

Master thesis

# EMBODIED COGNITION

*Effects of Image Schemas in  
Advertising Design*

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# Embodied Cognition: Effects of Image Schemas in Advertising Design

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## Abstract

For years, advertisements are used as an effective tool for branding. Many perfume brands currently use celebrity endorsement. However, not every perfume brand has the budget for this kind of marketing, so they have to come up with another kind of manner to convince consumers of buying their perfume. According to the embodied cognition principle, image schemas are used unconsciously when people think about symbolic meanings in everyday language use. Across two studies, it was examined if the image schemas of common region and containment could affect perceived intimacy, advertising effectiveness and odor evaluation. Study 1 is about the influence of common region (i.e., minimal separation, maximal separation, common region and control condition) on perceived intimacy and advertising effectiveness. Moreover, Study 1 used an online survey in order to collect the data. Common region showed a negative influence on perceived intimacy and advertising effectiveness, hence in contrast to the expectations. Study 2 is an extension of Study 1 in which there was another dependent variable (i.e., odor evaluation) next to perceived intimacy and advertising effectiveness. In order to collect the data an offline survey was used. Containment as well as common region were found to have a positive influence on perceived intimacy and advertising effectiveness. On the contrary, odor evaluation and purchase intention were only positively influenced by containment. Future research should be specifically focusing on gender differences and differences between singles and people in a relationship.

**Keywords:** Perfume Brands, Embodied Cognition, Image Schemas, Common Region, Containment, Perceived Intimacy, Advertising Effectiveness, Odor Evaluation.



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# 1. Introduction

Nowadays many brands make use of celebrities to promote their products. Especially perfume brands use this kind of marketing. These celebrity endorsers are inextricably linked with the brand (e.g., Keira Knightley and Chanel). Companies use celebrity endorsers because it could raise brand awareness and brand equity (Zafer Erdogan, 1999). However, there could also be a downside to celebrity endorsement. For example, there is a possibility that a change in image will occur. Celebrities make mistakes, and when they do, this could also affect the brands they endorse according to Zafer Erdogan (1999). Besides, they can overshadow the product (Tantisenepong, Gorton & White, 2012; Zafer Erdogan, 1999). Consequently, when using celebrity endorsement there are not only advantages but also disadvantages. It is important to consider these, because companies have to invest a lot of money to align themselves with endorsers. Not all perfume brands have the budget for celebrity endorsement, so this will be the problem setting of the current research. The practical relevance is about providing these companies a different way of influencing consumers, so that they can compete with companies who do use celebrity endorsement.

Axe is a good example of a brand that does not use celebrity endorsement. Nevertheless, their products are very popular, especially among men. In their advertisements they tell a story about a man who becomes literally irresistible for women when 'wearing' the scent of Axe. In this case, the underlying need for buying Axe may be triggered by the fact that a man wants to be irresistible for women. For some perfume brands irresistibility could be the need underlying purchase behavior, but how does a brand trigger this need? Via so-called image schemas certain perceptions could unconsciously be triggered. Results from Van Rompay, De Vries, Bontekoe and Tanja-Dijkstra (2012) shows, for example, that verticality cues trigger perceptions of luxury. Luxury can be readily expressed in verticality-related terms, such as "high class" and "uptown." In fact, the mind must be understood in the context of its relationship to the physical body that interacts with the world (Wilson, 2002). This is called embodiment and refers to behaviors or bodily states that are reflected in metaphors like "I am feeling up today." This example shows that an affective state like happiness is being associated with an upright posture. Besides, it is reasoned in terms of visual-spatial structures. Such visual-spatial structures are referred to as image schemas. Moreover, research has shown that people are unaware of the fact that they use image schemas (Lobel, 2014).

The current research will be focusing on the unconscious process of using image schemas when evaluating a women's perfume advertisement. Except Axe, most perfume advertisements for men are about depictions of power (Crequer, 2015). Women's perfume advertisements are more about intimacy between a man and woman, so therefore the current study focused on a women's perfume advertisement. Specifically, the use of containment and common region will be studied. Spending time together in a closed space (i.e., containment) can increase social interaction and intimacy (Hatch, 1987; Oldham & Brass, 1979; Te Vaarwerk, Van Rompay & Okken, 2015). It also means that people or objects occupy the same space (i.e., common region). Furthermore, as distance increases, objects or people become less part of the same space. When two people are separated, intimacy is more difficult than when those two people are in the same closed space. Moreover, common region was the most influential factor in the study of Te Vaarwerk et al. (2015). This research examined the influence of containment and common region with respect to a baby lotion as target product instead of a perfume and used another context in their visual appearance. Common region as well as containment could show the same, different or maybe even opposite effects in the current research.

In addition, the current research examines what influence containment and common region have on odor evaluation. When buying perfume, smell is one of the most important elements affecting purchase considerations (Xing, Song, Wang & Shi, 2009). Previous research (Ludden & Schifferstein, 2009) has shown that smell could affect consumer's product experience. Moreover, the visual appearance of a product has an influence on the expectations regarding smell according to the research of Te Vaarwerk et al. (2015). However, it is not sure if the same applies to advertising.

On the basis of the situation description the following research question emerges: *What is the influence of containment and common region in a women's perfume advertisement on the perceived intimacy, advertising effectiveness and odor evaluation?* The purpose of the current research is not only to provide perfume brands with a different way to influence consumers, but also to provide graphic designers insight into the embodied cognition principle within advertising.

## 2. Embodied cognition

When exploring ways to influence consumers with advertising, one of the relevant themes coming forward is embodied cognition. Embodied cognition is about the idea that the mind must be understood in the context of its relationship to the physical body that interacts with the world (Wilson, 2002). Moreover, people's behavior can be a predictor of their attitudes (Briñol & Petty, 2008). Many bodily responses are studied within embodied research and many effects have been found. For example, vertical head movements lead to more favorable attitudes than horizontal (Wells & Petty, 1980) or a fast heartbeat leads to a positive evaluation because the person thinks he likes it (Valins, 1966). According to Lobel (2014) research has shown that when people see the color red before taking an exam, they perform worse than when they have seen another color. Besides, men think women are more sexually attractive when wearing a red shirt on a picture than when wearing a shirt of another color. After completing these studies the researchers asked the respondents which factor could have affected them, but no respondent guessed that it was the color red. In conclusion, it can be said that people were unconscious about the influence of the color red.

Emotional experiences are often described in metaphoric language like "red is the color of love." This example shows that red is being associated with love, but it can also be associated with a warning which was shown in the previous example. When seeing the color red, these associations are created automatically and influence people's attitudes and behavior accordingly. Moreover, other examples like "I am feeling up today" or "I am on top of the situation" shows that an affective state like happiness is being associated with an upright posture and that it is easier to control another object from above. An important conclusion derived from embodied research is that "people understand and reason about abstract concepts in terms of concrete bodily interactions" (Van Rompay et al., 2012, p. 920). The aforementioned concepts of happiness and control are reasoned in terms of visual-spatial structures. Such visual-spatial structures are referred to as image schemas (Van Rompay et al., 2012). Image schemas are important, because they help to explain how the embodied mind simultaneously can be capable of abstract thought (Johnson, 2005). The current study will be focusing on the use of image schemas when evaluating a perfume advertisement and an odor sample. First, there will be taken a closer look at these dependent variables.

### 2.1. Perfume advertising

Celebrity endorsement is a very commonly used kind of marketing for perfume brands. These celebrity endorsers are inextricably linked with the brand. Companies use celebrity endorsers because it could raise brand awareness and brand equity (Zafer Erdogan, 1999). Other perfume brands, such as Axe, are also successful but without using celebrity endorsement. In conclusion, all perfume brands eventually want the same: consumers to buy their perfume. In order to make this happen, different factors have to be taken into consideration when designing marketing campaigns. Of special relevance to the current research is advertising.

#### 2.1.1. Advertising effectiveness

Many studies about celebrity endorsement show that physically attractive celebrities are more effective in an advertisement (Roozen, 2014). Besides, celebrities are successful in creating positive attitudes towards the advertisement and towards the product. However, celebrity endorsers can overshadow the product (Tantisenepong et al., 2012; Zafer Erdogan, 1999). Moreover, there is no conclusive evidence that celebrity endorsers are always able to create more purchase intentions (Roozen, 2014). According to Roozen (2014) it is important to determine advertising effectiveness for improving the attitude towards the advertisement, the attitude towards the product and the intention to purchase the product. In the current study, advertising effectiveness will be one of the dependent variables. The attitude towards the advertisement, the attitude towards the product and the intention to purchase the product will be measured in order to determine advertising effectiveness.

### 2.1.2. Odor evaluation

Next to advertising effectiveness, the current study will also be focusing on odor evaluation as dependent variable. Te Vaarwerk et al. (2015) showed that the visual appearance of a product could generate expectations regarding smell. This was examined by using the packaging design of a baby-care product and it confirmed the prediction that the visual appearance of a product can generate expectations regarding smell. Advertising is also part of the visual appearance of a product, because it contributes to the total ambiance of the product (Radford & Bloch, 2011). When evaluating perfume, the smell is an important purchase consideration (Xing et al., 2009). According to Ludden and Schifferstein (2009) smell can also affect consumer's product experience. Summarizing, advertising effectiveness and odor evaluation will be dependent variables in the current research. Furthermore, it will be determined what influence image schemas have on these variables. In the next subsection there will be taken a closer look at what image schemas are.

## 2.2. Image schemas

Images are representations of embodied experiences. Image schemas are, on the one hand, abstract because it needs to be general and applicable to a wide range of experiences. On the other hand, image schemas are not abstract because they are embodied (Clausner & Croft, 1999; Coëgnarts & Kravanja, 2012). That is, image schemas structure bodily and nonbodily experiences via metaphor (Johnson, 1987). They are used to convey symbolic meanings in everyday language use (Te Vaarwerk et al., 2015). Furthermore, they have a special cognitive function according to Núñez (2000): image schemas are perceptual as well as conceptual in nature. In fact, they provide a bridge between language and reasoning on the one side and vision on the other.

Emotional experiences are often described in metaphoric language which was already mentioned in the section about embodied cognition. Besides, the study about the color red (Lobel, 2014) and the association with passion or warning is an example of how an image schema is used unconsciously. Similarly, the concepts of "I am feeling up today" and "I am on top of the situation" are easily understood because of the associations which are present in people's mind about happiness and control in relation to verticality. The brand Axe also uses metaphoric language to describe emotional experiences. They convey the definition of irresistibility very literally in their advertising for men. Of course, not every man wants to be irresistible in such a way, but some kind of irresistibility could be desirable. Obviously, consumers use perfume because they want to smell nice (Low, 2009). They do not only want to smell nice for themselves, but according to Low (2009) people also want others to think they smell nice. According to Roberts and Havlicek (2011) using perfume could also make the wearer more attractive. Therefore, it is imaginable that perfume brands want to convey irresistibility and a sense of intimacy between men and women in their advertising. In order to convey the symbolic meanings of intimacy, image schemas could be used. The next subsection takes a closer look at intimacy.

## 2.3. Intimacy

The word intimacy can be used to refer to feelings, verbal and nonverbal communication processes, behaviors, people's arrangements in space, personality traits, sexual activities and kinds of long-term relationships (Reis & Shaver, 1988). There could be intimacy between a mother and her infant but also between two friends, between a man and woman or between two men or two women. In all cases there is intimacy but in different ways. Perfume advertising focuses mostly on the intimacy between a man and woman, so it is likely that perfume advertisements trigger perceptions of intimacy. Perceived intimacy will be the third dependent variable in the current research.

Furthermore, the expression of intimacy is experienced differently by men and women. Women perceive intimacy as emotional warmth, expressiveness, vulnerability and sensitivity, whereas men “express their love through sex, shared activities, practical help, economic support, or just being in the other’s presence” (Thompson & Walker, 1989, p. 847). In addition, men and women have different preferences for human body odors (Martins et al., 2005) and regarding advertising effectiveness the differences in gender are also apparent (Wolin & Korgaonkar, 2003). Therefore, the differences in gender could be important to take into account in the current research. Gender could alter or qualify the relationship between image schemas and advertising effectiveness and odor evaluation. According to Evans and Lepore (1997) this is called moderation. In fact, the following sub question can be formulated: *What are the differences between men and women in the influence of containment and common region in a women’s perfume advertisement on the perceived intimacy, advertising effectiveness and odor evaluation?*

Of special relevance to the current study are the symbolic meanings of intimacy and irresistibility. “Intimacy is closeness” and “a closed space is intimate” are examples of these concepts. We also understand figurative language such as a “close” friend or a “distant” relative. Smaller versus larger distances facilitate more intimate conversations and the experience of interpersonal warmth (Te Vaarwerk et al., 2015). Besides, we find that spaces, borders such as walls, and car windows offer protection from weather conditions and other people. What these examples show is that distance and containment are used primarily to transfer meanings related to interpersonal warmth and intimacy. In the next subsections there will be taken a closer look at these image schemas.

## 2.4. Distance

Concepts related to intimacy may be expressed in terms of being physically “close” or “far away” from another object (Johnson, 1987; Lakoff & Johnson, 1999). It is argued that the strong correlation in everyday embodied experience leads to the creation of primary metaphors. According to Lakoff and Johnson (1999) one of the most prominent primary metaphors is “intimacy is closeness” (e.g., we have a close relationship). In addition, research of Festinger, Schachter and Back (1950) shows that people who share space and time generally like each other more compared to people who are further away. Therefore, closeness is generally framed in positive terms and distance in negative terms.

The relationship between “intimacy” and “closeness” is embodied insofar as being physically close to someone enables intimate communication. Williams and Bargh (2008) showed that distance cues influence evaluations of intimacy-related constructs. In their research they primed respondents either with distance or nearness. When primed with distance, participants reported lower levels of emotional attachment to family members and hometowns (Te Vaarwerk et al., 2015; Williams & Bargh, 2008). The concept of “intimacy is closeness” is proven in many studies and therefore it can be assumed that when a man and woman are close together it definitely triggers more perceptions of intimacy than when they are far away from each other. Because of this and the complexity of the current research, variance of the distance schema will not be used in the current study since the results can be properly predicted.

## 2.5. Containment

Similar to distance, research has shown that spending time together in a closed space can increase social interaction (Hatch, 1987; Oldham & Brass, 1979; Te Vaarwerk, et al., 2015). Being inside a space is likened to feel safe, intimate, and emotionally expressive, whereas being on the outside triggers feelings of isolation or vulnerability (Te Vaarwerk et al., 2015). A closed space can be summarized in the term “containment.” Containment concepts are generally objects or events with an in-out orientation, like someone’s home. It consists of three parts: an interior, a boundary, and an exterior. There is no interior without a boundary and exterior, there is no exterior without a boundary and interior, and there is no boundary without an interior and an exterior (Núñez, 2000). Besides, containment can be minimized and maximized but it still remains the boundary. For example, Figure 1

(Van Rompay, 2014) shows two different ads for baby lotion. Results from this study showed that the thicker the line encapsulating an unborn child, the higher the ratings on skin protection and related qualities. These results could also be projected to the current research in the next sub question: *What is the influence of containment in a women's perfume advertisement on the perceived intimacy, advertising effectiveness and odor evaluation?*

So, both closeness and containment could trigger perceptions of intimacy. When two persons are close together, like each other and are in a closed space where others cannot see them, they might get a feeling of privacy and become intimate with each other. When this situation is shown in a perfume advertisement, people might think the advertisement shows a kind of intimacy and think they will find oneself in a similar situation when they will use the perfume. The higher imagery fluency, the more positive feelings come across (Jägersberg, 2012). So eventually, if people can easily imagine themselves in the same situation as which is presented in the advertisement, it might raise their attitude towards the advertisement and the product, and they even might want to buy the perfume.



Figure 1. Visual salience of a protective container. Reprinted from “Embodied Persuasion: Visual-spatial dimensions of meaning portrayal in visual and interactive media,” by T.J.L. Van Rompay, 2014, *Lecture Notes in Computer Science*, 8462, p. 248.

## 2.6. Common region

Both distance and containment implicate a third visual gestalt: common region. That is, as distance increases, objects or people become less part of the same space. Moreover, effects of common region can even override effects of distance. This is shown in a study of Mishra and Mishra (2010) about what choice people would make when a hazardous stimulus, like a nuclear power plant, would be placed nearby. Results showed that people would rather have the hazardous stimulus in a different village but at a smaller distance, than that the same hazardous stimulus would be located in their hometown at a larger distance from their homes. In addition, being on the outside of the container means that people or objects, like a nuclear power plant, no longer occupy the same space. People underestimate the risk of a disaster when it spreads from a different state than when it spreads from within the same state. Also when two people are separated, intimacy is more difficult than when those two people are in the same closed space. The following sub question can be formulated: *What is the influence of common region in a women's perfume advertisement on the perceived intimacy, advertising effectiveness and odor evaluation?*

Next to the fact that common region can override effects of distance, it was also the most influential factor in the study of Te Vaarwerk et al. (2015). As such, this study showed that a sense of visual separateness between mother and child had the most negative impact on product evaluation (i.e., baby lotion), especially in the maximal containment condition. However, the context in the current study is different from the research of Te Vaarwerk et al. (2015). The context is not composed of a mother and a child but a man and a woman. So, in the current study common region could provide the same, different or maybe even opposite effects.

**2.7. Conceptual model**

Based on the previous information, the conceptual model can be prepared. Figure 2 shows the conceptual model of the current research. The current research will look at the relationship between the image schemas of containment and common region and perceived intimacy, advertising effectiveness and odor evaluation. The model starts with the independent variables. Containment and common region will both be present in the perfume advertisement, one of them will be present and the other not or both will not be present.

In the middle of the model there is the moderator variable. Moderator variables can alter or qualify relations between the independent and dependent variables (Evans & Lepore, 1997). Gender is a moderator variable, because the effect of containment and common region on advertising effectiveness and odor evaluation could be different between men and women. So, the effect could depend on gender. Lastly, there are three dependent variables (i.e., advertising effectiveness, odor evaluation, perceived intimacy) which are already discussed earlier.

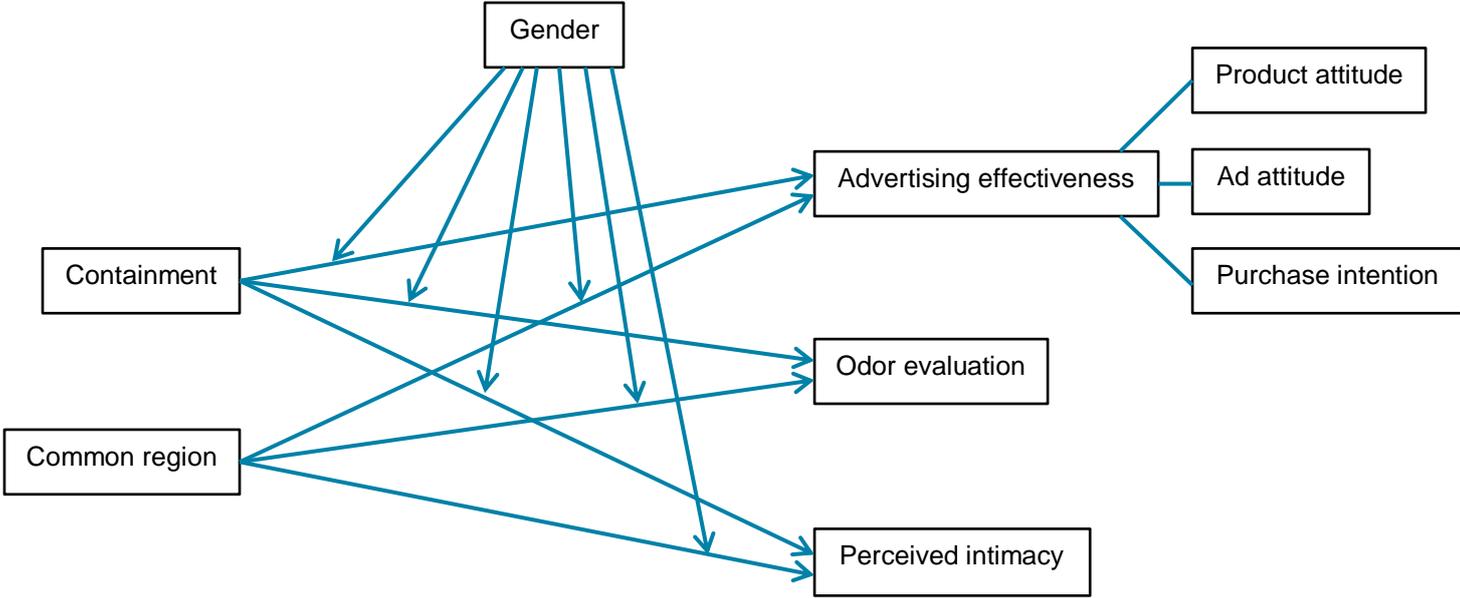


Figure 2. Conceptual model.



### 3. Current research

From the discussion presented so far it is apparent that the image schemas presented may convey a sense of intimacy or irresistibility. With respect to perfume advertising, intimacy may be reflected in concrete functional product characteristics (e.g., increasing self-assurance when wearing the perfume) or psychological benefits of product use (e.g., increasing intimacy between man and woman). These variables were used in the study of Te Vaarwerk et al. (2015), so this study will function as the basis for the current research. However, the current research used two sub studies. That is, Study 1 focused on the effects of common region on perceived intimacy and advertising effectiveness. Study 2 not only used common region as independent variable, but also containment. In addition, not only perceived intimacy and advertising effectiveness were used as dependent variables, but also odor evaluation. Besides, the results from Study 1 were taken into account when designing Study 2.

#### 3.1. Study 1

Based on the research of Te Vaarwerk et al. (2015) it can be said that common region was the most influential factor. Besides, containment must be clearly present in order to make the effect of common region occur. The effect of common region was greater in the maximal containment condition than in the minimal containment condition (Te Vaarwerk et al., 2015). Study 1 of the current research used common region as independent variable to examine if this variable has as much effect in another context. In the case of Te Vaarwerk et al. (2015) it was about the bond between mother and child and in this case it is about the intimacy between a man and woman. In Study 1, perceived intimacy and advertising effectiveness were used as dependent variables and tested the predictions that

**H1:** The use of common region in a perfume advertisement increases ...

- a) ... perceptions of intimacy.
- b) ... product attitude.
- c) ... advertisement attitude.
- d) ... try intention.

##### 3.1.1. Method

**Participants and design.** Study 1 employed a one-factor design with three levels of common region (i.e., common region, minimal separation, maximal separation). Besides, containment was present in the form of a fence where the fence either was coarse (i.e., minimal separation) or fine (i.e., maximal separation). There was also a control condition without any containment or common region. Men's perfume advertisements are mostly about depictions of power and intimacy is shown more in women's perfume advertisements (Crequer, 2015). Therefore, it was chosen to use a women's perfume. Besides, prior to the research it was not clear who were more appropriate respondents; men or women. On the one hand, the advertisement is about a women's perfume so it would have been logical to use women only as respondents. On the other hand, it was also important to measure the perceived intimacy and in this case it could have been easier for men to evaluate the attractiveness and irresistibility of the woman in the advertisement. Therefore, participants were men as well as women and they were between 18 and 65 years old (44 male, 69 female; mean age 28.7 years, SD = 12.8). In addition, they had to fill in an online survey (see Appendix A).

**Procedure.** Participants were asked for their opinion about a new perfume advertisement. They were recruited via convenience sampling and Facebook. Subsequently, they were randomly assigned to one of the four conditions (i.e., common region, minimal separation, maximal separation, control condition). Convenience sampling is the easiest way to recruit respondents (De Pelsmacker & Van Kenhove, 2006). The advertisement variants were designed in Adobe Photoshop on the basis of different pictures in order to keep the advertisement realistic, just like is the case with celebrity

endorsement. Apart from the common region manipulation, the advertisements were identical and featured the product and slogan only (see Figure 3 and Appendix B).

**Dependent measures.** Perceptions of intimacy were measured using three items of statements about what the advertisement suggests regarding the relationship between the man and woman. An example of one of the items is “*The advertisement suggests that the use of this perfume contributes positively to the relationship between men and women.*” For each of the items participants had to fill in to what extent they agreed with the statement on a 5-point Likert scale ( $\alpha = 0.68$ ). Nunnally (as cited in Santos, 1999) determined that a Cronbach’s alpha of 0.70 is acceptable, so the reliability of the perceived intimacy construct is slightly below the acceptance level. However, leaving one of the items out of the construct does not increase the reliability of the construct. Therefore, it was decided not to adapt the construct nor to remove items.

Advertising effectiveness was determined by measuring three variables: product attitude, attitude towards the advertisement, and purchase intention. Product attitude was measured using items about the functional characteristics of the product adapted from Te Vaarwerk et al. (2015). It concerned statements about the perfume making the wearer *irresistible*, *attractive*, *seductive*, and *self-assured*. The last item consisted of the statement “*The advertisement suggests that the perfume smells nice.*” Again participants had to fill in for each item to what extent they agreed with the statement on a 5-point Likert scale ( $\alpha = 0.74$ ).



Figure 3. The minimal separation (top left), maximal separation (top right), common region (bottom left), and control condition (bottom right) manipulations used in Study 1.

The attitude towards the advertisement was measured by a scale comprising the items *unappealing/appealing*, *uninteresting/interesting*, *irritating/not irritating*, suggested by Mitchel and Olson (1981). The last item was deleted because this item lowered the scale reliability highly. The items had to be answered on a 5-point semantic differential ( $\alpha = 0.83$ ). Finally, purchase intention was measured using one statement and a briefing beforehand. The briefing was about the participant imagining that he or she had to buy a perfume for a girlfriend. The advertisement is about a women's perfume, but both genders participated and therefore it was chosen to let respondents imagine to buy a perfume gift for a girlfriend. It concerns a high involvement situation, because buying a gift takes risks with it (Olshavsky & Granbois, 1979). Besides, participants had to imagine that they had the opportunity to smell an odor sample. Then they had to fill in on a 5-point Likert scale to what extent they would like to smell that odor sample. In this case, the construct is more about try intention instead of purchase intention, because this is important for Study 2. In Study 2 participants will indeed get an odor sample in order to measure odor evaluation and purchase intention.

### 3.1.2. Results

Analyses of variance (ANOVAs) were conducted with common region (i.e., minimal separation, maximal separation, common region, control condition) and gender (male versus female) as independent variables and perceived intimacy, product attitude, advertisement attitude and try intention as dependent variables.

**Perceived intimacy.** An analysis of variance with perceived intimacy as dependent variable revealed that the main effect of common region on perceived intimacy was not significant ( $F < 1$ ). Besides, the analysis of variance with gender and common region as independent variables and perceived intimacy as dependent variable showed no significant interaction effect between gender and common region ( $F < 1$ ). This means there were no differences in the perceptions of intimacy between the advertisement variants or between men and women.

**Product attitude.** Another analysis of variance with product attitude as dependent variable showed a significant main effect of common region ( $F(3, 109) = 2.84, p = 0.04, \eta^2 = 0.07$ ). Of special relevance is the product attitude in the control condition variant which was significantly higher as opposed to the common region variant ( $p = 0.03$ ). In general, the control condition variant showed the highest product attitude ( $M = 3.48, SD = 0.39$ ) and the common region variant showed the lowest product attitude ( $M = 2.93, SD = 0.82$ ). This result indicates a negative effect of common region on product attitude.

When gender was added to the analysis of variance results showed that the interaction between common region and gender was not significant ( $F(3, 105) = 1.79, p = 0.15, \eta^2 = 0.12$ ). However, when the analysis of variance was done with men only the results showed a marginally significant effect of common region on product attitude ( $F(3, 40) = 2.72, p = 0.06, \eta^2 = 0.17$ ). In this case, the significance level is between 0.05 and 0.10 and this is called a marginally significant effect (Brothers, 2013). Men showed the highest product attitude in the control condition variant ( $M = 3.50, SD = 0.39$ ) and the lowest product attitude in the common region variant ( $M = 2.69, SD = 1.04$ ).

**Advertisement attitude.** The effect of common region on advertisement attitude was also not significant ( $F(3, 109) = 2.12, p = 0.07, \eta^2 = 0.06$ ). However, this is a marginally significant effect. Of special relevance is the difference between the minimal separation variant and the common region variant ( $p = 0.06$ ), because this is also a marginal effect. The advertisement attitude is marginally significantly higher in the minimal separation variant than in the common region variant. The interaction effect between common region and gender was not significant ( $F < 1$ ). For both genders the advertisement attitude was highest in the minimal separation variant and lowest in the common region variant. Again, this finding indicates a negative influence of common region.

**Try intention.** With respect to try intention, respondents had to imagine that they had to buy a gift for a girlfriend and subsequently they had to indicate to what extent they would like to try the odor sample if this was available. The effect of common region on try intention was not significant ( $F(3, 109) = 1.34, p = 0.27, \eta^2 = 0.04$ ). Furthermore, the interaction between common region and gender was not significant ( $F(3, 105) = 1.03, p = 0.38, \eta^2 = 0.07$ ). Only using women in the analysis of variance showed a marginally significant effect of common region on try intention ( $F(3, 65) = 2.23, p = 0.09, \eta^2 = 0.09$ ). Women have the highest try intention in the minimal separation variant ( $M = 3.71, SD = 1.11$ ). In fact, women show a higher try intention for the separation variants in comparison with the common region and control condition variants. This finding indicates that women's try intention is positively influenced by separation.

### 3.1.3. Discussion

The findings in Study 1 can be related to the expectations according to existing literature which resulted in several hypotheses. In general, the influence of common region is not as great as was expected. In fact, common region showed more negative effects than the expected positive ones. For all dependent variables applies that the common region variant showed negative effects and for product attitude this effect was even significant.

Perceived intimacy showed no significant main or interaction effects. This means there are no significant differences in the degree of perceptions of intimacy and H1a cannot be confirmed. For women it was perhaps more difficult to evaluate the irresistibility and attractiveness of a woman than it was for men. Besides, only the front of the woman was visible and not the front of the man and this could have limited the results. For Study 2 it is important that participants see the man as well as the woman in the advertisement to rule this limitation out. With the analysis of variance with product attitude as dependent variable, it became clear that the control condition variant triggered a significant higher product attitude than the common region variant. So, common region has a negative effect on product attitude and H1b cannot be confirmed. The explanation for this effect is hard to find. Perhaps respondents thought the context was weird because it made them think of a prison due to the presence of a fence. In the control condition variant there was no containment at all, so maybe this finding indicates that people like the product more in an open advertisement. It is important to take these findings into account when designing advertisement variants for Study 2.

In addition, H1c cannot be confirmed because the common region variant scored the lowest advertisement attitude. The fact that separation showed positive effects is striking compared to the expectations. It seems that the influence of common region is contrary to what previous research has revealed. So, the context is an important factor when determining the influence of common region. Besides, the results indicate that the participants did not like the advertisements and maybe they also did not understand that the man and woman were enclosed by a fence. In the separation variants it is more evident that the man and woman are separated by a fence and the control condition variant does not display a fence at all. In Study 2 it is important to use another kind of containment in order to see if the inconsistent results of Study 1 can be contributed to the advertisement designs.

Respondents also had to imagine they had to buy a gift for a girlfriend. Besides, they had to indicate to what extent they would like to try an odor sample if this was available. No significant main or interaction effects were found, so H1d cannot be confirmed either. Only women showed a marginally significant main effect of common region. However, they were positively influenced by separation instead of the expectation of a positive influence of common region. Men showed no significant main or interaction effects. In Study 2 it is important to take into account that men will evaluate the advertisement and the perfume different than women, because men would buy the perfume for an opposite-sex friend and women for a same-sex friend. According to Gould and Weil (1991), men feel probably less comfortable than women for buying a gift to a girlfriend.

In general, it is hard to interpret the results in Study 1. The advertisement variants were designed in such a way that it was realistic and looked more like a picture than a graphic design. Te Vaarwerk et al. (2015) used a graphic packaging design of a baby lotion and maybe this works better than a realistic design of an advertisement. In line with this approach, it is important to design an advertisement in Study 2 which could give more space to people's own imagination.

## 3.2. Study 2

In Study 2, different advertisements were designed. Furthermore, respondents had to evaluate a perfume and the advertisement in order to find out if the advertisement, and the image schemas within, influenced perceived intimacy, advertising effectiveness and odor evaluation. Common region as well as containment were the independent variables in Study 2 and specifically tested the predictions that

**H2:** The use of containment in a perfume advertisement increases...

- a) ... perceptions of intimacy.
- b) ... product attitude.
- c) ... advertisement attitude.
- d) ... purchase intention.

**H3:** The use of common region in a perfume advertisement increases...

- a) ... perceptions of intimacy.
- b) ... product attitude.
- c) ... advertisement attitude.
- d) ... purchase intention.

In Study 1 only advertising effectiveness was used as dependent variable, but in Study 2 respondents also had to smell an odor sample and subsequently had to evaluate this odor. Moreover, the sequence of the questionnaire was varied in order to neutralize possible effects between vision and olfaction. According to Porcherot, Delplanque, Gaudreau and Cayeux (2013) "visual cues are likely to convey early sensory impressions and to generate strong expectations about product characteristics, which in turn could influence the final assessment of a product" (p. 161). In addition, olfaction has the potential to affect product judgements (Bone & Jantrania, 1992). All respondents had to look at the advertisement first, but half of the respondents subsequently had to evaluate this advertisement, then they had to smell the odor sample and evaluate the odor. The other half had to smell and evaluate the odor sample right after they had seen the advertisement. In this manner, the influence of visual cues on odor evaluation and the influence of olfaction on product evaluation was neutralized. Next to H2 and H3, Study 2 will also test the predictions that

**H4:** The use of containment in a perfume advertisement triggers a positive odor evaluation.

**H5:** The use of common region in a perfume advertisement triggers a positive odor evaluation.

### 3.2.1. Method

**Participants and design.** Study 2 employed a 2x2x2 between subjects design with two levels of common region (i.e., common region vs. separated), two levels of containment (i.e., containment vs. no containment) and two levels of gender (male vs. female; see Table 1). Participants were randomly assigned to one of the advertisement variants (i.e., containment – common region, containment – separated, no containment – common region, no containment – separated). Subsequently, they had to fill in an offline questionnaire which can be found in Appendix C. Besides, participants were men and women between 18 and 65 years old (46 male, 63 female; mean age 40.0 years, SD = 15.3). In return for their participation, respondents had the opportunity to win a Douglas gift card.

Table 1. Research Design of Study 2: a 2 x 2 x 2 Between-Subjects Design

Gender	Independent variable: Containment	Independent variable: Common region	
		Separated	Common region
Male	No containment	11 respondents	12 respondents
	Containment	13 respondents	10 respondents
Female	No containment	16 respondents	15 respondents
	Containment	13 respondents	19 respondents </td

**Stimuli.** In Study 2, a perfume advertisement for a women’s perfume was designed with the silhouettes of people and objects. Four versions of the perfume advertisement were designed. The advertisements were mostly black and white and the context consisted of a natural setting where a man and a woman were shown in a field in which a tree was present. This tree was either placed between the man and woman (i.e., separated) or next to the man (i.e., common region). Besides, the tree enclosed the (man and) woman (i.e., containment) or not (i.e., no containment). This setting is rather more appropriate and will give space to people’s own imagination than the setting used in Study 1. Apart from these manipulations, the advertisements were identical and featured the product and slogan only (see Figure 4 and Appendix D).

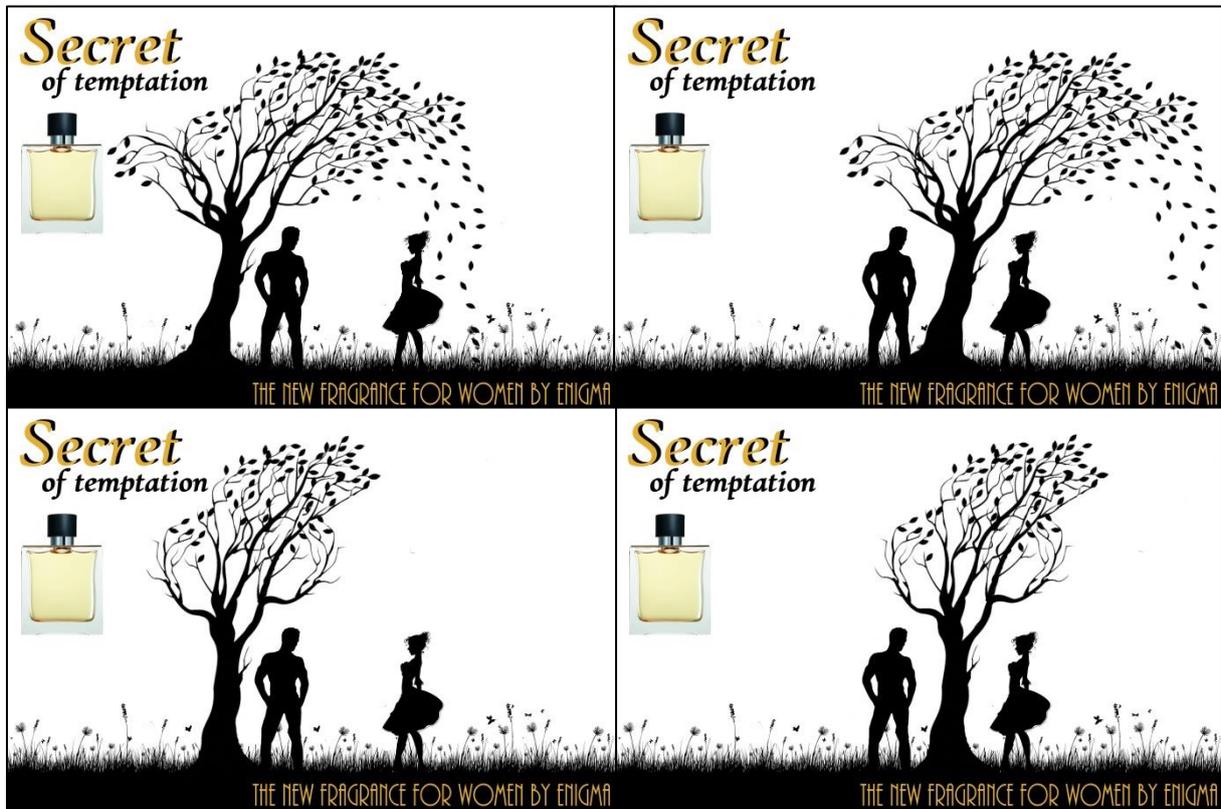


Figure 4. The containment – common region (top left), containment – separated (top right), no containment – common region (bottom left), and no containment – separated (bottom right) manipulations used in Study 2.

**Procedure.** Participants were informed that they had to give their opinion about a new perfume provided as a gift for a girlfriend. After they had read the purpose of the research, they were randomly assigned to one of the four advertisement variants (i.e., containment – common region, containment – separated, no containment – common region, no containment – separated). After exposure to one of the advertisements, participants filled out an offline questionnaire comprising the dependent measures. Participants were recruited via convenience sampling and snowball sampling. Family, friends, colleagues, neighbors were asked as respondents and via them other people were recruited (Goodman, 1961).

**Dependent measures.** Perceived intimacy was measured using statements whereby participants had to indicate their agreeableness on a 5-point Likert scale ( $\alpha = 0.88$ ). This scale consisted of five items about the relationship between the man and woman. An example of one of the items is *“I think the use of this perfume contributes to the attractive power between men and women.”* These items were adapted and extended from Study 1. Another dependent variable was advertising effectiveness. This variable can be divided in three sub variables (i.e., product attitude, advertisement attitude, purchase intention).

The attitude against the product was measured using a 4-item scale, based on Te Vaarwerk et al. (2015) and adapted from Study 1. An example of one of the items is *“I expect that the perfume will make the wearer more attractive.”* Participants had to fill in to what extent they agreed with the statements on a 5-point Likert scale ( $\alpha = 0.70$ ). Advertisement attitude was measured using five items which respondents had to answer on a 5-point semantic differential ( $\alpha = 0.85$ ). The items are a combination of Mitchel and Olson (1981) and Marchand (1998): *unbelievable/believable, not convincing/convincing, unrealistic/realistic, unappealing/appealing, and uninteresting/interesting.*

Odor evaluation was measured using eleven items which respondents had to answer on a 5-point semantic differential. Within this variable there were two constructs based on a factor analysis. The first construct was about the perceived intimacy of the odor which consisted of the following items: *not seductive/seductive, not sensual/sensual, unattractive/attractive, undesirable/desirable, everyday/distinctive* ( $\alpha = 0.86$ ). The second construct was about the characteristics of the odor and were partly based on the research of Ellen and Bone (1998): *not good/good, uncomfortable/comfortable, unpleasant/pleasant, sultry/fresh, chemical/natural* ( $\alpha = 0.81$ ). The item *mild odor/strong odor* was deleted, because this item did not fit into one of the constructs and lowered the scale reliability highly. In addition, purchase intention was measured after respondents had seen the advertisement (and half of the respondents also evaluated the advertisement) and smelled the odor sample. Respondents had to imagine they had to buy a perfume for a girlfriend and then fill in to what extent they would buy the perfume they just smelled.

Finally, manipulation checks were important to determine if the advertisement variants triggered the desired thoughts. It was measured using five items which participants had to answer on a 5-point Likert scale. Three of the items were about containment and an example of one of these items is *“I think the man and woman have privacy.”* The other two items were about common region. One example is *“I have the feeling the man and woman feel separated from each other.”*

### 3.2.2. Results

In order to measure the suitability of the manipulations several manipulation checks were done. In addition, analyses of variance (ANOVAs) were conducted with common region (common region versus separated), containment (containment versus no containment) and gender (male versus female) as independent variables. Also current relationship status (single versus relationship) was used as an additional independent variable because it showed interesting findings. Moreover, sequence was used as a covariate and perceived intimacy, product attitude, advertisement attitude, perceived intimacy of the odor, characteristics of the odor and purchase intention were the dependent variables in the analyses of variance.

**Manipulation checks.** Because it was not sure if the advertisement variants triggered the desired thoughts (e.g., intimacy, containment, separation) some questions were asked at the end of the questionnaire in order to check the manipulations. Analyses of variance showed that the advertisement variants apparently did not trigger thoughts about containment. The item *“I think the man and woman have privacy”* showed no significant differences between the containment variants ( $F(1, 106) = 1.13, p = 0.29, \eta^2 = 0.01$ ). This also applies to the items *“The advertisement gives me the feeling that the man and women are isolated from the outside world”* ( $F(1, 106) = 1.23, p = 0.27, \eta^2 = 0.01$ ) and *“I have the idea that the man and woman are enclosed”* ( $F < 1$ ). Perhaps the tree in the advertisements did not give feelings of isolation and privacy. The advertisement showed the man and woman in a field, but the entire surroundings are not displayed. Therefore, respondents could have been doubting the fact that the man and woman have privacy or are isolated from the outside world. In addition, the leaves of the tree were meant to be thought of as a boundary, but in real life leaves are no boundary so it could have been too subtly displayed in the advertisement.

Analyses of variance with common region as dependent variable showed no significant differences between the common region variants for the item *“The advertisement gives me the feeling that the man and woman wants to be intimate with each other”* ( $F < 1$ ). On the other hand, results did show significant differences within the item *“I have the feeling the man and woman feel separated from each other”* ( $F(1, 106) = 3.93, p = 0.05, \eta^2 = 0.04$ ). In fact, the separation condition triggered higher agreeableness ( $M = 2.74, SD = 1.00$ ) with the item than the common region condition ( $M = 2.32, SD = 1.13$ ). In real life people could easily pass by the tree by just walking around it. In this case, respondents did not think of this because they actually think the man and woman were more separated when the tree stood between them. However, this is less subtle than the containment aspects. Unfortunately, the manipulation checks did not show the desired results.

**Perceived intimacy.** An analysis of variance was conducted with perceived intimacy as dependent variable, and containment, common region and gender as independent variables. Results showed marginally significant main effects of containment ( $F(1, 104) = 3.37, p = 0.07, \eta^2 = 0.09$ ) and common region ( $F(1, 104) = 3.60, p = 0.06, \eta^2 = 0.09$ ) on perceived intimacy. Perceptions of intimacy are higher in the containment condition and in the common region condition as opposed to the no containment condition and the separated condition. In addition, the interaction effect between containment and common region on perceived intimacy appeared to be not significant ( $F < 1$ ).

Gender showed no significant three-way interaction effect with containment and common region ( $F(1, 100) = 1.88, p = 0.17, \eta^2 = 0.19$ ). So, if containment and common region both are present in the women's perfume advertisement or not, this does not show differences between men and women with respect to the amount of perceptions of intimacy. However, the analysis did show a marginally significant interaction effect with containment ( $F(1, 100) = 3.20, p = 0.08, \eta^2 = 0.19$ ) and a significant interaction effect with common region ( $F(1, 100) = 6.06, p = 0.02, \eta^2 = 0.19$ ). It means that there are differences between men and women with regard to the influence of containment and with regard to the influence of common region on perceived intimacy. Figure 5 shows that men have more perceptions of intimacy in the common region condition. Subsequently, men showed a significant main effect of common region ( $F(1, 41) = 8.68, p = 0.01, \eta^2 = 0.23$ ). Women do not show much differences between the common region and the separated condition as is clearly evident from Figure 5. However, women show more perceptions of intimacy in the containment condition. In fact, the main effect of containment on perceived intimacy for women was significant ( $F(1, 58) = 7.96, p = 0.01, \eta^2 = 0.14$ ).

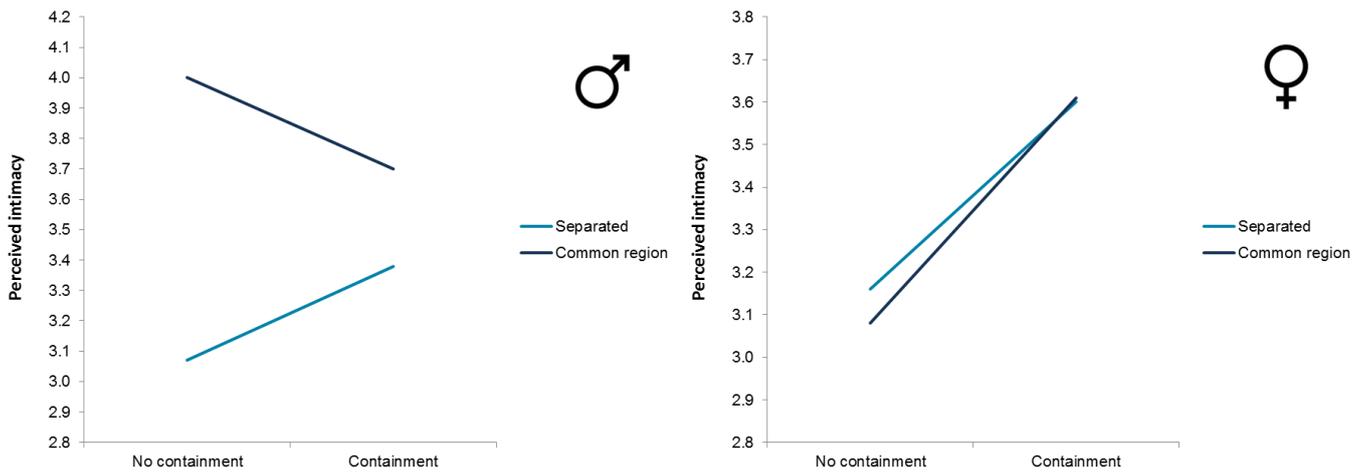


Figure 5. Effects of containment and common region on perceived intimacy for men (left) and women (right).

**Product attitude.** Results of the analysis of variance with product attitude as dependent variable showed no significant main effect of containment on product attitude ( $F(1, 104) = 2.11, p = 0.15, \eta^2 = 0.06$ ) and no significant main effect of common region on product attitude ( $F(1, 104) = 1.89, p = 0.17, \eta^2 = 0.06$ ). Also the interaction effect between containment and common region on product attitude was not significant ( $F < 1$ ). On the other hand, the three-way interaction effect between containment, common region and gender was significant ( $F(1, 100) = 12.64, p > 0.00, \eta^2 = 0.17$ ). The patterns shown in Figure 6 are about the same for both genders but is just the opposite of each other. It means that the interaction effects between containment and common region on product attitude differ between men and women. This can also be explained by the significant interaction effect between containment and common region for men ( $F(1, 41) = 11.53, p > 0.00, \eta^2 = 0.27$ ) and the marginally significant interaction effect for women ( $F(1, 58) = 2.91, p = 0.09, \eta^2 = 0.16$ ). When containment and common region are both present or not in a perfume advertisement, the product attitude for men will be increased and for women it will be decreased. When containment *or* common region is present, this will be the other way around.

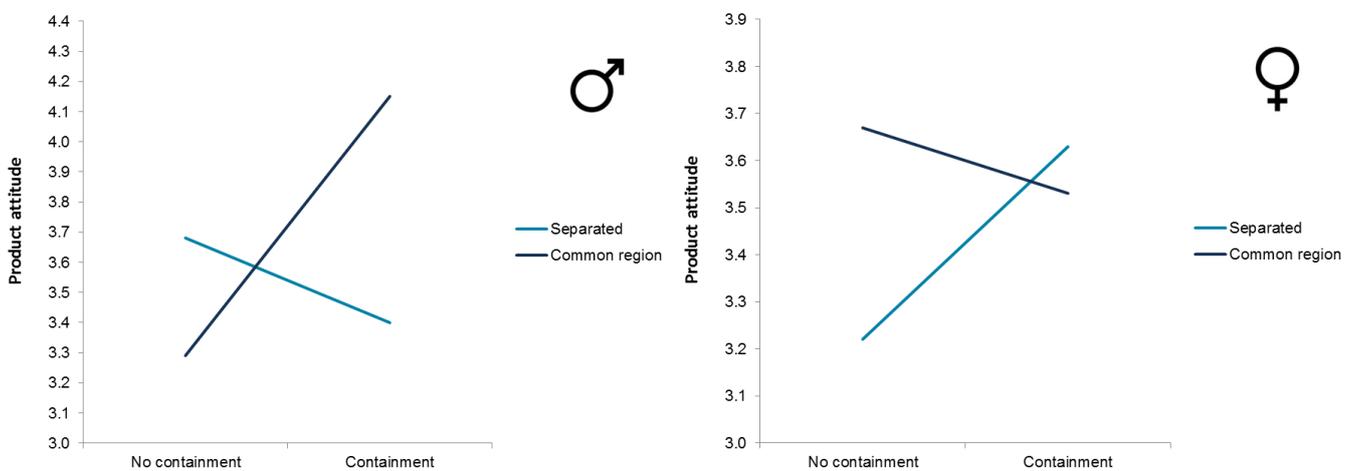


Figure 6. Effects of common region and containment on product attitude for men (left) and women (right).

**Advertisement attitude.** The analysis of variance with advertisement attitude as dependent variable showed no significant main effect of containment ( $F(1, 104) = 2.67, p = 0.11, \eta^2 = 0.04$ ) and common region ( $F < 1$ ). In addition, there was no significant interaction effect between containment and common region on advertisement attitude ( $F(1, 104) = 1.02, p = 0.31, \eta^2 = 0.04$ ) and no significant interaction effect between containment, common region and gender ( $F < 1$ ). However, within this analysis of variance the main effect of containment on advertisement attitude appeared to be marginally significant ( $F(1, 100) = 3.00, p = 0.09, \eta^2 = 0.07$ ). The advertisement attitude is higher in the containment condition ( $M = 3.64, SD = 0.67$ ) than in the no containment condition ( $M = 3.41, SD = 0.78$ ).

**Odor evaluation.** In order to measure odor evaluation, respondents had to smell an odor sample. Moreover, the variable can be divided in two constructs on the basis of a factor analysis. The first construct was about the perceived intimacy of the odor. Results showed no significant main effects of containment ( $F < 1$ ) and common region ( $F(1, 104) = 1.57, p = 0.21, \eta^2 = 0.02$ ). Besides, the interaction effect between containment and common region was not significant ( $F < 1$ ). Also the three-way interaction effect between containment, common region and gender was not significant ( $F < 1$ ). The second construct was about the characteristics of the odor. The analysis of variance showed no significant main or interaction effects. In addition, gender also showed no significant three-way interaction effect with containment and common region ( $F(1, 100) = 1.10, p = 0.30, \eta^2 = 0.12$ ). However, gender did show a significant interaction effect with containment ( $F(1, 100) = 4.87, p = 0.03, \eta^2 = 0.12$ ) on the characteristics of the odor. What becomes clear from Figure 7 is that men are positively influenced by containment. They think the characteristics of the odor are more positive in the containment condition in comparison with the no containment condition. On the other hand, women are negatively influenced by containment, which is also shown in Figure 7. Moreover, men showed a marginally significant main effect of containment ( $F(1, 41) = 3.99, p > 0.05, \eta^2 = 0.18$ ), whereas the main effect of containment for women was not significant ( $F(1, 58) = 1.17, p = 0.29, \eta^2 = 0.11$ ).

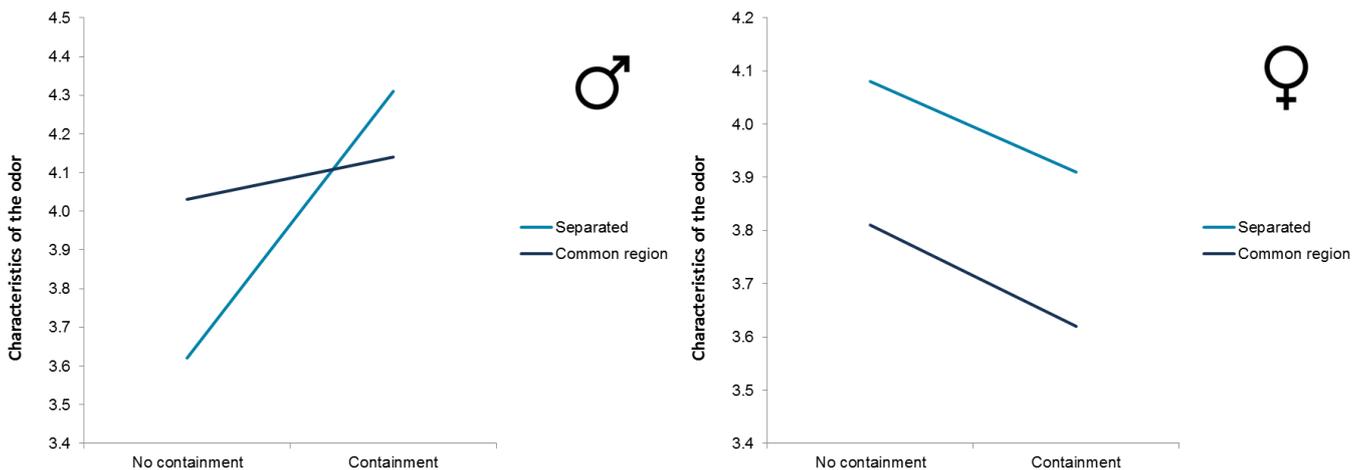


Figure 7. Effects of containment and common region on the characteristics of the odor for men (left) and women (right).

**Purchase intention.** Another analysis of variance showed no significant main effects of containment ( $F < 1$ ) and common region ( $F(1, 104) = 2.10, p = 0.15, \eta^2 = 0.06$ ) and no significant interaction effects between containment and common region ( $F(1, 104) = 2.56, p = 0.11, \eta^2 = 0.06$ ) and between containment, common region and gender ( $F < 1$ ) on purchase intention. Even so, the interaction effect between containment and gender on purchase intention appeared to be significant ( $F(1, 100) = 8.32, p = 0.01, \eta^2 = 0.15$ ). Figure 8 shows the purchase intentions for men and women. What becomes clear is that women are less positively influenced by containment than men. Men show a higher purchase intention in the containment condition ( $M = 3.87, SD = 0.46$ ). Subsequently, men showed a significant main effect of containment on purchase intention ( $F(1, 41) = 7.74, p = 0.01, \eta^2 = 0.17$ ). Meanwhile,

women show a higher purchase intention in the no containment condition, they are negatively influenced by common region and this is enhanced in the containment condition. However, women showed no significant main or interaction effects either with containment or common region.

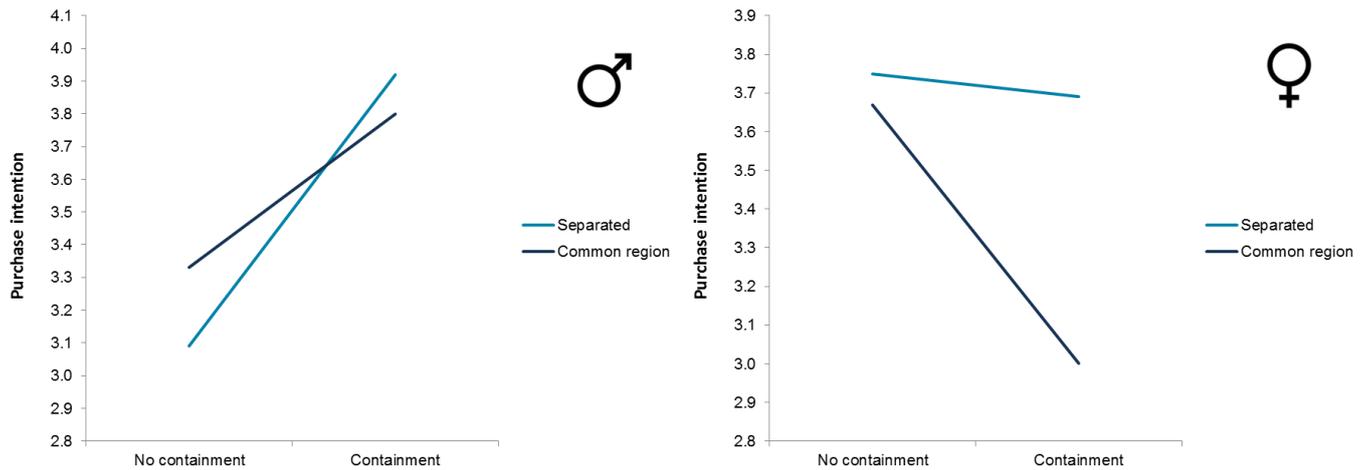


Figure 8. Effects of containment and common region on purchase intention for men (left) and women (right).

**Relationship status.** In addition to the differences in gender, it was also relevant to look at the differences in the dependent variables as a function of the current relationship status. Respondents were encoded as single or in a relationship. Results of the analysis of variance with perceived intimacy as dependent variable showed a significant three-way interaction effect between containment, common region and relationship status ( $F(1, 100) = 4.57, p = 0.04, \eta^2 = 0.14$ ). In Figure 9 it can be seen that singles show most perceptions of intimacy in the containment – common region variant ( $M = 4.03, SD = 0.15$ ), whereas respondents in a relationship show most perceptions of intimacy in the containment – separated variant ( $M = 3.57, SD = 0.65$ ). Moreover, singles showed a marginally significant interaction effect between containment and common region ( $F(1, 14) = 3.29, p = 0.09, \eta^2 = 0.31$ ). When containment and common region both are present or not in a perfume advertisement, the perceptions of intimacy are increased. This is not the case with respondents in a relationship and they showed no significant main or interaction effects on perceived intimacy.

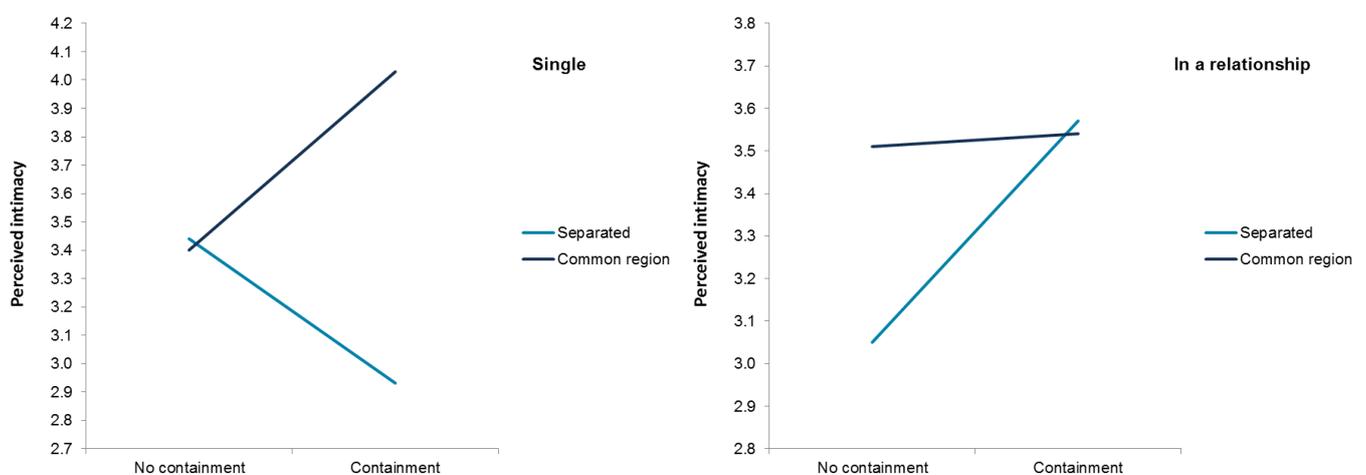


Figure 9. Effects of containment and common region on perceived intimacy for respondents who are single (left) and who are in a relationship (right).

Product attitude and the analysis of variance with containment, common region and relationship status as independent variables showed a significant interaction effect between these three variables ( $F(1, 100) = 7.51, p = 0.01, \eta^2 = 0.13$ ). Singles showed a significant interaction effect between containment and common region ( $F(1, 14) = 10.59, p = 0.01, \eta^2 = 0.48$ ), whereas respondents in a relationship did not show any main or interaction effects. Figure 10 shows that when containment and common region both are present in a perfume advertisement, the product attitude for singles will be increased but for respondents in a relationship this is not the case. They are more positively influenced when containment is present in the perfume advertisement, but this effect is not significant ( $F(1, 85) = 2.05, p = 0.16, \eta^2 = 0.07$ ).

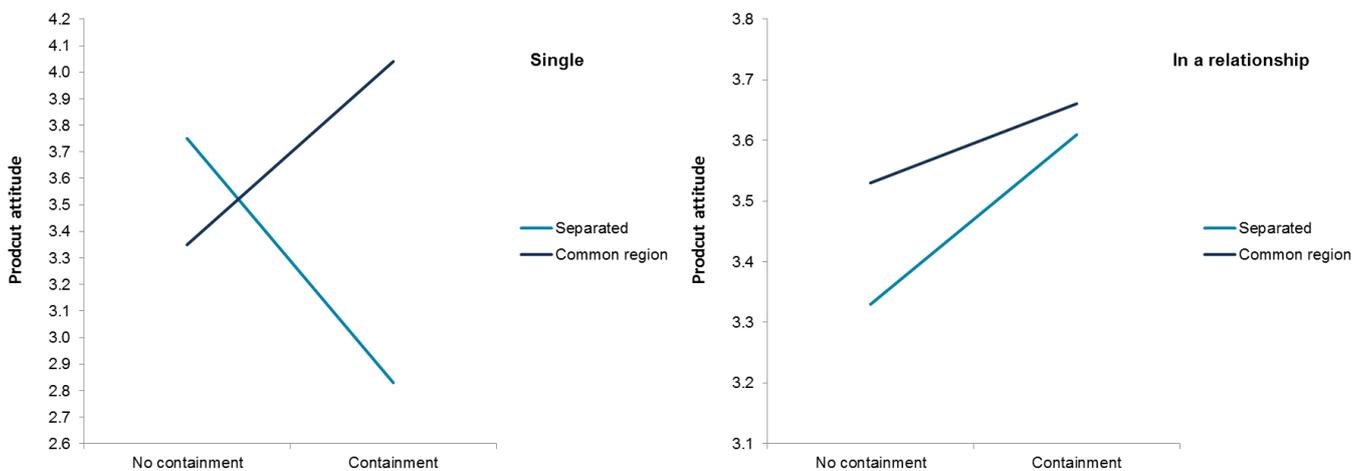


Figure 10. Effects of containment and common region on product attitude for respondents who are single (left) and who are in a relationship (right).

Advertisement attitude showed a significant main effect of relationship status ( $F(1, 100) = 8.23, p = 0.01, \eta^2 = 0.19$ ). This means there is a significant difference in advertisement attitude between respondents who are single and respondents who have a relationship. In Figure 11 these differences are shown. Besides, the results of the analysis of variance showed a marginally significant interaction effect between containment, common region and relationship status ( $F(1, 100) = 3.03, p = 0.09, \eta^2 = 0.19$ ). That is, the interaction effect between containment and common region differs between singles and respondents in a relationship. Singles showed a significant main effect of common region on advertisement attitude ( $F(1, 14) = 7.25, p = 0.02, \eta^2 = 0.42$ ). They had a more positive advertisement attitude in the common region condition ( $M = 4.15, SD = 0.38$ ) than in the separated condition ( $M = 3.73, SD = 0.58$ ). In addition, respondents in a relationship showed a significant main effect of containment on advertisement attitude ( $F(1, 85) = 3.92, p = 0.05, \eta^2 = 0.09$ ). The advertisement attitude was higher in the containment condition than in the no containment condition as is clearly evident from Figure 11. Next to the main effects, respondents in a relationship also showed a marginally significant interaction effect between containment and common region ( $F(1, 85) = 2.77, p = 0.10, \eta^2 = 0.09$ ). When containment or common region is present in a perfume advertisement the advertisement attitude is increased.

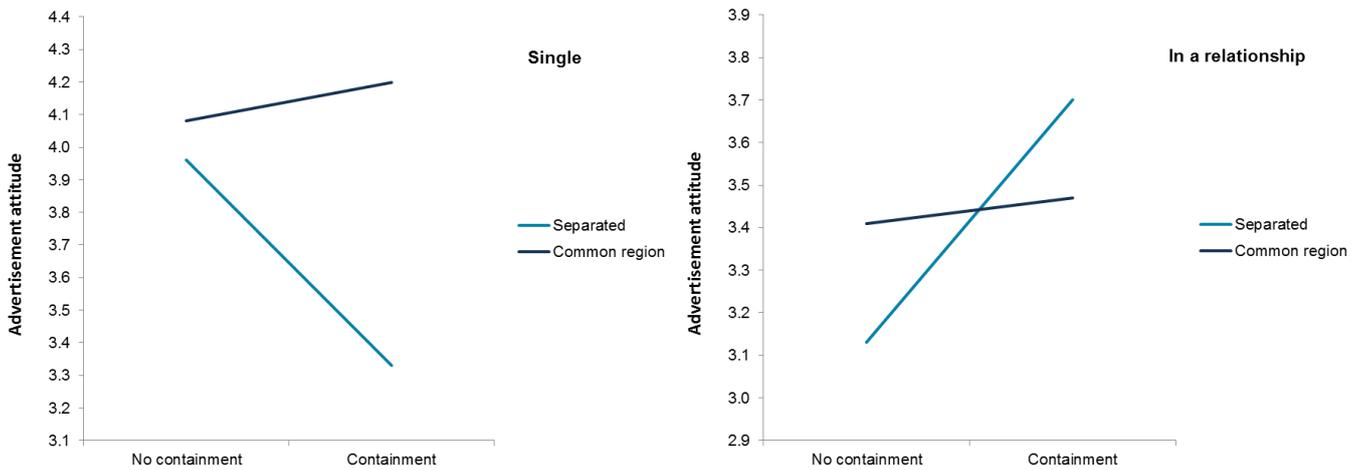


Figure 11. Effects of containment and common region on advertisement attitude for respondents who are single (left) and who are in a relationship (right).

Results with the analysis of variance with the perceived intimacy of the odor as dependent variable showed no significant three-way interaction effect between containment, common region and relationship status ( $F < 1$ ). However, singles showed a significant main effect of common region ( $F(1, 14) = 5.27, p = 0.04, \eta^2 = 0.31$ ). Singles indicated the odor sample as more intimate in the separated condition ( $M = 3.68, SD = 0.41$ ) than in the common region condition ( $M = 3.24, SD = 0.56$ ) as is shown in Figure 12. Respondents in a relationship showed no main or interaction effects on the first construct within odor evaluation. Next to the perceived intimacy of the odor, the second construct within odor evaluation also did not show a significant interaction effect between containment, common region and relationship status ( $F(1, 100) = 1.26, p = 0.27, \eta^2 = 0.05$ ). When looking at the analyses of variance with singles and respondents in a relationship taken separately it also showed no significant effects.

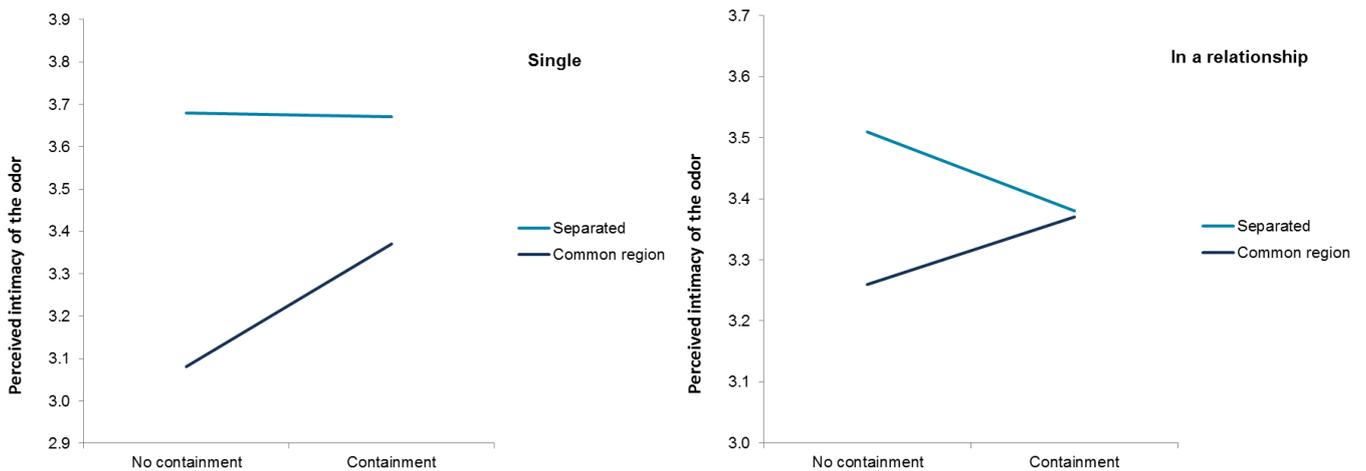


Figure 12. Effects of containment and common region on the perceived intimacy of the odor for respondents who are single (left) and who are in a relationship (right).

Finally, like the perceived intimacy of the odor and the characteristics of the odor, purchase intention also did not show a significant three-way interaction effect with containment, common region and relationship status ( $F(1, 100) = 1.24, p = 0.27, \eta^2 = 0.08$ ). However, respondents in a relationship showed a marginally significant interaction effect between containment and common region ( $F(1, 85) = 3.21, p = 0.08, \eta^2 = 0.08$ ). As is shown in Figure 13 the patterns are about the same for singles and respondents in a relationship, but they are just the opposite of each other. The marginally significant interaction effect between containment and common region for respondents in a relationship means that when containment *or* common region is present in a perfume advertisement, the purchase intention is increased. Single people are most positively influenced by common region, especially in the containment condition ( $M = 3.67, SD = 0.82$ ).

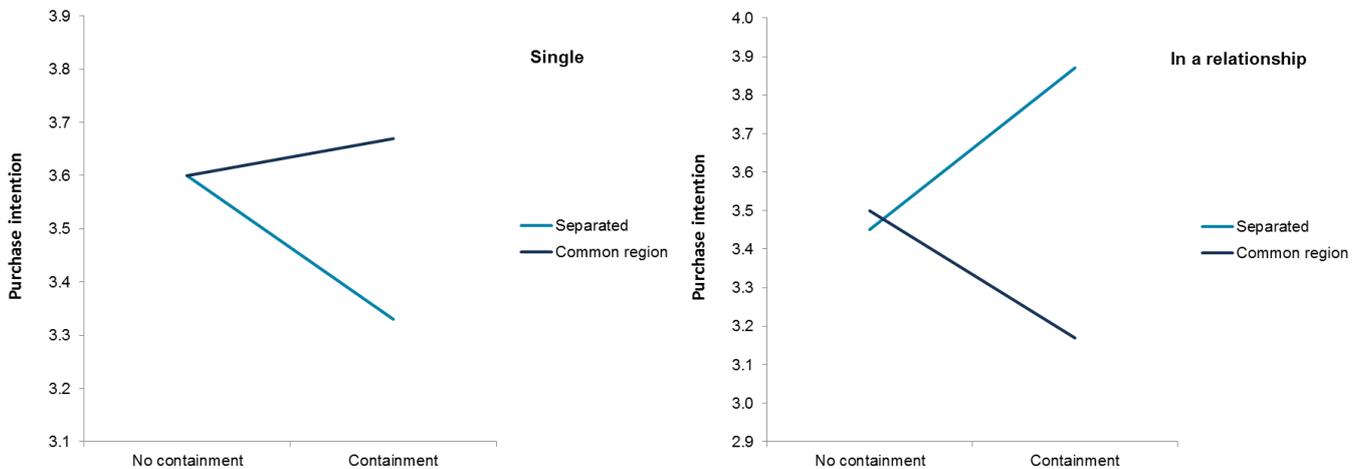


Figure 13. Effects of containment and common region on purchase intention for respondents who are single (left) and who are in a relationship (right).

### 3.2.3. Discussion

The findings presented show the effects of containment and common region on perceived intimacy, advertising effectiveness and odor evaluation. Despite the fact that the manipulation checks showed that the advertisement variants did not trigger the desired thoughts, interesting results have been found. Results with perceived intimacy as dependent variable showed that there were more perceptions of intimacy in the containment condition and in the common region condition in comparison with the no containment condition and the separated condition. However, these main effects were only marginal and not significant, so H2a and H3a cannot be confirmed with certainty. In addition, perceived intimacy showed a marginally significant interaction effect between containment and gender. Women were more positively influenced by containment than men and even showed a significant main effect of containment. Therefore, H2a can be confirmed for women. Furthermore, there appeared to be a significant interaction effect between common region and gender and men showed a significant main effect of common region. Men were more positively influenced by common region than women and for men H3a can be confirmed.

Product attitude showed no significant main effects of containment and common region, so H2b and H3b cannot be confirmed. On the other hand, product attitude did show some differences between men and women. When containment and common region are both present or not in a perfume advertisement the product attitude for men will be increased. The product attitude for women will be increased when containment or common region is present. So, in fact, H2b and H3b can both be confirmed for women. For men the hypotheses can be confirmed partly, because product attitude is only increased when containment *and* common region both are present in a perfume advertisement. When only one of them is present, the product attitude for men will be decreased.

H2c and H3c cannot be confirmed, because the main effects of containment and common region on advertisement attitude were not significant. However, the findings were in line with the expectation that containment positively influences advertisement attitude and it did show a marginally significant main effect of containment. Besides, the interaction effect between containment, common region and gender was not significant so H2c and H3c can also not be confirmed for men and women. With respect to odor evaluation few effects were found. There were no significant main effects of containment and common region for the perceived intimacy of the odor sample and the characteristics of the odor sample. This means H4 and H5 cannot be confirmed for both constructs. However, the characteristics of the odor sample showed a significant interaction effect between containment, common region and gender. Men were positively influenced by containment, but women were not. However, H4 cannot be confirmed for men because this effect was only marginally significant.

Concerning purchase intention, it appeared that there were no significant main effects of containment and common region. H2d and H3d cannot be confirmed on the basis of these results. Besides, the interaction effect between containment and gender was significant. The findings showed that men have a higher purchase intention in the containment condition than in the no containment condition and subsequently showed a main effect of containment. H2d can be confirmed for men. Women are negatively influenced by common region and this was enhanced in the containment condition. However, these effects were not significant and H2d or H3d cannot be confirmed for women.

Relationship status was an additional independent variable which appeared to be relevant in the current study. Analyses of variance with containment, common region and relationship status showed significant three-way interaction effects on almost all dependent variables except for the variables related to the odor sample (i.e., odor evaluation, purchase intention). The differences between relationship status means there are differences in the effect of containment and common region between people who are single or in a relationship. In general, it is striking that singles are more positively influenced by common region and containment than people in a relationship. Although speculative, this might relate to the notion that singles do not have an intimate relationship and maybe care more about the fact that people are in the same region and might be more sensitive to containment.



## 4. General discussion

The overall findings testify the influence of containment and common region on perceived intimacy, product attitude, advertisement attitude, the perceived intimacy of the odor, characteristics of the odor, purchase intention and most importantly, provide insight into the effects of image schemas in advertising design. Study 1 showed few significant results and it was hard to draw conclusions out of it. Eventually, it acted rather as a pre-study for designing Study 2. Moreover, it was difficult to connect the findings of Study 1 to the findings of Study 2. With respect to the underlying process, the findings in Study 2 stress the importance of embodied cognition. That is, containment and common region both increases perceptions of intimacy because of what containment and common region provoke in people's everyday embodied interactions with the environment (Van Rompay et al., 2012). When people or objects are in a common region and this is enhanced by a container it might be associated with emotionally laden constructs such as bonding, intimacy, and attachment (Hatch, 1987; Oldham & Brass, 1979). However, the manipulation checks in Study 2 did not confirm this previous research finding. It might be the case that the association of containment and common region with intimacy is unconscious, because previous research findings of Lobel (2014) also shows that people were not aware of which factor could have influenced them.

On the other hand, the influence of containment and common region on perceived intimacy, advertising effectiveness and odor evaluation are inconsistent with the expectations. Only when looking at the differences between men and women the findings could be connected to the hypotheses of the current research. In general, there are a lot of differences between men and women with respect to the influence of image schemas in a women's perfume advertisement. The differences within perceived intimacy could mostly be contributed to the fact that men and women experience the expression of intimacy differently (Thompson & Walker, 1989). In fact, women showed more perceptions of intimacy in the containment condition than in the no containment condition and men showed more perceptions of intimacy in the common region condition. Because men and women experience the expression of intimacy differently, it could be the case that men's perceptions of intimacy are increased when two people are in the same region ("just being in the other's presence", Thompson & Walker, 1989, p. 847) and that women's perceptions of intimacy are increased when people are enclosed by some kind of container.

With respect to product attitude, it holds that where women have a less positive product attitude men have a more positive product attitude and vice versa. The advertisements and the odor sample were about a women's perfume, so this could be the reason for these differences in gender. Men and women have different preferences for human body odors (Martins et al., 2005) and therefore they may think different aspects are important when evaluating a perfume for a girlfriend. Meanwhile, the advertisement attitude showed no differences in gender. In Study 1 it became clear that participants had a low advertisement attitude. Although speculative, this low advertisement attitude might be contributed to the context and setting. In Study 1 the context was more realistic (a picture-like advertisement) and the containment consisted of a fence. However, this might have given respondents the wrong associations (e.g., prison) which caused negative feelings about it. Therefore, Study 2 used advertisements which gave more space to people's own imagination because it looked less like a picture and it was less realistic. Subsequently, the advertisement attitude was higher and the research findings were more consistent.

Of further interest are the effects found with odor evaluation as dependent variable. However, few effects were found and this means containment and common region do not positively influence odor evaluation. In addition, previous research of Te Vaarwerk et al. (2015) showed that a product's visual appearance influence odor evaluation. On the other hand, olfaction has also the potential to affect product judgements (Bone & Jantrania, 1992). In order to neutralize these effects, the sequence of evaluating the advertisement and evaluating the perfume was varied and sequence was used as a covariate in the analyses of variance. Next to the evaluation of the odor sample, respondents also had

to indicate to what extent they would buy the odor. Men and women showed differences in purchase intention regarding the influence of containment and common region. A possible explanation could be contributed to the fact that respondents had to imagine they would buy the perfume for a girlfriend. According to Gould and Weil (1991), men and women feel more comfortable in giving gifts to same-sex friends than to opposite-sex friends. In the current study, men probably felt less comfortable than women for buying a gift for a girlfriend. Moreover, men's purchase intentions were positively influenced by containment and this might be contributed to the fact that containment was associated with safety (Te Vaarwerk et al., 2015) and reduced the risk of buying a gift for a girlfriend.

The findings presented in this paper account for the relevance of the embodied cognition theory, both from perfume brands' and graphic designers' point of view. The purpose of this study was not only to provide perfume brands insight into a different way of influencing consumers, but also to provide graphic designers insight into the embodied cognition principle within advertising.

#### 4.1. Limitations

There were some limitations within the current research which have to be mentioned. First of all, the advertisement variants in Study 1 were designed in Adobe Photoshop on the basis of different pictures. However, feedback of respondents showed that the advertisement attitude was low and therefore this could have limited the results within the current study. In addition, the manipulation checks in Study 2 showed that the advertisement did not trigger the desired thoughts. Only one out of five manipulation checks had succeeded (i.e., *"I have the feeling the man and woman feel separated from each other"*). The questions regarding the manipulation checks might have not been specific enough. For example, the item *"I have the idea the man and woman are enclosed"* could have been framed more specifically like *"I have the idea the man and woman are enclosed by the tree"*, so it would be more clear for respondents what is meant with "being enclosed." Also items like *"The distance between the man and woman is large"* and *"The man and woman can easily touch each other"* might have been easier to answer. When a tree is between a man and woman (i.e., separation) the distance between them could have been thought of as larger than when this tree was not between them (i.e., common region). Also touching each other is more difficult with a tree in the middle.

There could also have been some limitations on the basis of the questionnaire. With respect to purchase intention, respondents had to indicate to what extent they would buy the perfume after they had smelled the odor sample. However, no price was available and price is a key factor in making purchases according to Karmarkar, Shiv and Knutson (2015). So, this could have been a limitation for the respondents in their choice about buying the perfume. Besides, they would not have to buy the perfume for themselves but for a girlfriend. According to Olshavsky and Granbois (1979), buying a gift for someone is a special situation which contains risk. When buying a perfume for oneself, this risk disappears and maybe had shown different results.

Finally, there could have also been a limitation regarding the structure of the research. Study 1 acted more like a pre-test, but 113 respondents participated in this study. In Study 2 109 respondents participated. While looking back, it should have been better to had less respondents in Study 1 and more respondents in Study 2 because the results in Study 2 seems to be much more reliable and valid than in Study 1. In addition, there was also a demographic data about the current relationship status of the respondent which appeared to be relevant in Study 2. However, there were only 19 single respondents and 90 respondents had a relationship (they were either married or just in a relationship). In general, the sample sizes were quite small and it should have been better and increased the reliability of the research when more respondents participated, especially in Study 2.

## 4.2. Future research

According to the limitations and the results within the current study, there could be made some implications for future research. Looking at the results of the current research it is important to be less subtle in future research. In the research of Te Vaarwerk et al. (2015) the effects of common region were more present in the maximum containment condition than in the minimum containment condition. In the current research the separation was less subtle than the containment in the perfume advertisement. The manipulation checks showed that the only thing that people were aware of was the separation and this was obvious shown in the advertisement. Therefore, it is important to take these results into account when designing a comparative research. On the other hand, the use of image schemas could be unconscious (Lobel, 2014) and maybe this only applies to containment and not to common region even though this requires further investigation.

Finally, the current relationship status of respondents showed interesting findings. It might be the case that single people are more positively influenced by being together or being in the same region because they think this is more important while they do not have an intimate relationship. People in a relationship might be less sensitive to containment and common region. It could be an interesting study to look at the differences between single people and people in a relationship with respect to the influence of image schemas. In addition, it might be interesting to use other image schemas in advertising design and also use other contexts. For example men's perfume advertisements are mostly about depictions of power (Crequer, 2015). In this case, containment and common region might not be the most appropriate image schemas, but the verticality image schema is. According to Van Rompay et al. (2012) objects or people are seen as more successful and dominant when the camera angle is low and people have 'to look up.'

## 4.3. Practical implications

The practical implications are formulated for graphic designers, because the purpose of this study was not only to provide perfume brands insight into a different way of influencing consumers, but also to provide graphic designers insight into the embodied cognition principle within advertising. It appeared that perceived intimacy is an important factor when evaluating a women's perfume advertisement. In general, it seems that containment and common region incite more perceptions of intimacy and for graphic designers it is therefore important to use containment and common region in their advertising when intimacy is an important factor underlying purchase behavior. Besides, women show more perceptions of intimacy when containment is present and men show more perceptions of intimacy when common region is present. Graphic designers also have to take into account the differences in gender when designing advertisements either for men or women. Summarizing, the research presented allows perfume brands and their graphic designers to influence consumers more unconsciously and in a cheaper way than with celebrity endorsement.



## 5. Conclusion

The purpose of this study was to investigate if the use of image schemas in perfume advertisements could increase the amount of perceptions of intimacy, increase advertising effectiveness and triggers a positive odor evaluation. Many perfume brands use celebrity endorsement as persuasion strategy, but not all perfume brands have the budget for this kind of marketing. Therefore, the current study focused on another manner of influencing consumers: the use of image schemas. The study was conducted based on the following research question: *What is the influence of containment and common region in a women's perfume advertisement on the perceived intimacy, advertising effectiveness and odor evaluation?*

The effects of containment and common region on advertising effectiveness were determined by using perceived intimacy, product attitude, advertisement attitude and purchase intention as dependent variables. Besides, odor evaluation was determined by using the perceived intimacy of the odor and the characteristics of the odor as dependent variables. After a one-factor online study and a 2x2x2 offline study it can be said that the current research stresses the importance of embodied cognition within advertising design. The current study showed that both containment and common region increases perceptions of intimacy because of what they provoke in people's everyday embodied interactions with the environment. Perceptions of intimacy are higher when containment and common region are present in a women's perfume advertisement. Moreover, when containment is present women's perceptions of intimacy will be increased and when common region is present, perceptions of intimacy for men will be increased.

Product attitude and purchase intention did not show any effects of containment and common region. On the other hand, advertisement attitude showed a positive impact by containment. When containment is present in a women's perfume advertisement, the advertisement attitude will be increased. Besides, when looking at the differences in gender more interesting conclusions can be drawn. Despite the fact that product attitude showed no effects of containment and common region, it did show clear differences between men and women. Men's product attitude is only positively influenced when containment and common region both are present or when they are not present. For women this is just the other way around; their product attitude is positively influenced when containment *or* common region is present in a women's perfume advertisement. These differences might be the result of the fact that the advertisement was about a women's perfume. Purchase intention only showed an effect between gender and containment. Men's purchase intention is positively influenced by containment, whereas women's purchase intention is not. In the current research men had to imagine they had to buy a perfume for a girlfriend and this contains risk and they could have felt uncomfortable. Therefore, containment could have had more positive effect on men than women. In addition, odor evaluation also showed no effects of containment and common region. The only result that can be appointed is that men were positively influenced by containment. They thought the characteristics of the odor were more positive when containment was present in the perfume advertisement than when containment was not present. However, in general it cannot be said that containment and common region have a positive influence on odor evaluation.

One of the most remarkable and unexpected findings were the results with relationship status as independent variable. It showed that single respondents were more positively influenced by containment and common region than respondents in a relationship. Only with odor evaluation this was not the case. Here single respondents were positively influenced by separation. It might be the case that single people are more concerned with containment and common region, because they miss an intimate relationship within their lives. For future research, the differences in the influence between these two groups could be an interesting topic to study.

The current research showed that perfume brands, which are not as well-known as for example Chanel or Calvin Klein, do not necessarily need celebrity endorsement to market their products. With the use of the embodied cognition theory advertising can be designed in such a way that the image schemas of containment and common region easily provoke associations about intimacy. People are not always aware of the use of image schemas and that is why it is so important to understand the theory of embodied cognition. In this way, maybe not only perfume brands but also other kind of brands can benefit from the unconscious influence of image schemas.

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# Appendices

## Appendix A – Online questionnaire Study 1

Beste respondent,

Graag nodig ik u uit om deel te nemen aan mijn onderzoek. Het betreft een onderzoek naar uw mening over een nieuwe parfum advertentie. Het verzoek aan u om naar waarheid te antwoorden. Het gaat namelijk om uw ervaring en persoonlijke mening, dus er zijn geen foute antwoorden. Het invullen van de vragenlijst duurt ongeveer 5 minuten. Daarnaast beslist u zelf of u deelneemt aan het onderzoek. Deelname is geheel vrijwillig en u kunt te allen tijde stoppen met het onderzoek. De ingevulde gegevens worden vertrouwelijk behandeld en indien u niet meer wenst deel te nemen, worden uw gegevens verwijderd. Wanneer u vragen heeft, kunt u gerust mailen naar:

[l.e.m.nijmeijer@student.utwente.nl](mailto:l.e.m.nijmeijer@student.utwente.nl)

Bij voorbaat dank voor uw medewerking!

Met vriendelijke groet,

Loret Nijmeijer  
Student Marketing & Communications aan Universiteit Twente

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De onderstaande afbeelding is een advertentie voor het nieuwe parfum van het merk Enigma. Het is belangrijk dat u zich voorstelt dat u op zoek bent naar een parfum en dat u de onderstaande advertentie tegenkomt. Bekijk deze advertentie goed en beantwoord vervolgens de vragen.

(Appendix B)

---

*Probeer de volgende vragen te beantwoorden op basis van de advertentie die u net gezien hebt. Als u wilt, kunt u teruggaan om de advertentie nogmaals te bekijken.*

Er volgen nu een aantal stellingen over de advertentie die u gezien heeft. Geef voor elke stelling aan in hoeverre u het ermee eens bent.

	Helemaal mee oneens	Mee oneens	Niet mee oneens/niet mee eens	Mee eens	Helemaal mee eens
De advertentie suggereert dat het parfum de drager onweerstaanbaar maakt.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De advertentie suggereert dat het parfum de drager	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

aantrekkelijk  
maakt.

De advertentie  
suggereert dat  
het parfum de  
drager  
verleidelijk  
maakt.

De advertentie  
suggereert dat  
het parfum de  
drager  
zelfverzekerd  
zou laten voelen.

De advertentie  
suggereert dat  
het parfum lekker  
ruikt.

De advertentie  
suggereert dat  
het gebruik van  
dit parfum de  
gevoelens van  
intimiteit  
versterkt tussen  
man en vrouw.

De advertentie  
suggereert dat  
het gebruik van  
dit parfum  
positief bijdraagt  
aan de relatie  
tussen man en  
vrouw.

De advertentie  
suggereert dat  
het gebruik van  
dit parfum  
bijdraagt aan een  
gezonde  
spanning tussen  
man en vrouw.

---

Stel u bent op zoek naar een nieuw parfum voor een vriendin en u zou nu een proefmonster krijgen van het parfum waar u zojuist de advertentie van gezien hebt. Geef, met deze gedachte in uw achterhoofd, aan in hoeverre u het eens bent met de volgende stelling.

*Ik zou het proefmonster graag willen proberen.*

- Helemaal mee oneens
  - Mee oneens
  - Niet mee oneens/niet mee eens
  - Mee eens
  - Helemaal mee eens
- 

Geef voor het volgende aan in hoeverre de begrippen aansluiten bij uw mening over de advertentie die u gezien heeft.

Niet aansprekend	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Aansprekend
Oninteressant	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Interessant
Irritant	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Niet irritant

---

*Tenslotte nog een aantal vragen met betrekking tot uw persoonlijke gegevens.*

Wat is uw leeftijd?

Wat is uw geslacht?

- Man
- Vrouw

Wat is uw huidige relatiestatus?

Alleenstaand

In een relatie

Getrouwd

Gescheiden

Anders, namelijk:

---

Hartelijk dank voor uw medewerking!

**Vergeet niet om rechts op het pijltje te klikken om uw antwoorden op te slaan.**

Appendix B – Stimuli Study 1



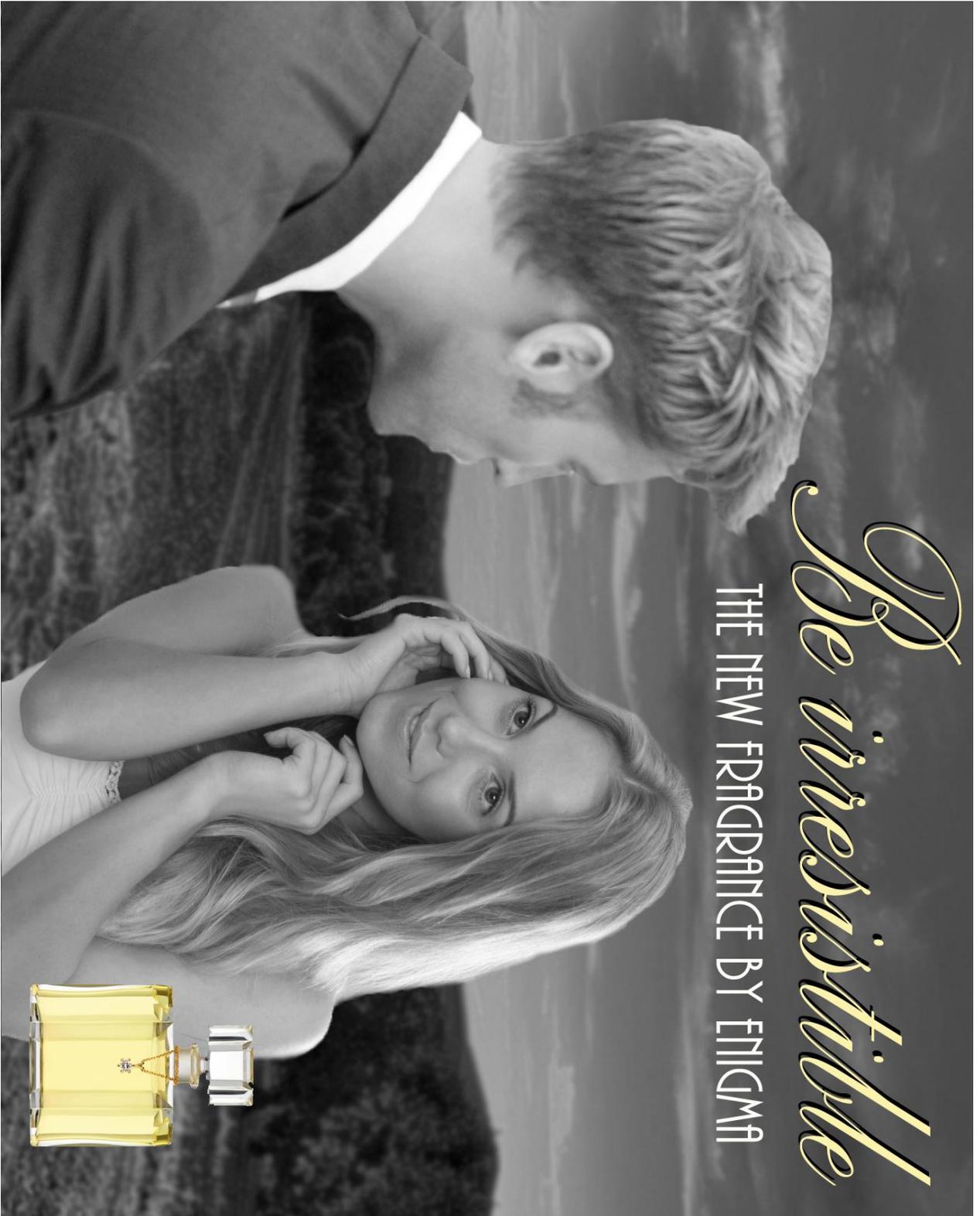
Common region



Minimal separation



Maximal separation



Control condition

## Appendix C – Offline questionnaire Study 2

Beste respondent,

Graag nodig ik u uit om deel te nemen aan mijn onderzoek. Het betreft een onderzoek naar uw mening over een nieuw parfum. Het verzoek aan u om naar waarheid te antwoorden. Het gaat namelijk om uw ervaring en persoonlijke mening, dus er zijn geen foute antwoorden.

Het invullen van de vragenlijst duurt ongeveer 5 minuten. Daarnaast beslist u zelf of u deelneemt aan het onderzoek. Deelname is geheel vrijwillig en u kunt te allen tijde stoppen met het onderzoek. De ingevulde gegevens worden vertrouwelijk behandeld en indien u niet meer wenst deel te nemen, worden uw gegevens verwijderd.

Wanneer u vragen heeft, kunt u gerust mailen naar:

[l.e.m.nijmeijer@student.utwente.nl](mailto:l.e.m.nijmeijer@student.utwente.nl)

Bij voorbaat dank voor uw medewerking!

Met vriendelijke groet,

Loret Nijmeijer

Student Marketing & Communications aan Universiteit Twente

Datum

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Handtekening

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U ziet een advertentie voor het nieuwe parfum van het merk Enigma. Het is belangrijk dat u zich voorstelt dat u op zoek bent naar een parfum voor een vriendin en u deze advertentie tegenkomt. Bekijk de advertentie goed en ga vervolgens door naar de vragen op de volgende bladzijden.

(Appendix D)

Er volgen een aantal stellingen over de advertentie die u gezien hebt. Geef voor elke stelling aan in hoeverre u het ermee eens bent.

	Helemaal mee oneens	Mee oneens	Niet mee oneens/ niet mee eens	Mee eens	Helemaal mee eens
Ik denk dat het parfum de drager zich zelfverzekerder zou laten voelen.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik verwacht dat het parfum de drager aantrekkelijker maakt.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De advertentie suggereert dat het parfum de drager onweerstaanbaar maakt.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik denk dat het parfum de drager verleidelijk maakt.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

	Helemaal mee oneens	Mee oneens	Niet mee oneens/ niet mee eens	Mee eens	Helemaal mee eens
Ik verwacht dat het gebruik van dit parfum de romantiek verhoogt tussen man en vrouw.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De advertentie suggereert dat het parfum de gevoelens van intimiteit versterkt tussen man en vrouw.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik denk dat het gebruik van dit parfum bijdraagt aan de aantrekkingskracht tussen man en vrouw.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik denk dat het gebruik van dit parfum het contact tussen man en vrouw bevordert.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik verwacht dat het parfum de spanning tussen man en vrouw op een positieve manier beïnvloedt.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Geef voor de volgende begrippen aan in hoeverre ze aansluiten bij uw mening over de advertentie die u gezien hebt.

Ongeloofwaardig	<input type="radio"/>	Geloofwaardig				
Niet overtuigend	<input type="radio"/>	Overtuigend				
Onrealistisch	<input type="radio"/>	Realistisch				
Niet aansprekend	<input type="radio"/>	Aansprekend				
Oninteressant	<input type="radio"/>	Interessant				

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*Vraag de onderzoeker om het geurmonster en beoordeel vervolgens het parfum op basis van de volgende vragen.*

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Geef voor de volgende begrippen aan in hoeverre ze aansluiten bij uw mening over het parfum die u zojuist geroken hebt.

Onaangenaam	<input type="radio"/>	Aangenaam				
Niet prettig	<input type="radio"/>	Prettig				
Niet lekker	<input type="radio"/>	Lekker				
Niet verleidelijk	<input type="radio"/>	Verleidelijk				
Niet sensueel	<input type="radio"/>	Sensueel				
Alledaags	<input type="radio"/>	Onderscheidend				
Niet aantrekkelijk	<input type="radio"/>	Aantrekkelijk				
Niet begerlijk	<input type="radio"/>	Begerlijk				
Zwoel	<input type="radio"/>	Fris				
Chemisch	<input type="radio"/>	Natuurlijk				
Milde geur	<input type="radio"/>	Sterke geur				

U bent op zoek naar een nieuw parfum voor een vriendin. Kunt u aangeven in hoeverre u het parfum dat u zojuist geroken heeft, zou willen kopen?

- Ik zou dit parfum zeker weten niet kopen.
- Ik zou dit parfum waarschijnlijk niet kopen.
- Ik zou dit parfum misschien niet/misschien wel kopen.
- Ik zou dit parfum waarschijnlijk wel kopen.
- Ik zou dit parfum zeker weten kopen.

De volgende stellingen gaan opnieuw over de advertentie die u gezien hebt. Geef aan in hoeverre u het ermee eens bent.

	Helemaal mee oneens	Mee oneens	Niet mee oneens/ niet mee eens	Mee eens	Helemaal mee eens
Ik denk dat de man en vrouw privacy hebben.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De advertentie geeft me het gevoel dat de man en vrouw afgesloten zijn van de buitenwereld.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik heb het gevoel dat de man en vrouw zich gescheiden voelen van elkaar.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ik heb het idee dat de man en vrouw ingesloten zijn.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
De advertentie geeft me het gevoel dat de man en vrouw intiem met elkaar willen zijn.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Tenslotte nog een aantal vragen met betrekking tot uw persoonlijke gegevens.

Wat is uw leeftijd?

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Wat is uw geslacht?

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Wat is uw huidige relatiestatus?

- Alleenstaand
- In een relatie
- Getrouwd
- Gescheiden
- Anders, namelijk: \_\_\_\_\_

**Hartelijk dank voor uw medewerking!**

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Wilt u graag kans maken op een Douglas giftcard t.w.v. €20,-?  
Vul dan onderstaande gegevens in.

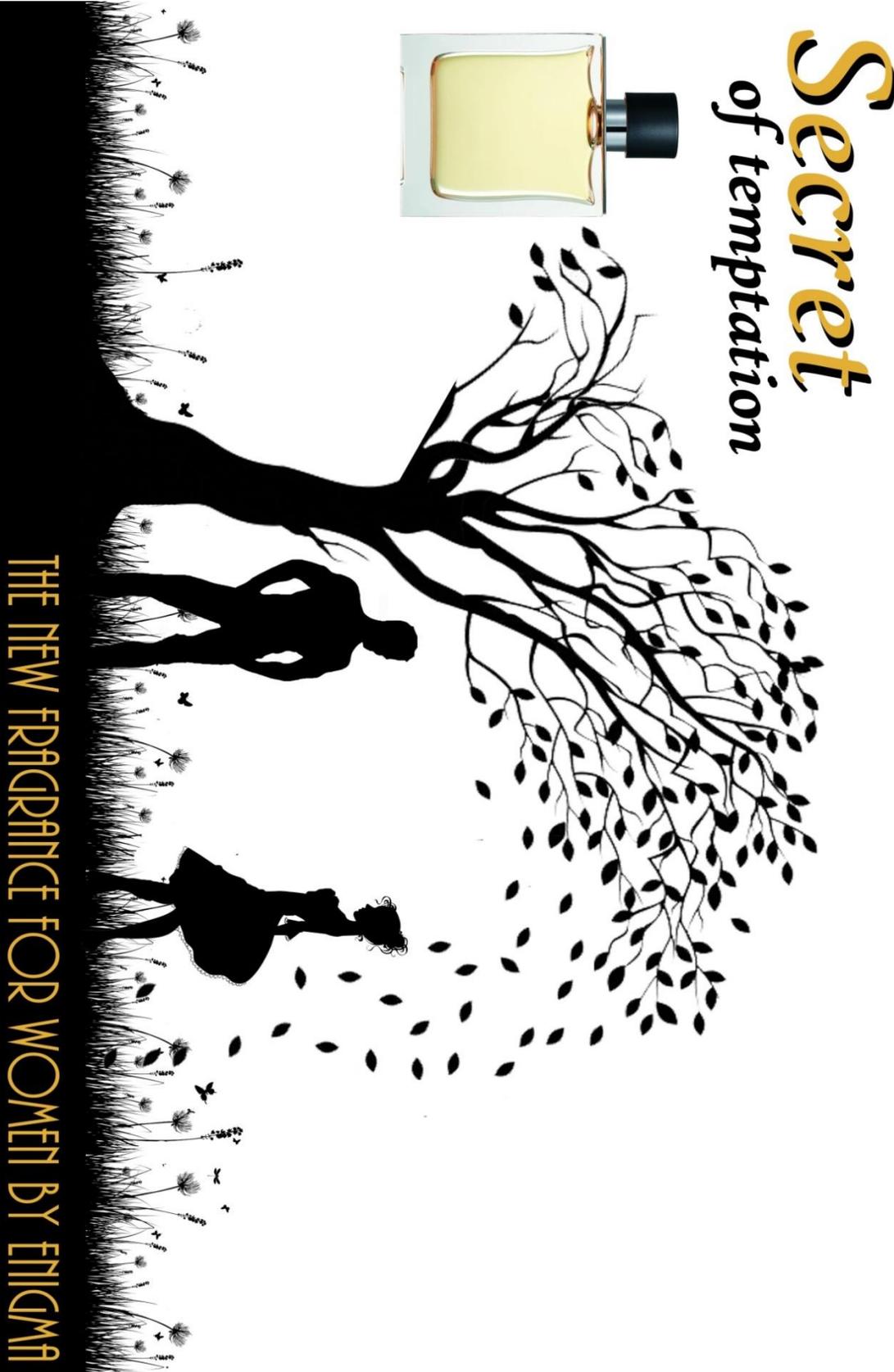
Voor- en achternaam

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E-mailadres

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Appendix D – Stimuli Study 2



Containment – common region

# Secret of temptation



THE NEW FRAGRANCE FOR WOMEN BY ENIGMA

Containment - separated

# Secret of temptation



THE NEW FRAGRANCE FOR WOMEN BY ENIGMA

No containment – common region

# Secret of temptation



THE NEW FRAGRANCE FOR WOMEN BY ENIGMA

No containment - separated



