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Exploring the fine line of Femvertising

A study on the impact of femvertising on products that can be targeted to both men and women

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Abstract

The purpose of this thesis is to study the effect of femvertising on a consumers' 'willingness to buy' and their 'ad attitude' for products that can be targeted to both males and females. Of particular interest is the possible backfiring effect of femvertising when used for different types of products and for both males and females. Femvertising is a form of advertising that emphasizes female empowerment in its messages. In previous research femvertising has mainly focused on its use for female-focused products and a female-only target audiences. In recent years a wider variety of companies have begun to use femvertising for a broader target audience including men. The questions in this study were answered using quantitative research in the form of an online experiment. The use of femvertising seemed to have a more negative effect on consumers' 'willingness to buy' and 'ad attitude' for products belonging to a masculine product category. In one particular case it seems that using femvertising for a male target audience is even less beneficial. Interpreting the effectiveness of femvertising in promoting a product that is perceived as feminine is not easily determined, since results are contradictory. This research ads to existing literature in providing a broader perspective on the use of femvertising and including men's opinions. The findings of this study suggest that companies should exercise caution in incorporating femvertising into their marketing strategies. Moreover, it is recommended that the limitations of this study are taken into consideration, as they provide opportunities for future research in this area.

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1. Introduction

1.1 Background

The ways and possibilities companies build advertising strategies change every day due to changes in society. Marketing especially is an industry where something that was considered new yesterday can be considered as old today. In the field of marketing, it is important to anticipate the ever-changing aspects in society, for example changing social gender norms. Gender specific advertising has played a part in advertising for decades but the way it is used highly depends on the gender norms of its time. Nowadays there are still differences in the way different genders are portrayed and targeted in advertisements. The most recent rise of feminism in the last two decades (third feminism wave) which started in the late nineties also created the opportunity for a new kind of marketing style named 'Femvertising' (E. Becker, 2016).

The term 'Femvertising' has especially grown in significance since the start of this century. It is important to differentiate femvertising from traditional gendered marketing because they are not one and the same. Traditional gendered marketing segments consumers based on their gender which most of the times expresses itself in gender stereotypes (for example: pink is for women, blue is for men) (Caruelle, 2020). Femvertising, in most cases, is more focused on women, but in a way that is contrary to traditional gender stereotypes. Femvertising aims to inspire and empower all women of all ages with a pro-woman way of communicating that can sometimes be considered feminist. This is focused on women's role in modern society and the evolution of gender equality which often goes against stereotypical gender norms (E. Becker, 2016) .

One of the most recognizable and earliest examples is Dove's 'Campaign for real beauty' which launched in 2004 and has been their mantra ever since. The overall message of the campaign is to celebrate women's unique differences rather than pursuing unachievable beauty standards. Even though Dove had received many positive reactions on their campaigns with this view in mind, they have also experienced quite some critique. Some say the campaign has broadened the global conversation about real beauty, while others say this is hypocritical because the brand's products help achieve overall beauty standards (Celebre & Denton, 2014). This example shows that people can have different opinions in terms of whether they like or feel connected to a femvertising message or not. Are these differences in how people experience these femvertising messages explained by their gender for example? Or is it possibly explained by whether the message is considered as 'the right fit' for the company or product category?

1.2 Problem statement

In the years after Dove started their femvertising 'Campaign for real beauty' many other, mainly female focused, companies followed. To just name a few examples, the brand 'Always' launched an advertising video during the United States' Super Bowl break in 2015. In the video several people are asked to throw, run and fight 'Like a girl'. They all weakly mimicked the tasks like slapping instead of punching and accidently dropping a ball. When young girls were asked to do the same, they all performed the tasks with force and confidence. 'Always' asked the viewer when doing something 'like a girl' became an insult (MOSAIC, 2018). Another example is the haircare brand Pantene with an advertisement that encourages women to embrace their natural grey hair. The message is to celebrate natural hair and question entrenched beliefs about gray hair, such as that it makes you old (Pantene UK, 2019).

These advertisements have been received mainly positively by the audience and many more brands have used this similar feminine positivity in their advertising campaigns. It seems that femvertising has been widely and successfully used by brands targeted towards women. Using female empowerment in their messaging seems logical since they have a female target audience and/or the message is in line with their beliefs.

But in recent years, the use of femvertising has increased for brands that do not have a female-only target audience. An example is the dating app Bumble that launched an advertisement including the famous tennis player Serena Williams called: 'The ball is in your court'. The dating app is different than others in the market since women make the first move after both people have 'liked' each other's profile (assuming they have heterosexual interests). The advertisement urges women to own their power. In the ad you hear Serena say "Don't wait to be told your place, take it! Don't wait for people to find you, find them." The advertisement tells that women control their own power when it comes to career and love life (MarketingActivo, 2019). Another example is Nike with their campaign 'Dream crazier' in which accomplishments of female athletes are highlighted who have broken barriers and inspired the next generation (Campaigns of the world, 2020).

For both Bumble and Nike, it is important for the brand to appeal to both men and women, as both are important audiences for them. Using femvertising can already be riskier in these cases because it is not desirable for the message to scare away male customers or be inconsistent with what the brand stands for to make the message trustworthy.

The above also applies to products originally considered more 'masculine'. Some examples that fall into this category of products considered 'masculine' are beer and cars. These kind of products have in the past primarily been targeted towards men. Because in recent years women show interest in those products as well, some of these brands have changed the way of adverting to appeal to a broader

audience. Some brands have taken it further and even started experimenting with femvertising. Using feminism in their messages can be even riskier since they have such a masculine stigma. Audi is an example of this with the Super Bowl commercial 'Daughter' in which a father watches his daughter competing in a soapbox race while wondering whether she would be judged on her gender in her life. The message eventually is that Audi is committed to equal pay for equal work. There was some criticism on the advertisement after the public discovered that only two of the fourteen U.S. board members were female. Some also did not see a connection between the message and driving luxury cars (Cause Marketing, 2017). Another example is Heineken with their advertising campaign "Cheers to all". Beer commercials have been male dominated for long, but Heineken tried a different direction in this commercial. The commercial plays with stereotypes about women choosing a sweet drink and men choosing beer. It shows a waiter handing out drinks and the men and women swapping them, resulting in the man drinking the cocktail and the woman drinking the beer. Some found the situation very relatable while others commented the commercial was a bit predictable and cliched (Heineken, 2020).

The last example, the male part of the brand Gillette, took it even further. Since this branch of Gillette is only targeted towards men it was even bolder to use a certain form of femvertising. In the commercial several aspects of 'toxic masculinity' are questioned like bullying, catcalling, and mansplaining. The advertisement calls on men to be change-makers and become an example for the next generation of young boys. Gillette changed their tagline from "The best a man can get" to 'The best a man can be'. While some praised the advertisement which was filmed right after the #MeToo movement started, others said they would never use Gillette again after seeing them attack 'traditional masculinity' (Guardian News, 2019).

The use of femvertising seems to have become more popular in the last decade, also by brands that are not necessarily only targeted towards women. The question is: 'When is femvertising the right way to promote a product and in what cases can it backfire and for whom?'. Is it for example possible that femvertising backfires because the customer does not feel a match between a certain product and a femvertising message? And if this is the case, what could be the explanation of the backfiring? Is it maybe because the product belongs to a more masculine product category or does the gender of the customer matter? It could be possible that men and women experience the power of a femvertising message in different ways. The most important part is to find out whether gender or a certain product category affects the likelihood that the femvertising message backfires.

1.3 Research question and sub-questions

This study will examine whether certain product categories are more suitable for the use of femvertising and whether its effect is different for men and women. This will tell whether the use of femvertising can be counterproductive if it is used for the wrong products or for the wrong customers. Because it seems

to be that more brands and products are using femvertising in their marketing strategies, this research focusses on the use of femvertising for products that are not necessarily targeted towards women only. For brands like 'Barbie', 'Always' and 'Dove' it is clearer why the use of female empowerment in their messages could benefit them since they are focused on women. Other brands like 'Nike', 'Nissan', 'Audi' and 'Heineken' have a wider target audience which is not only focused on males or females, but they have also tried femvertising in their marketing campaigns in the past. Whether the use of femvertising for these types of brands and products is perceived as genuine, and whether it differs by gender, remains to be investigated. Furthermore, the products that will be used in this research will be divided by product types that are perceived as more female or more male. This will be done to figure out whether this also matters for the perceived sincerity of the message, or the possibility that the message backfires. This research will also attempt to examine whether a possible positive/negative effect of femvertising on the willingness to buy could be explained by a positive/negative change in attitude towards the product after seeing a femvertising message.

This is described in the following research question: *To what extent does femvertising influence the customer's willingness to buy and ad attitude when used for different kinds of product categories with mixed gender target audiences?*

The following sub questions are also relevant:

- *To what extent is the effect of femvertising on willingness to buy explained by a positive change in attitude after seeing femvertising advertisement compared to more traditional advertisement?*
- *To what extent does the customer's gender influence the effect of femvertising on the attitude towards the advertisement and consequently willingness to buy?*
- *To what extent do different product categories, one being perceived as more feminine or masculine, influence the effect of femvertising on the attitude towards the advertisement and consequently willingness to buy?*

1.4 Academical & managerial contribution

This research will have academic value by filling a gap in existing academic knowledge. It delivers insights in the field of academic research by exploring under what conditions femvertising has a positive effect or a possible backfiring effect. Most of the existing academical research is highly focused on the way females' experience femvertising messages for feminine focused products (Drake, 2017; Erasmus, 2018; Kapoor & Munjal, 2019; Hainneville et al., 2021). In some studies, men's responses are also included, but, for example, cannot be separated from women's responses (Lima & Casais, 2021) or the sample is so small that no conclusion can be drawn (Abitbol & Sternadori, 2016).

But the differences in how females and males experience the same advertisements for different kinds of product categories, has still to be further investigated. The idea that male customers (compared to women) could be positively or negatively influenced by femvertising as well seems to be a subject for more research. Furthermore, it is not yet clear whether certain product categories are a better match with the use of femvertising in their marketing strategy.

Moreover, marketeers and managers will benefit from the findings of this study by figuring out whether it is appropriate or inadvisable for their company to apply femvertising in their upcoming marketing strategies. Traditionally femvertising has mostly been used for products that can be categorized in a more female minded product category with a target audience containing women or girls. In these cases, it seems rather obvious why there is a 'match' between the product, the message, and the target audience.

Femvertising is increasingly used for brands targeting male audiences, but it is crucial to determine if it is suitable and if there is a risk of a message backfiring. It is aimed to find out if it matters what kind of product categories (more male- or female-focused) use femvertising and whether the way it is perceived differs by gender.

The main goal is to find out, in what cases and for which audience, a femvertising message keeps or loses its power and if it will be perceived as sincere, credible, and genuine. Prior research lacks this by mainly only testing femvertising on woman for female focused brands. This research will take a wider approach.

2. Literature review

There seems to be a fine line of the use of femvertising, making it sometimes a success and sometimes a failure. This literature review will discuss prior research on the concept of femvertising in general, known criticism of the use of femvertising and the gap of what remains to be researched. This study will examine the role of gender in the perception of femvertising and also which product categories traditionally and stereotypically belong to certain genders. Furthermore, other theory like the concept of processing fluency is discussed in combination with the effect on attitude and purchase intention. At last, the variables and conceptual model will be discussed.

2.1 Theory

2.1.1 Origins of femvertising

To better understand the subject of femvertising, literature on the subject and related topics is reviewed. The term femvertising can be described as advertising that employs pro-female talent, messages and imagery to empower women and girls (Drake, 2017). Femvertising can be seen in all kinds of media nowadays, from print to tv-commercials to social media and all in-between. However, it flourishes most on the internet, where it invites digital discussions about political views (Varghese & Kumar, 2022). Before the term took its place in marketeers' terminology, some years have passed. The term "femvertising" itself only became popular after 2014 when "Always" had launched its "like a girl" super bowl campaign. Before this year, female-empowerment in advertisement was mostly referred to as 'counter stereotype' which did the reverse of what stereotypical gendered marketing has done in the past so far (Varghese & Kumar, 2022). Gender stereotypes in advertising have existed for decades, but a slow, gradual change began after the rise of feminism in the 1960s. These gradual changes included changes in occupational opportunities and domestic structures, especially for women. Furthermore, the gender distribution in the labor force changed. This also resulted in changes in family roles (Zotos & Eirini, 2014). But for years to come, women in commercials were still presented in an inferior manner with slow changes that were reflected in advertisement. It was not until the twentieth century that marketers carefully embraced changes in this gender-stereotypical way of advertising (Grau & Zotos, 2016). This goes together with the most recent wave of feminism (since the beginning of the 21st century) that is focused on subjects like sexual harassment and rape culture. The main way of communication goes via social media and the internet (Chamberlain, 2017). This movement has also led to changing roles of gender in the representations in advertising which eventually led to companies embracing femvertising into their strategies.

Femvertising is the opposite of stereotypical gendered marketing. Femvertising can be gendered marketing when it is used towards women only. This is the case for the 'like a girl' campaign from

Always, which clearly focusses towards women with their menstrual products (MOSAIC, 2018). However, femvertising is not restricted to gendered marketing aimed solely at women. It can also be directed towards men, as illustrated by the example of Gillette razors (Guardian News, 2019), or towards all genders, as exemplified by Audi (Cause Marketing, 2017), both of which were discussed in the introduction.

2.1.2 Femvertising: part of a bigger movement

The rise of the use of femvertising is not unexpected or extraordinary given other events. In fact, femvertising can be seen as part of a bigger movement in the advertising world, called brand activism. With brand activism companies make an open statement in public domain by lobbying, donating money for a certain cause and/or publishing a statement through their marketing communication. By doing so they hope to attract attention from their target audience which could help to have a favorable profit and enhance customers loyalty through an emotional connection (Shetty et al., 2019). This includes for example 'green branding' in which it serves as a way to alter consumer's environmental behavior (Khashe et al., 2015). In the most recent years the term 'woke activism branding' has also emerged. To explain the term 'woke', it can be defined as being 'awake' and alert to injustice, discrimination and other critical social issues (Moorman, 2020). Some examples are the #MeToo movement against sexual abuse and harassment, and the Black Lives Matter movement against black racism. By the use of this activism in marketing activities the brands go beyond the functional benefits (Mirzaei et al., 2022). Marketeers also saw the opportunity in the LGBTQ niche market to help increase public visibility and normalize its community (Benner, 2018). Other sociopolitical issues that are seen in woke advertising are public health, reproductive rights, immigration, gun control and of course feminism (Vredenburg et al., 2020).

While the use of woke brand activism can lead to customer's sympathy, companies should use it cautiously and carefully. When brand activism is not used correctly, there is a possible negative side to it (Mirzaei et al., 2022). If the activism of the brand is not in line with the company's core values, vision or ethics, it can be seen by the public as a marketing gimmick which can result in customers avoiding the brand (Shivakanth Shetty et al., 2019).

Greenwashing is a phenomenon where companies mislead customers regarding their environmental practices or product benefits. While many companies strive to improve their environmental position, some limit themselves to green claims without becoming more sustainable. This allows them to use green marketing as a competitive advantage, appealing to ecologically conscious consumers (Peattie & Crane, 2005; Szabo & Webster, 2021). However, research shows that the more ecologically conscious the customer is, the more skeptical they are towards the truthfulness of green advertising (Shrum et al., 1995).

2.1.3 Critique on femvertising

A similar, but far more recent phenomenon to green washing, which also applies to femvertising, is 'woke washing'. When brands start participating in woke advertising, they are often thoroughly scrutinized by potential buyers. The danger lies in the potential of failing to implement brand activism with the company's purpose and values, which makes the woke activism in advertising inauthentic. This leads to potentially misleading the customer with the 'woke' claims. It could damage both brand equity and the potential for social change (Vredenburg et al., 2020). This can happen with femvertising as well when it turns into faux feminism. This is a growing trend which occurs when brands use feminism to create idealistic taglines. Which means that a company does not pursue the action promoting gender equality by preventing misogynistic messaging or better representation of women in their boards (Varghese & Kumar, 2022). An example is Audi's super bowl commercial 'Daughter' discussed earlier in the introduction (Cause Marketing, 2017).

2.1.4 The future of femvertising

Research about the topic of femvertising has mostly been done about brands that exclusively target towards females. Besides that, the way men think about femvertising has rarely been explored as well.

In a study by A. Abitol & M. Sternadori (2016) focus groups are used in an exploratory study to investigate the effects of femvertising on consumer attitude and purchase intention based on company-cause fit. Their focus groups consisted of young-adults, and they were critical about advertising messages and questioned the motives behind them. None of them reported that there was a likelihood to engage in revenue-producing transaction with the companies shown. What they did find out is that the participants say that they find it important that the message is in line with what the company is known for or at least with what they practice. Since they only had one focus group consisting of male participants, they did not draw any conclusions about the differences in response between women and men. They also say it is convenient to define participants view on female empowerment and feminism beforehand (Abitbol & Sternadori, 2016).

Another study investigates attitudes of women towards femvertising advertisements compared to traditional advertisements. The findings from this research indicate that femvertising leads to more positive attitudes than traditional advertising because of a lower advertisement aversion. A limitation of this study is again that there were only female participants, and they did not establish their view on feminism beforehand (Åkestam et al., 2017).

A paper by V.E. Drake shows very similar results. Only female participants were randomly exposed to traditional or femvertising advertisement for the same brand. The results were that femvertising had a

positive impact on the brand opinion, purchase intention and the emotional connection with the brand. A limitation of the study is again that they did not include men to react to the same kind of advertisements (Drake, 2017).

While these studies provided some valuable insights, they are not applicable in all cases to other brands' use of femvertising today. In recent years, a broader group of companies have begun to use femvertising in their marketing strategies that are not limited to women alone. Heineken with the 'Cheers to all" campaign (Heineken, 2020) and Bumble with the "The ball is in her court" campaign are both examples of this. These campaigns, that have already been discussed in the introduction, are from companies who target to both genders, and these in particular can be considered as femvertising.

That the femvertising movement is not excluded for men is also evidenced by two other examples. Gillette's controversial campaign "We believe: The best a men can be" (also discussed in the introduction) shows that even products aimed only at men can be a subject for femvertising.

Based on the observation that more companies are beginning to implement femvertising in their marketing without proper research on the subject, it is even more valuable to dive deeper into the matter. Without proper research mistakes like Audi did with their campaign are easily made (Cause Marketing, 2017). They had to compromise on their credibility since they did not practice what they preached (Erasmus, 2018). It seems there is a gap in literature that explores the way women and also men feel about the use of femvertising for products that can be used by both genders in particular. And as S. Shetty (2019) concluded, the connection between the brand and the message must be authentic and genuine, otherwise it risks being seen as a marketing gimmick. In general, it can be stated that a consumer can be unforgiving when claims about the products are not valid (M. Becker et al., 2019).

2.1.5 The role of gender in advertisement and femvertising

By now it is clear that gender plays a big role in marketing and advertising. For this study it is important to dissect the role of gender in marketing since it becomes more important in the use of femvertising as well. More companies have started to include men in their target audience for their femvertising messages besides the targeted women. To understand what the effect of gender and gendered products in femvertising is, it is valuable to dig deeper into this subject by finding out what role gender had played in advertising in the past.

First, marketing is used in certain ways to portray men or women in advertising. Research shows that women are traditionally in general more likely to be presented in more family oriented, decorative, demure or/and fewer professional roles (M. Becker et al., 2019). Men, on the other hand, are typically more likely to be portrayed as independent, professional, and authoritarian. In their case age and physical appearance is less important compared to women (Zotos & Eirini, 2014). Another study also concluded

that women in commercials are more likely to be younger and depicted as users of household products and/or in dependent roles in home situations. Men are more likely to be seen in out of home independent roles (Gilly, 1988; Knoll et al., 2011). Femvertising is an example in which marketeers try to do just the opposite of the above.

Furthermore, consumers can, based on their shared culture, determine which products are suitable for women and men. But these cultural norms alongside psychological factors can prevent a certain gender from buying a useful product they desire because it does not belong to their gender (Morris & Cundiff, 1971). On the other hand, marketeers have also used marketing to assign a certain gender to a certain product (Aaker, 1997). This eventually leads to people feeling that a product belongs more to a given gender than the other while they can and, in most cases, are used by both genders. Some products seem to belong to a certain gender and a gendered product seems to be given a masculine or feminine identity (Milner & Fodness, 1996; Neale et al., 2015; van Tilburg et al., 2015). In this case it is not about obvious feminine or masculine products which are specifically designed for a certain gender like sanitary pads for women or a beard trimmer for men. In fact, gendered products could be acceptable by either gender, but the product is mainly or exclusively marketed towards a certain gender. This can be done with the design, advertising, promotion or perhaps distribution (Alreck, 1994). It is stated that men can be more reluctant to accepting a 'feminine' product than the other way around. Males can manifest anxiety for products with a feminine image (Ulrich & Tissier-Desbordes, 2018).

Fugate's (2010) study found that consumers associate certain products with gender identities. For instance, cars, athletic shoes, coffee, and beer are viewed as masculine. In contrast, hygiene and grooming products (except toothpaste, which is seen as androgynous) are considered feminine. Wine, bath soap, and food processors are also seen as feminine (Fugate & Phillips Melancon, 2010). Older research on impulse buying suggest that men and women are drawn towards specific product categories, although these categories can be used by both genders, Men tend to be more interested in functional products, while women tend to prefer products with an appearance-oriented focus (Dittmar et al., 1995). Research on beer as a product category suggests that it is often considered a more masculine alcoholic beverage than wine or cocktails. This perception is due, in part, to the associations that people have created around beer. However, this does not mean that women are not interested in beer, and the way beer is marketed can discourage female customers from making a purchase (Chapman et al., 2018)

The concept of whether a product is considered as feminine, or masculine is fluid and has the possibility to change over time. This may be because of changing gender roles in society, but also because of the way marketers position the product (Fugate & Phillips Melancon, 2010). There is an example that demonstrates both the power of marketers in assigning gender and one of the very first forms of what today might be called femvertising. When tobacco smoking became popular and normal in the last century, it was initially considered something men did. The brand Virginia Cigarettes made a change to

this when they launched their new 'Virginia Slims – Slimmer than the fat cigarettes men smoke' with the slogan "You've come a long way baby". With this campaign a movement started in the industry and smoking became something for sophisticated women too. With their messaging they played into the women desire for freedom, success, glamour, and business appeal. With the power of marketing, they have made a male-dominated product accessible to women (Richmond, 2003).

Assigning a particular gender to a product category and using an aligned marketing strategy to sell the products is a common occurrence in the past (Aaker, 1997). Masculine product categories using a marketing strategy that is traditionally more used for feminine products (like femvertising) to advertise their product is a newer trend. It is not known how customers feel about using femvertising for these types of products. Nor whether it works positively as with some feminine products and whether it can backfire and possibly damage the brand's reputation. Knowing which product categories are considered feminine or masculine will help this research determine for which of these product categories femvertising is more appropriate and for which it could backfire. Research states that being able to identify with a company is a powerful tool. But, for companies that have a broad consumer base, identification among one particular consumer segment might lead to disidentification among other segments (Bhattacharya & Sen, 2003). It could result in trying to include a customer segment while it backfires on one of a company's other segments.

2.1.6 Processing fluency and attitude

The main interest of this study is to examine when the use of femvertising is not successful anymore and could potentially backfire. The phenomenon of "processing fluency" may provide an explanation for the success femvertising campaigns have had in the past (Hainneville et al., 2021; Kapoor & Munjal, 2019) and why it possibly does not work for every consumer audience and/or every product. Processing fluency is a cognitive bias in which a person's liking of something is linked to how easily the brain finds it to think about, mentally process and understand it. According to the theory of hedonic marking of processing fluency, responses to stimuli are influenced by the ease or fluency with which the stimuli are processed (Musch & Klauer, 2003; Storme et al., 2015). It is stated that processing fluency is of great importance in consumer behavior because it can influence a broad range of consumer judgments and secondly, it can be triggered by many different manipulatable variables. When a consumer feels familiar with a subject, it makes it easier to process (Alter & Oppenheimer, 2009; Graf et al., 2018).

The important connection between processing fluency and the use of marketing has been researched in several ways. For example, it helps with brand recognition and brand preference. Long term exposure of advertising for a brand enhances the ease with which the consumer recognizes and processes a brand. Since the consumer 'knows' the brand already it helps towards more favorable attitudes towards the brand (Janiszewski & Meyvis, 2001; Lee & Labroo, 2004). Research has also stated that an

advertisement that is not easy to process can lead to a consumer missing its message completely. The customer is not able to deeply process the information on a cognitive level, which increases the risk of skipping to something else. This explains why processing fluency can be important for making an advertising message a success (Storme et al., 2015).

Femvertising advertisement is designed to empower women and challenge gender stereotypes in ways that align with the originally female target audience's values and beliefs, making them easier to process and positively evaluate. According to the theory of processing fluency this could explain the success femvertising has had in the past with female focused product categories targeting to women.

Storme et al. (2015) states that there are significant positive correlations between processing fluency and several constructs like attentions to an ad, and the motivation to process the ad and the depth of processing. These constructs have a positive effect on a person's attitude towards the ad and their purchase intention (Storme et al., 2015). Attitudes have the possibility to influence and individual's decision to make a purchase. They are evaluative judgements or feeling that people have about a particular object, person, or concept. They are formed through an individual's experiences, social influences, and cognitive processes, and can be positive, negative, or neutral (Argyriou & Melewar, 2011). The way an individual perceives an advertisement can have a significant impact on their willingness to buy a product or service. A positive attitude towards the advertisement is more likely to result in a higher willingness to purchase, while a negative attitude can reduce the chances of buying (MacKenzie & Lutz, 1989) (MacKenzie et al., 1986).

2.2 Hypotheses

In this research it is proposed that a company performing femvertising advertisement for a product, influences customers attitude towards the product and their willingness to buy. Whether the attitude will be positively or negatively affected, might be explainable by different variables.

As known by now, femvertising is not a 'tool' used by only female targeted brands anymore. Even though research shows some interest in femvertising being used for brands with a broader target audience, it still lacks some aspects. Research about the femvertising campaign from Audi involves a brand that targets both men and women. This research is also about the 2017 super bowl Audi commercial "Daughter", as discussed earlier (Cause Marketing, 2017). According to the research, the advertisement was in general received more negative than positive, while Audi claimed to identify and acknowledge a current social issue as they discussed gender stereotypes and equality in a business environment. The research by M. Erasmus (2018) explored the brand resonance of South-African females regarding to the femvertising campaign from Audi. Whereas the overall result of this research tells that there was an overall positive influence on the brand perception and the participants stated that they found it empowering, it only tells something about the perception of women (Erasmus, 2018). They give no insights in the brand resonance of potential male customer. Although this research stepped into a broader spectrum of femvertising by examining a brand with both male and female customers, it still lacks examination of the male point of view.

In another research earlier discussed, focus groups are used in an exploratory study to examine the effects of femvertising on consumer attitude and purchase intention. These focus groups were separated by gender. In this study different kinds of product categories were discussed in and males were included as participants ('Always' "like a girl" – female focused, 'Ram Trucks' "courage inside" – male focused, and 'Verizon' "inspire her mind" – androgynous, but there were too few male participants to come up with valid conclusions and finding differences in gender was not the goal of the study (Abitbol & Sternadori, 2016).

Furthermore, there are other studies on femvertising, but the vast majority of them only covers brands targeting women instead of including brands with a wider target audience as well (Hainneville et al., 2021) (Kapoor & Munjal, 2019). Overall, these studies conclude that femvertising has a positive outcome on the purchase intention of these women. It is expected that the positive effect will, in general, carry over to brands with a wider target audience as well. This leads to the following hypothesis:

H1: Femvertising advertisement positively affects the willingness to buy for products with a target audience that is aimed at all genders.

Before there is a positive or negative effect on the willingness to buy after seeing a particular advertisement, it might be explainable because of another variable. Available studies about femvertising often take the attitude towards the ad, brand or product into account (Abitbol & Sternadori, 2020; Åkestam et al., 2017; Elhajjar, 2021; Kapoor & Munjal, 2019).

A study by N. Åkestam aims to provide a better understanding of how femvertising impacts consumer attitudes and behaviors, and how it may differ from other forms of advertising that portray women in a more traditional or stereotypical manner. The study found that femvertising can have a positive impact on consumer attitudes and behaviors, particularly when it is perceived as authentic and genuine. Consumers who perceived femvertising as authentic were more likely to report positive attitudes towards the brand. (Åkestam et al., 2017). Another study by D. Kapoor and A. Munjal tested whether there is a relationship between the women's attitude towards femvertising and the influence over purchase intention. However a significant relationship between both has not been found (Kapoor & Munjal, 2019).

Although these studies did not find a significant relationship between women's attitudes and their purchase intention on willingness to buy, it does not necessarily mean that no such relationship exists. A possible mediating effect of attitude on willingness to buy refers to the way that attitudes influence an individual's decision to make a purchase. Like stated earlier by Argyriou & Melewar (2011) attitudes are feelings of people formed by experiences and they can be positive, neutral, or negative. In the context of consumer behavior, attitudes can play a role in an individual's willingness to buy a product or service (Spears & Singh, 2004). When an individual has a positive attitude towards a brand or product, they are more likely to be willing to make a purchase. On the other hand, if an individual has a negative attitude towards a brand or product, they may be less likely to make a purchase, even if other factors, such as price or convenience, are favorable (Long Yi, 2011) (Mohd Suki, 2016).

It is assumed that the general effect of attitude on purchase intention and willingness to buy will be applicable to the concept of femvertising as well. Since the concept has not been tested in many studies about femvertising or has not always been proven significant, it is relevant to test it in this study. The following hypothesis assumes that a possible positive effect of femvertising on willingness to buy, can be explained by a positive increase in attitude after seeing the femvertising message.

H2: The positive effect of femvertising on willingness to buy can be explained by the mediating effect of a positive change in ad attitude towards the product caused by femvertising.

The effect of femvertising on a person's attitude and willingness to buy might be influenced by other variables. The upcoming two hypotheses test the possible moderating influence of variables on the product attitude of a customer. There could be exceptions in which the effect of femvertising on attitude

is influenced. Like stated earlier, research's findings in differences between the way women or men react to femvertising are minimal. The research by M. Erasmus (2018) investigated a campaign from Audi with a non-specific gendered target audience. The research missed an opportunity to investigate males' perception of the commercial. It could be valuable to compare both women's and men's perspective on femvertising for this campaign to see whether gender matters in the way femvertising is perceived. The research from 2016 by A. Abitbol and M. Sternadori included men as participants in their study on femvertising but did not include their findings since it involved too little participants. On the other hand, the men who participated in the study did have opinions about the femvertising advertisements, of which the researchers were surprised by the richness and variety of men's perspectives (Abitbol & Sternadori, 2016). While these findings are not included in the research's conclusions, it does show that there is a reason to include men in femvertising studies.

Prior research states that gender has an important role in marketing as stated earlier by P.L Alreck (1994). Marketeers have used gender in their advertising campaigns to assign a certain gender to a product. This has led to products being perceived as more feminine or masculine, even though they are not limited to any particular gender. This can result in an unwillingness to use a product that has a different gender than what a person identifies with (Alreck, 1994). A similar effect could be applicable to the concept of femvertising being more appealing to women than men. It will be explored whether femvertising could even potentially harm the product attitude of male customers. Men have become part of the femvertising target audience as well (Cause Marketing, 2017; Guardian News, 2019), but males are less likely to identify themselves as feminist or are unsure about whether they stand behind feminist believes (Edley & Wetherell, 2001; Silver et al., 2019). Due to the concept of processing fluency (Lee & Labroo, 2004), it could be that a femvertising message is harder to process for males compared to females. Since so little is known about men's perceptions of femvertising while they are a potential consumer for some brands that use femvertising, it is all the more important to find out if there are differences in how different genders think about femvertising. This leads to the following hypothesis that states that the possible positive effect of a femvertising message on product attitude will be stronger for females than for males.

H3: The effect of femvertising on ad attitude is moderated by gender, such that femvertising has a stronger positive effect on ad attitudes among women than men.

Apart from gender, another variable could also influence the effect of femvertising on a person's ad attitude. Prior research has shown that gender also plays a role in the division of product categories which results in some products being perceived as masculine or feminine, and others as androgynous (Dittmar et al., 1995; Fugate & Phillips Melancon, 2010). Like P.L. Alreck (1994) states this can result in a perceived gender association of certain products, leading to a reluctance to use a product that does not align with a person's gender identity. This can be despite the fact that these products are not

exclusively intended for one gender (Alreck, 1994). Many studies about femvertising focus on researching products or brands which are considered as more feminine such as shampoo or kitchen supplies (Hainneville et al., 2021; Kapoor & Munjal, 2019). The study by A. Abitol and M. Sternadori (2016) does consider different types of products with different "gender identities," but they draw no conclusions from it.

Since it is stated that women and especially men can have a certain degree of reluctance towards products they do not traditionally identify with, it is assumed that due to the concept of processing fluency the same concept is applicable to the use of femvertising for different product categories as well (Aaker, 1997; Morris & Cundiff, 1971; Musch & Klauer, 2003). This means that a 'masculine' product has a less obvious fit with femvertising which leads to a negative effect on the product attitude of a customer. For a 'feminine' product it is expected to fit with femvertising which could lead to a more positive product attitude. An important note is that all products used in this research should have both male and female customers. The products used are targeted to all genders but are traditionally more related to a certain gender or no gender at all. To research whether the assumption holds, it has led to the following hypothesis:

H4: The effect of femvertising on attitude is moderated by product category such that femvertising for a feminine product category has a more positive effect on ad attitude than for a masculine product category.

2.3 Conceptual model

The conceptual model representing the hypotheses and variables is shown in the following figure.
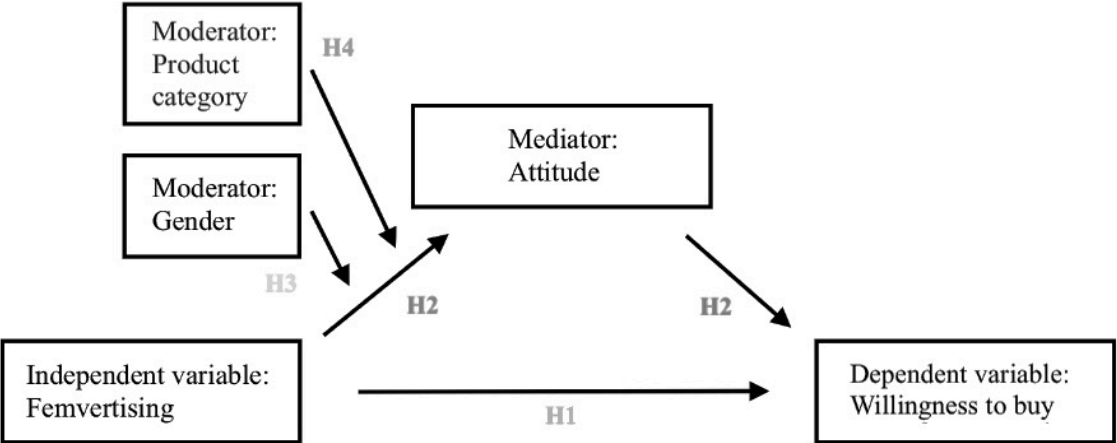
Figure 1: Conceptual Model

3. Methodology

This chapter outlines the methods used to gather and analyze the materials necessary for the study. Initially, the data collection techniques employed to address the main and sub-questions are discussed. Next, the pre-test will be examined, which provided valuable information used to construct the survey. The flow of the survey and the data collection process will also be analyzed. Finally, the model specifications used to analyze the data are described.

3.1 Study design

This research aims to determine how femvertising affects consumers attitude towards an advertisement and accordingly their willingness to buy of a certain product. In this study, it is particularly interesting to examine when consumers are hesitant after seeing a femvertising ad compared to a more traditional ad. It is researched whether gender and different kinds of products in the advertisement make a difference in consumer's restraint after seeing the femvertising advertisements.

Both the main research questions and the sub-questions will be answered with the results from quantitative data in the form of an online experiment. A survey is used as the measuring instrument for the online experiment. The experiment with which the quantitative data is collected has a between-subject design. This means that every respondent is assigned to one out of the two conditions. One condition is the treatment group whose respondents' answered questions about femvertising advertisements, and the other condition is the control group whose respondents' answered questions about more traditional and neutral advertising. There has been chosen for a between-subject design for the conditions instead of a within-subject design to reduce the possibility of bias (Charness et al., 2012). Respondents of the survey were not aware that they were randomly assigned to different conditions. When assigned to a random condition, the respondent was shown four different made-up advertisement which they had to answer questions about. The products (two being perceived as more masculine, two being perceived as more feminine) that are used in the advertisement and the exact content of the advertisements is pre-tested and discussed later in this chapter (3.2 Pre-test). All the respondents answered questions about all the products, which makes the product within-subjects. Most of the questions asked to the respondents are asked in a Likert-scale format to create and ensure unity among the whole survey. The research is built out of the following variables:

The independent variable is the type of advertisement. This categorical variable is split into two categories, femvertising advertisement and traditional advertisement. It contains advertisements from several products belonging to different product categories with target audiences that are not specifically male or female. The dependent variable is 'willingness to buy'. This variable measures the concrete effect of femvertising on respondents willingness to buy.

The mediator variable 'ad attitude' measures the way respondents feel about a the product's ad after seeing a traditional or femvertising advertisement. This variable will help to explain what the respondent's attitude is towards a certain femvertising or traditional ad and what the possible mediating effect is on the willingness to buy.

The next variable 'Gender' serves as a moderator. The respondent indicated with which gender they identify themselves. This variable helps to find out whether certain genders react in different ways to femvertising than others.

The last variable 'Product category' also serves as a moderator and is used to divide the products in the research into two product categories: product categories perceived as feminine (two products) and product categories perceived as masculine (two products). This division is created because some products traditionally are considered to be more feminine or masculine but still all genders can make use of the product. For example, cars are perceived as more masculine and body care products are considered as more feminine (Dittmar et al., 1995). This variable will help to understand whether certain product categories with a certain focus on gender will be potentially more suitable for femvertising.

Defining the variables helps to test the following hypotheses:

The first hypothesis (*H.1: Femvertising advertisement positively affects the willingness to buy for products with a target audience that is aimed at all genders*.) belongs to the main research question. The dependent variable 'willingness to buy' is measured with three 7-point Likert-scale questions in which respondents had to define to what level they agree or disagree with the statements given ("I would be interested in buying this product.", "If I was looking for *insert product*.", "I would buy this product." and "I would buy this product instead of a similar competing product.") (Spears & Singh, 2004).

The second hypothesis (*H2: The positive effect of femvertising on willingness to buy can be explained by the mediating effect of a positive change in ad attitude towards the product caused by femvertising.*) belongs to the first sub-question. The independent variable 'ad attitude' is tested as a mediator for the effect of femvertising on 'willingness to buy' with six 7-point Liker-scale questions in which the respondents also had to define the level of agreement or disagreement on the statements given ("I like the ad.", "The ad appeals to me.", "The ad is annoying.", "The ad irritates me.", "The ad is interesting." and "The ad suits the product shown.") (MacKenzie et al., 1986) (Spears & Singh, 2004).

The third hypothesis (*H3: The effect of femvertising on ad attitude is moderated by gender, such that femvertising has a stronger positive effect on ad attitudes among women than men.*) belongs to the second sub-question. With this hypothesis it is tested whether gender has a moderating effect on ad attitude and subsequently willingness to buy. To answer this hypothesis, knowledge about a respondents gender, 'ad attitude' and 'willingness to buy' is needed. To be sure that men and women are randomly

equally divided into the two conditions (traditional vs. femvertising), the question about respondent's gender is asked at the beginning of the survey. To reduce the potential risk of respondents becoming suspicious by asking about their gender at the beginning of the survey, they were also asked about their age. Other demographical questions are asked at the end of the survey which can be used, when necessary, to reduce possible confounding effects. The division by gender allows to analyze their results separately.

The fourth hypothesis (*H4: The effect of femvertising on attitude is moderated by product category such that femvertising for a feminine product category has a more positive effect on ad attitude than for a masculine product category).* Belongs to the third sub-question. To answer this sub-question four different kind of products were tested in the survey. Two of them were products that belong to a product category that is considered as more masculine (products used: Beer and cars) and the two other products used belong to a product category that is considered as more feminine (products used: Perfume and kitchen utensils). The explanation of the choice of products will be further discussed in the pre-test section below.

3.2 Pre-test

To create the stimuli needed for the survey, two aspects had to be pre-tested. It had to be determined what products to use for the advertisement stimuli that needed to be made and what traditional and female empowering slogans/taglines should come along with them. The goal of the pre-test was to test which ideas were best to use in the survey.

For the product variable it was important to find out what products consumers perceive as more masculine or feminine. Inspired by prior research 14 products had been selected to test on a small sample of respondents. These products were already used or tested in prior studies on being perceived as masculine, feminine or androgynous. The products used in the pre-test were coffee, cars, athletic shoes, potato chips, lawnmower, beer and construction tools (in prior studies referred to as being more masculine) and perfume, tea dishwashing liquid, wine, kitchen utensils, soap and shower gel (in prior studies referred to as being more feminine) (Chapman et al., 2018; Coley & Burgess, 2003; Fugate & Phillips Melancon, 2010; Gilly, 1988). The respondents had to indicate on a 7-point scale how feminine or masculine they considered the products to be.

For the slogan or tagline variable a number of 18 made-up taglines were tested (see 'Appendix III: Pre-test' for the taglines used). Some of those slogans had a more female empowering message and other more traditional. Respondents of the pre-test had to rate the slogans on a scale from 1 to 10, with 1 being not female empowering at all and 10 being extremely female-empowering. At the time of running

the pre-test, it was not sure what kind of products were going to be used. This resulted in some taglines not being generally applicable to all kinds of products.

In total 44 respondents were gathered of which 40 were useable to analyze. A result will be seen as significant at a $p<0,05$. To analyze the pre-test, a one-sample t-test in SPSS has been used on both the results of the products as the taglines (Appendix III: Pre-test). For the products tested, the four significantly highest scoring products (a higher score means rated more masculine) were cars ($\mu=5,350$), lawnmower ($\mu=5,525$), beer ($\mu=5,475$) and construction tools ($\mu=5,925$). Out of these products 'Car' and 'Beer' had been chosen to use in the survey as more masculine products. The lowest scoring products (a lower score means rated more feminine) were perfume ($\mu=2,750$), tea ($\mu=3,125$), wine ($\mu=2,925$) and kitchen utensils ($\mu=3,050$). Out of these products 'Perfume' and 'Kitchen utensils' had been chosen to use in the survey as more feminine products.

The choosing of an appropriate additional tagline was a bit more complex since not all the taglines are applicable to all products. So, some taglines had to be customized to make them fit the product. Taglines that scored significantly above the mean of 5 were used to make tagline for the femvertising products because respondents rated them as more female empowering. The femvertising ads got the following taglines: perfume got 'Charm is defined by you!', cars got 'Drive your way towards equality!', kitchen utensils got 'Women or men, can do anything the other can!' and beer got 'Toasting to equality, cheers to your choice!'. The taglines that scored significantly below the mean of 5 were rated as less female empowering and were customized and used for the traditional ads. The ads got the following taglines: perfume got 'Renew your soul!', cars got 'Discover the joy of driving', kitchen utensils got 'Get cooking! Unleash your inner chef!' and beer got 'Toasting to refreshment, cheers to your summer!'.

In some cases, the 'highest' or 'best' results are not used to create the ad, but instead a product or tagline has been chosen to make a better fit for the made-up advertisement so it would look or sound more credible. To reduce to possibility of measuring confounds, the ads had to be as similar as possible, apart from the changing taglines depending on the condition. For almost all the products, an image is used that could be used in both situations. Only for the car ad a different image was used for the traditional and femvertising ad to make the one look more female empowering and the other more traditional. In the traditional hands of a man are seen and in the femvertising ad hands of a woman can be seen. Apart from that the two images are similar. Furthermore, it has been taken into account that the length of the taglines for both conditions had to be similar as well. The created ads used in the survey can be found in the following table (Table 1) on the next page and the appendix (Appendix IV: Advertisements used in survey).

	Traditional advertisement	*Femvertising advertisement*
Perfume	RENEW YOUR *Soul*	*Charm* IS DEFINED BY YOU
Kitchen utensils	**GET COOKING!** **UNLEASH** YOUR INNER CHEF!	**WOMEN OR MEN,** **CAN DO ANYTHING THE OTHER CAN!**
Beer	TOASTING TO **REFRESHEMENT** CHEERS TO YOUR SUMMER	TOASTING TO **EQUALITY** CHEERS TO **YOUR** CHOICE
Car	**DISCOVER THE JOY OF DRIVING**	**DRIVE YOUR WAY TOWARDS EQUALITY**

Table 1: Advertisements used in the survey

3.3 Main study

The survey was available in both English and Dutch and started with an introduction to welcome the participants and give them some information about the purpose of the study. Respondents were told that participation was voluntary and contact information was given. The respondents had to confirm that they had read the information and agree to participate.

After that respondents were asked about their gender and age of which gender was the most important here to be able to branch respondents randomly into seeing femvertising or traditional ads of the same products. The reason why the gender question is asked at the beginning is because gender is an important factor in this research. By asking the question at the beginning, the researcher can ensure that both men and women are equally represented in both the traditional and femvertising conditions, making the comparison between the two conditions more accurate. On the same page, a control variable question was asked about their interest in the upcoming products. After this, all respondents had to read information which told them they were going to see four different ads on which they had to give their opinion. Since not all respondents were probably equally interested in buying the products they were going to see, they were told to imagine that they were looking for a product in that product category.

The ads of the products they were going to see are all brandless on purpose. It is not desired that respondents would subconsciously take their positive or negative opinions into account about a brand while answering the questions. To assure that the respondents would not think that the products shown are of poor quality because no brand name could be found, they were also told that they can assume that the products they were going to see are of good quality.

Following this, the respondents were divided into two groups: the 'traditional' condition or the 'femvertising' condition. Each group was presented with a set of statements to which they had to indicate their agreement or disagreement. Three of the statements are about their willingness to buy or purchase intention and six of the statements are about their attitude towards the ad. Both groups (traditional vs. femvertising) saw the same or very similar image for the products to reduce confounds (see table 1). Near the ending the respondents were asked to tell how female empowering they thought the advertisements were as a manipulation check. After that the last demographical questions were asked about their work situation, education level, nationality and whether they would describe themselves as feminist or not. At the end there was room for the respondents to leave comments and feedback (see Appendix I for complete survey)

3.4 Data collection

In advance it was stated to have at least 50 respondents (n>=50) in each condition to make working with the data valid (Simmons et al., 2013). The respondents were branched at the start of the survey into a 'femvertising' condition or a 'traditional' condition. Since 'gender' is one of the important variables it was branched at the start as well that there would be an equal division of men and women into both the 'femvertising' (women n>=50, men n>=50) and 'traditional path.' (women n>=50, men n>=50). This results in at least 200 respondents necessary under the most optimal circumstances.

The survey that has been set up via Qualtrics was distributed via different social media networks (WhatsApp, Facebook, LinkedIn, Instagram and Nextdoor). The results of the survey are analyzed with the statistical platform software SPSS with the help of the SPSS extension by Andrew F. Hayes (Hayes, 2017).

3.5 Manipulation check & control variables

Although the pre-test already tested whether people could differentiate the slogans on their level of being female empowering, still a manipulation check is included in the survey. For the manipulation check at the end of the survey the four advertisements they had to answer questions about earlier, were shown again. The respondents being in the 'femvertising' condition only saw the femvertising ads and the ones in the 'traditional' condition only saw the traditional ads. All the respondents had to indicate on a 7-point Likert-scale to what extent they thought the ads shown contained a female empowering message or not.

Furthermore, another question is asked which could serve as a possible control variables when analyzing the data. At the beginning of the survey (before a respondent had seen any ad yet) it was asked whether a respondent had any interest in buying one of the products they were going to see in the upcoming year at all. This is measured with a 7-point Likert-scale. Although respondents were asked to imagine that they were interested in the product shown, this question is still left in the survey in case it would be necessary to control for it.

3.6 Model specification

The first hypothesis (H1) explores the effect of the independent variable of a femvertising advertisement on the dependent variable willingness to buy. The independent variable is a dichotomous variable (consisting out of femvertising ads or traditional ads) and the dependent variable is continuous measured with a 7-point Likert scale. This main effect of femvertising on willingness to buy will be tested with independent sample t-tests.

The second hypothesis (H2) will be tested through the SPSS extension PROCESS (Hayes, 2017), specifically with model 4 (Appendix II: Models used by Hayes). With this it is tested whether there is a possible mediating effect of ad attitude (continuous variable measured with 7-point Likert scales) for a femvertising ad (dichotomous variable) on willingness to buy.

To test both the third and the fourth hypothesis (H3 and H4), moderation analyses are necessary. For H3 the moderating role of gender (categorical variable) is tested, on the effect of femvertising (dichotomous variable) on ad attitude (continuous variable) and subsequently willingness to buy (continuous variable). Because H3 is a fully between-subject design, model 1 from PROCESS by Hayes (2017) will be used to test the hypothesis. For H4 the moderating role of a gendered product (categorical variable) is tested, on the effect of femvertising (dichotomous variable) on ad attitude (continuous variable) and subsequently willingness to buy (continuous variable). Because H4 has a combination of a between- and within-subject design, it will be tested with a Mixed ANOVA.

4. Results

4.1 Data description

The goal for this study was to obtain at least 200 respondents with at least 100 women and 100 men equally divided over two conditions (traditional vs. femvertising). With a survey completion rate of 81,21%, 389 useful respondents were gathered. Of those respondents 113 were male (n=57 males in femvertising condition, n=56 males in traditional condition) and 276 were female (n=139 females in femvertising condition, n=137 females in traditional condition). The age of the subjects lies between 18 and 84. Of all respondents, relative to the rest, about one third were between the ages of 20 and 30 but the distribution is otherwise fairly evenly distributed across all ages (μ=44,88; σ=17,54). In addition, 62% of the respondents said to be employed (either full-time, part-time, or self-employed) and 19% were students. Most respondents are highly educated with a university degree (54,5% in total, either master's or bachelor's degree) or graduated from a university of applied science (29,6%). At last, most of the respondent were of Dutch nationality (91,8%) (See Appendix V: Data analyses results 1). While analyzing the data, a result will be considered significant if the p-value is below 0.05 ($p < 0,05$). Although not all results are normally distributed, for the tests done, this should not be a problem since the sample is large (n>30) (Fagerland, 2012).

4.2 Reliability & Manipulation check

To prepare the data for analyzing, it is necessary to ensure construct validity to be able to correctly measure the 'ad attitude' and 'willingness to buy'. The data for both 'willingness to buy' and 'ad attitude' can be interpreted on a score from 1 to 7, with 1 being very low and 7 being very high. The Cronbach's Alpha index is used to control for reliability of the variable used to measure the two factors. It can be said that a value of 0,70 or higher is considered reliable (Cronbach, 1951). To construct the overall variable of 'willingness to buy', three variables of four products had to be tested on their reliability. The Likert-scale questions that measured 'willingness to buy' (μ=3,085; σ=0,410), have a Cronbach's Alpha of 0,833. The same has been done to construct the 'ad attitude' variable. The questions that measured 'ad attitude' (μ=3,908; σ=0,711) have a Cronbach's Alpha of 0,871. Thus, Cronbach's Alpha for all variables is far above the minimum of 0,70. This indicates that the factors 'willingness to buy' and 'ad attitude' are measured successfully, and the Likert-scale scores can be reduced into two variables (See Appendix V: Data analyses results 2).

For the manipulation check it is tested whether respondents indicate a difference between the ads which are meant to be traditional, and the ads meant to be femvertising. It is tested on a 7-point Likert scale, where 1 is not at all female-empowering and 7 is very female-empowering. It needed to be tested whether the means of the two different groups are different from each other resulting in '*Ha: The ads*

from the femvertising conditions will be considered as more female empowering than the ads from the traditional condition'. Unfortunately, using an independent sample t-test is not ideal since not all the assumptions can be met. The Levene's test shows that the assumption of homogeneity of variance does not hold for any of the results for the t-test. A non-parametric alternative, the Mann-Whitney U test, will be used to further analyze the manipulation check. The test revealed a significant difference in respondent's perception of how female empowering they thought the ads were. The traditional beer ad (Median=2; n=193) and the femvertising beer ad (Median=3; n=196) significantly differ from each other, $U=10514,0$; $z=-7,856$; $p=0,001$; $r=-0,40$. The significant difference can also be seen between the traditional car ad (Median=2; n=193) and femvertising car ad (Median=3; n=196), $U=8149,5$; $z=-10,034$; $p=0,001$; $r=-0,51$; and the traditional kitchen utensil ad (Median=2; n=193) and the femvertising kitchen utensil ad (Median=4; n=196), $U=9536,5$; $z=-8,655$; $p=0,001$; $r=-0,44$). Based on the effect size (r), there appears to be a moderate difference between the traditional and femvertising ads of beer, cars, and kitchen utensils (Sawilowsky, 2009). The effect size of the difference between the perfume ads appeared to be slightly smaller than those of the other products. But nevertheless a significant difference between the traditional perfume ad (Median=2; n=193) and the femvertising perfume ad (Median=2; 196) has been found, $U=13561,0$; $z=-5,044$; $p=0,001$; $r=0,26$. This means that Ha is not rejected so there is a significant difference between the two conditions: Treatment group (femvertising ads) and control group (traditional ads). The femvertising condition is perceived as more female empowering (See Appendix V: Data analyses results 3). An overview of the means and standard deviations of the perceived level of female empowerment in the ads, can be found in table 2.

		Product			
		Perfume	Kitchen utensils	Beer	Car
Advertisement	Traditional	μ = 2,09 σ = 1,35	μ = 2,18 σ = 1,35	μ = 1,98 σ = 1,15	μ = 1,81 σ = 0,98
	Femvertising	μ = 2,82 σ = 1,56	μ = 4,00 σ =2,04	μ = 3,41 σ = 1,86	μ = 3,56 σ = 1,82

Table 2: Descriptives of the level of female empowerment in the ads perceived by the respondents

4.3 Results for hypothesis 1

The first hypothesis tests whether femvertising has a positive effect on the 'willingness to buy' of a consumer *(H1: Femvertising advertisement positively affects the willingness to buy for products with a target audience that is aimed at all genders).* To test this hypothesis, it is first tested whether there is an overall effect noticeable when the 'willingness to buy' of all products are combined, and the only difference is whether respondents have been in the traditional or femvertising condition. Second, the

effect of femvertising on 'willingness to buy' is tested for each product separately to see whether the effects would differ from each other between the products.

To test the main effect of femvertising on willingness to buy, independent sample t-tests are used. The 'willingness to buy' of the 196 respondents answering questions about the femvertising ads (μ=3,096; σ=1,005) compared to the 193 respondents who answered questions about the traditional ads (μ=3,076; σ=0,861) demonstrated not to be significantly different. Indicating that the 'willingness to buy' for the femvertising condition is not higher than for the traditional condition, t(379,816)=-0,203; p=0,420 (one-sided). Concluding that there is no overall significant positive effect of femvertising on the 'willingness to buy'.

When independent t-test are done to the products separately, different results occur to each product. An overview of these differences can be seen in table 3 and will be further explained below.

Willingness to buy	Traditional	Femvertising	t-statistics	p-value (one-sided)	Direction
Perfume	μ = 2,504 σ = 1,184	μ = 3,056 σ = 1,433	-4,142	p = 0,001	Positive ↑
Kitchen utensils	μ = 3,416 σ = 1,455	μ = 3,138 σ = 1,472	1,877	p = 0,031	Negative ↓
Beer	μ = 4,090 σ = 1,568	μ = 3,811 σ = 1,508	1,787	p = 0,037	Negative ↓
Car	μ = 2,295 σ = 1,196	μ = 2,378 σ = 1,213	-0,673	p = 0,251	Positive ↑
All products together	μ = 3,076 σ = 0,861	μ = 3,096 σ = 1,005	-0,203	p = 0,420	Positive ↑

Table 3: Results t-tests effect (willingness to buy)

The results of the car ad align with the overall effect of all the ads combined because there is no significant result assuming that femvertising (μ=2,378; σ=1,213) had a more positive effect on willingness to buy than the traditional ad (μ=2,295; σ=1,196), t(387)=-0,673; p=0,251 (one-sided).

For beer and kitchen utensils the opposite of what was expected in this hypothesis occurs. Both results show that femvertising has a significantly decreasing effect on 'willingness to buy' compared to

traditional ads. The respondents who saw the femvertising kitchen utensils ad (μ=3,138; σ=1,471) compared to the control group who saw the traditional kitchen utensils ad (μ=3,416; σ=1,455) demonstrated significantly weaker 'willingness to buy', t(387)=1,877; p=0,031 (one-sided). Something similar occurs with the respondents who saw the femvertising beer ad (μ=3,811; σ=1,508) compared to the control group who saw the traditional beer ad (μ=4,090; σ=1,568). It also demonstrates significantly weaker willingness to buy, t(387)=1,787; p=0,037 (one-sided). Although, according to the overall theory this significant decrease in 'willingness to buy' for beer is less surprising. Since beer belongs in the masculine product category, a negative effect of femvertising is expected. With this theory in mind, it is still unexpected that femvertising has a decreasing effect on 'willingness to buy' for kitchen utensils, since this product belongs to the feminine product category and a better fit with femvertising was expected. The analysis of H4 will involve further exploration on the moderating role of product category.

There is only one product for which the presumption of the hypothesis holds, being perfume. The respondents who saw the femvertising perfume ad (μ=3,056; σ=1,433) compared to the control group who saw the traditional perfume ad (μ=2,504; σ=1,184) demonstrated significantly increased 'willingness to buy', t(375,724)=-4,142; p=0,001 (one-sided). Further analysis will explore whether the different results for the products can be explained. When looking at the data, it should also be noticed that the means of the 'willingness to buy' variable (which are on a scale from 1 to 7) are relatively low, which indicates that respondents do not have a very high purchase intention on average for the products. Nevertheless, differences between the means could still be relevant. The results of the t-tests do not explain why differences are measured. There is a possibility that product category as well as gender may be moderating as proposed in hypotheses H3 and H4. More detailed analyses are needed to gain further insights into this possibility and whether the measured differences can be explained by moderation. (See Appendix V: Data analyses results 4).

4.4 Results for hypothesis 2

With the second hypothesis it is tested whether the impact of femvertising on 'willingness to buy' can be explained by a mediating effect of 'ad attitude' (*H2: The positive effect of femvertising on willingness to buy can be explained by the mediating effect of a positive change in ad attitude towards the product caused by femvertising.*). The approach of testing this hypothesis has been similarly done as with H1. The effect has been tested on all the products together and on the products separately. When mediation occurs, it is possible that the effect of femvertising on 'willingness to buy' can be (partly) explained by 'ad attitude'.

To analyze the possible mediation, model 4 of PROCESS by Hayes served to determine if the variable 'ad attitude' mediates the effect of femvertising on willingness to buy. The test has been done on the four products separately (perfume, kitchen utensils, beer, car), to indicate for each individual product

whether mediation occurs. Also, the mediating effect of 'ad attitude' on 'willingness to buy' for all the products together is investigated. At first, it can be concluded that for all products femvertising has a significant effect on the 'ad attitude', although not all effects head in the same direction. This can be concluded due to the output of the mediation analyses from model 4 PROCESS by Hayes, but it is also checked with the same analyses used for H1 for consistency (Independent Sample t-tests).

The 'ad attitude' of the respondents answering questions about the femvertising ads (μ=3,809; σ=0,862) compared to the respondents who answered questions about the traditional ads (μ=4,007; σ=0,787) demonstrated to be significantly different with lower scores on 'ad attitude' from the traditional condition, t(387)=2,367; p=0,009 (one-sided). Furthermore, the 'ad attitude' of perfume seemed to be the only product significantly positively impacted using femvertising compared to traditional advertising, t(387)=-3,914; p=0,001 (one-sided). The attitude for all other products is significantly impacted in a negative direction when femvertising is used compared to traditional advertising. An overview of the results can be seen in the table on the last page. The same that was mentioned for "willingness to buy" in the previous section also applies to "ad attitude," namely that the overall averages are relatively low at the mean of 4. The results of the t-tests can be seen in the table below (Table 4) (See Appendix V: Data analyses results 5).

Ad attitude	Traditional	Femvertising	t-statistics	p-value (one-sided)	Direction
Perfume	μ = 3,530 σ = 1,079	μ = 3,970 σ = 1,141	-3,914	p = 0,001	Positive ↑
Kitchen utensils	μ = 4,181 σ = 1,183	μ = 3,498 σ = 1,467	5,059	p = 0,001	Negative ↓
Beer	μ = 4,836 σ = 1,350	μ = 3,560 σ = 1,374	2,003	p = 0,023	Negative ↓
Car	μ = 3,481 σ = 1,198	μ = 3,207 σ = 1,169	2,286	p = 0,011	Negative ↓
All products together	μ = 4,007 σ = 0,787	μ = 3,809 σ = 0,862	2,367	p = 0,009	Negative ↓

Table 4: Results t-tests effect (ad attitude)

Further, H2 assessed the mediating role of 'ad attitude' on the relationship between femvertising and 'willingness to buy'. The results for the perfume product revealed a significant indirect effect of the impact of femvertising on 'willingness to buy' (b=0,380; t=3,867; CI [0,190; 0,574]). In addition, the direct effect of femvertising on 'willingness to buy' in presence of the mediator 'ad attitude' became insignificant (b=0,172; p=0,067). This indicates that 'ad attitude' fully mediates the relationship between femvertising and 'willingness to buy' for the product perfume. The effect of the mediation is complimentary which means in this case that both the direct effect and indirect effect have a positive outcome on 'willingness to buy' when femvertising occurs.

The results for beer revealed the opposite. There is no significant indirect effect of the impact of femvertising on 'willingness to buy' (b=-0,251; t=-0,494; CI [0,001; -2,017]). Moreover, the direct effect of femvertising on 'willingness to buy', when considering the mediator, turned out to be non-significant as well (b=-0,028; p=0,767). This indicates that there is no mediation occurring for the relationship between femvertising and 'willingness to buy' for beer.

For kitchen utensils the results are not as straightforward. There is a significant indirect effect of the impact of femvertising on 'willingness to buy' (b=-0,550; t=-4,835; CI [-0,773; -0,300]) and a significant direct effect when controlling for the mediator (b=0,271; p=0,010). However, the total effect of the model is not significant (b=-0,276; p=0,06).

Something similar also occurs to the following. For cars and all products together, the results to H1 already show that there is no significant relationship of the main effect of femvertising on 'willingness to buy'. Although classic methods suggest not to further analyze into mediation when this occurs (Baron & Kenny, 1986), it has been chosen to still analyze a possible mediating effect. More recent studies among statisticians state that the total effect should not always be used as a gatekeeper for mediation tests but it depends on the nature of the study (Hayes, 2009; Pieters, 2017; Preacher & Selig, 2012). The results for the car ad reveal that both the direct effect (b=0,272; p=0,003) and indirect effect (b=-0,190; t=-2,276; CI [-0,352; -0,023]) are significant but again the total effect (b=0,082; p=0,501) is not significant. This appears to be the same for all products together with the direct effect (b=0,1825; p=0,008) and the indirect effect (b=-0,1633; t=-2,400; CI [-0,298; -0,030]) being significant, but the total effect (b=0,019; p=0,840) again being non-significant. In this case the non-significant total effect can be explained by the contradictory results of the direct and indirect effect, meaning that the effect moves in different directions. The challenge in understanding this lies in the fact that the impact of femvertising on 'willingness to buy' is influenced by competitive mediation. In this case it means that the effect of femvertising on 'ad attitude' moves in a negative direction and the effect of 'ad attitude' on 'willingness to buy' moves in a positive direction. However, this competitiveness is not troubling when considering the structure of the model. The way the variables affect each other is logical since a positive

relationship between 'ad attitude' and 'willingness to buy' is expected. It only leads to a non-significant total effect which is not a problem for further analyzing.

The results suggest that there is an indirect-only partial mediation for the categories of kitchen utensils, car and all products combined. Because in these cases, the direct effect is significant, it can be stated that 'ad attitude' does not fully mediate the relationship. This means that the effect of femvertising operates through an indirect path that involves one mediator (ad attitude), but possibly more.

Mediating effect	Total effect	Direct effect	Indirect effect	Confidence interval		t-statistics	Conclusion
				Lower	Upper		
Perfume	0,552 p=0,000	0,172 p=0,067	0,380	0,190	0,574	3,867	Full mediation
Kitchen utensils	-0,279 p=0,061	0,271 p=0,010	-0,550	-0,773	-0,300	-4,835	Indirect-only mediation
Beer	-0,279 p=0,075	-0,028 p=0,767	-0,251	-0,494	0,001	-2,017	No mediation
Car	0,082 p=0,501	0,272 p=0,003	-0,190	-0,352	-0,023	-2,276	Indirect-only mediation
All products together	0,019 p=0,840	0,183 p=0,008	-0,163	-0,298	-0,030	-2,400	Indirect-only mediation

Table 5: Results mediation analyses

Taking the positive direct effect into account, it can be concluded that another mediating variable, which is not measured in this model, may affect the relationship of femvertising on 'willingness to buy'. Two variables have been controlled as covariates: 'Product interest beforehand' and 'Level of how feminist respondents see themselves'. Nevertheless, these variables gave no different results than what is already measured. A summary of the mediation analyses is demonstrated in the table 5. The comprehensive analyses can be found in Appendix V: Data analyses results 6.

4.5 Results for hypothesis 3

The third hypothesis tests whether gender moderates the effect of femvertising on ad attitude (*H3: The effect of femvertising on ad attitude is moderated by gender, such that femvertising has a stronger positive effect on ad attitudes among women than men.*). Prior it was expected that femvertising would be less effective for males in comparison with females. Successful moderation could indicate that the effect of femvertising can be more or less effective for a particular gender.

Moderation interaction	Effect	t-statistics	p-value	Conclusion
Perfume	0,070	0,283	0,777	No moderation
Kitchen utensils	-0,195	-0,653	0,514	No moderation
Beer	0,138	0,455	0,650	No moderation
Car	0,588	2,237	0,026	Moderation
All products together	0,150	0,814	0,416	No moderation

Table 6: Results moderation analysis (gender)

First, model 1 by PROCESS (Hayes) has been used to analyze the moderation effect of gender on the 'ad attitude' of all products together and on the products separately. These results are summarized in table 6. The study assessed the moderating role of gender on the relationship between femvertising and 'ad attitude'. They reveal a non-significant impact and interaction of gender on the relationship for perfume (b=0,070; t=0,283; p=0,777), kitchen utensils (b=-0,195; t=-0,653; p=0,514), beer (b=0,138; t=0,455; p=0,650) and the products all together (b=0,150; t=0,814; p=0,416). For these products the findings suggest that the moderator gender does not have a meaningful impact on the relationship between femvertising use and 'ad attitude. This means that it does not matter whether the respondent is a man or woman, they will on average react the same to a traditional ad compared to a femvertising ad for these products.

When looked at the car ads, something different occurs. The results reveal a positive and significant interaction effect of gender on the relationship between femvertising and 'ad attitude'. The test of highest order unconditional interaction also confirms a significant moderation (R2-chng=0,013; F=5,004; p=0,026). Thus, only for the car ads the hypothesis is supported. An overview of the results of the interaction of the moderation can be seen in table 6. (See Appendix V: Data analyses results 7).

Results of simple slope analysis are conducted to better understand the nature of the moderating effects shown in figure 2 on the next page. This shows that for women there is not much of a change when they see a femvertising car ad compared to a traditional one. For men on the other hand, when they are shown a femvertising ad their ad attitude is more negative than when they would have seen a traditional car ad. This significant difference shows that in the case of car advertising, femvertising has a backfiring effect on males. For females there is no backfiring effect of a femvertising car ad compared to a traditional car ad, although there is also no improvement in their attitude.

Multiple Line Mean of ad attitude: Car by Condition by Gender
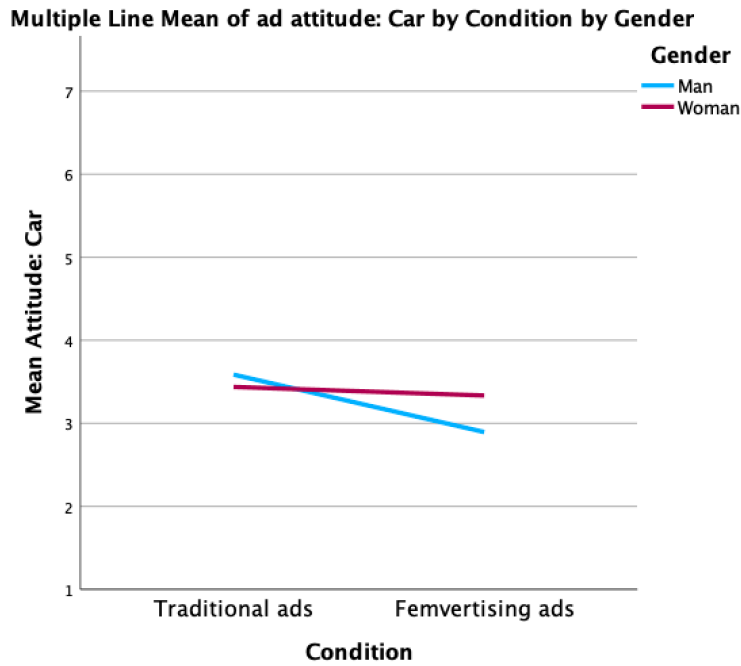
*Figure 2: Moderation (car) gender*condition*

4.6 Results for hypothesis 4

The fourth hypothesis states that the kind of product being advertised (either a product that is perceived as masculine or as feminine) moderates the effect of femvertising on 'ad attitude' (*H4: The effect of femvertising on attitude is moderated by product category such that femvertising for a feminine product category has a more positive effect on ad attitude than for a masculine product category.*). This statement suggests that perhaps particular product categories can be more successful for the use of femvertising then others. To test the hypothesis a Mixed ANOVA is used. This test compares the mean differences between groups that are split on two factors, one being a within-subjects factor and the other being a between-subjects factor. Because the different products have been seen by each respondent, it is not possible to analyze this moderation in the same way H3 is tested. Two Mixed ANOVA's have been conducted, of which one combining the products into a masculine and feminine product category, and the other Mixed ANOVA tests each product separately on moderation.

4.6.1 Mixed ANOVA 1

The first independent variable is the condition (traditional vs. femvertising) which is between-subjects. The second independent variable is the product category (masculine vs. feminine) which is a within-subjects. The dependent variable is the 'ad attitude'. In this first Mixed ANOVA tested, the within-subject variable consists out of the products perfume and kitchen utensils together, forming the feminine product category. The 'ad attitude' of the products beer and cars together, form the masculine product

category. So, analyzing occurs on a two-way 2 (condition: traditional vs. femvertising) x 2 (product category: masculine vs. feminine) Mixed ANOVA with repeated measures on the product category. An overview of the differences between 'ad attitude' per product category, effected by femvertising use, can be seen in table 7.

		Product category	
		Masculine	Feminine
Condition	Traditional	$\mu = 4{,}159$ $\sigma = 1{,}019$	$\mu = 3{,}855$ $\sigma = 0{,}872$
	Femvertising	$\mu = 3{,}883$ $\sigma = 1{,}060$	$\mu = 3{,}734$ $\sigma = 0{,}897$

Table 7: Descriptives 'Ad attitude' for product category

The assumption of sphericity is not relevant for the first Mixed ANOVA since sphericity can already be assumed because the within-subject variable consists out of only two factors. Levene's test is used for the assumption of equality of variances. The test showed non-significant results for both 'ad attitude' for masculine products ($p=0{,}696$) and 'ad attitude' for feminine products ($p=0{,}052$). This means that the assumption is met, and equality of variances can be assumed.

Results show a significant main effect of the within-subject variable 'product category' on 'ad attitude', $F(1)=16{,}954$; $p=0{,}001$. This means that the overall 'ad attitude' for the two product categories (masculine vs. feminine) significantly differs with masculine products receiving an overall higher 'ad attitude' then feminine products, regardless of the condition they are in. Also, results show a significant main effect of the between-subject variable 'condition' on 'ad attitude', $F(1)=5{,}604$; $p=0{,}018$. This indicates that femvertising in general has a negative effect on 'ad attitude' regardless of the product shown. While at first glance it seems that masculine products are slightly more harmed by the use of femvertising than feminine products, this difference is too small to be proven significant. This small non-significant result can visually be seen in figure 3 on the next page There is no significant interaction between 'product category' and 'condition' on 'ad attitude', $F(1)=1{,}976$; $p=0{,}161$ (See Appendix V: Data analyses results 8).
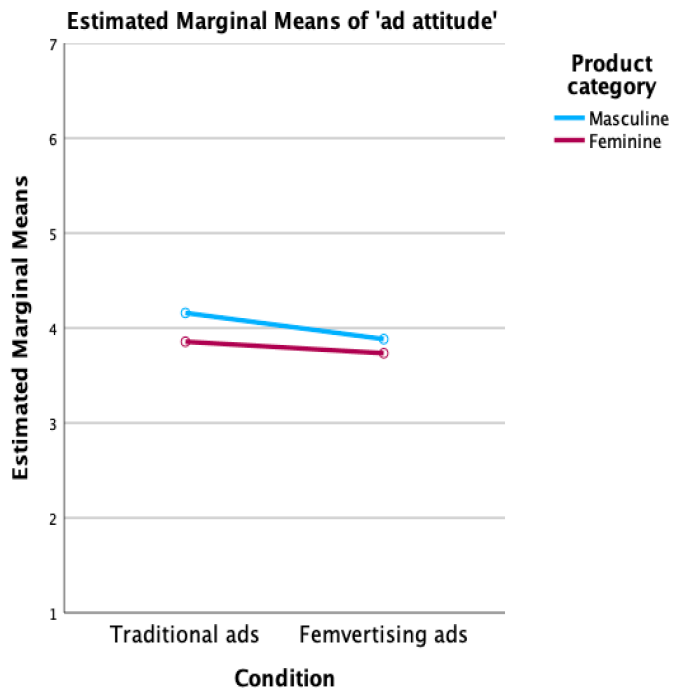
Figure 3: Moderation Product category*Condition

4.6.2 Mixed ANOVA 2

The second Mixed ANOVA is performed with the same first independent variable condition (between-subject) and dependent variable 'ad attitude'. The reason for performing this second ANOVA is to understand better what happens with the products individually. This means that the second independent variable 'product category' (within-subject), is being tested with each product separately. So, a two-way 2 (condition: traditional vs. femvertising) x 4 (product: perfume, kitchen utensils, beer, and car) Mixed ANOVA with repeated measures on the products. An overview of the differences between 'ad attitude' per product categories effected by femvertising use, can be seen in table 8.

		Products			
		Perfume	Kitchen utensils	Beer	Car
Condition	Traditional	μ = 3,529 σ = 1,079	μ = 4,181 σ = 1,183	μ = 4,836 σ = 1,347	μ = 3,481 σ = 1,982
	Femvertising	μ = 3,970 σ = 1,141	μ = 3,498 σ = 1,467	μ = 4,560 σ = 1,374	μ = 3,207 σ = 1,169

Table 8: Descriptives 'Ad attitude' for products

The assumption of sphericity, tested with Mauchly's sphericity test, has not been met which indicates that the main effect of the product category does violate the sphericity assumption with a significance value smaller than 0,05 (W=0,950; $x^2(5)$=19,627; p=0,001). Therefore, the F-value needs to be

corrected for the violations of sphericity. This means that for further interpretation of the analyses the Greenhouse-Geisser correction is used. For the assumption of equality of variances, Levene's test is used. The test shows non-significant results for the 'ad attitude' of perfume (p=0,419), beer (p=0,924) and car (p=0,301). For these products it can be assumed that there is equality of variances. Unfortunately, the results for kitchen utensils were significant (p=0,001), which means that the variances are not equal. The assumption is not met for one out of four factors. However, this should not cause major problems since ANOVA is reasonably robust to heterogeneity of variance when the sample sizes are equal, which they are. Despite knowing that this assumption is slightly violated, analyses are further continued because the effect of it is negligible.

Results show a significant main effect of the within-subject variable 'product' on 'ad attitude', F(2,899)=106,829; p=0,001. This means that the 'ad attitudes' for the different products differ from each other. The result of the other main effect of 'condition' on 'ad attitude', shows the same significant effect as for Mixed ANOVA 1 since these variables have not been changed for the second Mixed ANOVA. In contradiction to the results of the first Mixed ANOVA, the results of the second Mixed ANOVA do show a significant interaction between 'product' and 'condition' on 'ad attitude' F(2,899)=18,015; p=0,001. Results of pairwise comparison together with the profile plot (Figure 3), show that the product perfume is the one that significantly differs from the rest. The results show that the 'ad attitude' for the products kitchen utensils, cars, and beer decreases when femvertising is used instead of traditional advertisement. The product perfume is the exception. The 'ad attitude' for perfume increases when femvertising is used compared to traditional advertisement. A visual representation of this can be seen in the figure below (Figure 4) (See Appendix V: Data analyses results 9). t
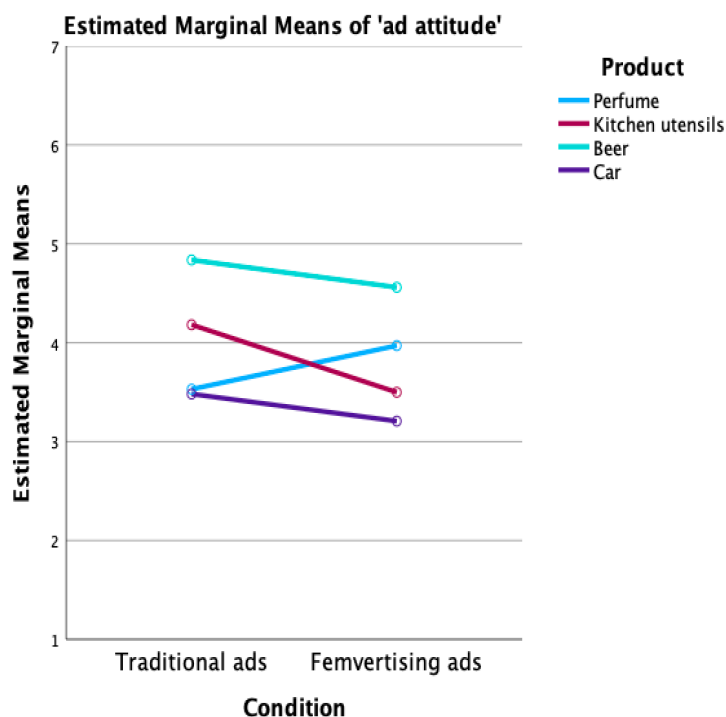
Figure 4: Moderation Product*Condition

5. General discussion

This chapter presents the conclusions drawn from the research results. Subsequently, the managerial and academic implications of the study's finding will be discussed. Finally, the limitations of this research will be addressed, along with recommendations for future research on this subject.

5.1 Summary & conclusions

Femvertising, a form of advertising that emphasizes female empowerment, has been gaining momentum for several years. Initially, it was mainly used for products marketed exclusively to women, but it has now expanded to include a wide range of product categories across various industries not only targeting females. Since other brands and products started to incorporate femvertising in their marketing strategies, it resulted in a new audience coming in contact with this form of advertising: males. Although femvertising has generally been proven successful for female-focused products, there is no certainty that it would yield the same results for products targeting a broader audience including all genders. Additionally, some male-focused brands that have incorporated femvertising in their strategies in recent years have received critical and, in some cases, negative responses. Moreover, academic research appears to have paid little to no attention to the integration of femvertising for such products and the way males, compared to females, respond to it. The main reason for this research was the lack of knowledge about the impact of femvertising in a wider range of product categories and with a broader target audience. This phenomenon inspired the research an led to the formulation of the main research question:

To what extent does femvertising influence the customer's willingness to buy and ad attitude when used for different kinds of product categories with mixed gender target audiences?

The research inquiries were explored and answered using a quantitative research method in the form of a survey. The products used in this research, for which ads were created, are usable by both men and women. Answering the main research question proved to be a complex undertaking. Results of the study revealed that there was no overall significant effect of femvertising, compared to traditional advertising, on 'willingness to buy'. But the non-significant overall effect can be explained when analyzing the products separately since they were expected to move in different directions.

The products tested seem to have different results from each other. The effect of femvertising on 'willingness to buy' stays non-significant for cars, but for the other products there is a significant effect. For beer, a significant decrease in 'willingness to buy' is measured when femvertising is used and for perfume a significant increase in 'willingness to buy' is measured. Since beer belongs in a more masculine product category and perfume belongs in a more feminine product category, these results are

as predicted. Only the ads for kitchen utensils show a significant unexpected difference, as the results show that femvertising has a negative effect on 'willingness to buy', whereas it was expected to be the other way around, since the product belongs to a feminine product category. To summarize, the observed impact on 'willingness to buy' aligns with what was expected for two out of four products tested. However, it remains unclear if these differences reflect a consistent pattern or just a coincidence. Therefore, further investigation in future research is necessary.

Furthermore, the effect of femvertising on 'ad attitude' is also investigated. When the effect of femvertising on 'ad attitude' is analyzed for all products together, a negative impact on 'ad attitude' is measured. However, it seems to become clearer that perfume is the only product benefitting from the use of femvertising. This is further confirmed when looking at the effect of femvertising on 'ad attitude' for each product individually. It is already stated that perfume is the only product with an increase in 'willingness to buy' when femvertising is used, but it is also the only product gaining a positive effect on 'ad attitude'. For the other products, being kitchen utensils, beer, and cars, femvertising has a significant negative impact on the ad attitude.

When looking at the possible mediating effect of 'ad attitude' on the relationship between femvertising and 'willingness to buy', perfume seems to be the only product with full mediation. This means that, for perfume, the effect of femvertising on 'willingness to buy' is fully explained by the effect of attitude. It shows that a positive change in ad attitude leads to an increase in willingness to buy. There is no mediation for the beer ad. When femvertising leads to a negative ad attitude, the mediating effect of 'ad attitude' becomes less clear. For the kitchen utensils ad and the car ad, there is an indirect-only partial mediation, and this mediation is also competitive in nature. The presence of a partial mediation, together with a positive direct effect in the opposite direction of the indirect effect, indicates the presence of another mediating process that competes with the observed effect of femvertising, pulling the results in the opposite direction. Unfortunately, this cannot be explained with the information provided by the results of this quantitative research. It can be concluded that 'ad attitude' partly mediates the negative relationship between femvertising and 'willingness to buy' for the kitchen utensils and car ads. However, more research is needed to identify other possible mediating variables that affect the relationship when the effect of femvertising is negative. Only when the effect of femvertising is positive, the relationship between femvertising and 'willingness to buy' can be explained by full mediation of 'ad attitude'. However, it should be noted that this conclusion is based on only one product (perfume) benefitting from the use of femvertising. Thus, caution should be exercised when making claims beyond the scope of the study. In order to draw more generalizable conclusions, it is necessary to conduct further research to determine whether full mediation always occurs when the effect of femvertising is positive.

Further, two possible moderations have also been tested on the relationship between femvertising and 'ad attitude': product category and gender. Product category was divided in two groups being the masculine product categories (containing beer and car) and the feminine product categories (containing perfume and kitchen utensils). Femvertising appeared to have a negative impact on 'ad attitude' for both product categories and when moderation analyses were done, it seemed that the masculine product category was even more harmed by the use of female empowering advertising. However, this effect turned out to be non-significant. Next, the moderation analyses were tested on each product separately to investigate if anything interesting would occur. Once again, it became clear that femvertising had a significant negative impact on all products, except for perfume, where a significant positive effect was observed. In this case it can be concluded that femvertising has a negative effect on the ad attitude for masculine products. Using female empowering messaging for masculine products could be counterproductive and may decrease ad effectiveness.

When the feminine product category is discussed, answering becomes less straightforward since the two products tested in this category behave in different directions. Femvertising has a negative effect on the ad attitude for kitchen utensils, but a positive effect for perfume. There are several potential implications of the results. Firstly, the significant differences observed within the feminine product category suggest that the effectiveness of femvertising may vary depending on the specific product, making it a hit or miss. Alternatively, these differences could also indicate that the feminine product category is less responsive to negative reactions to femvertising than the masculine product category. Finally, it is important to acknowledge that the manipulation of ads used in the study may have influenced the observed results. While the manipulation was found to be significant for all products, it is possible that the positive effect of femvertising observed for perfume can be assigned to respondents perceiving less difference between the manipulated ads for perfume compared to the other products. This could indicate that the manipulation may not have been strong enough to differentiate the perfume ads , or that a more subtle use of femvertising could lead to a greater success. It is important to note, however, that these conclusions are based on limited information and are therefore subject to further investigation.

Moreover, the moderating effect of gender on the relationship between femvertising and 'ad attitude' was examined. The findings indicated that gender did not significantly impact the relationship between femvertising and 'ad attitude' for three products, namely perfume, kitchen utensils, and beer. However, a significant interesting result of the moderating role of gender appeared for car ads. These results indicate that women and men react differently to the use of femvertising compared to traditional car advertising. Women did not react in a different way in their ad attitude on femvertising compared to traditional advertising. In this case there seems to be no gain in using femvertising when a company wants to advertise their car to women. On the other hand, men's ad attitude decreased when they saw a femvertising car ad compared to a traditional car ad. When this knowledge is combined with the

knowledge of separation in product categories, it seems that the only product which is sensitive to gender appears to be in the masculine product category. This suggests that men have more reluctance towards femvertising when it is used for a product of masculine nature. However, this is a preliminary finding and also counts just for one out of two masculine products. So, more research is needed to confirm these interpretations of the results.

To summarize, it seems that femvertising mainly has a more negative effect than positive effect on consumers' willingness to buy and their attitude towards the ad for the masculine product category. This applies to both men and women. In one particular case it seems that men's attitudes are even more harmed when femvertising is used, and this is the case for cars. This result confirms the expectation of femvertising possibly having a backfiring effect on male consumers. Furthermore, the ads from the perfume product act differently from the rest. It seems that this is the only product where femvertising has a positive impact on both consumers' attitude towards the ad and their willingness to buy. It looks like products that are perceived as masculine do not benefit from the use of femvertising. Whether this is the case for feminine products as well, is debatable. Since one feminine product benefits from femvertising and the other does not, results cannot serve a definite answer to this question. At the very least, it can be concluded that in some scenarios, femvertising has the potential to backfire, making consumers less interested in a product.

5.2 Academical & managerial implications

The findings of this research have relevant implications for academic practice and it adds to already existing literature in a couple of ways. First, the findings challenges the prevailing view that femvertising is merely a tool used in relation to women. Instead, it is worth understanding that the use of femvertising goes beyond women only and is already being used in a much broader way. Many brands incorporate femvertising in their marketing strategies, and their target audiences are not limited to women only. However, current research on femvertising mainly focuses on femvertising in combination with female brands and female consumers (Hainneville et al., 2021; Kapoor & Munjal, 2019). This research provides a broader perspective and also includes men's opinions in evaluating the impact of femvertising. Attention to the impact of femvertising on male consumers is just as important as the impact it has on female consumers when femvertising is used for products that target both genders.

This study also highlights the possible negative effect that femvertising can have. While femvertising has proven successful in many cases, it does not guarantee success in all circumstances. It is shown that, if used incorrectly, femvertising can damage consumers' attitudes towards a product. This is consistent with the risk of incorporating socially controversial and relevant issues into marketing strategies. Incorporating polarizing issues into marketing outings can potentially harm a company's reputation, as seen with examples such as woke-washing and green-washing (Vredenburg et al., 2020). When the

messages loses its credibility, it may result in a debacle for the company. Femvertising is a type of advertising that can, when used incorrectly, also belong into this category. This research shows that the use of feminism in marketing outings should be implemented thoughtfully.

These findings are equally relevant for the integration into the corporate world. The research emphasizes the importance of not blindly adopting a marketing strategy by another company, as what works in their case may not work for another. It may be tempting to capitalize on popular social movements such as feminism. Brands are advised to make sure that their efforts are in line with their values. It should as well be added that this does not mean that femvertising is harmful in all cases. The results also show that femvertising can be beneficial in some cases compared to traditional marketing outings. It is advised that a company needs to have a clear understanding of their brand identity, core values and customer's expectations before making the decision to incorporate topics such as feminism into their advertising. By doing so thoughtfully, a company can better align its message with its brand identity and reduce the possibility of the message backfiring.

5.3 Limitations & future research

While this research provides some insights in the way femvertising is perceived, the study also contains a series of limitations which will be discussed. First, the outcomings of the results have some limitations. In particular, the results of the mediation and moderation analyses give an indication of a trend that may be occurring, but it would be overconfident to draw firm conclusions from them. To begin with the mediation analyses, it is noteworthy that the competitive mediating effect of 'ad attitude' on the relationship between femvertising use and 'willingness to buy' is unexpected. However, it is difficult to draw conclusions with the knowledge by this research only. This research is limited to give a clear explanation of why this happens. The competitive mediation could occur because consumers might like the effort of incorporating feminism with the brand, but they may be unhappy about the way it is done. However, these are unsubstantiated assumptions that need to be further investigated with future research.

Second, the outcomings of the moderation analyses investigating the moderating effect of gender and 'product category' have some limitations as well. Both of these analyses do show some significant results that a moderation of the effect between femvertising and 'ad attitude' occurs. The moderation analyses for gender shows that there are differences for men and women in the way they react to femvertising when used for a car ad, and the moderation analyses for 'product category' shows that perfume is the only product that benefits from the use of femvertising. The problem is that these results are only shown for one out of the four products. The results show that there are differences, but it is uncertain in what way these trends will continue beyond the scope of this study. This study indicates that men may be more reluctant to engage in femvertising in some cases, but it is not entirely clear whether this is a coincidence or a trend. Future research is necessary to check whether the results of

moderation found in this study are really a trend or just an anomaly. To address this issue, a larger sample of products could be used. Other products that were tested in the pre-test of this study could be considered to expand the sample of products for future research. Suggestions for masculine products include construction tools and lawnmowers, while wine and tea could be included in the feminine product category. This will allow a greater number of products to be classified into different categories, allowing for more accurate analysis and categorization of the results. Another weakness is the formulation of the first hypothesis which assumes an overall positive effect of femvertising for all products. However, this is in contrast of what is implied by the theory of this study, which indicates that the effect of femvertising may vary depending on other factors specific to each product. In retrospect, it would have been beneficial to formulate the first hypothesis differently.

In addition, some limitations in the study design may have contributed to the lack of robust conclusions in some case. First, the sample used in the quantitative experiment was predominantly Dutch and highly educated which may limit the generalizability of the results to other populations. It should be considered using a more diverse samples in future research, to increase the external validity of the study. Furthermore, the fabricated ads used in the experiment were made with the information obtained from the pre-test. In future research, it would be advisable to conduct a second pre-test to test the created ads and to conduct an additional manipulation control before the main experiment. By doing so, it is possible to better modify the ads to complement the requirements of the manipulation. Furthermore, conducting an additional pre-test would give an opportunity to test a variety of images and slogans. A conjoint analysis could be used to identify the best matches between slogans and advertisements, with the goal of creating ads that are the best match for both conditions. Alternatively, it may be worthwhile to consider the use of videos instead of images. While images have been chosen in this study to facilitate better control of experimental conditions, videos offer the potential to convey a more nuanced and detailed femvertising message.

In conclusion, the study provides valuable insights into the phenomenon of femvertising, including its potential drawbacks. Despite this, the findings also suggest that more research is needed to fully understand the complexities of this issue. Therefore, researchers are encouraged to build on the findings and limitations uncovered by this thesis and delve deeper into the topic of femvertising, including the possibility of unintended negative consequences. There is still much to learn about this area of research, and continued investigation will contribute to a more complete understanding.

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Appendix

Appendix I: Complete survey

English

Welcome!
Thank you for your time by taking this survey. It is greatly appreciated!

The purpose of this study is to find out your opinion about some product advertisements. The questionnaire should
take approximately 5 minutes. Please take your time by carefully reading the questions. I'm interested in your opinion and there is no
right or wrong answer.

Know that participating in this research is completely voluntary.

This survey is part of my research for my master thesis. If you have any questions regarding this survey or research, feel free to
contact me via 608745ae@eur.nl.

Thank you in advance!

Andrea van den Eijkel

By clicking the button below you acknowledge to have read the above and that you agree to participate in the survey:

○ Yes, I have read the above

What is your age?

What is your gender?

○ Male

○ Female

○ Other, namely ...

I would be interested in buying the following
products in the upcoming year.

	Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree
Car	○	○	○	○	○	○	○
Beer	○	○	○	○	○	○	○
Perfume	○	○	○	○	○	○	○
Kitchen utensils	○	○	○	○	○	○	○

Please read the following carefully.

On the next screens, you will see four different advertisements (ads). For each ad, imagine that you are interested in buying a product from that category. You can assume that the products you see are of good quality. Please look at each ad as you normally would, and then answer the questions below.

Now, please continue to see the first ad.

(Participants saw only the "traditional" or "femvertising" ad of the following products, depending on the condition to which they were randomly assigned)

Imagine you're interested in buying a new perfume. Look at the ad and indicate to what extent you agree or disagree with the following statements.

Traditional advertisiment

Femvertising advertisement

After seeing the ad, how do you feel about the following statements?

	Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree
If I was looking for perfume, I would buy this product.	○	○	○	○	○	○	○
I would be interested in buying this product.	○	○	○	○	○	○	○
I would buy this product instead of a similar competing product.	○	○	○	○	○	○	○

After seeing the ad, how do you feel about the following statements?

	Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree
The ad is interesting.	○	○	○	○	○	○	○
I like the ad.	○	○	○	○	○	○	○
The ad is annoying.	○	○	○	○	○	○	○
The ad irritates me.	○	○	○	○	○	○	○
The ad appeals to me.	○	○	○	○	○	○	○
The ad suits the product shown.	○	○	○	○	○	○	○

Imagine you're interested in buying new kitchen utensils. Look at the ad and indicate to what extent you agree or disagree with the following statements.

Traditional advertisement

Femvertising advertisement

After seeing the ad, how do you feel about the following statements?

	Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree
I would be interested in buying this product.	○	○	○	○	○	○	○
I would buy this product instead of a similar competing product.	○	○	○	○	○	○	○
If I was looking for kitchen utensils, I would buy this product.	○	○	○	○	○	○	○

After seeing the ad, how do you feel about the following statements?

	Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree
The ad suits the product shown.	○	○	○	○	○	○	○
I like the ad.	○	○	○	○	○	○	○
The ad is annoying.	○	○	○	○	○	○	○
The ad irritates me.	○	○	○	○	○	○	○
The ad appeals to me.	○	○	○	○	○	○	○
The ad is interesting.	○	○	○	○	○	○	○

Imagine you're interested in buying beer. Look at the ad and indicate to what extent you agree or disagree with the following statements.

Traditional advertisement

Femvertising advertisement

After seeing the ad, how do you feel about the following statements?

	Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree
If I was looking for beer, I would buy this product.	○	○	○	○	○	○	○
I would buy this product instead of a similar competing product.	○	○	○	○	○	○	○
I would be interested in buying this product.	○	○	○	○	○	○	○

After seeing the ad, how do you feel about the following statements?

	Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree
The ad is interesting.	○	○	○	○	○	○	○
The ad appeals to me.	○	○	○	○	○	○	○
The ad irritates me.	○	○	○	○	○	○	○
I like the ad.	○	○	○	○	○	○	○
The ad is annoying.	○	○	○	○	○	○	○
The ad suits the product shown.	○	○	○	○	○	○	○

Imagine you're interested in buying a new car. Look at the ad and indicate to what extent you agree or disagree with the following statements.

Traditional advertisement

Femvertising advertisement

After seeing the ad, how do you feel about the following statements?

	Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree
I would buy this product instead of a similar competing product.	○	○	○	○	○	○	○
I would be interested in buying this product.	○	○	○	○	○	○	○
If I was looking for a car, I would buy this product.	○	○	○	○	○	○	○

After seeing the ad, how do you feel about the following statements?

	Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree
I like the ad.	○	○	○	○	○	○	○
The ad appeals to me.	○	○	○	○	○	○	○
The ad is annoying.	○	○	○	○	○	○	○
The ad irritates me.	○	○	○	○	○	○	○
The ad suits the product shown.	○	○	○	○	○	○	○
The ad is interesting.	○	○	○	○	○	○	○

Indicate to what extent you agree or disagree with the following statement:

The ads I've seen contain a female empowering message.

	Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree
Here, respondents saw the ads in miniature again, depending on which condition they were in. (traditional vs. femvertising)	○	○	○	○	○	○	○
	○	○	○	○	○	○	○
	○	○	○	○	○	○	○
	○	○	○	○	○	○	○

58

What is your current work situation?

- ☐ Full-time employed
- ☐ Part-time employed
- ☐ Self-employed
- ☐ Unemployed
- ☐ Student
- ☐ Other
- ☐ I'd rather not say

What is your highest education level? (Or what education level are you currently enrolled?)

- ○ Primary School
- ○ High School
- ○ Secondary Vocational Education (MBO)
- ○ University of Applied Science (HBO)
- ○ Bachelor's degree (WO)
- ○ Master's degree (WO)
- ○ Other
- ○ I'd rather not say

What is your nationality

- ○ Dutch
- ○ Other country in Europe
  - [_____]
- ○ Other country outside of Europe
  - [_____]
- ○ I'd rather not say

To what extent do you agree or disagree with the following statement?

	Strongly disagree	Disagree	Somewhat disagree	Neutral	Somewhat agree	Agree	Strongly agree
I would describe myself as an advocate of feminist beliefs.	○	○	○	○	○	○	○

Is there anything you would like to comment on the survey before ending?

[_____]

Appendix II: Models used by Hayes

Model 1

Conceptual Diagram
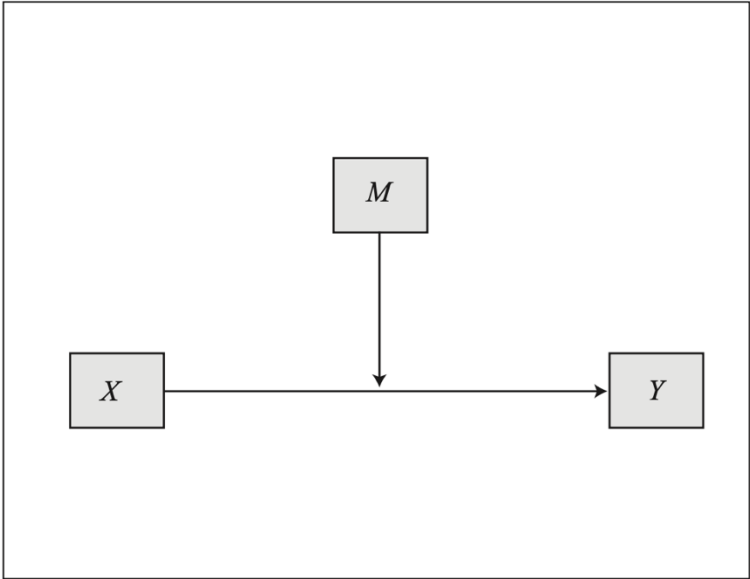
Model 4

Conceptual Diagram
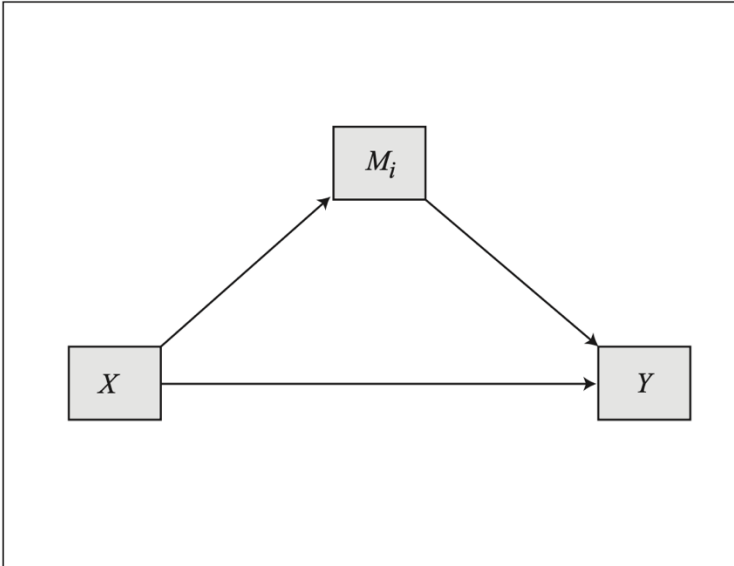
Appendix III: Pre-test

1. Products pre-tested
- Coffee
- Car
- Perfume
- Tea
- Athletic shoes
- Dischwashing liquid
- Potato chips
- Wine
- Lawnmower
- Beer
- Construction tools
- Kitchen utensils
- Soap
- Shower gel

2. Taglines pre-tested
- Beauty is defined by you!
- Unleash your creativity!
- Driven by power, powered by progress!
- Toasting to equality!
- Cleanse your body, refresh your mind!
- Taking care of yourself is not gender specific!
- Cheers to **your** choice!
- Push beyond your limits!
- Unleash your inner athlete!
- Run your way towards equality!
- Cheers to the refreshment!
- Build for performance, designed for style!
- Discover the joy of driving!
- Women or men, can do anything the other can!
- Soothe your skin, renew your soul!
- A sip of confidence!
- Strength has no gender!
- Experience the joy!

3. Results t-tests pre-test

One-Sample T-test for products

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Coffee	40	4.15	.662	.105
Car	40	5.35	1.122	.177
Perfume	40	2.75	1.056	.167
Tea	40	3.10	.871	.138
Athletic shoes	40	4.53	1.037	.164
Dishwashing liquid	40	3.23	1.121	.177
Patato chips	40	4.15	.580	.092
Wine	40	2.93	.971	.154
Landmower	40	5.53	1.037	.164
Beer	40	5.48	1.109	.175
Construction tools	40	5.93	.944	.149
Kitchen utensils	40	3.05	.904	.143
Soap	40	3.35	.949	.150
Shower gel	40	3.75	1.127	.178

One-Sample Test

Test Value = 4

	t	df	Significance One–Sided p	Significance Two–Sided p	Mean Difference	95% Confidence Interval of the Difference Lower	95% Confidence Interval of the Difference Upper
Coffee	1.433	39	.080	.160	.150	−.06	.36
Car	7.609	39	<.001	<.001	1.350	.99	1.71
Perfume	−7.486	39	<.001	<.001	−1.250	−1.59	−.91
Tea	−6.534	39	<.001	<.001	−.900	−1.18	−.62
Athletic shoes	3.201	39	.001	.003	.525	.19	.86
Dishwashing liquid	−4.374	39	<.001	<.001	−.775	−1.13	−.42
Patato chips	1.637	39	.055	.110	.150	−.04	.34
Wine	−7.002	39	<.001	<.001	−1.075	−1.39	−.76
Landmower	9.297	39	<.001	<.001	1.525	1.19	1.86
Beer	8.411	39	<.001	<.001	1.475	1.12	1.83
Construction tools	12.893	39	<.001	<.001	1.925	1.62	2.23
Kitchen utensils	−6.643	39	<.001	<.001	−.950	−1.24	−.66
Soap	−4.333	39	<.001	<.001	−.650	−.95	−.35
Shower gel	−1.403	39	.084	.168	−.250	−.61	.11

One-Sample T-test for taglines

One-Sample Statistics

	N	Mean	Std. Deviation	Std. Error Mean
Beauty is defined by you!	23	6.0000	2.33550	.48698
Unleash your creativity!	24	4.0000	2.41373	.49270
Driven by power, powered by progress!	18	5.1667	3.05345	.71970
Toasting to equality!	20	5.5500	2.25890	.50511
Cleanse your body, refresh your mind!	24	3.9583	2.83578	.57885
Taking care of yourself is not gender specific!	26	5.7308	2.85037	.55900
Cheers to your choise!	21	6.0952	2.73687	.59723
Push beyond your limits!	24	3.5000	2.75049	.56144
Unleash your inner athlete!	20	3.8000	2.23842	.50053
Run your way towards equality!	25	6.5200	2.58392	.51678
Cheers to the refreshment!	22	3.6364	2.80383	.59778
Build for performance, designed for style!	24	4.1250	2.29010	.46747
Discover the joy of driving!	24	3.0833	2.28257	.46593
Women or men, can do anything the other can!	19	7.3158	2.92599	.67127
Soothe your skin, renew your soul!	25	3.9600	2.35372	.47074
A sip of confidence!	16	4.3125	1.74045	.43511
Strength has no gender!	23	7.1304	2.70192	.56339
Experience the joy!	22	3.5000	2.08738	.44503

One-Sample Test

Test Value = 5

	t	df	Significance One–Sided p	Significance Two–Sided p	Mean Difference	90% Confidence Interval of the Difference Lower	90% Confidence Interval of the Difference Upper
Beauty is defined by you!	2.053	22	.026	.052	1.00000	.1638	1.8362
Unleash your creativity!	−2.030	23	.027	.054	−1.00000	−1.8444	−.1556
Driven by power, powered by progress!	.232	17	.410	.820	.16667	−1.0853	1.4187
Toasting to equality!	1.089	19	.145	.290	.55000	−.3234	1.4234
Cleanse your body, refresh your mind!	−1.800	23	.043	.085	−1.04167	−2.0337	−.0496
Taking care of yourself is not gender specific!	1.307	25	.102	.203	.73077	−.2241	1.6856
Cheers to your choise!	1.834	20	.041	.082	1.09524	.0652	2.1253
Push beyond your limits!	−2.672	23	.007	.014	−1.50000	−2.4622	−.5378
Unleash your inner athlete!	−2.397	19	.013	.027	−1.20000	−2.0655	−.3345
Run your way towards equality!	2.941	24	.004	.007	1.52000	.6358	2.4042
Cheers to the refreshment!	−2.281	21	.017	.033	−1.36364	−2.3923	−.3350
Build for performance, designed for style!	−1.872	23	.037	.074	−.87500	−1.6762	−.0738
Discover the joy of driving!	−4.114	23	<.001	<.001	−1.91667	−2.7152	−1.1181
Women or men, can do anything the other can!	3.450	18	.001	.003	2.31579	1.1518	3.4798
Soothe your skin, renew your soul!	−2.209	24	.018	.037	−1.04000	−1.8454	−.2346
A sip of confidence!	−1.580	15	.067	.135	−.68750	−1.4503	.0753
Strength has no gender!	3.781	22	<.001	.001	2.13043	1.1630	3.0979
Experience the joy!	−3.371	21	.001	.003	−1.50000	−2.2658	−.7342

Appendix IV: Advertisements used in survey

Traditional advertisement car

DISCOVER THE JOY
OF DRIVING

Femvertising advertisement car

DRIVE YOUR WAY
TOWARDS EQUALITY

Traditional advertisement beer

Femvertising advertisement beer

Traditional advertisement kitchen utensils

GET COOKING!
UNLEASH YOUR INNER CHEF!

Femvertising advertisement kitchen utensils

WOMEN OR MEN,
CAN DO ANYTHING THE OTHER CAN!

Traditional advertisement perfume

Femvertising advertisement perfume

Appendix V: Data analyses results
1. Descriptive output

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Age	389	18	84	44.88	17.540
Valid N (listwise)	389				

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Man	113	29.0	29.0	29.0
	Vrouw	276	71.0	71.0	100.0
	Total	389	100.0	100.0	

Work situation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Full-time employed	130	33.4	33.4	33.4
	Part-time employed	78	20.1	20.1	53.5
	Self-employed	33	8.5	8.5	62.0
	Unemployed	11	2.8	2.8	64.8
	Student	74	19.0	19.0	83.8
	Other	61	15.7	15.7	99.5
	I'd rather not say	2	.5	.5	100.0
	Total	389	100.0	100.0	

Education level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High School	21	5.4	5.4	5.4
	Secondary Vocational Education	37	9.5	9.5	14.9
	University of Applied Science	115	29.6	29.6	44.5
	Bachelor's degree (WO)	61	15.7	15.7	60.2
	Master's degree (WO)	151	38.8	38.8	99.0
	Other	4	1.0	1.0	100.0
	Total	389	100.0	100.0	

Nationality

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Dutch	357	91.8	91.8	91.8
	Other country inside Europe	22	5.7	5.7	97.4
	Other country outside Europe	9	2.3	2.3	99.7
	I'd rather not say	1	.3	.3	100.0
	Total	389	100.0	100.0	

Gender * Condition Crosstabulation

Count

		Condition		Total
		Traditional ads	Femvertising ads	
Gender	Man	56	57	113
	Vrouw	137	139	276
Total		193	196	389

Bar/pie charts of descriptive output

Work situation

- Full-time employed
- Part-time employed
- Self-employed
- Unemployed
- Student
- Other
- I'd rather not say

33.4%, 20.1%, 8.5%, 2.8%, 19.0%, 15.7%, 0.5%

Education level

- High School
- Secondary Vocational Education
- University of Applied Science
- Bachelor's degree (WO)
- Master's degree (WO)
- Other

5.4%, 1.0%, 9.5%, 29.6%, 15.7%, 38.8%

Age
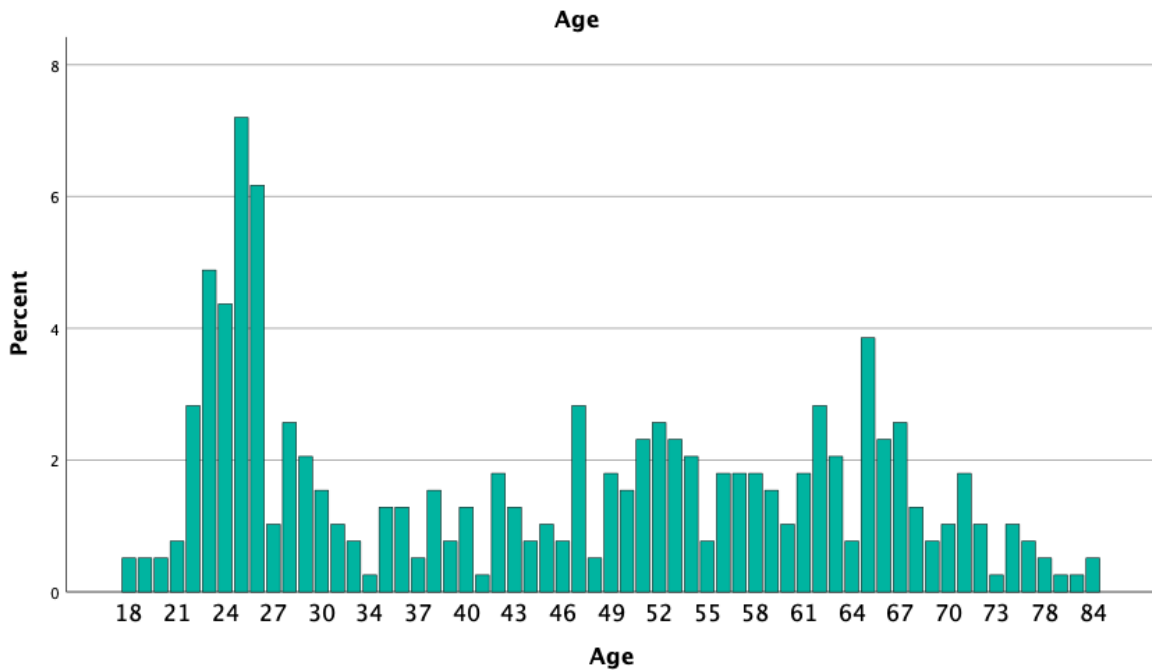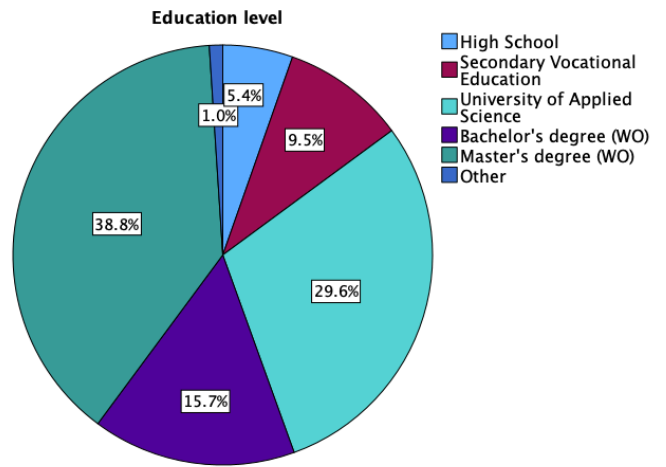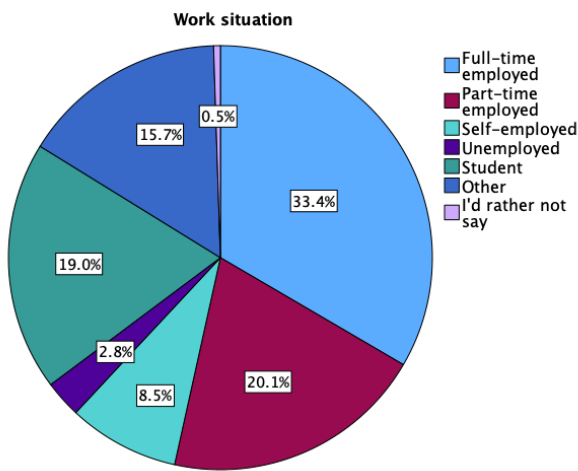
2. Tests on reliability

Scale: ALL VARIABLES Willingness to buy

Case Processing Summary

		N	%
Cases	Valid	387	99.5
	Excluded[a]	2	.5
	Total	389	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.833	.833	12

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.085	2.300	4.147	1.848	1.803	.410	12
Item Variances	2.260	1.511	3.059	1.548	2.025	.230	12

Scale: ALL VARIABLES Ad Attidude

Case Processing Summary

		N	%
Cases	Valid	387	99.5
	Excluded[a]	2	.5
	Total	389	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.871	.871	24

Summary Item Statistics

	Mean	Minimum	Maximum	Range	Maximum / Minimum	Variance	N of Items
Item Means	3.908	2.638	5.264	2.625	1.995	.711	24
Item Variances	2.513	2.095	3.188	1.093	1.522	.097	24

3. Manipulation check

T-Test

Group Statistics

	Condition	N	Mean	Std. Deviation	Std. Error Mean
How female empowering was the ad? (Beer)	Traditional ads	193	1.98	1.152	.083
	Femvertising ads	196	3.41	1.864	.133
How female empowering was the ad? Car	Traditional ads	193	1.81	.979	.070
	Femvertising ads	196	3.56	1.815	.130
How female empowering was the ad? (Kitchen utensils)	Traditional ads	193	2.18	1.350	.097
	Femvertising ads	196	4.00	2.041	.146
How female empowering was the ad? (Perfume)	Traditional ads	193	2.09	1.351	.097
	Femvertising ads	196	2.82	1.555	.111

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means		Significance				95% Confidence Interval of the Difference	
		F	Sig.	t	df	One–Sided p	Two–Sided p	Mean Difference	Std. Error Difference	Lower	Upper
How female empowering was the ad? (Beer)	Equal variances assumed	129.149	<.001	−9.045	387	<.001	<.001	−1.424	.157	−1.733	−1.114
	Equal variances not assumed			−9.077	325.909	<.001	<.001	−1.424	.157	−1.732	−1.115
How female empowering was the ad? Car	Equal variances assumed	142.955	<.001	−11.796	387	<.001	<.001	−1.748	.148	−2.039	−1.457
	Equal variances not assumed			−11.846	300.547	<.001	<.001	−1.748	.148	−2.038	−1.457
How female empowering was the ad? (Kitchen utensils)	Equal variances assumed	67.764	<.001	−10.379	387	<.001	<.001	−1.824	.176	−2.169	−1.478
	Equal variances not assumed			−10.411	338.900	<.001	<.001	−1.824	.175	−2.168	−1.479
How female empowering was the ad? (Perfume)	Equal variances assumed	20.345	<.001	−4.893	387	<.001	<.001	−.723	.148	−1.014	−.433
	Equal variances not assumed			−4.899	381.100	<.001	<.001	−.723	.148	−1.013	−.433

Mann-Whitney U Test

Mann–Whitney Test

Ranks

	Condition	N	Mean Rank	Sum of Ranks
How female empowering was the ad? (Beer)	Traditional ads	193	151.48	29235.00
	Femvertising ads	196	237.86	46620.00
	Total	389		
How female empowering was the ad? Car	Traditional ads	193	139.23	26870.50
	Femvertising ads	196	249.92	48984.50
	Total	389		
How female empowering was the ad? (Kitchen utensils)	Traditional ads	193	146.41	28257.50
	Femvertising ads	196	242.84	47597.50
	Total	389		
How female empowering was the ad? (Perfume)	Traditional ads	193	167.26	32282.00
	Femvertising ads	196	222.31	43573.00
	Total	389		

Test Statistics[a]

	How female empowering was the ad? (Beer)	How female empowering was the ad? Car	How female empowering was the ad? (Kitchen utensils)	How female empowering was the ad? (Perfume)
Mann–Whitney U	10514.000	8149.500	9536.500	13561.000
Wilcoxon W	29235.000	26870.500	28257.500	32282.000
Z	−7.856	−10.034	−8.655	−5.044
Asymp. Sig. (2–tailed)	<.001	<.001	<.001	<.001

a. Grouping Variable: Condition

4. Hypothesis 1: T-tests (Willingness to buy)

Group Statistics

	Condition	N	Mean	Std. Deviation	Std. Error Mean
Willingness to buy: Perfume	Traditional ads	193	2.5043	1.18444	.08526
	Femvertising ads	196	3.0561	1.43331	.10238
Willingness to buy: Kitchen utensils	Traditional ads	193	3.4162	1.45457	.10470
	Femvertising ads	196	3.1378	1.47138	.10510
Willingness to buy: Beer	Traditional ads	193	4.0898	1.56754	.11283
	Femvertising ads	196	3.8112	1.50784	.10770
Willingness to buy: Car	Traditional ads	193	2.2953	1.19594	.08609
	Femvertising ads	196	2.3776	1.21307	.08665
Willingness to buy: All products	Traditional ads	193	3.0764	.86143	.06201
	Femvertising ads	196	3.0957	1.00488	.07178

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							95% Confidence Interval of the Difference	
		F	Sig.	t	df	One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
Willingness to buy: Perfume	Equal variances assumed	16.532	<.001	-4.136	387	<.001	<.001	-.55180	.13343	-.81413	-.28948
	Equal variances not assumed			-4.142	375.724	<.001	<.001	-.55180	.13323	-.81378	-.28983
Willingness to buy: Kitchen utensils	Equal variances assumed	.002	.969	1.877	387	.031	.061	.27848	.14837	-.01322	.57018
	Equal variances not assumed			1.877	386.994	.031	.061	.27848	.14835	-.01320	.57016
Willingness to buy: Beer	Equal variances assumed	.164	.686	1.787	387	.037	.075	.27859	.15594	-.02801	.58518
	Equal variances not assumed			1.786	385.864	.037	.075	.27859	.15599	-.02810	.58527
Willingness to buy: Car	Equal variances assumed	1.044	.308	-.673	387	.251	.501	-.08221	.12215	-.32238	.15796
	Equal variances not assumed			-.673	386.999	.251	.501	-.08221	.12214	-.32236	.15793
Willingness to buy: All products	Equal variances assumed	4.402	.037	-.203	387	.420	.840	-.01924	.09496	-.20595	.16747
	Equal variances not assumed			-.203	379.816	.420	.839	-.01924	.09485	-.20574	.16726

5. Hypothesis 2: T-tests (Ad attitude)

Group Statistics

	Condition	N	Mean	Std. Deviation	Std. Error Mean
Attitude: Perfume	Traditional ads	193	3.5294	1.07905	.07767
	Femvertising ads	196	3.9702	1.14110	.08151
Attitude: Kitchen utensils	Traditional ads	193	4.1813	1.18253	.08512
	Femvertising ads	196	3.4983	1.46731	.10481
Attitude: Beer	Traditional ads	193	4.8359	1.34709	.09697
	Femvertising ads	196	4.5595	1.37442	.09817
Attitude: Car	Traditional ads	193	3.4810	1.19820	.08625
	Femvertising ads	196	3.2066	1.16903	.08350
Attitude: All products	Traditional ads	193	4.0069	.78692	.05664
	Femvertising ads	196	3.8087	.86230	.06159

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							95% Confidence Interval of the Difference	
		F	Sig.	t	df	One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
Attitude: Perfume	Equal variances assumed	.655	.419	-3.914	387	<.001	<.001	-.44088	.11264	-.66234	-.21942
	Equal variances not assumed			-3.916	386.369	<.001	<.001	-.44088	.11259	-.66224	-.21951
Attitude: Kitchen utensils	Equal variances assumed	13.324	<.001	5.051	387	<.001	<.001	.68305	.13524	.41715	.94895
	Equal variances not assumed			5.059	372.490	<.001	<.001	.68305	.13502	.41755	.94854
Attitude: Beer	Equal variances assumed	.009	.924	2.003	387	.023	.046	.27640	.13801	.00506	.54774
	Equal variances not assumed			2.003	386.992	.023	.046	.27640	.13799	.00510	.54770
Attitude: Car	Equal variances assumed	1.072	.301	2.286	387	.011	.023	.27437	.12002	.03839	.51035
	Equal variances not assumed			2.286	386.379	.011	.023	.27437	.12005	.03834	.51040
Attitude: All products	Equal variances assumed	1.503	.221	2.367	387	.009	.018	.19823	.08374	.03360	.36287
	Equal variances not assumed			2.369	384.788	.009	.018	.19823	.08368	.03371	.36276

6. Hypothesis 2: Model 4 PROCESS Hayes (Mediation)

Output mediation: Perfume

```
*************** PROCESS Procedure for SPSS Version 4.2 beta ***************

          Written by Andrew F. Hayes, Ph.D.        www.afhayes.com
     Documentation available in Hayes (2022). www.guilford.com/p/hayes3

**************************************************************************
Model  : 4
    Y  : WTB_P
    X  : CONDIT
    M  : ATTI_P

Sample
Size:  389

**************************************************************************
OUTCOME VARIABLE:
 ATTI_P

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .1951      .0381     1.2338    15.3203     1.0000   387.0000      .0001

Model
              coeff         se          t          p       LLCI       ULCI
constant     3.0885      .1785    17.3017      .0000     2.7375     3.4394
CONDIT        .4409      .1126     3.9141      .0001      .2194      .6623

**************************************************************************
OUTCOME VARIABLE:
 WTB_P

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .7415      .5497      .8160   235.6490     2.0000   386.0000      .0000

Model
              coeff         se          t          p       LLCI       ULCI
constant     -.7105      .1933    -3.6751      .0003    -1.0906     -.3304
CONDIT        .1717      .0934     1.8379      .0668     -.0120      .3553
ATTI_P        .8622      .0413    20.8570      .0000      .7810      .9435

************************** TOTAL EFFECT MODEL ***************************
OUTCOME VARIABLE:
 WTB_P

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .2057      .0423     1.7312    17.1039     1.0000   387.0000      .0000

Model
              coeff         se          t          p       LLCI       ULCI
constant     1.9525      .2115     9.2339      .0000     1.5368     2.3683
CONDIT        .5518      .1334     4.1357      .0000      .2895      .8141


************** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y **************

Total effect of X on Y
     Effect         se          t          p       LLCI       ULCI
      .5518      .1334     4.1357      .0000      .2895      .8141

Direct effect of X on Y
     Effect         se          t          p       LLCI       ULCI
      .1717      .0934     1.8379      .0668     -.0120      .3553

Indirect effect(s) of X on Y:
          Effect     BootSE   BootLLCI   BootULCI
ATTI_P     .3801      .0983      .1894      .5738

********************** ANALYSIS NOTES AND ERRORS **********************

Level of confidence for all confidence intervals in output:
  95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000
```

Output mediation: Kitchen utensils

```
*************** PROCESS Procedure for SPSS Version 4.2 beta ***************

          Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
     Documentation available in Hayes (2022). www.guilford.com/p/hayes3

**************************************************************************
Model  : 4
    Y  : WTB_K
    X  : CONDIT
    M  : ATTI_K

Sample
Size: 389

**************************************************************************
OUTCOME VARIABLE:
 ATTI_K

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .2487      .0618     1.7786    25.5086     1.0000   387.0000      .0000

Model
               coeff         se          t          p       LLCI       ULCI
constant      4.8644      .2143    22.6960      .0000     4.4430     5.2858
CONDIT        -.6830      .1352    -5.0506      .0000     -.9489     -.4171

**************************************************************************
OUTCOME VARIABLE:
 WTB_K

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .7360      .5416      .9927   228.0591     2.0000   386.0000      .0000

Model
               coeff         se          t          p       LLCI       ULCI
constant      -.2175      .2445     -.8898      .3741     -.6982      .2631
CONDIT         .2709      .1043     2.5968      .0098      .0658      .4760
ATTI_K         .8043      .0380    21.1783      .0000      .7296      .8789

************************* TOTAL EFFECT MODEL **************************
OUTCOME VARIABLE:
 WTB_K

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .0950      .0090     2.1406     3.5231     1.0000   387.0000      .0613

Model
               coeff         se          t          p       LLCI       ULCI
constant      3.6947      .2351    15.7136      .0000     3.2324     4.1570
CONDIT        -.2785      .1484    -1.8770      .0613     -.5702      .0132


************** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y **************

Total effect of X on Y
     Effect         se          t          p       LLCI       ULCI
     -.2785      .1484    -1.8770      .0613     -.5702      .0132

Direct effect of X on Y
     Effect         se          t          p       LLCI       ULCI
      .2709      .1043     2.5968      .0098      .0658      .4760

Indirect effect(s) of X on Y:
           Effect     BootSE   BootLLCI   BootULCI
ATTI_K     -.5493      .1136     -.7726     -.3300

********************** ANALYSIS NOTES AND ERRORS **********************

Level of confidence for all confidence intervals in output:
  95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000
```

Output mediation: Beer

```
*************** PROCESS Procedure for SPSS Version 4.2 beta ***************

          Written by Andrew F. Hayes, Ph.D.        www.afhayes.com
     Documentation available in Hayes (2022). www.guilford.com/p/hayes3

*************************************************************************
Model  : 4
    Y  : WTB_B
    X  : CONDIT
    M  : ATTI_B

Sample
Size:  389

*************************************************************************
OUTCOME VARIABLE:
 ATTI_B

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .1013      .0103     1.8521     4.0111     1.0000   387.0000      .0459

Model
              coeff         se          t          p       LLCI       ULCI
constant     5.1123      .2187    23.3745      .0000     4.6823     5.5423
CONDIT       -.2764      .1380    -2.0028      .0459     -.5477     -.0051

*************************************************************************
OUTCOME VARIABLE:
 WTB_B

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .8051      .6482      .8409   355.6201     2.0000   386.0000      .0000

Model
              coeff         se          t          p       LLCI       ULCI
constant     -.2719      .2289    -1.1882      .2355     -.7219      .1780
CONDIT       -.0277      .0935     -.2964      .7671     -.2115      .1561
ATTI_B        .9077      .0343    26.5003      .0000      .8403      .9750

************************ TOTAL EFFECT MODEL *************************
OUTCOME VARIABLE:
 WTB_B

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .0904      .0082     2.3647     3.1916     1.0000   387.0000      .0748

Model
              coeff         se          t          p       LLCI       ULCI
constant     4.3684      .2471    17.6765      .0000     3.8825     4.8543
CONDIT       -.2786      .1559    -1.7865      .0748     -.5852      .0280


************** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y **************

Total effect of X on Y
     Effect         se          t          p       LLCI       ULCI
     -.2786      .1559    -1.7865      .0748     -.5852      .0280

Direct effect of X on Y
     Effect         se          t          p       LLCI       ULCI
     -.0277      .0935     -.2964      .7671     -.2115      .1561

Indirect effect(s) of X on Y:
           Effect     BootSE   BootLLCI   BootULCI
ATTI_B     -.2509      .1244     -.4938      .0008

********************** ANALYSIS NOTES AND ERRORS **********************

Level of confidence for all confidence intervals in output:
  95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000
```

Output mediation: Car

```
*************** PROCESS Procedure for SPSS Version 4.2 beta ***************

          Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
     Documentation available in Hayes (2022). www.guilford.com/p/hayes3

*************************************************************************
Model  : 4
    Y  : WTB_C
    X  : CONDIT
    M  : ATTI_C

Sample
Size:  389

*************************************************************************
OUTCOME VARIABLE:
 ATTI_C

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .1154      .0133     1.4009     5.2255     1.0000   387.0000      .0228

Model
              coeff         se          t          p       LLCI       ULCI
constant     3.7554      .1902    19.7429      .0000     3.3814     4.1294
CONDIT       -.2744      .1200    -2.2859      .0228     -.5104     -.0384

*************************************************************************
OUTCOME VARIABLE:
 WTB_C

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .6796      .4619      .7838   165.6586     2.0000   386.0000      .0000

Model
              coeff         se          t          p       LLCI       ULCI
constant     -.3826      .2016    -1.8982      .0584     -.7789      .0137
CONDIT        .2719      .0904     3.0079      .0028      .0942      .4496
ATTI_C        .6912      .0380    18.1791      .0000      .6165      .7660

************************* TOTAL EFFECT MODEL **************************
OUTCOME VARIABLE:
 WTB_C

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .0342      .0012     1.4511      .4530     1.0000   387.0000      .5013

Model
              coeff         se          t          p       LLCI       ULCI
constant     2.2131      .1936    11.4320      .0000     1.8325     2.5937
CONDIT        .0822      .1222      .6730      .5013     -.1580      .3224


************** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y **************

Total effect of X on Y
     Effect         se          t          p       LLCI       ULCI
      .0822      .1222      .6730      .5013     -.1580      .3224

Direct effect of X on Y
     Effect         se          t          p       LLCI       ULCI
      .2719      .0904     3.0079      .0028      .0942      .4496

Indirect effect(s) of X on Y:
          Effect     BootSE   BootLLCI   BootULCI
ATTI_C    -.1896      .0833     -.3519     -.0233

********************** ANALYSIS NOTES AND ERRORS **********************

Level of confidence for all confidence intervals in output:
  95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000
```

Output mediation: All products

```
*************** PROCESS Procedure for SPSS Version 4.2 beta ***************

          Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
     Documentation available in Hayes (2022). www.guilford.com/p/hayes3

**************************************************************************
Model : 4
    Y  : WTB_ALL
    X  : CONDIT
    M  : ATTI_ALL

Sample
Size:  389

**************************************************************************
OUTCOME VARIABLE:
 ATTI_ALL

Model Summary
          R       R-sq       MSE         F        df1        df2          p
      .1195      .0143      .6819    5.6042     1.0000   387.0000      .0184

Model
              coeff         se          t          p       LLCI       ULCI
constant     4.2051      .1327    31.6873      .0000     3.9442     4.4661
CONDIT       -.1982      .0837    -2.3673      .0184     -.3629     -.0336

**************************************************************************
OUTCOME VARIABLE:
 WTB_ALL

Model Summary
          R       R-sq       MSE         F        df1        df2          p
      .7263      .5276      .4154  215.5209     2.0000   386.0000      .0000

Model
              coeff         se          t          p       LLCI       ULCI
constant     -.4065      .1964    -2.0697      .0391     -.7926     -.0203
CONDIT        .1825      .0658     2.7725      .0058      .0531      .3120
ATTI_ALL      .8237      .0397    20.7595      .0000      .7457      .9017

************************* TOTAL EFFECT MODEL *************************
OUTCOME VARIABLE:
 WTB_ALL

Model Summary
          R       R-sq       MSE         F        df1        df2          p
      .0103      .0001      .8770      .0410     1.0000   387.0000      .8396

Model
              coeff         se          t          p       LLCI       ULCI
constant     3.0572      .1505    20.3138      .0000     2.7613     3.3531
CONDIT        .0192      .0950      .2026      .8396     -.1675      .2059


************** TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y **************

Total effect of X on Y
     Effect         se          t          p       LLCI       ULCI
      .0192      .0950      .2026      .8396     -.1675      .2059

Direct effect of X on Y
     Effect         se          t          p       LLCI       ULCI
      .1825      .0658     2.7725      .0058      .0531      .3120

Indirect effect(s) of X on Y:
            Effect     BootSE   BootLLCI   BootULCI
ATTI_ALL    -.1633      .0682     -.2967     -.0291

********************** ANALYSIS NOTES AND ERRORS **********************

Level of confidence for all confidence intervals in output:
  95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000
```

7. Hypothesis 3: Model 1 PROCESS Hayes (Moderation)

Output moderation gender: Perfume

```
*************** PROCESS Procedure for SPSS Version 4.2 beta ***************

          Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
    Documentation available in Hayes (2022). www.guilford.com/p/hayes3

*************************************************************************
Model  : 1
    Y  : ATTI_P
    X  : CONDIT
    W  : Gender

Sample
Size:  389

*************************************************************************
OUTCOME VARIABLE:
 ATTI_P

Model Summary
          R        R-sq        MSE          F        df1        df2          p
      .2156       .0465     1.2294     6.2539     3.0000   385.0000      .0004

Model
               coeff         se          t          p       LLCI       ULCI
constant      3.6539      .6944     5.2617      .0000     2.2886     5.0193
CONDIT         .3209      .4381      .7324      .4643     -.5404     1.1822
Gender        -.3306      .3926     -.8422      .4002    -1.1025      .4412
Int_1          .0701      .2477      .2831      .7772     -.4168      .5571

Product terms key:
 Int_1    :         CONDIT   x       Gender

Test(s) of highest order unconditional interaction(s):
       R2-chng          F        df1        df2          p
X*W       .0002      .0802     1.0000   385.0000      .7772
----------
    Focal predict: CONDIT   (X)
          Mod var: Gender   (W)

Data for visualizing the conditional effect of the focal predictor:
Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/
   CONDIT     Gender     ATTI_P      .
BEGIN DATA.
     1.0000     1.0000     3.7143
     2.0000     1.0000     4.1053
     1.0000     2.0000     3.4538
     2.0000     2.0000     3.9149
END DATA.
GRAPH/SCATTERPLOT=
 CONDIT   WITH     ATTI_P   BY       Gender   .

*********** BOOTSTRAP RESULTS FOR REGRESSION MODEL PARAMETERS ************

OUTCOME VARIABLE:
 ATTI_P

               Coeff   BootMean     BootSE    BootLLCI    BootULCI
constant      3.6539     3.6514      .6751     2.3534     5.0062
CONDIT         .3209      .3224      .4359     -.5452     1.1817
Gender        -.3306     -.3332      .3829    -1.0704      .4102
Int_1          .0701      .0715      .2466     -.4211      .5520

********************** ANALYSIS NOTES AND ERRORS ************************

Level of confidence for all confidence intervals in output:
  95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000

------ END MATRIX -----
```

Output moderation gender: Kitchen utensils

```
*************** PROCESS Procedure for SPSS Version 4.2 beta ***************

          Written by Andrew F. Hayes, Ph.D.        www.afhayes.com
     Documentation available in Hayes (2022). www.guilford.com/p/hayes3

**************************************************************************
Model : 1
    Y : ATTI_K
    X : CONDIT
    W : Gender

Sample
Size: 389

**************************************************************************
OUTCOME VARIABLE:
 ATTI_K

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .2576      .0663     1.7793     9.1180     3.0000   385.0000      .0000

Model
              coeff         se          t          p       LLCI       ULCI
constant     4.6686      .8354     5.5881      .0000     3.0260     6.3112
CONDIT       -.3505      .5270     -.6651      .5064    -1.3867      .6856
Gender        .1146      .4723      .2427      .8084     -.8140     1.0432
Int_1        -.1946      .2980     -.6530      .5141     -.7804      .3912

Product terms key:
 Int_1   :         CONDIT   x        Gender

Test(s) of highest order unconditional interaction(s):
      R2-chng          F        df1        df2          p
X*W      .0010      .4265     1.0000   385.0000      .5141
----------
    Focal predict: CONDIT   (X)
          Mod var: Gender   (W)

Data for visualizing the conditional effect of the focal predictor:
Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/
   CONDIT      Gender     ATTI_K      .
BEGIN DATA.
     1.0000     1.0000      4.2381
     2.0000     1.0000      3.6930
     1.0000     2.0000      4.1582
     2.0000     2.0000      3.4185
END DATA.
GRAPH/SCATTERPLOT=
 CONDIT   WITH     ATTI_K   BY       Gender   .

*********** BOOTSTRAP RESULTS FOR REGRESSION MODEL PARAMETERS ************

OUTCOME VARIABLE:
 ATTI_K

              Coeff    BootMean     BootSE    BootLLCI    BootULCI
constant     4.6686      4.6805      .7856      3.1573      6.2476
CONDIT       -.3505      -.3559      .5365     -1.4126      .7083
Gender        .1146       .1115      .4469      -.7733      .9705
Int_1        -.1946      -.1933      .3043      -.7907      .4054

********************** ANALYSIS NOTES AND ERRORS **********************

Level of confidence for all confidence intervals in output:
  95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000

------ END MATRIX -----
```

Output moderation gender: Beer

```
*************** PROCESS Procedure for SPSS Version 4.2 beta ***************

          Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
     Documentation available in Hayes (2022). www.guilford.com/p/hayes3

**************************************************************************
Model : 1
    Y  : ATTI_B
    X  : CONDIT
    W  : Gender

Sample
Size: 389

**************************************************************************
OUTCOME VARIABLE:
 ATTI_B

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .1560      .0243     1.8353     3.1990     3.0000   385.0000      .0234

Model
              coeff         se          t          p       LLCI       ULCI
constant     4.8678      .8485     5.7369      .0000     3.1995     6.5361
CONDIT       -.5113      .5352     -.9552      .3401    -1.5636      .5411
Gender        .1428      .4797      .2978      .7660     -.8003     1.0859
Int_1         .1375      .3026      .4545      .6497     -.4574      .7325

Product terms key:
 Int_1    :        CONDIT   x       Gender

Test(s) of highest order unconditional interaction(s):
      R2-chng          F        df1        df2          p
X*W       .0005      .2065     1.0000   385.0000      .6497
----------
    Focal predict: CONDIT   (X)
          Mod var: Gender   (W)

Data for visualizing the conditional effect of the focal predictor:
Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/
   CONDIT     Gender     ATTI_B      .
BEGIN DATA.
     1.0000     1.0000     4.6369
     2.0000     1.0000     4.2632
     1.0000     2.0000     4.9173
     2.0000     2.0000     4.6811
END DATA.
GRAPH/SCATTERPLOT=
 CONDIT   WITH     ATTI_B   BY        Gender   .

*********** BOOTSTRAP RESULTS FOR REGRESSION MODEL PARAMETERS ************

OUTCOME VARIABLE:
 ATTI_B

              Coeff   BootMean     BootSE   BootLLCI   BootULCI
constant     4.8678     4.8553      .8992     3.0636     6.6045
CONDIT       -.5113     -.4988      .5846    -1.6422      .6571
Gender        .1428      .1497      .4977     -.8444     1.1403
Int_1         .1375      .1312      .3215     -.5100      .7665

********************** ANALYSIS NOTES AND ERRORS **********************

Level of confidence for all confidence intervals in output:
  95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000

------ END MATRIX -----
```

Output moderation gender: Car

```
*************** PROCESS Procedure for SPSS Version 4.2 beta ***************

          Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
     Documentation available in Hayes (2022). www.guilford.com/p/hayes3

**************************************************************************
Model : 1
    Y : ATTI_C
    X : CONDIT
    W : Gender

Sample
Size: 389

**************************************************************************
OUTCOME VARIABLE:
 ATTI_C

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .1707      .0291     1.3856     3.8525     3.0000   385.0000      .0097

Model
              coeff         se          t          p       LLCI       ULCI
constant     5.0144      .7373     6.8015      .0000     3.5648     6.4639
CONDIT      -1.2797      .4651    -2.7517      .0062    -2.1941     -.3653
Gender       -.7365      .4168    -1.7671      .0780    -1.5559      .0829
Int_1         .5881      .2629     2.2369      .0259      .0712     1.1051

Product terms key:
 Int_1    :         CONDIT    x        Gender

Test(s) of highest order unconditional interaction(s):
      R2-chng          F        df1        df2          p
X*W      .0126     5.0037     1.0000   385.0000      .0259
----------
    Focal predict: CONDIT   (X)
          Mod var: Gender   (W)

Conditional effects of the focal predictor at values of the moderator(s):

    Gender     Effect         se          t          p       LLCI       ULCI
    1.0000     -.6916      .2215    -3.1226      .0019    -1.1270     -.2561
    2.0000     -.1034      .1417     -.7298      .4659     -.3820      .1752

Data for visualizing the conditional effect of the focal predictor:
Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/
   CONDIT     Gender     ATTI_C     .
BEGIN DATA.
    1.0000     1.0000      3.5863
    2.0000     1.0000      2.8947
    1.0000     2.0000      3.4380
    2.0000     2.0000      3.3345
END DATA.
GRAPH/SCATTERPLOT=
 CONDIT   WITH    ATTI_C   BY       Gender   .

*********** BOOTSTRAP RESULTS FOR REGRESSION MODEL PARAMETERS ************

OUTCOME VARIABLE:
 ATTI_C

             Coeff    BootMean     BootSE    BootLLCI    BootULCI
constant    5.0144      5.0270      .7280      3.5938      6.4509
CONDIT     -1.2797     -1.2865      .4485     -2.1568      -.4119
Gender      -.7365      -.7431      .4143     -1.5610       .0768
Int_1        .5881       .5918      .2570       .0891      1.0978

********************** ANALYSIS NOTES AND ERRORS ***********************

Level of confidence for all confidence intervals in output:
  95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000

------ END MATRIX -----
```

Output moderation gender: All products

```
Run MATRIX procedure:

*************** PROCESS Procedure for SPSS Version 4.2 beta ***************

          Written by Andrew F. Hayes, Ph.D.       www.afhayes.com
     Documentation available in Hayes (2022). www.guilford.com/p/hayes3

**************************************************************************
Model  : 1
    Y  : ATTI_ALL
    X  : CONDIT
    W  : Gender

Sample
Size:  389

**************************************************************************
OUTCOME VARIABLE:
 ATTI_ALL

Model Summary
          R       R-sq        MSE          F        df1        df2          p
      .1270      .0161      .6841     2.1044     3.0000   385.0000      .0992

Model
              coeff         se          t          p       LLCI       ULCI
constant     4.5512      .5180     8.7853      .0000     3.5326     5.5697
CONDIT       -.4552      .3268    -1.3929      .1645    -1.0977      .1873
Gender       -.2024      .2929     -.6912      .4899     -.7782      .3734
Int_1         .1503      .1848      .8135      .4164     -.2129      .5136

Product terms key:
 Int_1   :          CONDIT   x        Gender

Test(s) of highest order unconditional interaction(s):
      R2-chng          F        df1        df2          p
X*W      .0017      .6618     1.0000   385.0000      .4164
----------
    Focal predict: CONDIT   (X)
          Mod var: Gender   (W)

Data for visualizing the conditional effect of the focal predictor:
Paste text below into a SPSS syntax window and execute to produce plot.

DATA LIST FREE/
   CONDIT     Gender     ATTI_ALL    .
BEGIN DATA.
     1.0000     1.0000     4.0439
     2.0000     1.0000     3.7390
     1.0000     2.0000     3.9918
     2.0000     2.0000     3.8372
END DATA.
GRAPH/SCATTERPLOT=
 CONDIT    WITH     ATTI_ALL BY        Gender   .

*********** BOOTSTRAP RESULTS FOR REGRESSION MODEL PARAMETERS ************

OUTCOME VARIABLE:
 ATTI_ALL

              Coeff   BootMean     BootSE    BootLLCI    BootULCI
constant     4.5512     4.5298      .5726     3.4165     5.6736
CONDIT       -.4552     -.4425      .3673    -1.1545      .2766
Gender       -.2024     -.1892      .3117     -.8029      .4157
Int_1         .1503      .1424      .2013     -.2529      .5322

*********************** ANALYSIS NOTES AND ERRORS ***********************

Level of confidence for all confidence intervals in output:
  95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals:
  5000

------ END MATRIX -----
```

8. Hypothesis 4: Mixed ANOVA 1

Within-Subjects Factors

Measure: MEASURE_1

Product_category	Dependent Variable
1	MASC_PC_ATTI
2	FEM_PC_ATTI

Between-Subjects Factors

		Value Label	N
Condition	1	Traditional ads	193
	2	Femvertising ads	196

Descriptive Statistics

	Condition	Mean	Std. Deviation	N
Attitude: Masculine product category	Traditional ads	4.1585	1.01894	193
	Femvertising ads	3.8831	1.06021	196
	Total	4.0197	1.04771	389
Attitude: Feminine product category	Traditional ads	3.8554	.87155	193
	Femvertising ads	3.7343	.98728	196
	Total	3.7943	.93243	389

Box's Test of Equality of Covariance Matrices[a]

Box's M	3.097
F	1.027
df1	3
df2	27163021.5
Sig.	.379

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.

a. Design: Intercept + CONDIT
   Within Subjects Design: Product_category

Mauchly's Test of Sphericity[a]

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon[b] Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Product_category	1.000	.000	0	.	1.000	1.000	1.000

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept + CONDIT
   Within Subjects Design: Product_category

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Product_category	Pillai's Trace	.042	16.954[b]	1.000	387.000	<.001	.042
	Wilks' Lambda	.958	16.954[b]	1.000	387.000	<.001	.042
	Hotelling's Trace	.044	16.954[b]	1.000	387.000	<.001	.042
	Roy's Largest Root	.044	16.954[b]	1.000	387.000	<.001	.042
Product_category * CONDIT	Pillai's Trace	.005	1.976[b]	1.000	387.000	.161	.005
	Wilks' Lambda	.995	1.976[b]	1.000	387.000	.161	.005
	Hotelling's Trace	.005	1.976[b]	1.000	387.000	.161	.005
	Roy's Largest Root	.005	1.976[b]	1.000	387.000	.161	.005

a. Design: Intercept + CONDIT
Within Subjects Design: Product_category

b. Exact statistic

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Product_category	Sphericity Assumed	9.930	1	9.930	16.954	<.001	.042
	Greenhouse–Geisser	9.930	1.000	9.930	16.954	<.001	.042
	Huynh–Feldt	9.930	1.000	9.930	16.954	<.001	.042
	Lower–bound	9.930	1.000	9.930	16.954	<.001	.042
Product_category * CONDIT	Sphericity Assumed	1.158	1	1.158	1.976	.161	.005
	Greenhouse–Geisser	1.158	1.000	1.158	1.976	.161	.005
	Huynh–Feldt	1.158	1.000	1.158	1.976	.161	.005
	Lower–bound	1.158	1.000	1.158	1.976	.161	.005
Error(Product_category)	Sphericity Assumed	226.665	387	.586			
	Greenhouse–Geisser	226.665	387.000	.586			
	Huynh–Feldt	226.665	387.000	.586			
	Lower–bound	226.665	387.000	.586			

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Product_category	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Product_category	Linear	9.930	1	9.930	16.954	<.001	.042
Product_category * CONDIT	Linear	1.158	1	1.158	1.976	.161	.005
Error(Product_category)	Linear	226.665	387	.586			

Levene's Test of Equality of Error Variances[a]

		Levene Statistic	df1	df2	Sig.
Attitude: Masculine product category	Based on Mean	.153	1	387	.696
	Based on Median	.140	1	387	.709
	Based on Median and with adjusted df	.140	1	385.721	.709
	Based on trimmed mean	.150	1	387	.699
Attitude: Feminine product category	Based on Mean	3.807	1	387	.052
	Based on Median	3.535	1	387	.061
	Based on Median and with adjusted df	3.535	1	383.680	.061
	Based on trimmed mean	3.716	1	387	.055

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + CONDIT
Within Subjects Design: Product_category

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	11879.999	1	11879.999	8711.163	<.001	.957
CONDIT	7.643	1	7.643	5.604	.018	.014
Error	527.778	387	1.364			

Estimated Marginal Means

1. Grand Mean

Measure: MEASURE_1

Mean	Std. Error	95% Confidence Interval	
		Lower Bound	Upper Bound
3.908	.042	3.825	3.990

2. Condition

Estimates

Measure: MEASURE_1

Condition	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Traditional ads	4.007	.059	3.890	4.124
Femvertising ads	3.809	.059	3.693	3.925

3. Product_category

Estimates

Measure: MEASURE_1

Product_category	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	4.021	.053	3.917	4.124
2	3.795	.047	3.702	3.888

4. Condition * Product_category

Measure: MEASURE_1

Condition	Product_category	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Traditional ads	1	4.158	.075	4.011	4.306
	2	3.855	.067	3.724	3.987
Femvertising ads	1	3.883	.074	3.737	4.029
	2	3.734	.067	3.603	3.865

Estimated Marginal Means of 'ad attitude'
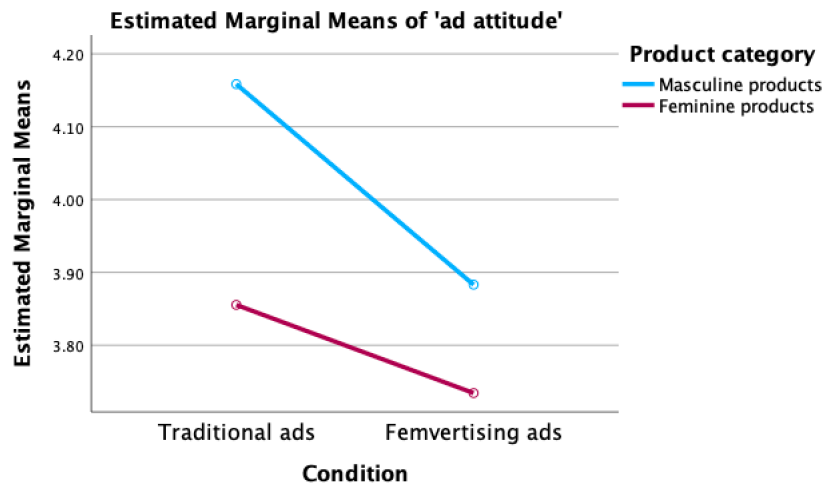
9. Hypothesis 4: Mixed ANOVA 2

Within-Subjects Factors

Measure: MEASURE_1

Product	Dependent Variable
1	ATTI_P
2	ATTI_K
3	ATTI_B
4	ATTI_C

Between-Subjects Factors

		Value Label	N
Condition	1	Traditional ads	193
	2	Femvertising ads	196

Descriptive Statistics

	Condition	Mean	Std. Deviation	N
Attitude: Perfume	Traditional ads	3.5294	1.07905	193
	Femvertising ads	3.9702	1.14110	196
	Total	3.7515	1.13106	389
Attitude: Kitchen utensils	Traditional ads	4.1813	1.18253	193
	Femvertising ads	3.4983	1.46731	196
	Total	3.8372	1.37512	389
Attitude: Beer	Traditional ads	4.8359	1.34709	193
	Femvertising ads	4.5595	1.37442	196
	Total	4.6967	1.36620	389
Attitude: Car	Traditional ads	3.4810	1.19820	193
	Femvertising ads	3.2066	1.16903	196
	Total	3.3428	1.19002	389

Box's Test of Equality of Covariance Matrices[a]

Box's M	14.091
F	1.393
df1	10
df2	715638.242
Sig.	.176

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.

a. Design: Intercept + CONDIT
 Within Subjects Design: Product

Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Product	Pillai's Trace	.465	111.407[b]	3.000	385.000	<.001	.465
	Wilks' Lambda	.535	111.407[b]	3.000	385.000	<.001	.465
	Hotelling's Trace	.868	111.407[b]	3.000	385.000	<.001	.465
	Roy's Largest Root	.868	111.407[b]	3.000	385.000	<.001	.465
Product * CONDIT	Pillai's Trace	.126	18.423[b]	3.000	385.000	<.001	.126
	Wilks' Lambda	.874	18.423[b]	3.000	385.000	<.001	.126
	Hotelling's Trace	.144	18.423[b]	3.000	385.000	<.001	.126
	Roy's Largest Root	.144	18.423[b]	3.000	385.000	<.001	.126

a. Design: Intercept + CONDIT
 Within Subjects Design: Product

b. Exact statistic

Mauchly's Test of Sphericity[a]

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon[b]		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Product	.950	19.627	5	.001	.966	.977	.333

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

a. Design: Intercept + CONDIT
   Within Subjects Design: Product

b. May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Product	Sphericity Assumed	377.946	3	125.982	106.829	<.001	.216
	Greenhouse-Geisser	377.946	2.899	130.378	106.829	<.001	.216
	Huynh-Feldt	377.946	2.931	128.964	106.829	<.001	.216
	Lower-bound	377.946	1.000	377.946	106.829	<.001	.216
Product * CONDIT	Sphericity Assumed	63.735	3	21.245	18.015	<.001	.044
	Greenhouse-Geisser	63.735	2.899	21.986	18.015	<.001	.044
	Huynh-Feldt	63.735	2.931	21.748	18.015	<.001	.044
	Lower-bound	63.735	1.000	63.735	18.015	<.001	.044
Error(Product)	Sphericity Assumed	1369.150	1161	1.179			
	Greenhouse-Geisser	1369.150	1121.857	1.220			
	Huynh-Feldt	1369.150	1134.151	1.207			
	Lower-bound	1369.150	387.000	3.538			

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Product	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Product	Linear	2.521	1	2.521	2.556	.111	.007
	Quadratic	202.748	1	202.748	174.790	<.001	.311
	Cubic	172.677	1	172.677	124.100	<.001	.243
Product * CONDIT	Linear	14.705	1	14.705	14.907	<.001	.037
	Quadratic	30.821	1	30.821	26.571	<.001	.064
	Cubic	18.209	1	18.209	13.086	<.001	.033
Error(Product)	Linear	381.764	387	.986			
	Quadratic	448.900	387	1.160			
	Cubic	538.485	387	1.391			

Levene's Test of Equality of Error Variances[a]

		Levene Statistic	df1	df2	Sig.
Attitude: Perfume	Based on Mean	.655	1	387	.419
	Based on Median	.706	1	387	.401
	Based on Median and with adjusted df	.706	1	386.244	.401
	Based on trimmed mean	.701	1	387	.403
Attitude: Kitchen utensils	Based on Mean	13.324	1	387	<.001
	Based on Median	12.007	1	387	<.001
	Based on Median and with adjusted df	12.007	1	373.848	<.001
	Based on trimmed mean	13.144	1	387	<.001
Attitude: Beer	Based on Mean	.009	1	387	.924
	Based on Median	.114	1	387	.736
	Based on Median and with adjusted df	.114	1	383.196	.736
	Based on trimmed mean	.021	1	387	.885
Attitude: Car	Based on Mean	1.072	1	387	.301
	Based on Median	1.074	1	387	.301
	Based on Median and with adjusted df	1.074	1	385.890	.301
	Based on trimmed mean	1.160	1	387	.282

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + CONDIT
   Within Subjects Design: Product

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Intercept	23759.999	1	23759.999	8711.163	<.001	.957
CONDIT	15.286	1	15.286	5.604	.018	.014
Error	1055.556	387	2.728			

Estimated Marginal Means

1. Grand Mean

Measure: MEASURE_1

Mean	Std. Error	95% Confidence Interval	
		Lower Bound	Upper Bound
3.908	.042	3.825	3.990

2. Condition

Estimates

Measure: MEASURE_1

Condition	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Traditional ads	4.007	.059	3.890	4.124
Femvertising ads	3.809	.059	3.693	3.925

3. Product

Estimates

Measure: MEASURE_1

Product	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	3.750	.056	3.639	3.861
2	3.840	.068	3.707	3.973
3	4.698	.069	4.562	4.833
4	3.344	.060	3.226	3.462

Pairwise Comparisons

Measure: MEASURE_1

(I) Product	(J) Product	Mean Difference (I–J)	Std. Error	Sig.[b]	95% Confidence Interval for Difference[b]	
					Lower Bound	Upper Bound
1	2	−.090	.081	.267	−.249	.069
	3	−.948*	.075	<.001	−1.095	−.801
	4	.406*	.070	<.001	.269	.543
2	1	.090	.081	.267	−.069	.249
	3	−.858*	.086	<.001	−1.026	−.689
	4	.496*	.080	<.001	.339	.653
3	1	.948*	.075	<.001	.801	1.095
	2	.858*	.086	<.001	.689	1.026
	4	1.354*	.075	<.001	1.207	1.501
4	1	−.406*	.070	<.001	−.543	−.269
	2	−.496*	.080	<.001	−.653	−.339
	3	−1.354*	.075	<.001	−1.501	−1.207

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

4. Condition * Product

Measure: MEASURE_1

Condition	Product	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Traditional ads	1	3.529	.080	3.372	3.687
	2	4.181	.096	3.993	4.370
	3	4.836	.098	4.643	5.029
	4	3.481	.085	3.313	3.649
Femvertising ads	1	3.970	.079	3.814	4.126
	2	3.498	.095	3.311	3.686
	3	4.560	.097	4.368	4.751
	4	3.207	.085	3.040	3.373