonitor 2010). Thus, the perfume industry needs to consider how men and women make their perfume decisions in order to customise the perfume itself, to attract the attention of both genders and, hence, to develop a unique brand position.

Only a few studies have examined the perfume and its specific characteristics in consumer decision making. Schmitt and Shultz (1995) reported that consumers' perfume choices do not depend on the quantity of the perceived product information in terms of price, brand image, packaging or scent. Instead, the purchase target (oneself, boyfriend, father or male friend)

significantly influences consumers' perfume decisions. Markham and Cangelosi (1999) approved these results and found that besides the purchase target, the scent as well as the brand is important to women, across cultures, when making a perfume decision. Besides these factors, design aspects influence the perception of a perfume as consumers connect certain colours with a feminine or masculine scent (Zellner et al. 2008).

However, no study has analysed the impact and relative importance of fragrance and flacon design on men's and women's perfume purchase decisions. This is surprising because related research demonstrates a significant impact of ambient scent and fragrance, as supporting product features, on the purchase decision (e.g., Bone and Jantrania 1992; Chebat and Michon 2003; Knasko 1995; Milotic 2003; Mitchell et al. 1995; Spangenberg et al. 1996). Thus, it can be assumed that a perfume's scent is a key product attribute in the decision making process.

Consumers only take notice of a perfume when the flacon, as an eye-catching element, attracts consumer attention. Furthermore, the flacon is an indicator of the perfume's gender assignment. Studies have shown that the feminine features of flacons are mainly rounded, whereas masculine features are angular and straight (Wellmann et al. 2004).

Our study aims to examine the influence of scent and flacon on the purchase intentions of men and women in order to identify gender-related differences in perfume decision making. The focus is placed on buying the perfume for oneself and not as a gift for someone else. Therefore, hypotheses are developed by reviewing the gender-related literature. A laboratory survey with 160 male and female students, rating their purchase intentions by evaluating unisex perfumes, was conducted. The influence of each factor, as well as their interactions, is identified using analysis of variance (ANOVA). Then, the results are reported and discussed. Finally, limitations, further research and managerial implications are given.

The contribution of this research is to point out the understanding of perfume decision making and the role gender plays. The results are relevant for the perfume industry to adapt perfume design to gender-specific preferences in order to draw the attention of both genders. This is important as economic crises and saturated markets require further distinguishing from competitors in the personal care industry.

Literature Review

In the literature, men and women are differentiated based on sociocultural, psychological and biological aspects (Aloisi 2007, p. 3 ff.; Guentuerkuen/Hausmann 2007, p. 88 ff.; Steins 2010, p. 15 ff.). Within these research areas, gender-specific aspects were found to influence

consumer behaviour in general and consumer decision making in particular. Previous studies show that women place more emphasis on aesthetics when deciding on a purchase because they place more value on fashion and style, whereas men prefer to shop for functional products, in particular products stemming from the domain of information technology (Dittmar et al. 1995; Rook/Hoch 1985). However, there is a movement away from this stated stereotypical shopping behaviour (Coley/Burgess 2003). That is, women also purchase products that are considered to be typical male products and vice versa.

Furthermore, men are becoming more involved in the entire shopping process. However, sociocultural studies still show that gender-related differences in decision making styles, based on male- and female-specific traits, do exist (Mitchell and Walsh 2004; Palan 2001). Mitchell and Walsh (2004) investigated several gender-related decision making traits and found that women enjoy shopping and spend more time on it. Hence, women take more time to make decisions as they shop more attentively and stop more often at shelves to consider all available product information, whereas men browse shelves (Haeusel 2008, p. 131; Kreienkamp 2007, p. 99; Petrevu 2001; Wiltinger 2009). Despite this increased shopping involvement, men make less effort when it comes to shopping and spend little time on decision making to find the best product alternative (Mitchell/Walsh 2004). As a result, men consider less information, are willing to make more risky purchase decisions (Meyers-Levy/Sternthal 1991; Rahman 2000) and are less confused by the wide range of products (Mitchell/Walsh 2004). Therefore, it is hypothesised that:

H₁: Gender has an influence on the purchase intention of a perfume.

When men and women intend to purchase a perfume, they first consider visual product attributes at the point of purchase. For perfumes, the flacon is the eye-catching cue that triggers the decision process, which is related to cognition and affection (Clement 2007; Coley/Burgess 2003). A flacon's shape is adapted to men's and women's design preferences, which are determined by their respective hormones. As a result, women favour products with soft shapes conditioned by oestrogens, whereas men favour angular and straight-shaped products conditioned by testosterone (Haeusel 2008, p. 128; Wiltinger 2009).

The flacon and the perfume's scent trigger affective processes in terms of personal emotions and associations. Therefore, a perfume decision is less cognitive- and more affective-driven (Weinberg/Gottwald 1982). However, the information processing of perfume attributes differs between male and female consumers as they exhibit different cognitive and affective states (Petrevu 2001; Coley/Burgess 2003). Men process product information on a logical and

analytical level (Costa et al. 2001). Women are better at decoding and processing nonverbal cues and are more visually oriented (Holbrook 1986). Furthermore, studies show that women are more emotional, decide more often on an affective level and remember product details based on emotional associations (Coley/Burgess 2003; Guentuerkuen/Hausmann 2007, p. 95). For that reason, women value products with stylistic and symbolic details related to emotions (Coley/Burgess 2003; Dittmar et al. 1995; Underhill 1999, p. 125 ff.), whereas men are objective and focused on the function of a product (Coley/Burgess 2003). During product evaluation, men consider cognitive-related product cues such as price (Petrevu 2001, Darley/Smith 1995, Haeusel 2008, p. 134). Women take all available information into account and analyse the specific product message in detail such as product shape and colour (Meyers-Levy/Maheswaran 1991). These psychological and biological differences in perfume decision making lead to gender-specific differences in perception and in the importance of single perfume attributes such as the flacon and its design. Therefore, it is hypothesised that:

H₂: Women are more influenced by a perfume's flacon design than are men.

Based on the flacon design, male and female consumers have certain expectations and personal associations of the scent. The scent is processed affectively as the olfactory areas in the brain are directly connected to the limbic system, which is responsible for emotions (Engen 1982, p. 172; Wilson/Stevenson 2006, p. 55; Ehrlichman/Halpern 1988). That is, scents lead to positive or negative emotions. A perfume's scent is perceived as pleasant when it triggers positive associations and emotions, which in turn affect the purchase intention and, hence, the final perfume decisions of consumers (Bone/Ellen 1999). Both men and women emphasise a pleasant scent because it is a way to define their personalities and individualities as well as to communicate on a nonverbal level (Borstnar 2002, p. 418; Jellinek 1992, p. 12 ff., 74). Furthermore, the scent represents a perfume's primary product performance. Therefore, it is hypothesised that:

H₃: The purchase intentions of men and women are positively influenced by a perfume's pleasant scent.

Method

Experimental Design and Sample

To test the hypotheses a $2 \times 2 \times 2$ between-subjects factorial design was employed, with scent (pleasant/unpleasant), flacon (pleasant/unpleasant) and gender (male/female) as the

experimental factors. The participants were 205 students (88 men, 117 women) with ages ranging from 19 to 25 years from a university in central Germany. Participants were randomly assigned to one of the eight treatments. After eliminating 45 incomplete questionnaires, 160 cases were left for data analysis.

Procedure

Participants entered a room in groups of five and took their seats at a table offering enough space as to not disturb each other. Based on the respective treatments, participants were handed a pleasant or an unpleasant flacon. The perfume brand, shown on the flacon's front, was covered by opaque sellotape. Thus, the brand did not influence a participant's evaluation of the perfume and final purchase intention. At the same time, participants were handed a pleasant or unpleasant scent according to the respective treatments. The scent was given on neutral fragrance strips that had been prepared in advance. That is, male and female participants received either a combination of a pleasant scent and pleasant flacon, pleasant scent and unpleasant flacon, unpleasant scent and pleasant flacon or unpleasant scent and unpleasant flacon. They were told that the flacon and scent belonged together. Then, participants were asked to view the flacon and smell the scent at the same time. Thus, a typical perfume decision was simulated where both flacon and scent were considered by consumers during their purchase decision processes. Finally, participants were given a questionnaire to rate their purchase intentions. During this time, they still had the opportunity to view the flacon and smell the scent.

Measurement

Dependent Variable

The dependent variable was purchase intention. In their "theory of reasoned action", Fishbein and Ajzen (1975) connected attitude, intention and behaviour because an individual's attitude toward behaviour influences its behavioural intention, which in turn influences behaviour. According to this theory, purchase intention is the best single predictor of a consumer's actual behaviour. As the term "intention" implies, the consumer made the purchase decision but did not realise the purchase itself at this point. Hence, the intention to buy a product can differ from buying the product (Ajzen et al. 2004). That is why Juster (1966) criticises the predictive accuracy of purchase intention as a valid construct and proposes purchase probability because

it is more specific. Despite criticism, purchase intention is widely used in marketing research. By specifying purchase horizon and situation its validity can be improved.

A participant's intention to buy a perfume was measured with a four-item scale ($\alpha = .953$). The scale items were "My willingness to buy the product is" (very low/very high), "It is very likely that I will buy the perfume" (strongly disagree/strongly agree), "I would purchase the perfume next time I need a perfume" (strongly disagree/strongly agree) and "I would definitely try the perfume" (strongly disagree/strongly agree). These items were based on purchase intention scales from Petrevu and Lord (1994) and Doods et al. (1991), which have been shown to be reliable measures of purchase intention. Participants responded to all items on a seven-point Likert scale. All items were adapted to the product perfume.

Covariates

The intention to buy a perfume is influenced by several factors. To account for individual differences in forming a purchase intention, involvement and the quantity of using a perfume were included as covariates. Involvement was measured because it has been shown to be related to consumer behaviour including consumers' purchase intentions and purchase decisions (Laurent/Kapferer 1985; Lockshin et al. 1997; Mittal/Lee 1989; Mittal 1989). Participants were asked to rate their product involvement, purchase involvement and purchase decision involvement. As the results were found not to be statistically significant for the covariates, involvement and the quantity of using a perfume were not considered in the further analysis.

Manipulation Check

Before conducting the main study, it was necessary to pretest olfactory and visual stimuli to identify a pleasant and unpleasant scent and flacon. The pretest involved 32 participants with ages ranging from 24 to 30 years. Participants were asked to rate different unisex perfumes to identify a pleasant and an unpleasant scent and flacon. All scents and flacons were evaluated independently as the fragrance strips were handed out first, followed by the flacons. Thus, participants were not able to associate the scent with the flacon. The perfume brand was hidden by sellotape. After considering each flacon and smelling each scent, participants were asked to complete a questionnaire concerning the scent, flacon and their purchase intention. The pleasantness of the scent was measured with a four-item scale. Scale items were "I find the scent pleasant", "I find the scent fragrant", "I find the scent appealing" and "I find the

scent good smelling”. The pleasantness of the flacon design was measured with a four-item scale, too. Scale items were “I consider the flacon as aesthetic”, “I consider the flacon as good looking”, “The flacon arouses my curiosity” and “I find the flacon appealing”. Both the scent and flacon were evaluated on a five-point Likert scale (strongly disagree/strongly agree). Purchase intention was measured on a seven-point Likert scale using the same items as in the main study. In addition, participants were asked if they could imagine that the scent or flacon was available in a store. That is, if they considered the scent or flacon to be realistic (very unrealistic/very realistic, seven-point Likert scale). The consistency of each participant’s evaluations was verified by directly asking participants to decide on one scent and flacon (“Would you prefer scent/flacon 1 or 2?”).

Findings

Manipulation Check

A t-test was carried out to analyse the manipulation check. The results indicated significant differences between the scent CKOne and Musk by Alyssa Ashley in terms of pleasantness ($M_{CKOne} = 3.69$, $M_{Musk} = 2.87$, $t = 2.414$, $p < .05$) and purchase intention ($M_{CKOne} = 4.13$, $M_{Musk} = 3.22$, $t = 1.482$, $p < .05$). Furthermore, participants considered both scents to be realistic. Likewise, significant differences in means were found between the flacons of CKOne and Musk by Alyssa Ashley in terms of pleasantness ($M_{CKOne} = 3.2$, $M_{Musk} = 2.17$, $t = 2.887$, $p < .05$) and purchase intention ($M_{CKOne} = 4.22$, $M_{Musk} = 2.61$, $t = 2.991$, $p < .05$).

Hence, participants judged the perfume CKOne, its scent and flacon, as pleasant and the perfume Musk, with its scent and flacon, as unpleasant. Thus, the eight treatments were based on these both perfumes.

Hypothesis Testing

The data from the 160 participants were analysed using a three-factorial ANOVA to evaluate whether or not there were significant effects of scent and flacon on men’s and women’s perfume purchase intentions. The results of the ANOVA are reported in Table 1 and the mean scores are reported in Table 2.

Table 1. ANOVA results for purchase intention

	df	F	p^a	Effect size η^2
Gender	1	0.676	.412	.005
Scent ^b	1	35.783	.000	.194
Gender*Flacon ^b	1	7.307	.000	.047

Note. ^a $\alpha = .05$. ^bHypothesis supported.

Table 2. Means of purchase intention

	Men	Women	n
<i>Scent</i>			
Pleasant	3.04	3.03	40
Unpleasant	2.11	1.58	40
<i>Flacon</i>			
Pleasant	2.68	2.93	40
Unpleasant	2.47	1.68	40

Note. Measured on a seven-point Likert Scale (strongly disagree/strongly agree).

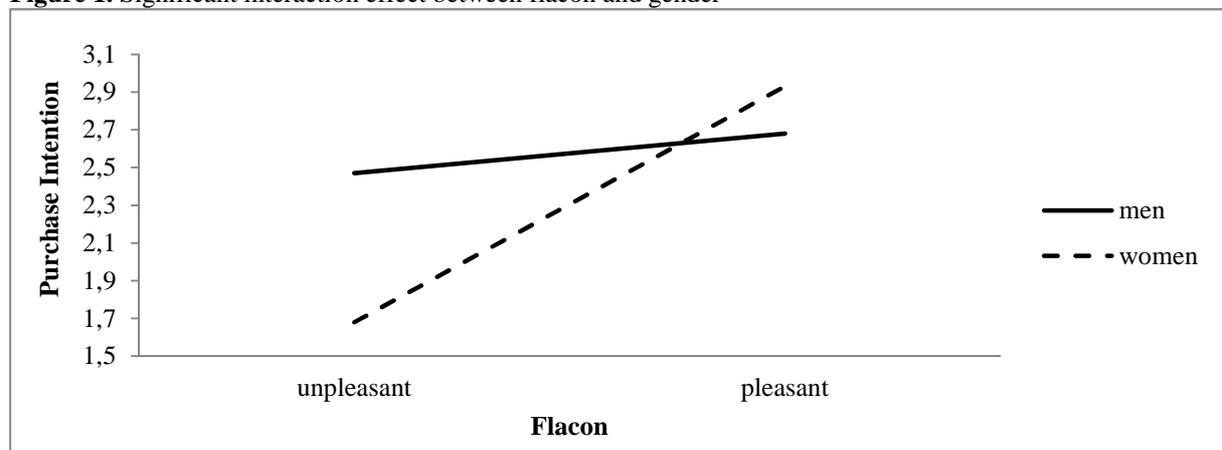
The results of the ANOVA indicated no significant main effect for gender on purchase intention ($F = .676, p = .412$). Therefore, Hypothesis 1 was not supported. However, a significant interaction effect between gender and flacon was found ($F = 7.307, p = .008$). Therefore, Hypothesis 2 was supported. The result for the main scent effect on male and female consumer's purchase intentions was found to be significant ($F = 35.783, p = .000$). Therefore, Hypothesis 3 was supported.

Discussion

The results of the study provide evidence that gender has no influence on the purchase intention of perfume in general. In terms of a perfume's scent, women were found to emphasise a pleasant scent. This result supports previous research (Markham/Cangelosi 1999), which concluded that scent is important for women when purchasing perfume. In addition, our study shows that men's perfume purchase intentions are influenced by a pleasant scent, too.

Furthermore, a significant result was found in terms of flacon design preferences as shown in figure 1. The perfume purchase intentions of men and women were positively influenced by a pleasant flacon.

Figure 1. Significant interaction effect between flacon and gender



However, the purchase intentions of women increased more with a pleasant flacon than did the purchase intentions of men. Thus, it can be concluded that a pleasant flacon is more important for women than it is for men. On one hand, this result supports the belief that women are more visually oriented (Holbrook 1986) and place more emphasis on a product's design as it triggers emotions and individual associations. On the other hand, it is shown that men not only consider hard and key product facts but they are also attracted by a pleasant product design.

Limitations

There are several limitations to this study that must be addressed. First, unisex perfumes were used to examine gender-specific differences in perfume decision making. The scents as well as the flacons of unisex perfumes are a compromise between masculine and feminine preferences to attract the attention of both genders. However, women prefer flacons with ornamentation as well as round and soft shapes, whereas men prefer simple and angular designs (Wiltinger 2009). The unisex perfumes CKOne and Musk, used in this study, exhibit simple and straight flacon shapes, but bright colours (Zellner et al. 2008). These gender-specific compromises between the flacon design and scent may influence purchase intention negatively as they do not match perfectly men's or women's preferences.

In order to avoid the influence of the perfume's brand on a participant's perfume evaluation and purchase intention, the brand was not given as additional information. Nevertheless, the flacon of CKOne may have been recognised by participants as it is a popular perfume and thereby its shape is well known. Hence, the brand may have influenced the evaluation of the CKOne flacon and the final purchase intention.

A perfume decision is made on a highly emotional and individual level. Therefore, it is difficult to identify perfumes that are considered consistently pleasant or unpleasant. The unisex perfumes used in this study were selected based on the statistical analysis of the 32 participants' perfume evaluations within the pretest. However, the pretest's results do not necessarily reflect the scent and design preferences of the participants in the main study because of individual differences between and within the two samples. This may have influenced the results. Furthermore, the student sample used in the study may have limited generalisability to the wider population. Studies show that consumer behaviour and preferences can change with advancing age and different status (Hoyer/Macinnis 2008, p. 302; Hervé/Mullet 2009; Kotler/Armstrong 2010 p. 164 ff.).

Further Research

This study concentrates on analysing the correlation among flacon, scent and gender and its influence on purchase intention. However, forming a purchase intention that results in a final perfume purchase decision is a complex process influenced by several factors that are not included in this study and require further research. Important factors include perfume brand, price, advertising and store displays. As men and women give different weights to product attributes (Fischer/Arnold 1994; Holbrook 1986), further research needs to identify the relative importance of these single factors to both genders when forming purchase intentions. Additional mediator variables such as the age and status of consumers also need to be considered, as studies show that these factors can influence consumer behaviour (Hervé/Mullet 2009; Kotler/Armstrong 2010 p. 164 ff.). Finally, since gender differences have become a wide research area, cultural differences in gender-specific perfume decision making should be investigated.

Managerial Implications

The present empirical study confirms the previous assumption about the perfume decision making process, but also provides managers with new insights into the terms of single perfume attributes and their relevance to men and women.

Men and women tend to purchase products with a stereotypic design to underline their gender belonging (Wellmann et al. 2004, p. 90). That is why managers should consider refraining from unisex perfumes as they are a combination of men's and women's scent and design preferences. In order to meet these gender-specific preferences, managers should follow a segmentation strategy and develop perfumes separately for men and women. The design compromise of unisex perfumes results mainly in masculine flacon design elements. This is a problem as the study shows that women place great value on a perfume's flacon. Nevertheless, men place emphasis on a pleasant flacon too and consider it to be an influencing factor on their purchase intentions. That is, although the scent of a perfume is essential, it is also important to make an effort to develop an eye-catching flacon to attract the attention of male and female consumers. That is why the flacon should be highlighted in magazines and television advertisements as well as optimally placed in stores. Furthermore, managers need to be aware that a consumer's purchase intention, in terms of perfume, is not only based on objective product characteristics but also on emotions triggered by visual and olfactory cues. That is, the scent and flacon have to be adapted to the specific target group.

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