

# SOUND SYMBOLISM, GENDER AND FRAGRANCE IN BRANDING AND MARKETING

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**Abstract:** The current study aimed to combine theories of sound symbolism and branding; something which there has been a lack of in the previous research, in investigating whether gendered sound symbolism affects how much someone is willing to pay for a fragrance. In order to investigate this relationship, the current study created eight brand names which were deemed either masculine or feminine, in accordance with theories of gendered sound symbolism (Klink, 2000; Slepian and Galinsky, 2015), and paired each of these brand names with existing masculine and feminine fragrance descriptions. Following this, a survey was created in which participants were asked how much they would pay for each of the fragrances, from which they were given five different options. The survey was completed online through voluntary participation, during which 69 individuals took part. The study's results unveiled several interesting patterns. First of all, on the whole, male participants were willing to pay more for fragrances than the female participants, contrary to what other previous research has indicated (Habbal, 2020). Furthermore, the study found that participants were more likely to pay more for fragrances that had descriptions that matched their own reported gender. As well as this, participants were willing to pay more for products when the “gender” of a brand name and description were congruent, suggesting that participants favour congruent branding, even if this is subconsciously. Finally, and perhaps most interestingly, this study found that participants were willing to pay the most for fragrances when the “gender” of a brand name, description and a participant’s own reported gender were all congruent, indicating that sound symbolism does affect how much someone is willing to pay for a fragrance and therefore, highlighting the importance of choosing a brand name.

**Keywords:** sound symbolism, the pink tax, gender, brand naming, gender

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# 1 Introduction

In previous years, sound symbolism and branding have both been studied extensively, however, there has been a lack of research that combines the two. In consideration of this, the current study is concerned with the combination of sound symbolism and branding; in which it aims to investigate the effects of congruent and incongruent branding, in also discovering whether the gendered sound symbolism of brand names affects how much someone is willing to pay for a fragrance. Ultimately, this study aims to answer the question “does gendered sound symbolism affect how much someone is willing to pay for a fragrance?”, in which different types of vowels and consonants will be manipulated to investigate this idea. This essay will begin by outlining previous research conducted on sound symbolism, brand naming, the commercial gendering of fragrances and the pink tax. After shedding light on previous studies, the current study will then be outlined, while also highlighting the need for the research. Next, the study’s research questions and hypotheses will be outlined. Following this, the study’s methodology will be explained, in which the study’s sample will be described, as well as the study’s materials, including the word list and the survey used. Then, the study’s results will be outlined, noting any of the patterns found. Subsequently, the study’s results will then be discussed in further detail; drawing comparisons to previous studies and examining the hypotheses made. Afterwards, future directions for research will be outlined, as well as highlighting any limitations of the study. Finally, this study will reach its conclusion, in concluding that the results support three of the four hypotheses made and ultimately stating that sound symbolism does affect a participant’s valuation of a fragrance.

## 1.1 Previous Research

### 1.1.1 Sound Symbolism

A large majority of natural language is arbitrary – that is, many of the words in human languages have no relation to their actual meaning. However, there are some aspects of language that are non-arbitrary, meaning that they are links between natural forms and meaning, this idea is often referred to as sound symbolism (Hinton, Nichols and Ohala, 1994). The ideas behind sound symbolism have been around for centuries and even date back as far as Plato, who claimed that meanings must have natural forms (Reeve, 1998). However, since then, ideas surrounding sound symbolism have continued to develop, becoming a popular research area in linguistics.

One very famous experiment that investigated sound symbolism, and more specifically, iconicity, is an experiment conducted by Köhler (1929). Within their experiment, they showed participants two different shapes and asked them which was called ‘kiki’ and which was called ‘bouba’. The results from Köhler’s study were overwhelming, with almost all of the participants claiming that the shape with sharper edges was called ‘kiki’ and the one with rounder edges was called ‘bouba’. Although ‘kiki’ and ‘bouba’ are both pseudowords, almost all of the participants were in agreement of which name belonged to which shape and therefore, Köhler’s results provided further evidence for the idea that meanings can have natural forms and ultimately, iconicity.

Since Köhler’s experiment, sound symbolism has been studied in much greater detail, with complexification increasing in the process. Cuskley et al. (2017) completed a similar experiment to Köhler’s, in that they also investigated the ‘*bouba-kiki*’ effect, however, instead of simply asking which shape was ‘bouba’ and which was ‘kiki’, they asked participants to rank how appropriately each name fit each shape. This study believes that this method is more suitable than simply asking which shape is ‘bouba’ and which is ‘kiki’, as it allows for more flexibility and does not force participants to choose one or the other, as they may feel that neither fits appropriately. Notably, they did not use ‘bouba’ and ‘kiki’, but did use eight other words, which were contrasted in terms of their voicing. Ultimately, they found that words with voiced consonants were more likely to be associated with rounded shapes, while voiceless consonants were more commonly associated with angular shapes, acting in support of the existence of sound symbolism, alongside previous studies.

### 1.1.2 Brand Naming

Klink (2013) highlights the importance of brand naming, claiming that it is one of the most important decisions a marketer can make. Aaker (1991) argues that an effective brand name can enhance a favourable image for a product, however, an ineffective brand name can massively hinder a product’s success and therefore, a marketer must ensure that they have considered a range of brand names. Notably, Aaker recognises that a range of different factors can make a brand name ineffective, including one that is simply hard to pronounce as it makes it harder for consumers to discuss and recommend the brand. It is important for a brand name to have several characteristics, for example, it must be easy to pronounce and translatable (Collins, 1997), however, as well as this, the brand name must be suggestive of

what it is selling (Keller et al., 1998). In other words, the form of a brand name must be related to the ‘meaning’ the brand wishes to convey to consumers, as in sound symbolism.

Collins (1977) argues that there are two main strategies in brand naming. The first is called the “Juliet Principle” and is where a marketer chooses a brand name at ‘random’ and is simply established in the mind of consumer through constant repetition. The second strategy is called the “Joyce Principle” and is concerned with choosing a name based on linguistic theory, more specifically, what we now know as, sound symbolism. Using the second strategy allows a marketer to choose not only a desirable name but a relevant one. Since Collin’s work, theories of sound symbolism have progressed massively, including several that look specifically at brand naming, however, studies that have investigated both areas often fail to integrate more sophisticated points of the linguistic advances.

### **1.1.3 Sound Symbolism in Brand Naming**

Hinton et al (1994) insist that it is important for marketers to imbue meaning into a brand name, through the use of devices such as sound symbolism and therefore, it is not surprising that many brands seem to do so, for example, energy is suggested by the letter ‘v’ in the brand name ‘Viagra’ (Begley, 2002) and efficiency is suggested by the letter ‘z’ in the brand name ‘Prozac’ (Erlich, 1995). Interestingly, Ultan (1978) claims that the relationship between sound and meaning is not language specific, which means it is easier for brands to reach a global market with the same product.

Although sound symbolism has been extensively studied in a purely linguistic manner, in terms of a focus on marketing there has been somewhat limited coverage, and when it has been studied, it has been from more of a marketing perspective, meaning they have not considered more sophisticated advances in linguistics and often conflate written and spoken forms. In consideration of this, this study aims to pair the two more successfully. Despite this, there has been several useful findings in regard to sound symbolism that are either explicitly related to brand naming or can be generalised to relate to marketing.

There have been numerous studies that have found that there is a relationship between vowels and gender, but in regard to marketing, Klink’s (2000) experiment seems to be one of the most prevalent. Based on previous studies by those such as Ultan (1978), Klink assumed that

there was a difference between front and back vowels and the gender they denote. As well as this, Klink recognised studies that were conducted on the frequencies of animal sounds, in which it was found that higher frequency sounds (front vowel sounds) are perceived as ‘softer’ and ‘friendlier’, while lower frequency sounds (back vowel sounds) are perceived as ‘harsher’ and more ‘aggressive’ (Ohala, 1994). Notably, /ə/ is placed in the middle of the frequency continuum and is also in the middle in terms of frontness. In consideration of findings such as these, Klink hypothesised that brand names containing front vowel sounds (/i/ and /a/) will be perceived as ‘softer’, ‘thinner’, ‘friendlier’ and ‘more feminine’. On the other hand, he hypothesised that back vowel sounds (/u/ and /ɒ/) would be perceived as ‘harsher’, ‘thicker’, ‘less friendly’ and ‘more masculine’. To test his hypotheses, Klink created 124 word-pairs, with each pair being the same except for either the vowels or consonants being contrasted; each back vowel was contrasted with each front vowel and consonants were contrasted depending on whether they were a fricative or a stop, as well as whether they were voiced or voiceless. Each of the 265 participants that took part, were given a booklet of questions that contained the non-words, in which they were asked questions such as “which brand name is friendlier?” and “which brand name is more feminine?”. As Klink had hypothesised, on the whole, participants perceived brand names containing front vowels as softer and more feminine, while they perceived brand names containing back vowels as harsher and more masculine. Therefore, this study, like Klink, believes that this finding can be utilized by marketers when choosing a brand name – if they are aiming their product at females, they should use front vowels, and if they are aiming the product at males, they should use back vowels.

Moreover, several studies have claimed that there is a voiced-gendered name effect – that is, there are evident patterns regarding voicing and the gender of a name. Slepian and Galinsky (2015), among others, propose that voiced consonants produce ‘harder’ or ‘harsher’ sounds. On the other hand, they note that voiceless consonants produce ‘softer’ or more ‘subdued’ sounds. Taking these proposals further, they claim that the voicing of phonemes can denote the gender of a name, with voiced sounds being more common in male names and voiceless sounds being more common in female names. More specifically, Slepian and Galinsky believe that the voicing of a phoneme that a name begins with is especially important in determining the gender of a name, with their focus being on English (language) names. Notably, they make these associations based on previous work concerned with gender, much of which claims that stereotypically men are described as ‘tougher’ and ‘harder’ than women

in western societies (Slepian, Weisbuch, Rule and Ambady, 2011). Slepian and Galinsky gathered their findings through conducting eleven different studies, which included a mixture of primary and secondary data. One of their studies that was particularly noteworthy was the second one they conducted, in which they examined baby names in the United States over a 75-year period (1936-2013), which consisted of more than 270,000,000 babies and 87,620 different names, in which they found that their claims were prevalent, as voiced consonants were more common in male names (8.8% more frequent), and voiceless consonants were more frequent in female names (9.64% more frequent).

Another one of Slepian and Galinsky's studies was based around a random experiment that bared no relation to the voice-gendered name effect, the purpose was instead to simply gather the names of 1,000 participants. Within this study, once again, they found that voiced consonants were more common in male names and voiceless consonants in female names, especially at the beginning of a name, as they did for the most part in their other ten studies. Notably, there was 20.54% more males with voiced consonants within their names, while there were also 8.48% more females with voiceless consonants in their names. However, one linguistic limitation of Slepian and Galinsky's study is that despite investigating sound symbolism they were concerned with the written forms of words, as opposed to the actual spoken pronunciation of the names, which could have had a significant impact on their results. For instance, although the letter 'k' is present in the name Frankie, the pronunciation would typically be /fræŋgi/ in English, however, this study is still interested in discovering whether their findings correlate with this study's findings. Furthermore, although Slepian and Galinsky looked at birth names as opposed to brand names, this study assumes that the same pattern will be found in brand names, especially as many brands are often named after people.

#### **1.1.4 The Gendering of Fragrances**

For many people, fragrances are a common part of everyday life (Sczesny and Stahlberg, 2002), with many claiming that they are an important aspect of social interaction (Milinski and Wedekind, 2001). Furthermore, an individual's preference of fragrance is said to vary depending on their own gender (Freyberg and Ahren, 2011), with a significant amount of previous research focusing on the distinctions made between stereotypically masculine and feminine odours (Fiore, 1992). In consideration of this, it may be no surprise that the

relationship between fragrances and gender has been well studied for several decades, with many of the previous studies finding similar patterns.

Lindqvist (2012) investigated participant's awareness of the gender of several fragrances, in terms of the gender they are marketed towards. Within their experiment, they blindfolded eighteen undergraduate students, who were all 'naïve' participants, meaning they had little knowledge of the fragrance industry and did not have any experience in types of experiments like these. The experiment had participants smell twelve different fragrances: six feminine, five masculine and one unisex, in accordance with Edwards' fragrance guide (Edwards, 2008). Notably, each of the fragrances were added into a 500ml glass jar in which 1ml of the fragrance was added. From these glass jars, participants were required to smell each of the fragrances and answer several questions about each of the scents. One part of their experiment included asking participants to rank both the masculinity and femininity of each scent, on a scale of 0-10. From this question, there were clear differences between the masculinity and femininity of each of the fragrances, with the average rating for each fragrance being correct gender. Remarkably, the unisex fragrance was rated higher on the femininity scale than masculinity scale. This distinction between the masculine and feminine scents, demonstrates that participants are aware that masculine and feminine fragrances actually have different scents, rather than just differing in their marketing. Notably, this means that when considering the written descriptions, there should also be differences between masculine and feminine fragrances, as the descriptions should match the scents as closely as possible. However, another of the questions asked participants if they would wear the fragrance themselves, and although for the most part, participants seemed to favour the fragrances that were targeted at their specific gender, the difference was much less significant than expected by the researcher, with many of the participants claiming that they would wear a fragrance that was not aimed at their gender and therefore, this study is interested to see if having participants read a description rather than smell a fragrance, will yield similar results.

However, often studies are not able to use actual scents and instead rely on descriptions, which means that metaphor becomes very important. Notably, odours can often be difficult to identify, which means that they are vulnerable to influence of language, meaning human's ability to accurately describe a smell becomes important, in which it has been found that even subtle aspects of language can affect the cognition of odour (Majid, 2019). For example, several previous studies have found that grammatical gender can have a significant impact on

the way in which descriptions of odours can denote gender (Bender et al., 2016; Hopp, 2013; Yorkston & De Mello, 2005). One study that investigates this idea came from Hopp (2013), in which they highlight how French as a language is particularly transparent in regard to grammatical gender, comparing it to German in which the frequency of feminine and masculine nouns is very similar and harder to distinguish between.

Aside from grammatical gender, it has been noted that gender associations can influence the way in which odours are perceived and ultimately paired with particular genders (Yorkston and De Mello, 2005). Within previous studies, such as Yorkston and De Mello's (2015), it has been noted that English is especially susceptible to gender associations as the language does not have grammatical genders and therefore, gender associations become the main way in which gender can be denoted. It has been said that English, among other languages, often 'genderize' different natural and artificial objects; with natural objects often being associated with feminine connotations, and artificial objects with masculine connotations (Speed and Majid, 2019; Sera et al., 1994). In their experiment, Speed and Majid had forty-two participants, who were all bilingual native German speakers, read eight fragrance descriptions and asked them several questions about the fragrance, including "how likely are you to buy this fragrance for your father or brother?" and "how likely are you to buy this fragrance for your mother or sister?", as well as asking them to rate the masculinity and femininity of each of the scents, similar to Lindqvist's (2012) study. As expected, participants were significantly more likely to buy a fragrance for their father or brother if the fragrance description was a masculine one. Likewise, participants were also more likely to buy the fragrances with feminine descriptions for their mother or sister. Furthermore, each of the fragrances mean scores on the masculinity and femininity ratings, placed each of the fragrances as the correct gender. Ultimately, this work suggests that fragrance descriptions and therefore, odour descriptions in general, can denote a particular gender, based on the relevant gender associations of which one may hold.

In terms of which kinds of smells are associated with the commercial gender of fragrances, there are evident patterns found. For instance, floral scents are very much associated with feminine fragrances (Donna, 2009), with an overwhelming 96% of feminine fragrances being described as having floral qualities in the H&R Fragrance Guide (a catalogue of a collection of fragrances, which contains descriptions of each of the fragrances). On the other hand, 'woody' smells seem to be more commonly associated with masculine fragrances, with 38%

of masculine fragrances being described as woody, compared with just 6% of feminine fragrances, in the H&R Fragrance Guide. As well as ‘woody’ smells, masculine fragrances seem to be based on ‘aromatic’ and ‘fresh’ smells. The clear differences between commercially masculine and feminine fragrances and their scents, can also be seen within fragrance descriptions, as they aim to describe the fragrance as accurately as possible.

### **1.1.5 The Pink Tax**

The pink tax is a phenomenon that is concerned with the pricing of gender-based products. More specifically, the phenomenon comments on the pricing of products aimed at women, claiming that they are usually more expensive, hence the name ‘the pink tax’ (Dooley, 2020); note the name is not to do with the product being pink, but instead just a feminine product. In some circumstances, this ‘tax’ is literal, for example, the sale of sanitary products, however, often the ‘tax’ is not literal, but simply an inflated price. For example, Dooley draws on new Bic pens that were released in pink and were marketed towards women, claiming that it was time for women to stop using ‘men’s pens’, however, this pen was twice the price of the standard variant, supplying a perfect example of the pink tax. In addition, BIC razors that are also aimed at women, cost \$2.50 more on average than their men’s razors. Likewise, and perhaps even more relevant to this study, Dell released a campaign targeted towards women called ‘Della’ (Forbes, 2009), in which they used sound symbolism to denote femininity in the addition of ‘a’ to ‘Dell’; despite more recent research suggesting that ‘a’ is neutral in terms of the gender it denotes (Klink, 2013). Notably, this laptop was lighter and smaller than other computers, in which Dell have been widely criticised for this useless and sexist innovation, with claims that it was simply a way to make more money. Moreover, it has been found that products in the United States that are aimed at women are more than twice as likely to be priced higher than a comparable men’s product, with over 60% of comparable products being priced higher for women (Joint Economic Committee: U.S. Congress, 2016). As well as this, it has been found that in the United States, gender-based pricing is costing female consumers approximately \$1400 a year (Forbes, 2012).

Habbal (2020) argues that there are many reasons for the existence of the pink tax, with one of the key reasons being women’s willingness to pay more for gendered products, which they claim is a result of gender socialization, similar to Smith (2007). Remarkably, Habbal, among others such as (Slaby and Frey, 1975), note that through gender socialization females are

often made to feel as though their appearance is of significant importance, which makes many willing to pay more for products concerning fashion or beauty, in which fragrances may be considered within, especially for more desirable brands. As well as this, Habbal recognises that the pink tax has been apparent for decades now and therefore, women have simply been socialized to accept higher prices. Surprisingly, there has been a limited amount of research conducted on the reverse of the pink tax; investigating whether men are willing to pay more for products that are gender specific.

## **1.2 The Current Study**

### **1.2.1 Rationale**

In light of previous research, the current study aims to integrate the sound symbolism of fragrances with a study of gendered marketing. In doing so, this study will deal with masculine and feminine scents, and aim to see how much each gender will pay for congruent and incongruent branding. Unlike other previous studies concerned with the pink tax, this study will not only investigate whether women are willing to pay more for products marketed at their gender, but also whether men will pay a premium for fragrances with more masculine brand names. This study hopes to identify some gaps in the previous research, in placing the focus on sophisticated theories of linguistics and combining them with gendered marketing, something which the previous research has seemingly lacked. Furthermore, as mentioned previously, there has been an absence of research conducted on the reverse of the pink tax, that is, investigating whether men are also willing to pay more for products aimed at their gender and therefore, this study aims to shed some light on the matter.

The current study aims to investigate the particular topic through the use of a survey, which will involve asking participants how much they are willing to pay for a collection of fragrances, which will contain brand names created by this study and existing fragrance descriptions. As previously mentioned, Cuskley et al. (2017) used a scaled answering system in their experiment, which is similar to what this study will adopt, as it allows participants to answer more freely, in which they can choose from several different categories, as opposed to just two. Moreover, much of the previous work conducted on branding and fragrances has been conducted with participants actually smelling the fragrance, whereas this study will rely on the descriptions, similar to Speed and Majid (2019). In consideration of this, the current

study is interested to discover whether similar patterns are found between the two different methods. Furthermore, this study aims to further research conducted on brand naming and sound symbolism, in discovering whether gendered sound symbolism affects an individual's valuation of a fragrance based on their gender, as opposed to just discovering which vowel and consonants are associated with which gender.

### **1.2.2 Research Questions and Hypotheses**

After consulting and examining previous literature from all of the different areas, this study formed several research questions:

1. Does gender affect how much someone is willing to pay for fragrances?
2. Are participants willing to pay more for fragrances that have descriptions that are congruent with their gender?
3. Are participants willing to pay more for fragrances where the gender of the description is congruent with the "gender" of the brand name?
4. Are participants willing to pay more for fragrances where the gender of the description is congruent with both the "gender" of the brand name and their own gender?

As well as this, in consideration of the previous research already discussed, this study also formed four main hypotheses:

1. Women are willing to pay more for fragrances than men in general.
2. Participants are willing to pay more for fragrances that have descriptions that are congruent with their gender.
3. Participants are willing to pay more for fragrances where the gender of the description is congruent with the "gender" of the brand name.
4. Participants are willing to pay more for fragrances where the gender of the description is congruent both with the gender of the brand name and their own reported gender.

## 2 Experiment

### 2.1 Methods

#### 2.1.1 Participants

Participants were gathered through posts on several social media sites, including Instagram, Twitter and Facebook, through which it was voluntary for participants to take part. Overall, this study consisted of 69 participants; 25 of which were male and 44 of which were female. Notably, because the survey was completed through voluntary participation, it was not possible for the gender sample to be completely balanced. Furthermore, there was one non-binary participant and although it would be interesting to investigate non-binary participants' responses, because there was only one non-binary participant, their results were omitted. The participants varied in age; however, one requirement was that all participants had to be at least 18 years of age. In addition, all but one of the participants native language was English, however, all of the participants were fluent in English and therefore, this study decided to include the results from the participant who was not a native speaker of English.

#### 2.1.2 The Word List

In light of theories of sound symbolism, this study created eight non-words for the brand names, all of which followed a CVCV structure – the form of which most previous studies have also followed, such as Klink (2000). The 'feminine' brand names were made up of voiceless consonants and front vowels ('kesi', 'feti', 'tefi' and 'seki'), whereas the 'masculine' brand names were made up of voiced consonants and back vowels ('zogu', 'dovu', 'guzu' and 'vodu'). Once again, the masculine and feminine discrepancies were determined by previous findings discussed in the literature review. In order to maintain consistency, for the masculine sounding words, the first vowel was always 'o' and the last was always 'u', and for the feminine sounding words, the first vowel was always 'e' and the last was always 'i'. Once the non-words had been created, existing fragrance descriptions were then researched and taken from The Perfume Shop's website, more specifically, fragrances that have both male and female variants were of particular interest, such as Paco Rabanne's 'Invictus' and 'Olympea' and 'Armani Diamonds for Him and for Her'. After this, each of the eight non-words, were paired with two existing fragrance descriptions: one masculine and one feminine – any words that clearly gave the gender of the fragrance away

were changed, such as ‘cologne’ or ‘man’. Notably, each of the non-words were paired with both a masculine and feminine fragrance description, to ensure that it was not only the fragrance description that was affecting each of the participant’s valuation of the products, but also the brand name and ultimately, sound symbolism too; meaning participants answered sixteen different questions, featuring eight different brand names.

### **2.1.3 The Survey**

The survey for this study was created using Google Forms and was estimated to take around ten minutes, this was to ensure that the participants maintained concentration and completed the survey adequately, however, the survey did not have a time limit, ensuring that participants were not rushing to finish it. As well as this, the question order for each section was randomised for each participant, meaning it was not always the same product that was last, just in case a participant’s attention had decreased by this point. It was also compulsory that participants answered all of the questions. Moreover, at the start of each of the questions regarding the fragrances, the name of the fragrance was in the title of each question, as well as being integrated at the start of the fragrance description, and at the end when they were asked how much they would pay for the product, certifying that the fragrance name had been established in the participant’s mind. In addition, the survey had a grey colour scheme, in an attempt to avoid any gender stereotypical colour preferences (Golz, 2010).

### **2.1.4 Procedure**

At the beginning of the survey, participants were informed on the purpose of the investigation, with informed consent being given at this time. Following this, demographic information about the participants was collected, including their gender, age and language abilities, including asking them if they were a native speaker of English. After this, participants were asked to read each of the fragrance descriptions, which the brand name was integrated into several times, and state how much they would be willing to pay for each of the products (a copy of the survey can be found in appendix 1). Notably, the participants were given five different options to choose from: “Less than £5”, “£5-£20”, “£21-£35”, “£36-£50” and “Over £50”; adopting a scaled answering system like that of the study conducted by Cuskley et al. (2017). Before submitting the survey, participants were debriefed, ensuring that they understood the purpose and aims of the study, as well as making them aware that they can withdraw at any time.

## 3 Results

### 3.1 Calculations

In this section, the study's results will be presented through the use of graphs and tables; each of the hypotheses made will be addressed, in which it will be detailed whether the results act in support or against each of them. For each of the results, percentages were calculated in order to make the results more comparable, especially as there was not an equal number of male and female participants in the study. Moreover, percentages were generated and sorted by columns, meaning all of the results in each column equal 100%. For example, in section 3.2 below, the male and female responses are separated into two columns and both each add up to 100% individually, as detailed by the 'Total' column on each table. Notably, the raw number of items (not total number of participants) are in parentheses in each of the tables.

Moreover, each of the figures presents percentages and not the raw number of items.

### 3.2 Hypothesis (1) – women are willing to pay more for fragrances than men in general

	Overall male responses	Overall female responses
<b>Less than £5</b>	24.5% (98)	15.2% (107)
<b>£5-£20</b>	24% (96)	28% (197)
<b>£21-£35</b>	24.8% (99)	30.7% (216)
<b>£36-£50</b>	13.3% (53)	17.9% (126)
<b>Over £50</b>	13.5 (54)	8.2% (58)
<b>Total</b>	<b>100% (400)</b>	<b>100% (704)</b>

*Table 1 – showing the overall responses by gender*

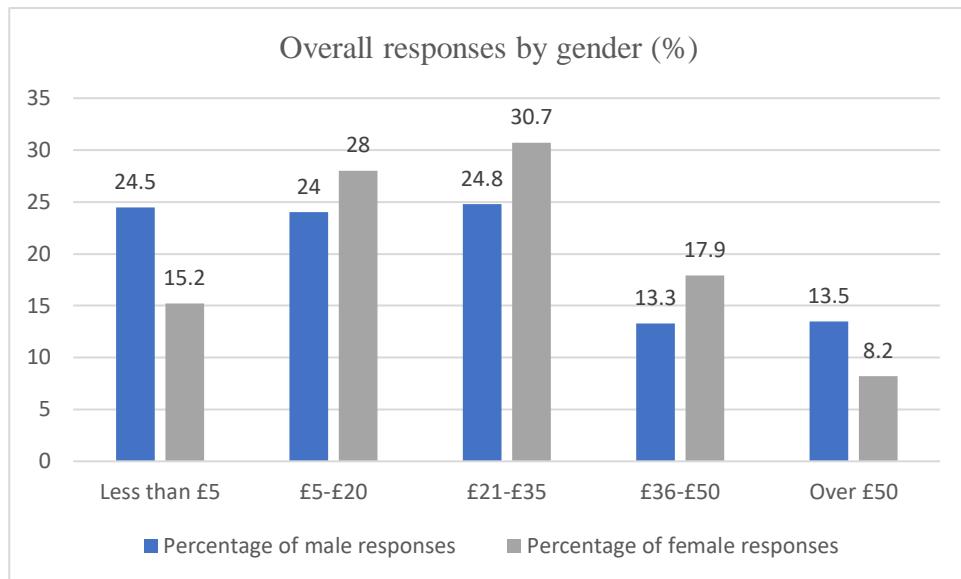


Figure 1 – showing the overall responses by gender (%).

Although this study hypothesised that, on the whole, women would be willing to pay more for the fragrances, the current study's results do not directly reflect this. From table 1 and figure 1, we can see that generally both males and females were less willing to choose the two highest categories, with the lowest three categories being chosen more frequently. When looking at the results, it is apparent that men were more willing to pay "Over £50" than women, with 13.5% of the male responses being "Over £50" and just 8.2% of the female responses. Despite this, it appears that men were also more likely to choose the lowest category ("Less than £5"), with 24.5% of the male responses being in this category, in comparison to 15.1% of the female responses. Notably, both the male and female responses were more likely to be "Less than £5" (the lowest option) than "Over £50" (the highest option). In terms of the mode, the results show that for both female and male participants, the most common price option was the middle one ("£21-£35"). Ultimately, figure 1 demonstrates that although the female participants were less likely than the male participants to choose the two highest categories, they were also less likely to choose the two lowest categories.

### 3.3 Hypothesis (2) – participants are willing to pay more for fragrances that have descriptions that are congruent with their gender

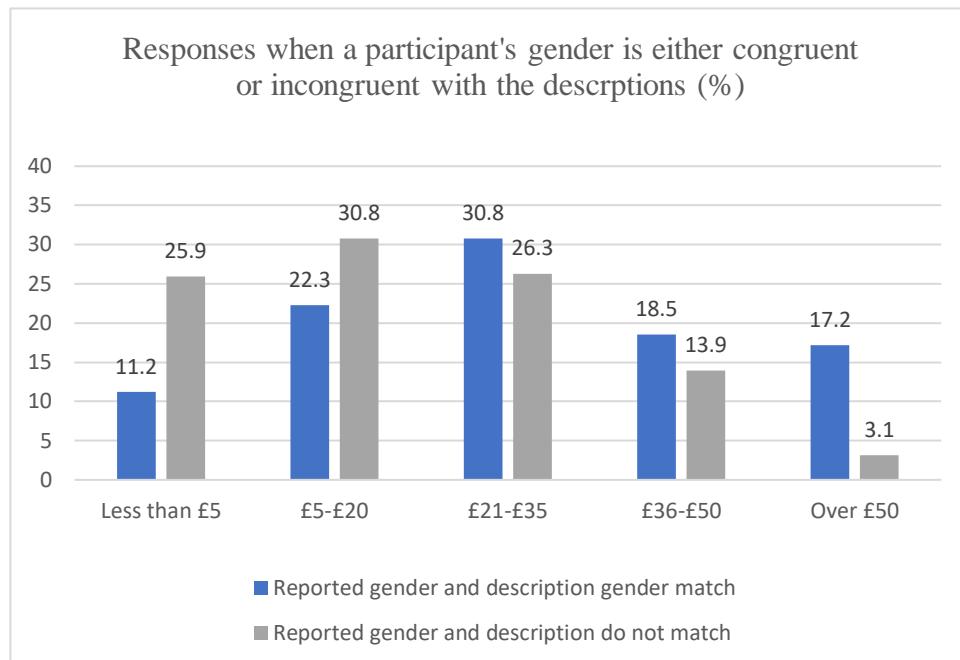


Figure 2 – showing responses when a participant's gender is congruent or incongruent with descriptions (%).

From figure 2, it is noticeable that participants were more likely to choose the highest category (“Over £50”) when their gender was congruent with the gender of the fragrance description, with a difference of 14.1%. As well as this, it can be seen that participants were significantly more likely to choose the lowest category (“Less than £5”) when their gender did not match the gender of the description, with a difference of 14.7% being noticed. Notably, the mode response when the gender of the description and participant were congruent, was “£21-£35”, while the mode response was “£5-£20” when the two contexts were incongruent. Ultimately, the results shown in figure 2, support hypothesis (2) as participants seem to be willing to choose the highest categories more often for fragrances when their own gender is congruent with the gender of the fragrance description.

Participant Gender	Male	Male	Female	Female
Description Gender	Male	Female	Male	Female
<b>Less than £5</b>	7.5% (15)	41.5% (83)	17% (60)	13.4% (47)
<b>£5-£20</b>	15.5% (31)	32.5% (65)	29.8% (105)	26.1% (92)
<b>£21-£35</b>	30% (60)	19.5% (39)	30.1% (106)	31.3% (110)
<b>£36-£50</b>	20.5% (41)	6% (12)	18.5% (65)	17.3% (61)
<b>Over £50</b>	26.5% (53)	0.5% (1)	4.5% (16)	11.9% (42)
<b>Total</b>	<b>100% (200)</b>	<b>100% (200)</b>	<b>100% (352)</b>	<b>100% (352)</b>

Table 2 – showing responses to masculine and feminine descriptions.

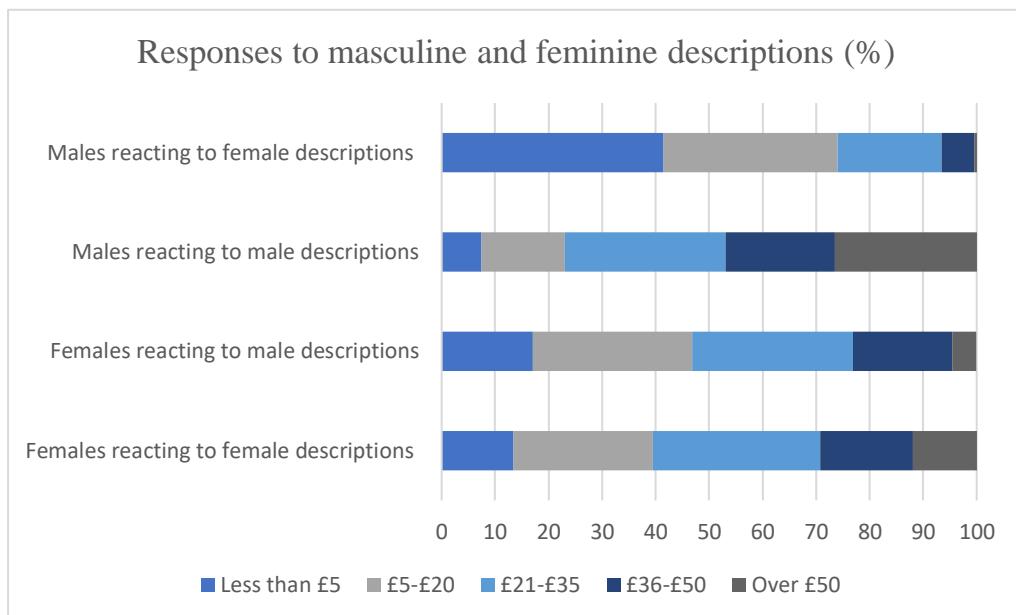


Figure 3 – showing responses to masculine and feminine descriptions (%).

Both table 2 and figure 3 highlight that like the overall trend, male participants were also more likely to choose the highest category (“Over £50”) when the description matched their gender. In fact, there was only one instance in which a male participant chose the “Over £50” category when it was a female description (as shown in table 2). Similar to the overall trend, male participants were also more likely to choose the lowest category when the description did not match their reported gender, with a staggering difference of 34% between the “Less than £5” responses between male and female descriptions for male participants. Moreover, the mode response for male participants reacting to feminine descriptions was the lowest

option (“Less than £5”), whereas the mode response for male participants reacting to masculine descriptions was “£21-£35”.

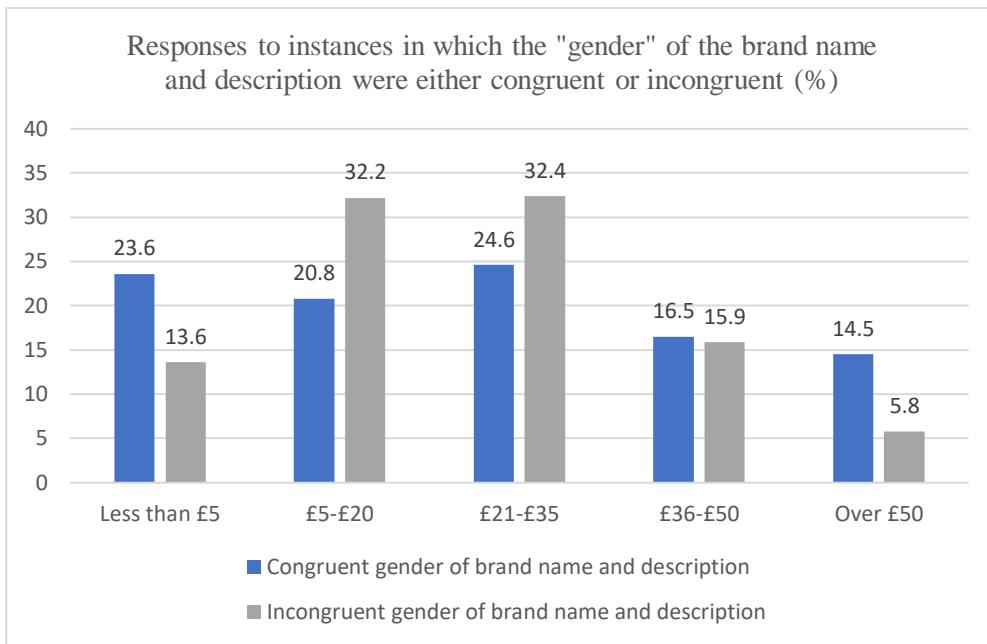
Like the overall trend, figure 3 demonstrates that female participants also appear to be more likely to choose the highest category when the description matched their gender, as well as being more likely to choose the lowest category when the description did not match their gender. However, female participants appear to be much less phased by the gender of the descriptions, with there being less than a 4% difference in all of the price categories, other than the highest category which yielded a difference of 7.4% between their responses to masculine and feminine descriptions. Notably, this 7.4% difference is still considerably smaller than the 21.5% difference noticed in the highest category for male responses.

Furthermore, from table 2, it can be observed that the mode response for both male and female participants when reacting to fragrances that had descriptions that matched their own reported gender, was the middle option (“£21-£35”), the same as the overall mode response in the study. Notably, the mode response for female participants reacting to masculine descriptions was also “£21-£35”.

### **3.4 Hypothesis (3) – participants are willing to pay more for fragrances where the gender of the description is congruent with the “gender” of the brand name**

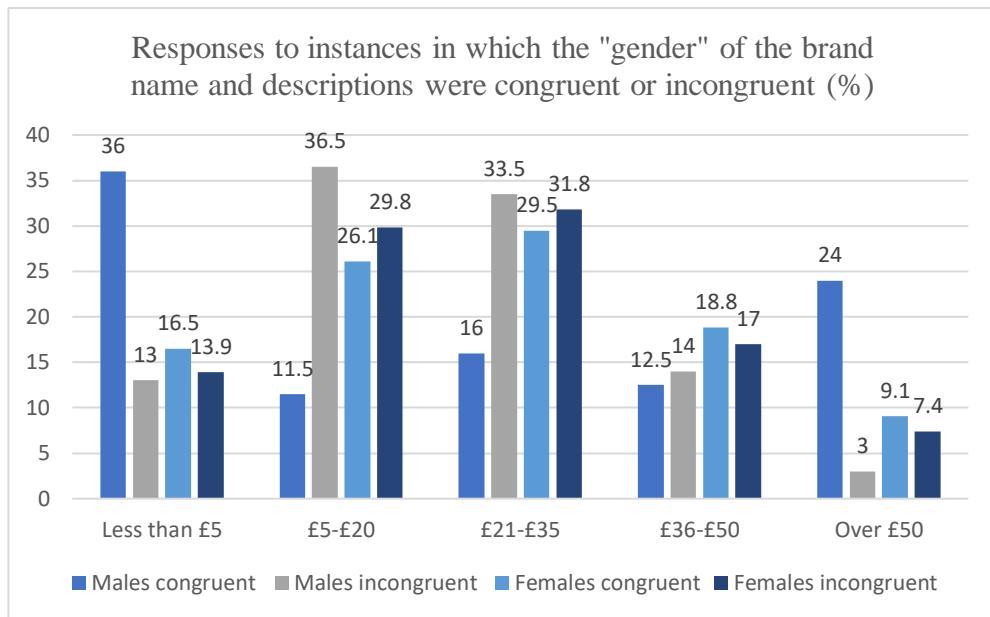
	<b>Responses when the “gender” of the brand name and description were congruent</b>	<b>Responses when the “gender” of the brand name and description were incongruent</b>
<b>Less than £5</b>	23.6% (130)	13.6% (75)
<b>£5-£20</b>	20.8% (115)	32.2% (178)
<b>£21-£35</b>	24.6% (136)	32.4% (179)
<b>£36-£50</b>	16.5% (91)	15.9% (88)
<b>Over £50</b>	14.5% (80)	5.8% (32)
<b>Total</b>	<b>100% (552)</b>	<b>100% (552)</b>

*Table 3 – showing the responses to instances in which the “gender” of a brand name and description were either congruent or incongruent.*



*Figure 4 – showing the responses to instances in which the “gender” of a brand name and description were either the same or different (%).*

It is noticeable from the table 3 and figure 4 that participants were willing to pay more for products when the “gender” of the brand name and description were the same, as hypothesised. More specifically, from looking at the results, we can see that when the two were congruent in terms of gender, 14.5% of the responses were willing to pay “Over £50”, compared to just 5.8% of instances when the branding was incongruent. However, it is interesting that this congruent context also yielded more responses in which participants were only willing to pay less than £5; with 23.6% of instances when congruent and 13.6% when incongruent. Moreover, although participants were more willing to choose the two highest categories when the description and brand name had the same gender, the mode response was the middle option for both the congruent and incongruent contexts.



*Figure 5 – showing the responses to instances in which the “gender” of a brand name and description were either the same or different (%).*

By looking at figure 5, it can be noted that similar to the overall trend, male participants were willing to choose the highest category more on products when the “gender” of the brand name and description were the same, with only 3% of the male responses being “Over £50” when the gender did not match, compared to 24% when the branding was congruent, evidently a significance difference. Despite this, the results also show that male participants were more likely to choose the “Less than £5” option when the branding was congruent, similar to the overall trend. Notably, the mode response for male participants reacting to instances that were congruent was “Less than £5”, whereas the mode response was “£5-£20” for the incongruent context.

Like that of which was found with male participants, female participants were also willing to choose the highest category more frequently for fragrances in which the “gender” of the brand name and description were the same. When the “gender” of the brand name and description were congruent, 9.1% of female participants were willing to spend “Over £50”, as opposed to 7.4% when the branding was incongruent. Notably, the female participants appear to be much less phased by congruency of the brand name and description than males do; with just a 1.7% difference for females and a much larger difference of 21% for males, when considering the highest category (“Over £50”). Also, like the males, there were also more instances in which females chose the lowest category when the branding was congruent as opposed to incongruent. Moreover, the mode for female participants reacting to the congruent

instances was “£21-£35”, which also happened to be the mode response for female participants reacting to the incongruent instances.

### 3.5 Hypothesis (4) – participants are willing to pay more for fragrances where the gender of the description is congruent both with the “gender” of the brand name and their own reported gender

	Gender	Male	Male	Female	Female
	All Congruent	Yes	No	Yes	No
<b>Less than £5</b>		5% (5)	31% (93)	10.2% (18)	16.9% (89)
<b>£5-£20</b>		4% (4)	30.7% (92)	26.1% (46)	28.6% (151)
<b>£21-£35</b>		22% (22)	25.7% (77)	27.3% (48)	31.8% (168)
<b>£36-£50</b>		22% (22)	10.3% (31)	21% (37)	16.9% (89)
<b>Over £50</b>		47% (47)	2.3% (7)	11.9% (27)	5.9% (31)
<b>Total</b>		100% (100)	100% (300)	100% (176)	100% (528)

Table 4 – showing the effect that the “gender” of a brand name, reported gender and description have when all congruent.

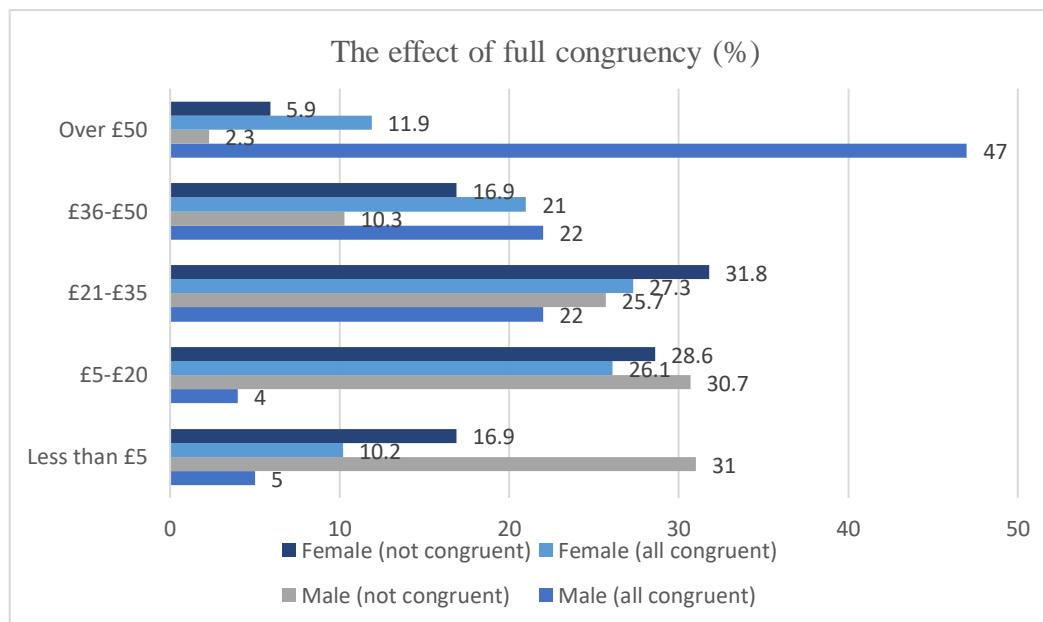


Figure 6 – showing the effect that full congruency between the “gender” of a brand name, reported gender and description has (%).

From table 4 and figure 6, it is noticeable that both the male and female participants chose the highest category (“Over £50”) more often when the “gender” of the brand name, description and their own reported gender were all congruent, as expected. When looking specifically at

the male participants, it appears that when the “gender” of the brand name, description and their own reported gender were all congruent, the frequency of them choosing the highest category, significantly increased, with a difference of 44.7% being noticed between the instances in which all three had the same gender and instances in which they were not all congruent. Furthermore, from table 4, it can be seen that when all of these areas were congruent, “Over £50” was the mode response for male participants, with a difference of 25% between the most common and second most common option. By contrast, the mode response for instances in which not all three were congruent was “Less than £5”.

Although the female participants also appear to be more likely to spend more money on a fragrance when all three factors are congruent, the difference is smaller than that of which is noticed from the male participants, with a difference of 6% between the number of “Over £50” responses when all three were congruent and instances in which not all three contexts were congruent, but still present, nonetheless. Moreover, unlike the male participants, when all three factors were congruent in terms of gender, the mode response was “£21-£35” for the female participants, and not “Over £50” like the male participants. Remarkably, the least common response from both the male and female participants when all three areas were congruent was either the lowest (“Less than £5”) or second lowest option (“£5-£20”), whereas the least common response when all three contexts were not congruent, was the highest option (“Over £50”) for both the male and female participants.

## 4 Discussion

### 4.1 Summary of Findings

In summary, the results from this study acted in support of three of the four hypotheses made. First of all, the current study found that male participants were willing to choose ‘Over £50’ (the highest category) more often than female participants, the opposite to what the study hypothesised; however, males were also more likely to choose the lowest option (“Less than £5”) than females. Notably, the mode response for both male and female participants was “£21-£35”, which was also the middle option. In addition, as the study predicted in hypothesis (2), the results indicate that participants were willing to spend more on fragrances when the gender of the description and a participant’s reported gender were congruent; with the male participants seeming to be especially sensitive to this. Another interesting finding

was that participants were also willing to spend more money when the “gender” of the brand name and the gender of the description were congruent, as initially expected in hypothesis (3); however, interestingly, participants were also more likely to choose the lowest category when the “gender” of the brand name and description were the same. As well as this, as predicted in hypothesis (4), the results show that participants are willing to pay more for fragrances when the gender of the description, brand name and their own reported gender were all congruent; with males, once again, appearing to be particularly sensitive to this context of full congruency. When considering the four hypotheses made, the results support all of the hypotheses other than hypothesis (1), as male participants chose the highest category more often than female participants which was not anticipated, however, as a whole, the study managed to address all of the research questions it intended to.

## **4.2 Implications**

### **4.2.1 Hypothesis (1) – women are willing to pay more for fragrances than men in general**

While previous research has suggested that women are willing to pay more for products than men (Habbal, 2020), in which many have suggested that this is a result of the pink tax, the results of this study indicate the opposite for the fragrances used in this study, with the male participants choosing the highest category more frequently. In consideration of the results based on hypothesis (1), the results of the current study also help to answer research question (1) (“does gender affect how much someone is willing to pay for fragrances?”), as a participant’s gender did seem to have some influence on their valuation of fragrances.

Notably, while studies alike have been conducted using a range of different products and found that female participants are willing to spend more on the whole, the current study raises the possibility that this difference found to other studies, may be because of the specific products used within the study (fragrances), as this may just be one type of product than men are willing to pay more for than women. Despite this, as previous claims made by those such as Habbal (2020) and Slaby and Frey (1975) note that women are often willing to pay more for beauty products as they are socialized to feel that their appearance is of paramount importance, the current study predicted that this could not be generalized to fragrances, in which it appears that it cannot be, or at least not for those who took part in this study. Furthermore, much of the previous research has focused on reality and actual prices, as

opposed to asking how much someone would be willing to spend (Habbal, 2020; Dooley, 2020) and therefore, just because female products are usually more expensive (Forbes, 2012), does not necessarily mean they will choose to pay more when given the option, as in studies like these, which could explain the difference found in this study to other previous studies.

Furthermore, although the male participants were willing to choose the highest category more often than females, they were also more likely to choose the lowest category and therefore, this must be taken into consideration when interpreting the findings. Instead, from the results we can note that the male participants' valuation of fragrances is more polarised than female participants, in which it seems the male participants are more likely to significantly resonate with a fragrance or severely dislike it, based on their valuation of fragrances. In addition, the mode response for both males and females was the middle option ("£21-£35") and therefore, on the whole, the difference between the amount males and females are willing to spend, may not be as significant as it may initially appear, however, it does still stand that male participants were more likely to choose the highest category than female participants, with a noticeable difference of 5.3%.

#### **4.2.2 Hypothesis (2) – participants are willing to pay more for fragrances that have descriptions that are congruent with their gender**

In line with hypothesis (2), the results demonstrate that participants were willing to spend more on fragrances when the gender of the description was congruent with their reported gender. Notably, as participants were willing to pay more for fragrances in which the gender of the descriptions matched the participant's reported gender, it can be noted that participants are willing to spend more on fragrances that are commercially aimed at their gender, even without actually knowing that they are aimed at their gender, as these descriptions were taken from actual fragrances. When considering this pattern, it can also be said that the current study answered research question (2) ("are participants willing to pay more for fragrances that have descriptions that are congruent with their gender?"), as it appears that there is a correlation between the two.

Moreover, the fact that participants seemed to favour fragrances that had descriptions matching their own gender, acts in support of Speed and Majid's (2019) study which found that participants showed awareness of the "gender" of a fragrance from the description, in

which participants also claimed they were more likely to purchase a fragrance that matched their gender. Similarly, the results correlate with other previous studies that had participants actually smell fragrances, in which participants also displayed awareness of the commercial gender of fragrances without being told, such as Lindqvist (2012), however it appears that participants in this study were significantly more likely to purchase fragrances aimed at their own gender, while in Lindqvist's study this pattern was less significant. Remarkably, as previously mentioned in the study's rationale, the current study was interested in discovering whether or not similar patterns would be found to studies that had participants actually smelling fragrances, in which it appears that they do in terms of recognising the gender of a fragrance, further suggesting that the metaphor language uses to describe odours, must be at least somewhat accurate, as Majid (2019) also suggested.

Furthermore, when looking specifically at each gender, the results highlight that male participants were significantly more likely to choose "Over £50" for the fragrances with masculine descriptions, than females were for those with feminine descriptions, just like the overall trend. In consideration of this, the current study notes that male participants are particularly inclined to spend more on products that are aimed at their own gender, suggesting that marketers must take this into extra consideration when targeting a fragrance at males. Nevertheless, female participants were still willing to choose the highest category more often when the description was a feminine one, highlighting that they also favour products that are commercially aimed at their gender, even if the results were less significant than in male participants.

#### **4.2.3 Hypothesis (3) – participants are willing to pay more for fragrances where the gender of the description is congruent with the “gender” of the brand name**

Moreover, as the study expected, participants were willing to spend more money on fragrances where the “gender” of the brand name and gender of the description were congruent, with a difference of 8.7% being noticed between the responses for “Over £50” between instances that were congruent and incongruent. Notably, participants were also more likely to choose the second highest category (“£36-£50”) when the gender of the description and brand name were congruent. Ultimately, this finding helped answer research question (3) (“are participants willing to pay more for fragrances where the gender of the description is congruent with the “gender” of the brand name?”). From this pattern, it can therefore be

suggested that participants are sensitive to congruent branding, even when their own reported gender does not match both the “gender” of the brand name and description, further indicating that both the description and brand name affect a participant’s valuation of a fragrance, further suggesting that gendered sound symbolism can affect a participant’s valuation of a fragrance, as Klink (2000) also suggested. Furthermore, this also suggests that participants have some sense of awareness of congruency between the gender of the descriptions and brand names, even if this is subconsciously. In consideration of this, the current study stresses the importance of marketers aiming to have congruent branding within their product’s marketing strategy, including congruency between the brand name and product description, as many successful brands already do, especially if they are targeting one specific gender.

Despite this, the results note that participants were also more likely to choose the lowest category when the “gender” of the brand name and description were congruent, which was not anticipated by this study. Having said that, one explanation for this seems to be that participants were choosing the lowest category when these two factors were congruent, but for the opposite gender to their reported gender. For example, male participants appear to have been choosing “Less than £5”, which happened to be the mode response by male participants for congruent instances, when the brand name and description were both feminine, as the results in the previous section suggest that this is the case, as there was only one instance in which the male participants chose “Over £50” when the description was a feminine one. Notably, the female participants did not seem to object the combination of masculine brand names and descriptions in a manner that the male participants did with feminine ones, with there being sixteen instances in which female participants still chose the highest category in this context; a difference of 4% being noticed between the male and female participants.

#### **4.2.4 Hypothesis (4) – participants are willing to pay more for fragrances where the gender of the description is congruent both with the “gender” of the brand name and their own reported gender**

As expected, the participants were willing to pay more for products when the “gender” of a brand name, description and reported gender were all the congruent. Notably, as stated, there was a significant difference noticed between the two contexts, with the least frequent option

being “Over £50” when the three contexts were incongruent, compared to “Less than £5” being the most common response when all of three of the contexts were congruent, clearly demonstrating that this context of full congruency significantly increases a participant’s valuation of a fragrance. Furthermore, this finding helped the current study to answer research question (4) (“are participants willing to pay more for fragrances where the gender of the description is congruent with both the “gender” of the brand name and their own gender?”; arguably the main research question. Remarkably, the fact that this full congruency yields the instances in which participants are willing to choose the highest category most frequently, demonstrates that congruent branding has an impact on someone’s valuation of a fragrance, even if they are not told the “genders” of the fragrances. Moreover, this trend supplies evidence in support of the claim that sound symbolism can affect how much someone is willing to pay for a fragrance, as the study set out to investigate.

In consideration of this, it can be argued that Slepian and Galinsky (2015) and Klink’s (2000) studies are both supported by this study, as participants seemed to resonate more with the vowels and consonants that each of these studies deemed to make a brand name either more masculine or feminine, especially when they were congruent with their own reported gender. More specifically, this study acts in support of Klink’s finding that as a result of sound symbolism, front vowels are perceived as more feminine and back vowels as more masculine. As well as this, the current study’s results indicate that voiced consonants are perceived as more masculine and voiceless consonants as more feminine, as Slepian and Galinsky stated. Notably, the current study was interested in discovering whether Slepian and Galinsky’s study of baby names could be applied to brand names, in which the results suggests it can be, as similar results were found among both of the studies.

The findings discussed in this subsection have important implications for brands, with the current study arguing that marketers should aim to have a sense of full congruency like this, if they want to increase the amount participants are willing to pay for fragrances, however, the current study recognises that this may become more difficult for products that are unisex. Furthermore, the findings of this study more generally act in support of many other claims made by researchers including Klink (2013) and Aaker (1991), who have both argued that choosing a brand name is a vital process than can either help or hinder a product’s success, which clearly seems to be the case here, as brand names that matched one’s reported gender increased the chance of them choosing the highest categories, especially in this context of full

congruency. In consideration of this, the current study also believes that it is crucial for a brand to find a suitable brand name, which appears to be one that utilizes theories of sound symbolism, with gendered sound symbolism in particular affecting a participant's valuation of a fragrance within this study.

#### **4.2.5 Male Participants and Congruent Branding**

The male participants' particular sensitivity to each of the contexts of congruent branding and "masculine" fragrances in general; whether that be determined by the description or brand name, is a particularly interesting and unexpected finding this study uncovered. Notably, this particular trend could link to the theories of masculine identities, many of which argue that males are afraid to be perceived as feminine and therefore, actively construct a masculine identity, in which they take on stereotypically masculine traits, in the rejection of feminine characteristics (Cohn and Zeichner, 2016). Although participants were aware that the study was anonymous and therefore, would not be 'constructing a masculine identity' to display to others, such theories suggest that this behaviour is ingrained in many males in a way that females do not seem to exhibit, meaning we could still expect it to be present when answering the survey. Moreover, this could be of significance when using fragrances as the specific product, as distinctions between the gender of fragrances can be obvious to many, especially as many female fragrances are focused on floral scents, a very stereotypically feminine odour (Cornett, 2019), which can clearly be seen within several of the descriptions.

### **4.3 Limitations**

Although this study aimed to eliminate any possible weaknesses, the current study acknowledges that there were still a few limitations present, as there is in most studies. It is unfortunate that the study was not able to gain a larger sample size than 69, as this would have made the results more representative, however, because participation was voluntary this did not prove possible. Nevertheless, the sample size still allowed the study to uncover significant patterns that ultimately allowed the study to answer the research questions it set out to. Moreover, another limitation in regard to the study's sample was the imbalance of participants by gender, with just under 64% of the participants being female, however, once again, as participation was voluntary this was difficult to control. Notably, it may have been easier to gain both a larger and more gender balanced sample in regular circumstances, however, the COVID-19 pandemic made it difficult to actively recruit people in person.

A limitation in regard to the procedure, is that participants read brand names rather than listening to them, however, it may have been more reliable and consistent if the study had recorded each of the brand names and descriptions and had participants listen to them instead, to ensure everyone was aware of the pronunciation, especially as the study examines sound symbolism. However, the current study attempted to create words that reflected sound symbolism as transparently as possible. Despite reading being a limitation in one manner, having participants read fragrance descriptions rather than smell the fragrances, allowed the study to investigate whether similar patterns were found as other studies that had participants actually smell fragrances and therefore, having participants read was successful in this context, as it allowed the study to examine metaphor between language and odour.

#### **4.4 Future Directions**

One interesting area for future research which this study has considered, would be to investigate how non-binary participants, an understudied group of society (Bradford, 2019), respond to each of the gendered descriptions and brand names. Notably, this was not possible within the current study, as there was only one non-binary participant, who had to be removed from the study. More generally in terms of gender, if the study was to be repeated comparing males, females and non-binary participants, this study would like to gain a more gender balanced sample, as this is something that the current study seemingly did not manage to do, however, the study is aware that this may be difficult without selecting participants and funding.

In addition, as previously stated, it may have been more consistent if participants were asked to listen to the descriptions and brand names instead of reading them and therefore, in any possible future studies, this method would be adopted, in which a speaker of RP English would be required. Nevertheless, it would be interesting to discover whether any differences in the results occur between the two methods and therefore, this study does not regret the method used within this particular study.

Furthermore, the current study grouped consonants and vowels together based on the gender they are said to denote, however, it may have been interesting to distinguish whether gendered sound symbolism is especially impactful through either vowels or consonants, in

which vowels and consonants would also need to be used in a brand name in isolation of each other. In consideration of this, if a future study is carried out, this area would be considered, as it could be particularly useful for marketers to take into consideration when naming a brand.

As well as this, as the study found that gender can have an effect on how much someone is willing to spend on a fragrance, this study believes it would be interesting to investigate whether age also has an impact on the matter, as previous research has been disjointed about this idea, however, Schewe (1994) suggested that older members of society are willing to pay less for products on average and therefore, it would be interesting to try and explore this fragmented area of research, in discovering whether there is correlation.

Moreover, as previously mentioned, the male participants seemed to be significantly more likely to pay more for fragrances with congruent branding and masculine fragrances in general, which the current study has suggested could be associated with theories of masculine identities. In consideration of this, if another study was carried out and the same results were found, it could be interesting to investigate this idea and try and discover why males are particularly sensitive to the gendering of fragrances, which would require the study to have questions surrounding why the participants either liked or disliked each of the fragrances.

## 5 Conclusion

In conclusion, the current study has investigated the impact gendered sound symbolism can have on how much someone is willing to spend on fragrances. Moreover, within this study, the effect of congruent and incongruent branding has been explored, in which it has been noticed that congruent branding increased the participants' valuation of fragrances, in which it has stressed that marketers must take advantage of this pattern. On the whole, three of the four hypotheses made by the study were supported by the results. One of the main findings from this study is that the male participants were more likely to choose the highest category than the female participants, which was the opposite to what the study has hypothesised in light of what other previous studies had discovered. Furthermore, the results demonstrate that the participants were more likely to pay more for fragrances when the gender of the description matched their reported gender and therefore, spend more on fragrances that are commercially aimed at their gender. In addition, the results note that participants were also more likely to pay more for fragrances when the "gender" of a brand name and description

were the same, suggesting that participants are aware of marketing congruency even subconsciously, with males being particularly more likely to spend more in these situations. The final and perhaps most significant finding from the study, was that participants were willing to pay more for fragrances where the gender of the description is congruent both with the “gender” of the brand name and their own reported gender; demonstrating that gendered sound symbolism does affect how much someone is willing to spend on a fragrance, as the study set out to discover, as well as, once again, congruent branding. Consequently, this study acted in support of the studies conducted by Klink (2000) and Slepian and Galinsky (2015), as brand names containing front vowels and voiceless consonants appear to increase the female participants’ valuation of fragrances, while back vowels and voiced consonants seem to significantly increase the male participants’ valuation of fragrances. In consideration of the overall findings, the current study highlights the importance of brand naming, agreeing with others such as Klink (2013) and Aaker (1991), in arguing that marketers must utilize theories of sound symbolism when choosing a brand name, in order to increase a product’s chance of success.

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## 7 Appendices

### Appendix 1 – the survey used in this study.

## Branding Survey

This study is concerned with branding and is conducted by Greg Lawson at Newcastle University.

First you will be asked for some general information about yourself, including your age, gender and language abilities. Next, you will be asked to read through a list of products and state how much you would be willing to pay for each product. This survey should take approximately 10-15 minutes, however, there is no time limit.

There are no specific benefits to you for participating other than those you draw from contributing to our knowledge about language.

\* Required

### Informed Consent \*

The following information will be recorded for this research but will not be identifiable to you personally: the experiment will automatically record responses and any other information you provide at our request such as your gender and age. You can find additional information at this link: <https://bit.ly/expinfo-lawson>. Clicking the agree box below indicates that: You agree that your anonymous data may be kept permanently in Newcastle University archives and may be used by qualified researchers for teaching and research purposes. You agree that your anonymous data may be included in aggregate datasets made publicly available for general use, e.g., released as part of scholarly publication. You voluntarily agree to participate and can stop or withdraw at any time.

Agree

Disagree

Next

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# Branding Survey

\* Required

## General Information

In this section, you will be asked for some general information in regard to your gender, age and language abilities.

What gender are you? \*

- Male
- Female
- Non-binary
- Prefer not to say

How old are you? \*

- 18-24
- 25-34
- 35-44
- 45-60
- 60+

Is English your first language? \*

- Yes
- No

Is English the only language you speak? \*

- Yes
- No

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# Branding Survey

\* Required

## Fragrances

This section has several brands of fragrances, each with a description of the fragrance. Thinking as someone who is ready to purchase a new fragrance for themselves, read each of the brand names and fragrance descriptions and state how much you would be willing to pay for each product.

### Seki \*

Seki breaks with the tradition of sparkling, cool eau de toilettes, conveying a more delicate, romantic attitude. Seki subtly opens with a warm aquatic accord and sweet lychee. How much would you be willing to pay for Seki?

- Less than £5
- £5-£20
- £21-£35
- £36-£50
- Over £50

### Zogu \*

Zogu creates a heady contrasting aromatic blend of lemon and bergamot top notes with noble woody orris, bringing an intriguing infusion to the orange blossom signature of the original scent. At the base, a suave patchouli and musk blend creates the scent timbre. How much would you be willing to pay for Zogu?

- Less than £5
- £5-£20
- £21-£35
- £36-£50
- Over £50

### Seki \*

Seki is charismatic and uninhibited. From start to finish, the suggestive cool Musks linger throughout. How much would you be willing to pay for Seki?

- Less than £5
- £5-£20
- £21-£35
- £36-£50
- Over £50

**Kesi \***

Kesi is a combination of citrus and wood for a scent that strikes the perfect harmony of sophistication and seduction. This eau de toilette is a citron cocktail of bergamot and lemon with soft notes of olive tree blossom, warmed with Guaiac wood and Tonka Bean. How much would you be willing to pay for Kesi?

- Less than £5
- £5-£20
- £21-£35
- £36-£50
- Over £50

**Tefi \***

Tefi evokes brooding virility and a sense of erotic mystery. Covered in a grainy black leather texture, the Tefi bottle has a seductive look, inspired by the classic black leather biker jacket. How much would you be willing to pay for Tefi?

- Less than £5
- £5-£20
- £21-£35
- £36-£50
- Over £50

**Vodu \***

Vodu is audaciously devastating, viciously liberating, popcorn that packs a punch. 24/7 addiction. Popped puffed corn, musk, and milkwood notes ignite the skin. How much would you be willing to pay for Vodu?

- Less than £5
- £5-£20
- £21-£35
- £36-£50
- Over £50

**Gozu \***

Gozu is ecstatically addictive, a powerful adrenalin shot for serial winners. Power, courage, victory distilled into a daring smash-up of freshness and heat. When you're in it to win. How much would you be willing to pay for Gozu?

- Less than £5
- £5-£20
- £21-£35
- £36-£50
- Over £50

**Dovu \***

Dovu is cut like a diamond, this multi-faceted heart of precious black glass is an enigmatic and powerful weapon of seduction with the power to create obsession and addiction to love. How much would you be willing to pay for Dovu?

- Less than £5
- £5-£20
- £21-£35
- £36-£50
- Over £50

**Zogu \***

Zogu is a sexy burst of grapefruit fizz and Sicilian bergamot lead this thrilling fragrance, while a heart of mouthwatering sugar orchid and white cactus embodies its sensual, decisive side. How much would you be willing to spend on Zogu?

- Less than £5
- £5-£20
- £21-£35
- £36-£50
- Over £50

**Tefi \***

Tefi is perfect if you find you're a lover of both fancy florals and mouth-watering sweet gourmands, this scent toes the line between both fragrance families. Kicking off with a burst of fruity lychee and raspberry notes, at first spritz it's refreshingly youthful. How much would you be willing to pay for Tefi?

- Less than £5
- £5-£20
- £21-£35
- £36-£50
- Over £50

**Kesi \***

Kesi consists of a fusion of contrasts, from the salty vanilla undertones to the cashmere wood base, it will catch your attention at first spray. What starts off as sweet transforms into a more sophisticated blend of florals (jasmine, lily) and heady ambergris, which gives the scent more added versatility. How much would you be willing to pay for Kesi?

- Less than £5
- £5-£20
- £21-£35
- £36-£50
- Over £50

**Dovu \***

Dovu is a refined fragrance for young, urban individuals. In the initial aromas, the icy opening contrasts with lingering sensual, burning accents. The emblematic notes of fragrance are subverted with original surprising and addictive ingredients. How much would you be willing to pay for Dovu?

- Less than £5
- £5-£20
- £21-£35
- £36-£50
- Over £50

**Gozu \***

Gozu is a unique creation that reveals a flower's full magic and operates its metamorphosis by the incredibly soft embrace of Madagascar vanilla and a touch of honey. Sambac jasmine, from India, amplifies the radiance and elegance of this celebration of noble materials. How much would you be willing to pay for Gozu?

- Less than £5
- £5-£20
- £21-£35
- £36-£50
- Over £50

**Feti \***

Feti is a remarkably young, extremely brilliant, insanely wealthy, hugely beautiful fragrance. Excess in its purest state. Its sex-appeal is disturbing, beyond control. How much would you be willing to pay for Feti?

- Less than £5
- £5-£20
- £21-£35
- £36-£50
- Over £50

**Vodu \***

Vodu draws on inspiration from the desert in the magical hour of twilight. Mixed with the coolness of the night, the burning desert air exudes profound fragrances. In the hour when the wolves come out and the sky is set ablaze, a new magic unfolds. How much would you be willing to pay for Vodu?

- Less than £5
- £5-£20
- £21-£35
- £36-£50
- Over £50

### Feti \*

Feti is a new fragrance with a radiant burst of flowers, a joyful trail of exultant floral notes that explode with faceted beauty. The dazzling light of juicy Citrus blends with the colourful shine of Grasse Rose and Jasmine, heightened by an enveloping woody echo of Sandalwood tinged with Vanilla. How much would you be willing to pay for Feti?

- Less than £5
- £5-£20
- £21-£35
- £36-£50
- Over £50

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## Branding Survey

### Thank You

Thank you for participating in this survey, your help is greatly appreciated.

The goal of this study was to see which products participants were willing to spend the most money on. In particular, this study was investigating whether participants were willing to spend more money on products that were aimed at their gender. This survey used existing fragrance descriptions taken from a mixture of both men and women's fragrances, and then matched them with the made-up brand names. The masculinity or femininity of each brand name was determined by theories of sound symbolism. Notably, each of the brand names was matched with both a feminine and a masculine fragrance description.

If you have any questions regarding this study, feel free to contact me at [g.lawson@newcastle.ac.uk](mailto:g.lawson@newcastle.ac.uk). Once again, thank you!

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**Appendix 2 – information sheet that participants had access to before completing the survey.**

**Information Sheet**

**English Literature, Language and Linguistics – Newcastle University**

<b>Study title:</b>	Which products are individuals willing to spend more money on?
<b>Principal Investigator:</b>	Christine Cuskley
<b>Researcher collecting current data:</b>	Greg Lawson

**What is this document?** This document explains what kind of study we're doing, what your rights are, and what will be done with your data. If there are any special benefits or risks, they will be explained here. Please read the information carefully and retain it for your records.

**Nature of the study:** You are about to participate in a study which involves reading the descriptions of fragrances and stating how much you would be willing to pay. Your session should last for about 10-15 minutes. You will be given full instructions before the study begins.

**Compensation:** There are no known risks to participation in this study. The only benefits to you personally are those you draw from making a contribution to our knowledge about.

**Confidentiality:** The data we collect will not be associated with your name or with any other personal details or identifying information.

**Voluntary participation:** Your participation is voluntary, and you may stop playing at any time for any reason. Any data you provide or produce up to this point will not be collected. To withdraw at any time, you will need to contact [g.lawson@newcastle.ac.uk](mailto:g.lawson@newcastle.ac.uk), with the date and time of when you completed the study.

**Contact information:** This research is being conducted by Greg Lawson at Newcastle University and overseen by Dr. Christine Cuskley. The researcher can be contacted at [g.lawson@newcastle.ac.uk](mailto:g.lawson@newcastle.ac.uk) or [christine.cuskley@newcastle.ac.uk](mailto:christine.cuskley@newcastle.ac.uk) for questions or to report a research-related problem. Contact Newcastle University Research Ethics at [res.policy@ncl.ac.uk](mailto:res.policy@ncl.ac.uk) if you have concerns regarding your rights as a participant in the research

**By agreeing to these terms, you consent:**

- that the anonymous response data you produce may be kept permanently in research archives at Newcastle University, and used for the specific research project which made them.
- to your anonymous data being used by the above-named researcher as well as by other qualified researchers, for teaching or research purposes, in professional presentations and publications.
- to your anonymous data being included in aggregate data released as part of scholarly publication.

**You have the right to terminate my participation at any point. If you choose to withdraw formally, your data will be deleted.**