

# **Celebrity endorsement in the new era of influencer marketing: understanding the impact of advertisement type, endorser type, and level of congruency on consumers' attitudes**

**Romy van der Wielen**

Master Communication Science, University of Twente, De Zul 10, 6522 NJ Enschede, The Netherlands

**Supervisor:** Joris van Hoof

**Second supervisor:** Ronald Voorn

## **Abstract**

**Aim-** Consumers admire celebrities and have been proven to elicit favorable responses to advertisements and higher purchase intentions. Companies are increasingly using social media influencers (SMIs) to promote their brands, rather than 'traditional' celebrities, as a result of the fast adoption of social media. The current study has compared different types of advertisements and endorsers including their congruency with the endorsed product on consumers' attitudes and purchase intentions in terms of a mediation model.

**Method-** To investigate this effect a 2 (endorser versus non-endorser) by 2 (traditional celebrity versus SMI) by 2 (high versus low congruency) between-subjects experiment in the form of an online questionnaire was conducted.

**Results-** The results of the experiment showed that there was a strong partial mediation effect between consumers' ad attitudes, brand attitudes, and purchase intentions. However, for high endorser-product congruency and endorser advertisements, only an effect on ad attitudes and brand attitudes was found.

**Discussion-** This study emphasizes the need of using human faces in advertisements and ensuring a high level of endorser-product congruency to persuade consumers and the need of evaluating all three components in the online environment to get complete and relevant information about consumer purchase behavior. However, the significant role of endorser type in advertising based on academic research, this relation will need to be investigated further in the future.

## **Keywords**

Celebrity endorsement; traditional celebrity; social media influencer; influencer marketing; congruency

## **Introduction**

From the standpoint of marketing communication, businesses must create brand advertising strategies that support a company's competitive differential advantage for their products or services (Erdogan, 1999). The most utilized technique of brand advertising is celebrity endorsement (Wei & Lu, 2013). Celebrity endorsement is a powerful marketing tool used since the late nineteenth century (Erdogan, 1999). While the technique was initially used in traditional brand or product marketing, it has now expanded to other marketing communication forms, including health marketing, political marketing, and non-profit marketing (Knoll & Matthes, 2017). If marketers pick the appropriate endorser, they may improve attitudes and reinforce behavioral intentions (Knoll & Matthes, 2017), it can draw attention to advertising material and help to shape a more favorable perception of the brand (Erdogan et al., 2001).

Advertisers frequently use celebrities to add personality to a product or brand. People admire and find celebrities appealing because of their personality, fame, and social position, as well as their expertise in the sector of the brand (Almaida et al., 2019). However, due to the rapid adoption of social media, companies are increasingly preferring social media influencers (SMIs) to promote their businesses, instead of 'traditional' celebrities. Traditional celebrities did not get famous through the internet, they just made their way to social media. In addition, SMIs established their careers online and were previously unknown to the public (Schouten et al., 2019). As a result, SMIs' reputation is completely based on the content they create and the engagement they have within the social media activity, which is generally in collaboration with their followers (Schouten et al., 2019). SMIs have the power to influence a large audience's purchase decisions, they typically develop deeper and more meaningful relationships with their followers since they are seen as more trustworthy (Belanche et al., 2021; Djafarova & Rushworth, 2017).

SMIs and traditional celebrities are almost conceptually identical in the social media context. SMIs are defined as individuals who have established a substantial number of followers

and are considered trustworthy influencers in one or more domains (De Veirman et al., 2017). On the other hand, traditional celebrities are seen as ordinary social media users who assemble a large group of followers on social media platforms to engage with their followers about their personal lives (Abidin, 2016). The main characteristics of these two terms include high numbers of followers, active engagement, and product or brand promotion (Jin et al., 2019). Despite the growing use of SMIs to promote brands, academic understanding of SMIs' worth is limited, while the efficacy of traditional celebrity endorsement has been extensively studied (Bergkvist & Zhou, 2016). Although recent qualitative research shows that SMIs, rather than traditional celebrities, have a greater impact on young consumers' brand views and purchasing behaviors (Djafarova & Rushworth, 2017), only a minority of studies have explicitly compared the two forms of endorsement. More research on the impact of these two endorser types on advertising effectiveness would be beneficial to both academics and practitioners (Bergkvist & Zhou, 2016; Schouten et al., 2019).

Therefore, the current study has compared the effectiveness of endorser and non-endorser advertisements in terms of the dual mediation hypothesis (DMH). According to MacKenzie et al. (1986), the DMH is superior compared to other models. DMH specifies a direct and indirect relation from the attitude towards the ad, through brand attitudes, to purchase intentions (MacKenzie et al., 1986). Furthermore, the differences in effect for a traditional celebrity versus a SMIs on consumers' attitudes and purchase intentions were explored. Finally, endorser-product congruency has been implemented as an independent factor that might explain possible variations in efficacy between these two types of endorsements. Whereas, endorser-product congruency is the degree of harmony, match, or fit between the endorser and the endorsed product (Kamins & Gupta, 1994). Congruency is an important factor in explaining celebrity endorsement effects according to Kamins and Gupta (1994), and it may also play a role in SMI marketing.

The findings of this study might be utilized to fill in the literature gap and have as well practical implications for marketers. To sum up, this research aimed to answer the following research question: “To what extent may different types of advertisements and endorsers including their congruency with the endorsed product affect consumers’ attitudes and purchase intentions?”.

### **Theoretical framework**

This section clarifies the contextual background of this study in which an overview of important literature on the used terms in this study is given. Starting with advertisement type, influencer marketing, and celebrity endorsement, which includes both traditional celebrities and SMIs. Furthermore, the relevant literature on congruency, product type, and the mediation model including ad attitudes, brand attitudes, and purchase intentions is highlighted. Finally, a conceptual map illustrating the variables of interest for this study is provided.

#### **Advertisement type**

Being aware of the name attached to a symbol or visual image may be more essential than being aware of the brand itself (Aaker, 1996). Cueing such as symbols and images can have a significant impact on awareness levels (Aaker, 1996). Consumers use these symbols and images to define themselves, and when they come across brands that resemble them in some manner, they experience various levels of satisfaction and avoid various levels of disappointment, resulting in positive attitudes toward the brand and motivations to purchase products or services (Sirgy, 1982). According to Aaker (1996), brands represent ideal users in advertising, whereas an ideal user can be an athlete, celebrity, or expert. Images of these human faces might be crucial because they are physiologically relevant visual cues that provide fundamental information on social interaction and instantly attract more attention than cars, houses, clothes, and foods (Van Rullen, 2006). Moreover, people spend more time examining intrinsic characteristics of faces (i.e., the eyes, nose, and mouth) than external features, according to eye-movement studies (Althoff & Cohen, 1999).

Many studies have demonstrated that faces are undoubtedly the most physiologically and socially relevant visual stimuli in the social communication world, and as a result, they have a unique power to attract attention and communicate important information (Frischen et al., 2007; Henderson et al., 2005; Itier & Batty, 2009). Capturing visual attention is crucial for influencing customers' emotions, attitudes, and behavior. However, in the context of digital marketing, the impact of a human face on customer interaction has received little attention (Torbarina et al., 2020). Therefore, the following hypotheses were tested in this study to see whether there were any differences in the effect of advertising with an endorser versus one without an endorser on consumers' attitudes and purchase intentions.

H1: An advertisement including an endorser will have a higher positive effect on consumers' ad attitudes than an advertisement without an endorser.

H2: An advertisement including an endorser will have a higher positive effect on consumers' brand attitudes than an advertisement without an endorser.

H3: An advertisement including an endorser will have a higher positive effect on consumers' purchase intentions than an advertisement without an endorser.

### **Influencer marketing**

Influencer marketing is a big business that is just becoming bigger. However, instead of focusing on the target market, this marketing style concentrates on a few important individuals (Brown & Hayes, 2008). Influencer marketing is a marketing approach that relies on the power of prominent people or opinion leaders to increase brand awareness and purchase decisions among consumers (Brown & Hayes, 2008). Influencers are frequently linked with millennials in areas such as fashion, cosmetics, and luxury travel, but they are now appearing across a broad range of ages and product categories (Campbell & Farrell, 2020). Influencer marketing advertisements are often faced by online channels and blend in with the surrounding content's structure (Campbell & Grimm, 2019). According to Cho (2013), the recent success of influencer marketing can be traced

to the convergence of numerous key dynamics. To begin with, consumers' media consumption has moved from print to the internet. Moreover, when consumers are online, they have a distinct reaction to advertisements. Consumers are goal-oriented when using the internet, which makes them more sensitive to explicit ads (Cho, 2013). They act as a reference group on which influencers can apply aspirational, informational, or attachment-driven persuasion (Campbell & Farrell, 2020).

### **Celebrity endorsement**

Matching the images of celebrity endorsers with the endorsed product is one of the most widely used advertising tactics, therefore it has been a hot topic of research from the standpoints of both marketers and consumers (Arora et al., 2019; Lee & Koo, 2016). Celebrity endorsement is a type of marketing communication in which a well-known person from sports, entertainment, education, fashion, or any other field utilizes their social position or reputation to help promote a product, service, or concept (Arora et al., 2019). According to Erdogan (1999), companies have a lot of influence over their endorsers since they create them. They may create characters that are consistent with their brands and target groups, and they can make sure that these characters are only endorsing specific products. However, companies have little control over celebrity endorsers' personas since the celebrities have built their public character over time (Erdogan, 1999).

In literature, both celebrity and non-celebrity endorsers have advantages, which explains why academic research is still inconclusive (Keel & Natarajan, 2012). Some research found that celebrity and non-celebrity endorsers have similar effects on advertising attitudes, brand attitudes, and purchase intentions (Keel & Natarajan, 2012). While other research found that non-celebrity endorsers or “created” endorsers are more effective than celebrity endorsers, yet more research found that celebrities are more effective than non-celebrities (Keel & Natarajan, 2012; Tom et al., 1992). Despite more than 50 years of research, the understanding of the impact of endorsements is still highly fragmented. This is unsurprising, considering the numerous factors

that influence celebrity endorsements' effectiveness and make it a difficult advertising approach (Schimmelpfennig & Hunt, 2019). For example, expertise, congruency, trustworthiness, attractiveness, likability, familiarity, and a variety of other personal qualities have been shown to influence brand perception, image, purchase intention, and other effectiveness indicators (Schimmelpfennig & Hunt, 2019).

### **Traditional celebrity**

A celebrity endorser is “any individual who enjoys public recognition and who uses this recognition on behalf of a consumer good by appearing with it in an advertisement” (McCracken, 1989, p. 310). Friedman and Friedman (1976) further suggested that a celebrity endorser is someone well-known in the public for accomplishments outside of the product category they are endorsing. As a result, they can be sportsmen, singers, actors, chefs, or anyone else in the public eye. The function of the endorser might be seen as a celebrity expert, a long-term spokesman affiliated with a product, or an inspirational figure with no specific expertise or relationship with the product (Seno & Lukas, 2007). The traditional view of celebrity endorsers is a celebrity appearing in TV commercials or famous individuals posing on billboards, with the notion that by showing people who are of interest to their target market, consumers will be more likely to attempt the company's products or services (Glucksman, 2017). This is in line with what Kamins et al. (1989) have stated, celebrity endorsements traditionally only consider famous individuals who created value for themselves through music, sports, or movies, before participating in advertising activities (Kamins et al., 1989). People grow familiar with characters and performers on ongoing programs over time, and they frequently feel they know these actors as well as they know their friends and neighbors (Hoffner & Buchanan, 2005). Individuals create relationships with celebrities who are only known through the media in the same way as they would with actual people (Dibble et al., 2015). In this study, traditional celebrities are known as celebrities who became famous outside of social media (e.g., actors, singers, or athletes).

## **Social media influencers**

People are witnessing the spectacular growth of this generations' new idols who owe their success to social media and the internet in today's increasingly digital environment (Ruiz-Gomez, 2019). These new idols are individuals who got famous and have gained recognition because of their social media presence, which is known as social media influencers (SMIs) (Khamis et al., 2016). In essence, SMIs are individuals who, as a result of their knowledge and expertise on specific issues, have developed credibility with large social media audiences and therefore have a substantial effect on the decisions of their followers and peer consumers (De Veirman et al., 2017). Moreover, they are characterized as third-party endorsers who have built large social networks by openly revealing details about their personal lives, experiences, and thoughts through texts, photographs, videos, hashtags, and other means (De Veirman et al., 2017).

SMIs such as fitness experts, food bloggers, beauty bloggers, fashionistas, and others, are increasingly being used as the face of brands' marketing (Khamis et al., 2016). In the academic context, researchers discovered that consumers feel more connected to SMIs and perceive them as more real when examining the effect of this new form of celebrity endorsement (Tran & Strutton, 2014). Because people genuinely identify with and attempt to copy such non-traditional celebrities, their perceived authenticity and deep connectivity with SMIs result in increased purchase intention of the products they promote (Tran & Strutton, 2014). However, SMIs do not only directly affect big audiences' purchasing decisions, they also frequently build deeper and more meaningful relationships with their followers (Belanche et al., 2021; Djafarova & Rushworth, 2017). These relationships are one of the reasons allowing them to build successful online communities (Djafarova & Rushworth, 2017), it offers SMIs more persuasive power over their followers' attitudes and behaviors toward the products and/or services they support in their brand collaborations (Jiménez-Castillo & Sánchez-Fernández, 2019).



In today's increasingly digital world, the social media platforms WhatsApp, Facebook, and YouTube are seen as the most popular platforms used by Dutch users (Statista, 2021a). However, many brand marketers have recognized Instagram as the most significant social media platform for influencer marketing due to its photo and video sharing capabilities (Evans et al., 2017). SMIs try to develop a connection, trust, and engagement with their followers through self-disclosure, whereas the audience provides input via likes and comments (Ruiz-Gomez, 2019). In this study, the following hypotheses were examined to investigate the differences in effect between traditional celebrities and SMIs on consumers' attitudes and purchase intentions.

H4: SMIs as endorsers will have a higher positive effect on consumers' ad attitudes than traditional celebrities as endorsers have.

H5: SMIs as endorsers will have a higher positive effect on consumers' brand attitudes than traditional celebrities have.

H6: SMIs as endorsers will have a higher positive effect on consumers' purchase intentions than traditional celebrities have.

### **Congruency**

Most advertisers feel that selecting the correct celebrity is critical to the advertisements' success because consumers believe that the celebrity should have a high level of positive impact and recognition, and that the celebrity's image should fit that of the product (Choi & Rifon, 2012). Congruency between the endorser and the product is a key aspect in assessing the effectiveness of celebrity endorsement (Choi & Rifon, 2012). According to Misra and Beatty (1990), the endorsers' congruency or match-up is expressed when the highly relevant qualities of the endorser are congruent with the highly significant traits of the brand or endorsed product. Furthermore, Kamins and Gupta (1994) used the term congruency, fit, or match-up to describe the degree of harmony between an endorsers' available associations and the qualities connected with the brand and/or endorsed product. The match-up (congruency) hypothesis established the concept of an

endorser-product fit, stating that a stronger "fit" between the endorsed product and the endorser can make advertising more persuasive (Kamins & Gupta, 1994) and is more effective in generating favorable advertisement perceptions that boost endorser credibility and advertising efficacy than a poor fit between the two (Davies & Slater, 2015). By transferring cultural aspects from the brand image to the product, a congruent endorser-product match is more likely to encourage people to buy the endorsed product (Jin et al., 2019). The following hypotheses were evaluated in this study to see whether there were any variations in the impact of high or low levels of endorser-product congruency on consumer attitudes and purchase intentions.

H7: Endorsers with high endorser-product congruency will have a higher positive effect on consumers' ad attitudes than low endorser-product congruency.

H8: Endorsers with high endorser-product congruency will have a higher positive effect on consumers' brand attitudes than low endorser-product congruency.

H9: Endorsers with high endorser-product congruency will have a higher positive effect on consumers' purchase intentions than low endorser-product congruency.

Furthermore, also interaction effect between endorser type and level of congruency was examined. Interaction effects occur when the influence of one independent variable changes the effect on the amount of another independent variable. In sum, the following hypothesis was investigated:

H10: SMIs as endorsers with high endorser-product congruency will have a higher positive effect on consumers' ad attitudes than traditional celebrities with high endorser-product congruency have.

### **Product type**

Celebrity endorsers promote a specific image with their followers which can increase consumers' self-identity with the endorsers and allows the endorsers to communicate more

personally and engaging (Gilal et al., 2020). It also helps consumers to build a higher level of trust and understanding toward the celebrity endorser, increasing their effectiveness (Gilal et al., 2020). Consumers can be motivated to buy products based on both the utilitarian and hedonic benefits or values that brands provide, according to previous studies (Holbrook & Hirschman, 1982). Products can be characterized as utilitarian and hedonic characteristics. Hedonic items, in particular, are defined by their experiential value, such as joy, pleasure, and excitement; utilitarian products, on the other hand, are defined mainly by their functional or instrumental value (Chen et al., 2016). Furthermore, Lim and Ang (2008) have stated that hedonic values are emotional advantages that meet hedonic sensory pleasure demands, whereas utilitarian values are about rational benefits. As a result, brand endorsers can promote utilitarian and hedonic product attributes to strengthen consumers' relationships with the brand (Gilal et al., 2020).

From this standpoint, it stands to reason that different sorts of products could evoke quite different responses in terms of celebrity endorsement efficacy. It has already been stated that celebrities can be useful in promoting hedonistic products (Wakefield & Barnes, 1996). According to Friedman and Friedman (1976), the influence of celebrity endorsement on a utilitarian product may not be as strong as it is for a hedonic product. Hedonic items involve some social risk since they are enjoyable, emotional, and value expressive, and products with larger social risks benefit more from celebrity endorsement (Friedman & Friedman, 1976; Stafford et al., 2002). As a result, the focus of this research is on hedonic product advertising, namely perfume advertisements.

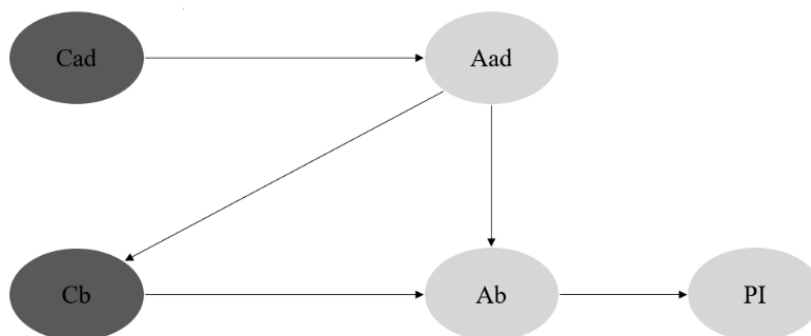
### **Dual mediation hypothesis**

The importance of affective reactions to advertising on ad attitudes, brand attitudes, and purchase intentions was critically explored over the past decades. Attitude is a prominent research topic in marketing studies as it may be used to predict consumer behavior (Mitchell & Olson, 1981). Additionally, social psychology researchers have developed various theoretical frameworks for the study of attitudes making research on this important construct easier (Spears

& Singh, 2004). The Dual Mediation Hypothesis (DMH) and most of the theoretical frameworks follow the same three paths: attitude towards the ad leads to attitudes towards the brand and leads to purchase intentions (López & Ruiz, 2011). This suggests that brand attitudes have a favorable impact on the relation between ad attitudes and purchase intentions, strengthening the claim that brand attitude is an essential mediator (López & Ruiz, 2011). DMH defines an indirect flow of causality from ad attitudes to brand attitudes, through brand cognitions, to purchase intentions. However, the strength of ad attitudes to purchase intentions, mediated by brand attitudes is consistent with previous studies and is reported as the strongest association discovered (MacKenzie et al., 1986). Therefore, this study will focus on this relationship, which is shown and highlighted in Figure 1.

**Figure 1**

*Adapted Dual Mediation Hypothesis*



*Note.* Cad: ad cognitions or thoughts; Aad: attitude toward the ad; Cb: brand cognitions; Ab: attitude toward the brand; PI: purchase intentions (MacKenzie et al., 1986).

### ***Ad attitudes***

Attitudes are known whether an object is liked or disliked since they are linked to consistent positive or negative assessments of an object, an idea, an emotion, or a tendency to respond (Ajzen, 1991). According to Zhu and Kanjanamekanant (2021), different meta-analyses published in top publications revealed a consistently positive direct connection between ad attitudes and purchase intentions. It is suggested that attitudes are crucial determinants of

consumers' purchase intentions as consumers' buying decisions are influenced by their attitudes and varied impressions of advertisements lead to different levels of purchase intentions (Ajzen, 1991; Chen et al., 2017). When affective reactions are triggered, consumers may make purchasing decisions based just on ad attitudes, rather than fully absorbing all brand information (Biehal et al., 1992; Lafferty et al., 2002). To sum up, the following hypotheses were investigated:

H11: Consumers' ad attitudes will have a direct positive effect on consumers' purchase intention.

H12: Consumers' ad attitudes will have a positive effect on consumers' brand attitudes.

### ***Brand attitudes***

Attitudes can impact purchase intentions indirectly through brand attitudes (Cox & Locander, 1987; (MacKenzie et al., 1986). Brand attitudes can be described as an individual's internal assessment of the brand (Mitchell & Olson, 1981), which can be favorable or unfavorable after being exposed to advertisement stimuli of the brand. Consumers' brand attitude is a generally long-lasting, one-dimensional summary judgment of the brand that presumably motivates behavior (Spears & Singh, 2004). Brand attitude is a recognized mediator between advertising stimuli and many marketing characteristics including purchase intentions, according to multiple research (Gresham & Shimp, 1985; MacKenzie et al., 1986; Trivedi, 2018). As a result, the study of attitude is critical in marketing and advertising research to predict consumer purchase intentions (Evans & Bang, 2018; Kobia & Liu, 2017; Oliver, 1980). The following hypothesis was investigated:

H13: Consumers' brand attitudes will have a positive effect on consumers' purchase intentions.

### ***Purchase intentions***

The term "purchase intentions" refers to a persons' desire to take action concerning a certain brand (Bagozzi, 1981). Purchase intentions are described as consumers' likelihood to buy

the product of a brand in the future (Yoo et al., 2000). Moreover, according to Spears and Singh (2004), a persons’ purchase intentions are their conscious plans to attempt to buy a product or service of a specific brand. The majority of consumer behavior studies claim that purchase intentions are a result of consumers' attitudes towards the ad and brand (Trivedi, 2018). In this study, the following hypothesis was investigated:

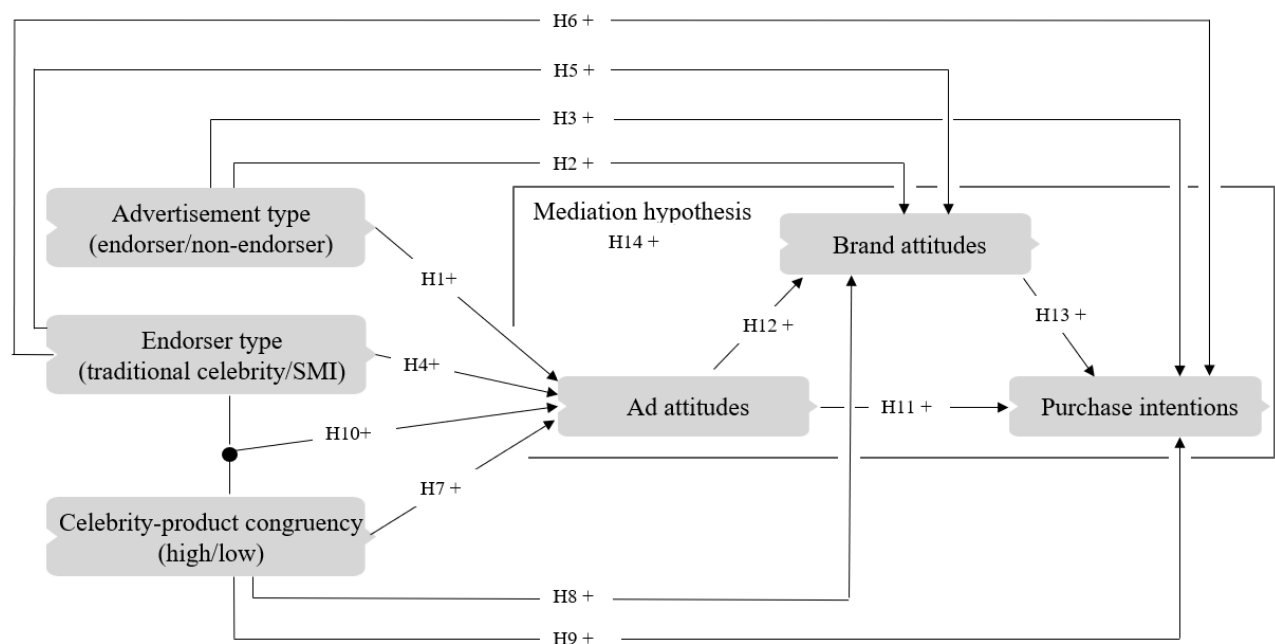
H14: The relationship between consumers’ ad attitudes and purchase intentions will be positively mediated by brand attitudes.

### Conceptual research framework

This study has chosen not only to explore the effect of different advertisement types but also the differences in the effect of SMIs and traditional celebrities including their level of endorser-product congruency on consumers’ attitudes and purchase intentions. Moreover, this study also attempts to confirm the findings of the DMH model. These objectives are presented in the proposed framework of this study in Figure 2.

Figure 2

Proposed conceptual research framework



## **Methodology**

This chapter explains the data collection approach used to address the study question. The research design, pre-test design and results, measures, and analysis technique, as well as a description of the participants, manipulation checks, validity, and reliability are described in the following sections.

### **Research design**

The purpose of this study was to investigate the relationship of advertisement type, endorser type, and endorser-product congruency on consumers' attitudes and purchase intentions. This study investigates the question of whether different types of advertisements and endorsers including their congruency with the endorsed product may affect consumers' attitudes and purchase intentions among female consumers. This relationship has been investigated using a quantitative research approach. Quantitative research approaches, according to Verhoeven (2014), use information about things, organizations, and people to discover relationships in the given information. This study used a between-subjects experimental design, which implies that each participant was only exposed to one manipulation rather than all of them. In this way, each change in attitudes may be examined. Furthermore, a control group was utilized in this study since it allows the researcher to get the opposite of what they desire to increase the validity and reliability of the results (Verhoeven, 2014).

A 2x2x2 experimental design was used, with four different conditions and one control condition, which is been presented in Table 1. This design includes two different manipulation combinations as advertisements: 1; traditional celebrity vs SMIs, and 2; high endorser-product congruency versus low endorser-product congruency. No further manipulations involving the independent variable, advertising type, were made since it was explored using the control condition.

**Table 1***Manipulations as advertisements used in this study*

Advertisement	Human presence	Traditional celebrity	SMIs	Endorser-product congruency
Ad 1	Yes	Yes	No	Low
Ad 2	Yes	Yes	No	High
Ad 3	Yes	No	Yes	Low
Ad 4	Yes	No	Yes	High
Ad 5 (control group)	No	No	No	-

**Pre-test design**

A pre-test was used to determine whether the endorser types would be recognized and perceived as good representations of the four conditions based on prior subject knowledge. The pre-test showed pictures of ten traditional celebrities with high congruency, ten traditional celebrities with low congruency, ten SMIs with high congruency, and ten SMIs with low congruency. Since this study was conducted among Dutch participants, the traditional celebrities and SMIs used for this study were both internationally and nationally recognized. The longlist of the chosen celebrities and SMIs used in the pre-test is shown in Appendix A. The pictures were exposed to 21 participants, which were randomly assigned. The participants were asked to choose whether they believed the individuals were traditional celebrities or SMIs after being exposed to the manipulations, using a 5-Point Likert Scale: (1) as a traditional celebrity, (2) slightly as a traditional celebrity, (3) nor as a traditional celebrity, nor as a social media influencer, (4) slightly as a social media influencer, and (5) as a social media influencer. Subsequently, the participants were asked if they were familiar with the traditional celebrity or SMI using a 5-Point Likert Scale: (1) not familiar at all, (2) slightly familiar, (3) moderately familiar, (4) very familiar, and (5) extremely familiar. Additionally, participants were asked if they considered the endorser-product congruency was high or low. The congruency was measured via a 5-Point Likert Scale varied from (1) extremely bad match, (2) somewhat bad match, (3) neither good nor bad match, (4)



somewhat good match, (5) extremely good match. The pre-test results are presented in Appendix B. Based on these findings, four individuals were chosen for the final manipulations, as shown in Table 2.

**Table 2**

*Pre-test results*

	Traditional celebrity vs. SMI		Familiarity		Congruency	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Dafne Schippers	1.4	0.6	3.3	1.2	2.3	1.2
Ariana Grande	1.3	0.7	4.1	0.6	4.3	0.6
Dionne Slagter	4.0	0.9	2.7	1.2	2.2	1.0
Nikkie de Jager	4.2	1.3	4.1	0.7	3.5	1.1

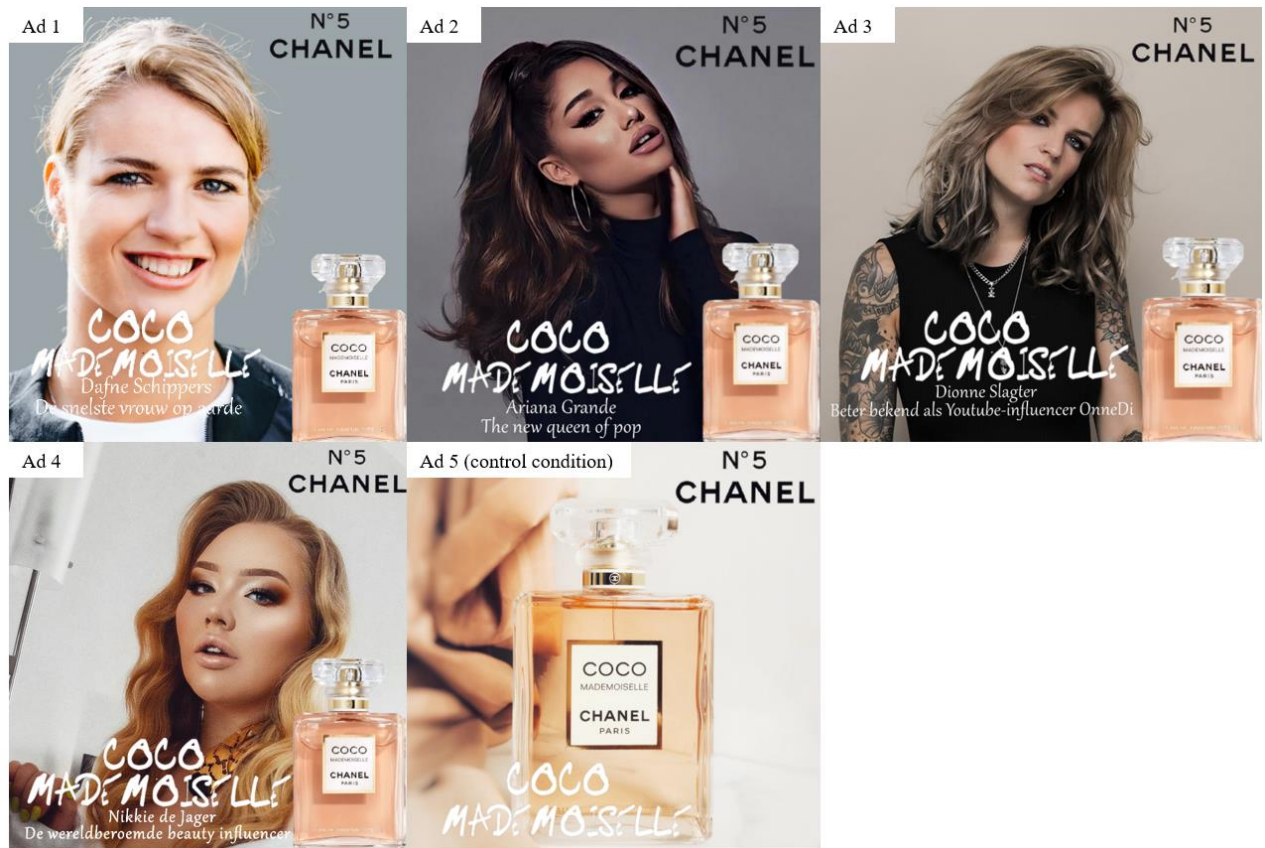
Subsequentially, according to experts of two different perfumery chains, the following perfumes were mentioned as the top three most frequently bought by consumers between the age of 18 till 30: (1) Lancome La vie est belle, (2) Yves Saint Laurent Black Opium, and (3) Chanel Coco Mademoiselle. Chanel was mentioned the most by experts, therefore this study has focused on the perfume Chanel Choco Mademoiselle.

## Measures

To complete this experimental study, an online questionnaire was chosen as a data collection method, which is presented in Appendix C. An online questionnaire through Qualtrics was used to measure the influence of the five different advertisements on the dependent variables: ad attitudes, brand attitudes, and purchase intentions. The five advertisements were chosen based on the results of the pre-test and are presented in Figure 3.

**Figure 3**

*Five manipulations (advertisements) used in this study*



The dependent variables were measured based on an instrument developed and previously used by other researchers, which are shown in Table 3. Immediately after exposing the advertisement, ad attitudes were measured as “the overall reaction to the perfume advertisement”. Subsequently, brand attitudes were measured as “the overall feeling about the perfume brand”. These variables were measured through some statements: (1) “I think the advertisement is good”, (2) “I like the advertisement”, (3) “I consider the advertisement as pleasant”, (4) “I think the advertisement is interesting”, and (5) “I think the advertisement is favorable”. Finally, purchase intentions known as “the probability of a consumer that he/she will buy the perfume” was measured via four statements: (1) “I would consider buying this perfume”, (2) “It is possible that I would buy this perfume”, (3) “I am willing to buy this perfume”, and (4) “I am certain that I would buy this perfume”. All statements were measured according to a 5-Point Likert Scale: (1) strongly disagree, (2) disagree, (3) neither agree nor disagree, (4) agree, and (5) strongly agree.

**Table 3***The source of measurements*

Construct	Indicators	Source
Ad attitudes and brand attitudes	Good – bad	(Gardner et al., 1985; Graeff, 1996; MacKenzie et al., 1986; Mitchell & Olsen, 1981; Sirgy, 1985)
	Dislike – like	
	Unpleasant – pleasant	
	Favorable – unfavorable	
	Interesting – boring	
Purchase intentions	Likely – unlikely	(Gardner et al., 1985; MacKenzie et al., 1986; Mitchell & Olsen, 1981)
	Possible – impossible	
	Certain – uncertain	
	Very good chance – no chance at all	

**Manipulation checks**

A manipulation check question was included to determine whether the participants recognized the conditions as an endorser (human) or non-endorser (non-human). Table 7 presents the values for both the endorser advertisement and non-endorser advertisement conditions, which indicates most of the participants remembered seeing an endorser in the endorser advertisement conditions ( $N = 215$ ). Further, a chi-square test of independence was performed, and the results demonstrated that the manipulations were effective,  $X^2(2, N = 267) = 254.82, p < .001$ . The  $p$ -value shows that the conditions were recognized as endorser and non-endorser advertisements.

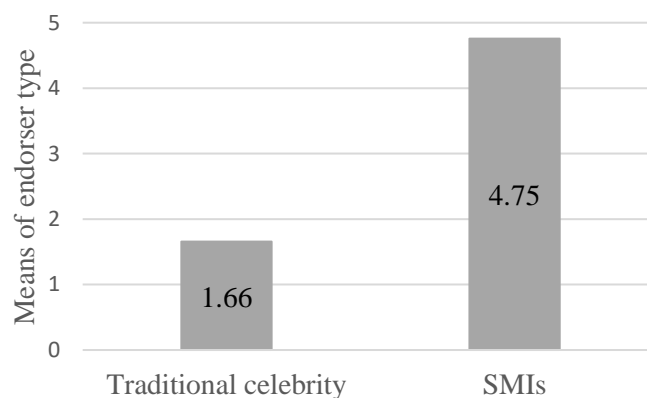
**Table 7***Crosstab endorser advertisement versus a non-endorser advertisement*

	Yes		Can't remember		No		Total	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Endorser advertisement	215	98.5%	4	1.8%	0	0%	219	100%
Non-endorser advertisement	1	2.1%	1	2.1%	46	95.8%	48	100%

Another manipulation check was added to the questionnaire to see if the participants identified the manipulation based on various conditions. On a 5-Point Likert Scale, participants were asked whether they considered the person in the manipulation was a traditional celebrity or a SMI. An independent samples t-test was conducted to compare all conditions for traditional celebrities and SMIs. There was a significant difference in the scores for traditional celebrities ( $M_{\text{traditionalcelebrity}} = 1.66$ ,  $SD = 1.05$ ) and SMIs ( $M_{\text{SMIs}} = 4.75$ ,  $SD = 0.72$ ) conditions,  $t(213) = -25.26$ ,  $p < .001$ ). This means the manipulations were manipulated correctly according to endorser type. These results are visualized in more detail in Figure 4.

**Figure 4**

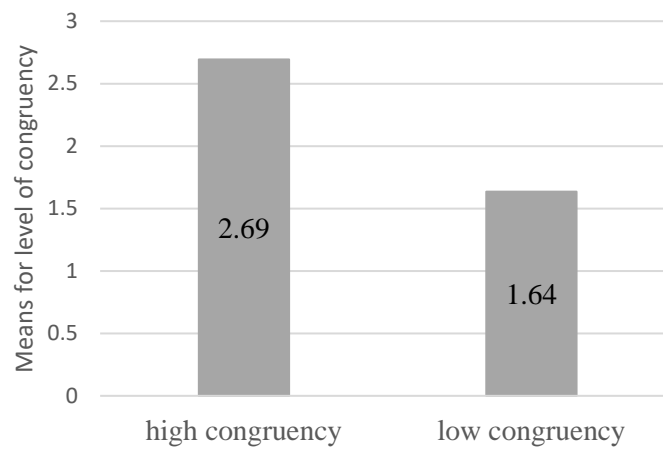
*Bar chart displaying manipulation check for endorser type*



Furthermore, the participants were also questioned if the person had a high or low level of congruency with the endorsed product. Another independent samples t-test was conducted to compare all conditions for the level of endorser-product congruency. There was a significant difference in the scores for high level of congruency ( $M_{\text{highcongruency}} = 2.69$ ,  $SD = 1.16$ ) and low level of congruency ( $M_{\text{lowcongruency}} = 1.64$ ,  $SD = 0.91$ ) conditions,  $t(213) = 7.44$ ,  $p < .001$ ). This indicates that the manipulations were performed appropriately based on the level of endorser-product congruency. Figure 5 illustrates these findings in further detail.

**Figure 5**

*Bar chart displaying manipulation check for endorser type*



### **Validity**

The validity of a research method is determined by whether it measures what it promises to measure and whether the results are near to real-world values (Verhoeven, 2014). However, the independent and dependent variables are supported by scientific literature, factor analysis to measure construct validity can still be meaningful. Factor analysis reduces a large number of variables into a fewer number of factors for identifying whether the variables are correlated with each or not. The factor analysis was constructed with the dependent variables ad attitudes, brand attitudes, and purchase intentions, of which the results are presented in Table 4.

**Table 4***Factor analysis including dependent variables*

Dependent variable	Component		
	1	2	3
Brand attitudes 1	0.89		
Brand attitudes 2	0.88		
Brand attitudes 3	0.83		
Brand attitudes 4	0.79		
Brand attitudes 5	0.75		
Ad attitudes 1		0.86	
Ad attitudes 2		0.84	
Ad attitudes 3		0.84	
Ad attitudes 4		0.73	
Ad attitudes 5		0.69	
Purchase intentions 1			0.88
Purchase intentions 2			0.84
Purchase intentions 3			0.82
Purchase intentions 4			0.80
Eigenvalues	6.68	2.59	1.29

The results show that all dependent variables are located in the same component, respectively. This indicates that the variables cover the right subject. Furthermore, the results demonstrated that all factor loadings of the variables are greater than 0.5, indicating that all variables are strong and create a single component. This concludes all dependent variables can be considered valid. When it comes to the explained total variance, all factors have an eigenvalue that is greater than 1. This means the factor explains more variation than a single observable variable.

### **Reliability**

After all the components had been integrated into their respective constructs, Cronbach's alpha was calculated to determine the constructs' internal consistency. As a result, the

measurements can be seen as reliable since their values were all above 0.7, which is shown in Table 5. This means the constructions can be considered as internally consistent and reliable.

**Table 5**

*Results Cronbach's Alpha per construct*

	Cronbach's Alpha	N of items	N of items deleted
Ad attitudes	0.87	5	0
Brand attitudes	0.92	5	0
Purchase intentions	0.94	4	0

### **Data collection procedure**

After the pre-test was examined, the final survey was developed. The questionnaire was sent via online platforms such as Facebook, LinkedIn, and Instagram. An online survey is beneficial since it is a cost-effective and time-saving method of data collection. It was critical, particularly in the context of the COVID-19 pandemic, to select a data collecting technique that could be utilized online on devices that people use at home, such as computers, tablets, and mobile phones. The participants for this study were drawn from a non-probability sample, which implies they were chosen non-randomly based on convenience, according to McCombes (2020). This makes data collection efficient and quick for the researcher.

Participants were informed what to expect and what the study was about right at the beginning of the survey. Besides, they were asked to submit demographic information such as gender and age in the survey's first questions. To keep the survey anonymous, no questions concerning personal information were asked, and no personal information about the participants was gathered. Participants could also contact the researcher if they had any questions concerning the survey. It is necessary to conduct research ethically to guarantee that it produces benefits while minimizing the danger of damage. As a result, a proposal for an ethics review that complies with the ethical criteria was approved by the BMS Ethics Committee.

The advertisements were shown after the demographic data was collected. Subsequently, the questions about ad attitudes, brand attitudes, and purchase intentions were presented. Participants could go back to a previous question or exit the survey at any time. However, they had to complete all questions before moving on to the next question. The data was analyzed once it was collected to see if the hypotheses could be accepted or rejected. Various analyses were carried out using SPSS version 26.

## **Sample**

This study has only focused on Dutch female participants from the age of 18 to 30 years because this generation of social media users is undeniably more active and more vocal than other age groups (Statista, 2021c). Therefore, this generation may be more influential to SMIs than traditional celebrities. The needed sample for this study was 250 participants, in which 50 participants per condition served as a rule of thumb. Participants who did not meet the requirements of the study were moved forward to the end of the survey. Of the 305 participants who completed the main survey, 38 participants were excluded for not meeting the study criteria because this study focuses only on Dutch females between the age of 18 till 30 years. Moreover, participants were also removed whenever the duration of their participation was extremely low (< 1 minute) or extremely high (> 30 minutes). The remaining 267 participants were used for further analysis.

The distribution of the participants among the conditions can be considered equal, as each group contained about 50 participants. The demographic information of the respondents within the conditions is presented in Table 6. With a total of 267 respondents, it appears that the average age for all conditions is similar to the total average age ( $M_{\text{age}} = 23.9$ ,  $SD = 3.64$ ). Besides, participants were exposed to the conditions randomly, however, the control group had the least amount of exposure compared to the other conditions ( $N = 48$ ).



**Table 6**

*Results for the variable age (in years) and purchase experience per condition*

	Conditions									
	1		2		3		4		5	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
<hr/>										
Age										
Age in years	24.1	3.65	23.8	3.64	23.8	3.87	24.3	3.56	23.7	3.64
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
<hr/>										
Purchase experience										
Yes, recently	6	11.1%	6	11.5%	6	10.7%	9	15.8%	4	11.6%
Yes, in the past	10	18.5%	9	17.3%	17	30.4%	7	12.3%	14	21.3%
No	38	70.4%	37	71.2%	33	58.9%	41	71.9%	30	67%

*Note.* Condition 1: Traditional celebrity/high congruency; condition 2: traditional celebrity/low

congruency; condition 3: SMIs/low congruency; condition 4: SMIs/high congruency; condition 5: control group

a. Chi-square test purchase experience in all conditions,  $X^2(8, N = 267) = 8.77, p = .362$ .

As the conditions included Chanel perfume, all respondents were asked whether they previously have or have not purchased Chanel perfume. The results show that most of the respondents reported to have not bought the perfume before (67%), this is equal within all conditions. This indicates that the likelihood of participants being influenced by prior purchases is minimal. Moreover, a chi-square test of independence was performed for purchase experience in all conditions. The results show ( $p = .362$ ) that the purchase experiences of all participants were not independent of each other per condition.

Furthermore, also an ANOVA test was performed to see whether there were any significant differences within the age groups per condition. The results demonstrated that the effect of age was not significant for the five conditions,  $F(12, 254) = 0.74, p = .710$ .

## Results

It was hypothesized that advertisement type, endorser type, and the level of endorser-product congruency have a positive effect on consumers' ad attitudes, which eventually positively predict purchase intentions. Additionally, it was hypothesized that consumers' brand attitudes will mediate this relationship. A series of ANOVA and regression analyses were carried out to test these hypotheses. The proposed relationships were tested via a 2 (endorser/non-endorser advertisement) x 2 (traditional celebrity/SMI) x 2 (high/low endorser-product congruency) research design.

### Hypotheses testing

Statistical tests were performed to examine the hypotheses and study the effects that occur in the conceptual model, the results of these tests are presented in detail in this next section. This section is divided into three steps. The first step describes the added value of implementing an endorser or no endorsers in advertisements. The second step reveals which endorser type and the level of congruency had the most positive impact on the dependent variables. Finally, the third step looks at the mediation effect of the dependent variables on each other.

#### *Endorser versus non-endorser conditions*

The variables of the main focus in this study were advertisement type, endorser type, and endorser-product congruency on consumers' ad attitudes, brand attitudes, and purchase intentions. The control condition was included to test whether there were any significant differences between an endorser advertisement and a non-endorser advertisement on consumers' attitudes and purchase intentions. The results of the multivariate variation analysis (MANOVA), presented in Table 8, showed that there are significant differences between an endorser advertisement and a non-endorser advertisement on consumers' ad attitudes ( $p < .001$ ) and on brand attitudes ( $p = .046$ ). However, no significant differences were found between these two variables on consumers' purchase intentions ( $p = .849$ ).

**Table 8**

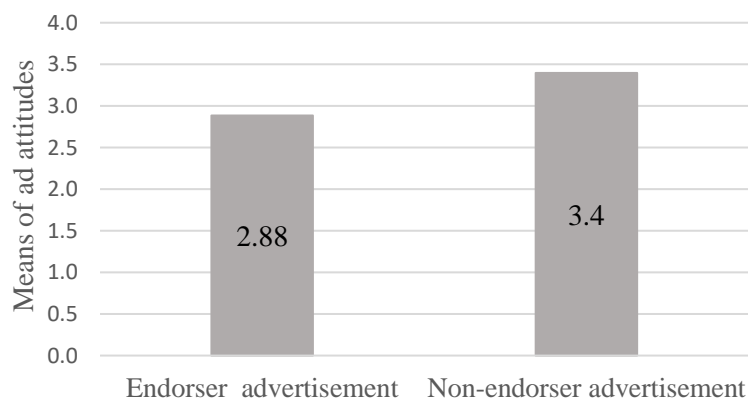
*MANOVA test results between an endorser and non-endorser conditions on dependent variables*

Source	Dependent variables	<i>df</i>	<i>Mean square</i>	<i>F</i>	<i>Sig.</i>
Endorser versus non-endorser conditions	Ad attitudes	1	10.35	17.73	.000
	Brand attitudes	1	2.2	4.01	.046
	Purchase intentions	1	0.04	0.04	.849

Based on a univariate ANOVA test, the results indicate significant differences in ad attitudes indicating that participants exposed to a non-endorser advertisement have more favorable ad attitudes ( $M_{\text{non-endorser}} = 3.4$ ,  $SD = 0.55$ ) than participants that were exposed to an endorser-advertisement ( $M_{\text{endorser}} = 2.88$ ,  $SD = 0.8$ ). These results are presented in a more detailed bar chart in Figure 6.

**Figure 6**

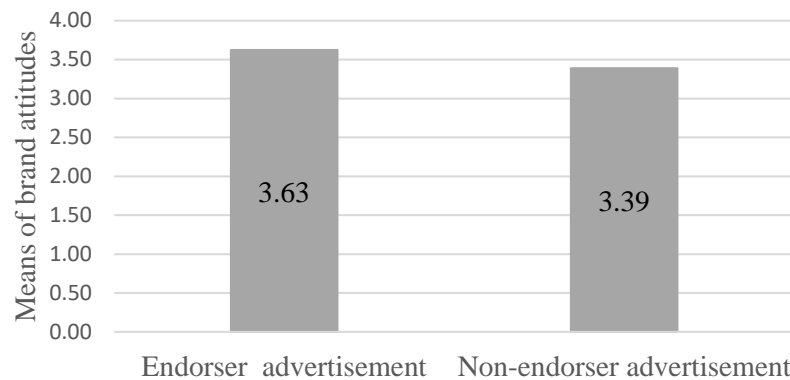
*Bar chart displaying the differences between advertisement type on ad attitudes*



On the other hand, the significant differences of an ANOVA test on brand attitudes are the other way around, in which the endorser advertisement ( $M_{\text{endorser}} = 3.63$ ,  $SD = 0.75$ ) claims to be more favorable towards consumers' brand attitudes than a non-endorser advertisement ( $M_{\text{non-endorser}} = 3.39$ ,  $SD = 0.73$ ). This significant difference is shown in Figure 7.

**Figure 7**

*Bar chart displaying the differences between advertisement type on brand attitudes*

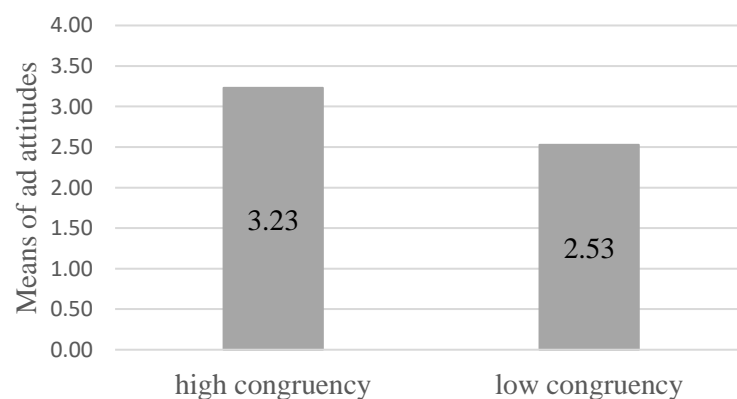


***Endorser type and congruency***

It was hypothesized that endorser type and endorser-product congruency positively affect consumers' ad attitudes. The results of the MANOVA test indicated that there are no significant differences between a traditional celebrity and SMI on consumers' ad attitudes,  $F(1, 215) = 1.5$ ,  $p = .222$ . However, when looking at the level of congruency, there are significant differences found between high level and low level of congruency on consumers' ad attitudes,  $F(1, 215) = 51.78$ ,  $p < .001$ . When looking at this significant difference in further detail, the graphic of the univariate ANOVA test in Figure 8 reveals that high congruency ( $M_{\text{highcongruency}} = 3.23$ ,  $SD = 0.76$ ) has a higher positive effect on consumers' ad attitudes than low congruency ( $M_{\text{lowcongruency}} = 2.53$ ,  $SD = 0.68$ ).

**Figure 8**

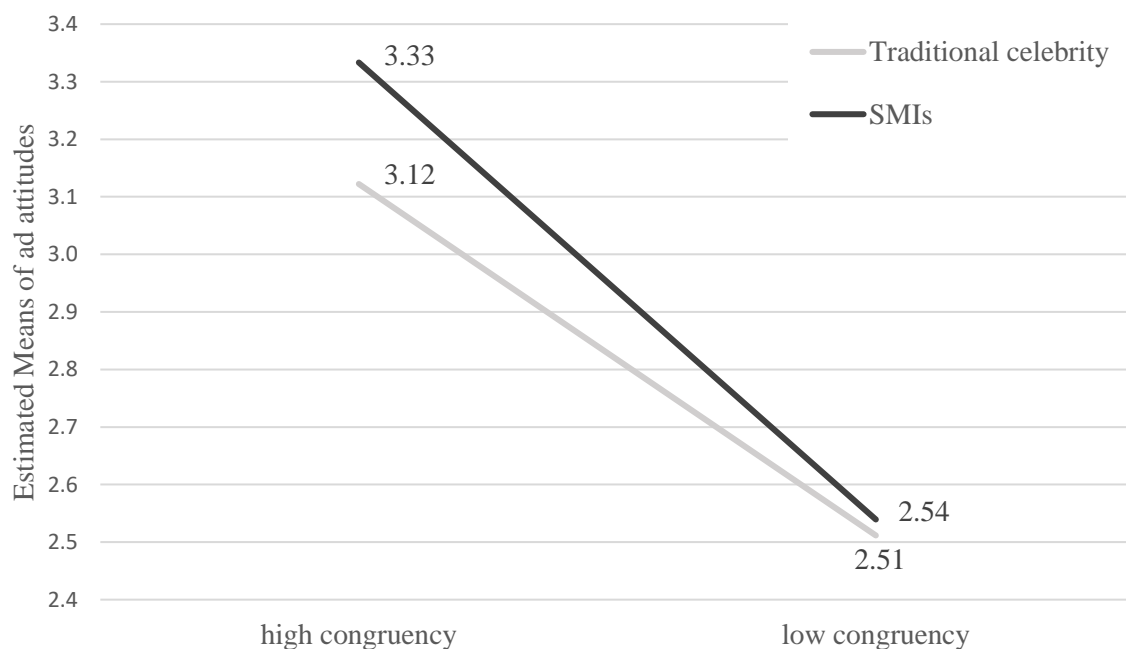
*Bar chart displaying the impact of endorser-product congruency on consumers' ad attitudes*



Further, the interaction between endorser type and the level of endorser-product congruency on consumers' ad attitudes was examined via another MANOVA test, which indicates that the results are significant,  $F(3, 215) = 18.2, p < .001$ . While examining these results in a more detailed graph shown in Figure 9, it can be considered that the combination of a SMIs endorser with a high level of endorser-product congruency has the highest positive influence on consumers' ad attitudes ( $M_{\text{highcongruencySMI}} = 3.33, SD = 0.77$ ).

**Figure 9**

*Plot displaying the interaction effect of endorser type and congruency on consumers' ad attitudes*



Moreover, it was expected that endorser type and endorser-product congruency have a positive impact on consumers' brand attitudes, according to the hypothesis. The results of test show that there are no significant differences between endorser types ( $F(1, 215) = 0.36, p = .548$ ) nor between the level of congruency ( $F(1, 215) = 0.03, p = .860$ ) on brand attitudes. This indicates that neither endorser type nor the level of congruency affects consumers' brand attitudes.

Besides, it was hypothesized that endorser type and endorser-product congruency have a positive effect on consumers' purchase intentions. The test results suggest that neither endorser

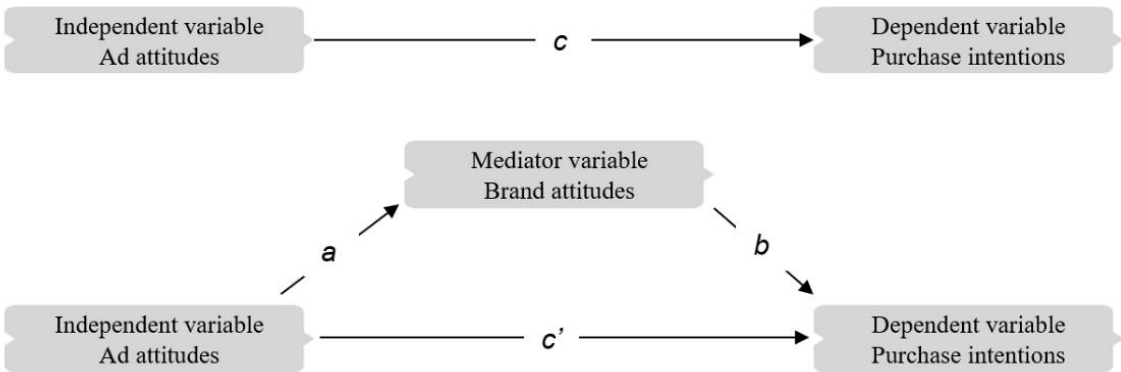
type nor the level of congruency has an impact on consumers’ purchase intentions because there are no significant differences between endorser types ( $F(1, 215) = 1.2, p = .276$ ) nor between the level of congruency ( $F(1, 215) = 2.65, p = .105$ ) on purchase intentions.

**Mediation hypothesis**

Looking at the mediation model in the proposed framework, it was hypothesized that having positive ad attitudes will positively predict consumers’ purchase intentions, in which brand attitudes mediate this relationship. To start with, the overall mediation hypothesis was analyzed based on the main conditions in this study, which are the conditions including an endorser. Further, the relationship between these variables may differentiate per condition, therefore, the mediation hypothesis was also investigated per condition. A series of regression analyses were performed, via the PROCESS macro version 4.0 in SPSS by Hayes (Hayes, 2022), per condition to test the last hypotheses in this study. The relationships of a mediation hypothesis are visualized in Figure 10 and the results of all regression analyses are shown in Table 9.

**Figure 10**

*Mediation analysis*



**Endorser conditions (main conditions).** Step 1 of the mediation model ( $c$ ), presents the regression of ad attitudes on purchase intentions, which is significant for the endorser conditions (endorser advertisements),  $\beta = 0.48, t(219) = 6.59, p < .001$ . In step 2 of the mediation process ( $a$ ), the regression of ad attitudes on brand attitudes, is significant,  $\beta = 0.26, t(219) = 4.34, p <$

.001. Further, step 3 of the mediation process (b) indicates that the effect of the mediator on purchase intentions is significant,  $\beta = 0.75$ ,  $t(219) = 9.76$ ,  $p < .001$ . Step 4 of the analyses (c') shows that the endorser conditions (endorser advertisements) is a significant predictor of ad attitudes: 95% CI [0.100, 0.307]. The confidence interval does not include zero, this indicates partial mediation between ad attitudes and purchase intentions by brand attitudes of endorser conditions, which is confirmed:  $b = 0.67$ .

**Non-endorser condition (control condition).** In step 1 of the mediation model (c), the regression of the independent variable, ad attitudes, on the dependent variable, purchase intentions, is not significant for the control condition (non-endorser advertisements),  $\beta = 0.23$ ,  $t(48) = 0.92$ ,  $p = .362$ . Step 2 shows that the regression of value ad attitudes on the mediator (a), brand attitudes, is significant for the control condition,  $\beta = 0.73$ ,  $t(48) = 4.44$ ,  $p < .001$ . Step 3 of the mediation process (b) shows that the effect of the mediator on purchase intentions, controlling for the control condition, is significant,  $\beta = 0.76$ ,  $t(48) = 3.99$ ,  $p < .001$ . Step 4 of the analyses (c') reveals that the control group (non-endorser advertisements) is not a significant predictor of ad attitudes: 95% CI [0.184, 1.036]. Although steps two and three were significant, the confidence interval includes a zero, which indicates that the mediator, brand attitudes, does not mediate the association between ad attitudes and purchase intentions.

**Traditional celebrity.** In step 1 of the mediation model (c), the regression of ad attitudes on purchase intentions, is significant for traditional celebrities,  $\beta = 0.38$ ,  $t(106) = 3.53$ ,  $p < .001$ . Step 2 shows that the regression of ad attitudes on brand attitudes (a) is also significant,  $\beta = 0.26$ ,  $t(106) = 2.89$ ,  $p = .0047$ . Step 3 of the mediation process (b) shows that the effect of the mediator on purchase intentions, is significant,  $\beta = 0.65$ ,  $t(106) = 5.88$ ,  $p < .001$ . Step 4 of the analyses (c') reveals the conditions including a traditional celebrity is a significant predictor of ad attitudes: 95% CI [0.037, 0.318]. The confidence interval does not include zero, which means there is partial mediation of traditional celebrity conditions by brand attitudes, which is confirmed:  $b = 0.55$ .

**Social media influencer.** Step 1 of the mediation model (*c*), presents the regression of ad attitudes on purchase intentions, is significant for SMIs,  $\beta = 0.53$ ,  $t(106) = 5.49$ ,  $p < .001$ . In step 2 of the mediation process (*a*), the regression of ad attitudes on brand attitudes, is again significant,  $\beta = 0.27$ ,  $t(106) = 3.29$ ,  $p = .0013$ . Step 3 (b) indicates that the effect of the mediator on purchase intentions is significant,  $\beta = 0.86$ ,  $t(106) = 8.05$ ,  $p < .001$ . Step 4 of the analyses (*c'*) shows that conditions including SMIs is a significant predictor of ad attitudes: 95% CI [0.083, 0.396]. This indicates partial mediation of SMIs conditions by brand attitudes, which is confirmed:  $b = 0.77$ .

**High endorser-product congruency.** In step 1 of the mediation model (*c*), the regression of ad attitudes on purchase intentions, is significant for high endorser-product congruency,  $\beta = 0.49$ ,  $t(111) = 4.64$ ,  $p < .001$ . Step 2 shows that the regression of ad attitudes on brand attitudes (*a*) is also significant,  $\beta = 0.46$ ,  $t(111) = 5.4$ ,  $p < .001$ . Step 3 of the mediation process (b) shows that the effect of the mediator on purchase intentions, is significant,  $\beta = 0.76$ ,  $t(111) = 7.27$ ,  $p < .001$ . Step 4 of the analyses (*c'*) reveals the conditions with high endorser-product congruency is a significant predictor of ad attitudes: 95% CI [0.191, 0.534]. This means there is partial mediation of high endorser-product congruency conditions by brand attitudes, which is confirmed:  $b = 0.84$ .

**Low endorser-product congruency.** Step 1 of the mediation model (*c*), presents the regression of ad attitudes on purchase intentions, is significant for low endorser-product congruency,  $\beta = 0.52$ ,  $t(108) = 4$ ,  $p < .001$ . In step 2 of the mediation process (*a*), the regression of ad attitudes on brand attitudes, is not significant,  $\beta = 0.17$ ,  $t(108) = 1.61$ ,  $p = .1112$ . Step 3 (b) indicates that the effect of the mediator on purchase intentions is significant,  $\beta = 0.73$ ,  $t(108) = 6.16$ ,  $p < .001$ . Step 4 of the analyses (*c'*) shows that conditions with low endorser-product congruency are not a significant predictor of ad attitudes: 95% CI [-0.049, 0.283]. Even though steps one and three were significant, it is indicated that the mediator, brand attitudes, does not mediate the relation between ad attitudes and purchase intentions.



**Table 9***Regression analyses per relationship for each condition*

Relation	$\beta$	$N$	$t$	$p$
Endorser conditions				
X on Y	0.48	219	6.59	< .001
X on M	0.26	219	4.34	< .001
M on Y	0.75	219	9.76	< .001
X on Y via M	0.67	219	-	0.100, 0.307
Non-endorser condition				
X on Y	0.23	48	0.92	.362
X on M	0.73	48	4.44	< .001
M on Y	0.76	48	3.99	< .001
X on Y via M	-	48	-	0.184, 1.036
Traditional celebrity				
X on Y	0.38	106	3.53	< .001
X on M	0.26	106	2.89	.0047
M on Y	0.65	106	5.88	< .001
X on Y via M	0.55	106	-	0.037, 0.318
Social media influencer				
X on Y	0.53	106	5.49	< .001
X on M	0.27	106	3.29	.0013
M on Y	0.86	106	8.05	< .001
X on Y via M	0.77	106	-	0.083, 0.396
High endorser-product congruency				
X on Y	0.49	111	4.64	< .001
X on M	0.46	111	5.4	< .001
M on Y	0.76	111	7.27	< .001
X on Y via M	0.84	111	-	0.191, 0.534
Low endorser-product congruency				
X on Y	0.52	108	4	< .001
X on M	0.17	108	1.61	.01112
M on Y	0.73	108	6.16	< .001
X on Y via M	-	108	-	-0.049, 0.283

*Note.* X: ad attitudes; Y: purchase intentions; M: brand attitudes;  $\beta$ : standardized coefficient;  $N$ : number of items;  $t$ : statistical inference;  $p$ : significance value.

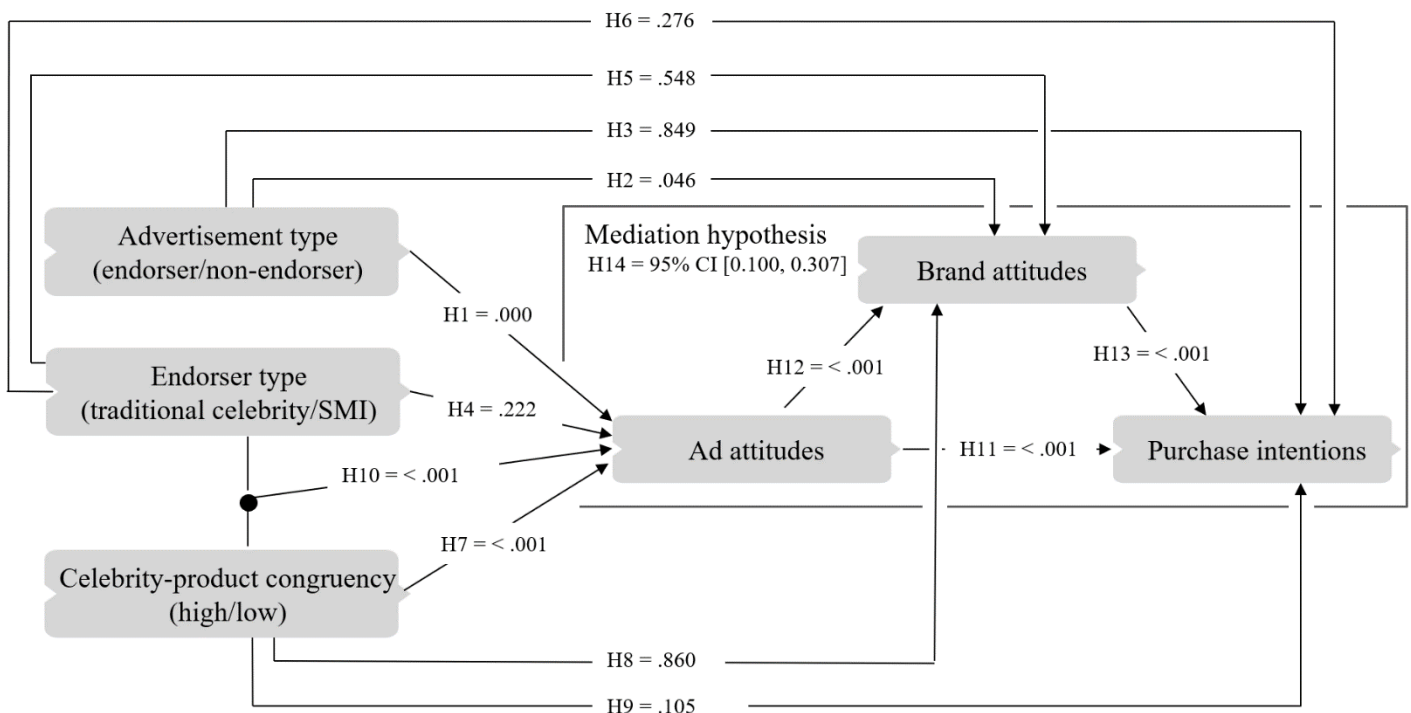
## Additional results

The hypothesis in this study indicated the interaction effect of endorser type and level of endorser-product congruency on ad attitudes. However, the interaction effect between these two variables on brand attitudes and purchase intentions can be of great value. Therefore, a multivariate variation analysis (MANOVA) was conducted to determine whether the interaction of endorser type and the level of congruency has an impact on consumers' brand attitudes. It can be concluded that the combination of endorser type and the level of congruency have no impact on brand attitudes because the results show that there are no significant differences between these two variables on brand attitudes ( $F(3, 215) = 0.30, p = .823$ ). Moreover, the results also indicate that there are no significant differences in the interaction between endorser type and the level of congruency on consumers' purchase intentions ( $F(3, 215) = 1.52, p = .210$ ).

An overview of the described results is visualized in Figure 11. Further, based on these results the hypotheses used in this study can be either accepted or rejected. Table 10 gives an overview of these hypotheses, and the next chapter dives more into the reasons for these findings.

**Figure 11**

*An overview of results based on the research framework*



**Table 10***Overview of hypotheses used in this study*

H1	An advertisement including an endorser will have a higher positive effect on consumers' ad attitudes than an advertisement without an endorser.	Rejected
H2	An advertisement including an endorser will have a higher positive effect on consumers' brand attitudes than an advertisement without an endorser.	Accepted
H3	An advertisement including an endorser will have a higher positive effect on consumers' purchase intentions than an advertisement without an endorser.	Rejected
H4	SMIs as endorsers will have a higher positive effect on consumers' ad attitudes than traditional celebrities as endorsers have.	Rejected
H5	SMIs as endorsers will have a higher positive effect on consumers' brand attitudes than traditional celebrities have.	Rejected
H6	SMIs as endorsers will have a higher positive effect on consumers' purchase intentions than traditional celebrities have.	Rejected
H7	Endorsers with high endorser-product congruency will have a higher positive effect on consumers' ad attitudes than low endorser-product congruency.	Accepted
H8	Endorsers with high endorser-product congruency will have a higher positive effect on consumers' brand attitudes than low endorser-product congruency.	Rejected
H9	Endorsers with high endorser-product congruency will have a higher positive effect on consumers' purchase intentions than low endorser-product congruency.	Rejected
H10	SMIs as endorsers with high endorser-product congruency will have a higher positive effect on consumers' ad attitudes than traditional celebrities with high endorser-product congruency have.	Accepted
H11	Consumers' ad attitudes will have a direct positive effect on consumers' purchase intention.	Accepted
H12	Consumers' ad attitudes will have a positive effect on consumers' brand attitudes.	Accepted
H13	Consumers' brand attitudes will have a positive effect on consumers' purchase intentions.	Accepted
H14	The relationship between consumers' ad attitudes and purchase intentions will be positively mediated by brand attitudes.	Accepted

## **Discussion**

This study was realized by conducting a 2x2x2 online experimental design on female participants in the Netherlands between the age of 18 and 30 years. Moreover, the main objective of this study was to investigate the influence of different advertisement types, endorser types, and the level of congruency on consumers' attitudes in the context of female perfume. Specifically, the influence of endorser and non-endorser advertisements, traditional celebrities and SMIs, in combination with high and low endorser-product congruency on consumers' ad attitudes, brand attitudes, and purchase intentions. Furthermore, the effects of the dependent variables on each other were explored in a mediation hypothesis setting among all conditions.

### **Main findings**

This section is divided into the same three steps as the results section, (1) endorser versus non-endorser advertisements, (2) endorser type and the level of congruency, and (3) mediation effect of the dependent variables on each other.

#### ***Endorser versus non-endorser conditions***

The influence of endorser versus non-endorser advertisements on consumers' attitudes and purchase intentions was investigated in the first phase of the analysis. It was expected that an advertisement including an endorser will have a higher positive effect on consumers' ad attitudes, brand attitudes, and purchase intentions than an advertisement without an endorser. Based on the results, a significant effect of endorser versus non-endorser advertisements on consumers' ad attitudes was found. However, this effect was not expected because the non-endorser advertisement had a greater effect on ad attitudes than the endorser advertisements. For this reason, the first hypothesis must be rejected (H1). On the other hand, the findings showed a statistically significant effect of endorser advertisements on consumers' brand attitudes, which confirms the hypothesis (H2). A reason for this inconsistency might be that consumers' level of involvement may play a crucial role in being persuaded by endorser or non-endorser

advertisements. As Torbarina et al. (2020) has stated, human presence in an advertisement may only be effective for consumers with a low level of engagement. Since the level of engagement of participants was not investigated in this study, it is possible that different levels of engagement existed among the participants.

Furthermore, the third hypothesis (H3) cannot be confirmed as the results showed no significant differences between an endorser and non-endorser advertisements on purchase intentions. This means human presence does not influence consumers' purchase intentions. An explanation for this result may be that consumers are currently exposed to a wide range of commercial communications and promotional messages. Due to their integrated and comprehensive experiences of sponsored advertisements, consumers may be unaffected by these differences in advertising.

#### ***Endorser type and congruency conditions***

Prior studies have stated that young consumers genuinely identify with SMIs, rather than traditional celebrities, their perceived authenticity and deep connectivity with such non-traditional celebrities result in increased consumers' attitudes and purchase intentions (Djafarova & Rushworth, 2017; Tran & Strutton, 2014). Despite academic results, no significant effects were found in this study between traditional celebrities and SMIs on consumers' ad attitudes, brand attitudes, nor on purchase intentions. Therefore, three hypotheses (H4, H5, and H6) cannot be accepted. It might be possible that consumers' attitudes and purchase intentions were affected by other independent factors as multiple studies have demonstrated substantial effects of endorser credibility and attractiveness on consumer attitude change, according to Schimmelpfennig and Hunt's (2019) meta-analysis. However, there are even more potential factors that might influence consumers' attitudes and purchase intentions (e.g., trustworthiness, likability, or familiarity) (Schimmelpfennig & Hunt, 2019). Another explanation for these results might be the way the manipulations were presented to the respondents. All manipulations consisted of pictures of a

product next to an endorser, similar to a typical advertising format. Although this provides an experimentally valid comparison of endorser types, this is not how social media influencers often interact with products. The endorsed product is usually part of a larger message and is included in a social media post through textual or visual narratives, such as an Instagram post or a vlog (Jiménez-Castillo & Sánchez-Fernández, 2019). The last probable reason is that in the digital world, SMIs and traditional celebrities are nearly identical perhaps by the limited academic understanding of SMIs (Bergkvist & Zhou, 2016; De Veirman et al., 2017), with the primary differences being high numbers of followers, active engagement, and product promotion (Jin et al., 2019).

Furthermore, in contrast to the endorser type, the level of endorser-product congruency seemed to have a positive effect on consumers' ad attitudes. A high level of congruency resulted in more favorable attitudes than a low level of congruency, which supports the seventh hypothesis (H7) of this study and is also consistent with previous studies. According to Rahman et al. (2014), each influencer is identified as a supporter of a specific product category, they can be seen as experts in a certain field of expertise and share more promotional fits (a match between an influencer and a product) to inform others. On the other hand, there were no significant differences in the level of congruency on consumers' brand attitudes or purchase intentions. Even though several researchers have found that congruency has a favorable impact on consumers' brand attitudes and purchase intentions (Davies & Slater, 2015; Jin et al., 2019), two hypotheses (H8 and H9) must be rejected in this study. This result might be explained by the fact that, in contrast to congruent items, items with some degree of incongruity can trigger more extensive processing because people strive to resolve and find meaning in the incongruity by making small changes in their attitudes (Mandler, 1982). Only minor inconsistencies can be considered "interesting and favorably valued", resulting in positive responses (Tesser, 1978). Another reason for the results can be that the manipulations used in this study may have caused the participants to have a

cognitive bias because it included small phrases about the endorser's professional life. The reason for this was related to the low correlations in terms of congruency in the pre-test. However, the findings of the main test may have been influenced as a result of this.

Furthermore, the interaction effect of endorser type and the level of endorser-product congruency has been investigated. The results indicated that there is an interaction effect between endorser type and the level of congruency on ad attitudes. The highest positive effect on consumers' ad attitudes is when a SMI with a high level of endorser-product congruency is presented, of which the hypothesis (H10) can be accepted.

### ***Mediation hypothesis of dependent variables***

Additionally, the mediation hypothesis of consumers' attitudes and purchase intentions was examined. Multiple studies have stated that ad attitudes lead to brand attitudes, which then lead to purchase intentions (López & Ruiz, 2011; MacKenzie et al., 1986; Trivedi, 2018). First, this study has investigated the direct relationship between ad attitudes on purchase intentions in the mediation hypothesis. For the main manipulations, which are the endorser conditions, it can be stated that consumers' ad attitudes have a direct positive effect on their purchase intentions. In this way, the eleventh hypothesis can be confirmed (H11). However, this relationship is also investigated per each condition, including the control condition. The results showed significant differences in effect in the relation of ad attitudes on purchase intentions for the traditional celebrity, SMIs, high congruency, and low congruency conditions. On the other hand, advertisements without an endorser do not affect this relationship. A possible explanation for this outcome may be that the previous hypothesis concerning the statistical differences of endorser versus non-endorser advertisements on consumers' purchase intentions was not found. This may have explained the outcome of the mediation hypothesis for non-endorser advertisements.

Second, the results contrast earlier findings, as the relation between ad attitudes on the mediator, brand attitudes showed significant differences in effect for the endorser conditions,

which is in line with the hypothesis (H12). Furthermore, a positive relationship between ad attitudes and brand attitudes was also found in the non-endorser, traditional celebrity, SMIs, and high congruency conditions. However, this was not the case for the low congruency conditions. It might be possible that low congruency conditions evoke different attitudes towards the ad and the brand because the manipulations only focused on product congruency and did not include brand congruency. Moreover, another explanation might be, as previously stated, that there were no significant effects in the level of congruency on consumers' brand attitudes. In which the results in the relation between ad attitudes on brand attitudes for the low congruency advertisement may be affected as a result of this.

Third, the mediation hypothesis revealed a positive relationship between brand attitudes and purchase intentions. The hypothesis (H13) can be confirmed for the endorser conditions since the findings showed significant effects between brand attitudes and purchase intentions, which was also the case for the other conditions independently.

Finally, the results confirm the last hypothesis (H14) and showed that the effect of ad attitudes on purchase intentions is partially mediated by brand attitudes for the endorser conditions, which is consistent with previous research. Furthermore, results showed that within the traditional celebrity, SMIs, and high congruency conditions the relationship between ad attitudes and purchase intentions is also partially mediated by brand attitudes. This suggests that brand attitudes can be considered as an important mediator in consumers' attitudes and purchase intentions. Non-endorser and low congruency conditions, on the other hand, showed no effect in this relationship. Although the level of involvement among participants was not investigated, a substantial explanation for this finding is that the product class (female perfume) may have been of the significant high importance of which the central processing was activated (Petty et al., 1983). Participants may have paid greater attention to strong arguments than to peripheral signals (e.g., ad appearance), whereas endorsers with high congruency can be considered as strong



arguments (e.g., expertise) and advertising without an endorser or low endorser-product congruency might have been considered as weak arguments.

### **Theoretical implications**

The findings of this study, in terms of the effect of high endorser-product congruency advertisements on consumer' ad attitudes and endorser advertisements on brand attitudes, as well as the mediation hypothesis, are consistent with earlier research. As a result, this study builds on prior studies and confirms previous findings. To begin with, according to Aaker (1996), marketers frequently use ideal users to resemble their products, whereas images of human faces are meaningful cues that encourage social interaction and draw consumers' attention (Van Rullen, 2006). Moreover, the results of this study of the use of endorsers in advertisements confirm the findings of prior studies, human faces are physiologically and socially meaningful visual cues as they can affect consumers' attitudes and behavior (Henderson et al., 2005; Itier & Batty, 2009; Torbarina et al., 2020). Subsequently, this study showed positive effects of high endorser-product congruency on consumers' ad attitudes, which is in line with previous research. As stated before, a good match between an endorser and the product is more effective in persuasion and generating favorable advertisements than a poor match between the two (Davies & Slater, 2015; Kamins & Gupta, 1994). As a final point, according to multiple studies, ad attitudes positively affect purchase intentions, mediated by brand attitudes (López & Ruiz, 2011; MacKenzie et al., 1986; Trivedi, 2018). In the study's main conditions, all flows in the mediation hypothesis were positive, which confirms previous academic findings.

In contrast to expected findings, it can be stated that the results of this study contradict those of earlier previous studies in terms of the effect of different endorser types on consumers' attitudes and purchase intentions. Whereas, according to a recent study, SMIs have a greater impact on young consumers' attitudes and purchasing behavior than traditional celebrities (Djafarova & Rushworth, 2017). These unexpected findings might be caused due to previously

mentioned influence of other factors, the format of the manipulation, or the limited academic understanding of SMIs.

### **Practical implications**

Besides extending present academic knowledge, the findings in this study have also relevant practical implications. This study found a strong positive relationship between consumers' ad attitudes and purchase intentions, which was mediated by brand attitudes. It can be concluded that marketers should focus not only on consumers' ad attitudes and purchase intentions but also on consumers' brand attitudes, as this is an important predictor in this relationship. This technique is particularly crucial for marketers promoting utilitarian products (e.g., perfume) because this study only focused on perfume advertisements.

Furthermore, businesses might also benefit from this knowledge by incorporating high endorser-product congruency advertisements. The relevance of the level of congruency on consumers' ad attitudes, as well as the significant relationship between attitudes and purchase intentions, was demonstrated in this study. Positive ad attitudes may lead to stronger brand attitudes and purchase intentions as a result of exposure to high congruency advertisements. Marketers may certainly benefit from such techniques in the future since they may be used to assess the impact of advertising on consumer behavior.

### **Limitations and future research**

This study includes several limitations. The first limitation is related to the results of the pre-test concerning the level of endorser-product congruency. Three out of four endorsers were simply chosen and provided good replications of the manipulations used in this study. However, SMIs with low endorser-product congruency had to be selected based on relatively low correlations. There were no SMIs with a high familiarity that showed a strong correlation and stood out from the others. To address this issue, it was decided to include brief statements regarding the endorsers' professional lives. The sentences may have caused cognitive bias among

the participants. Future research might thus extend the number of endorsers or participants to improve the quality of the results and make the selection process easier.

Second, because this study was an online experiment, the respondents actively participated on their own devices. This study design was chosen because of the strong lockdown caused by COVID-19 and the convenience by which a representative number of participants could be reached. Participants could, however, participate in any location they desired, implying that they may have been affected by external factors (noises, internet issues, or other distractions). Furthermore, there was a chance that participants might differ from one another in terms of whether they were interested in purchasing perfume. Future research should therefore explore doing a face-to-face experiment in perfume shops. This allows the researcher to regulate external factors while still ensuring that the participants are interested in purchasing perfume.

Third, future researchers might concentrate on strengthening the results' generalizability. This research exclusively included female participants from the Netherlands between the ages of 18 and 30. Future research might include a broader range of ages and gender groups to see whether the results differ. Furthermore, while this study only focused on female perfume advertisements, it might be interesting to look at the inclusion of different endorsers in a different product category in future research. As previously stated, the level of involvement differs per product category and may have a significant impact on the success of advertising in changing customers' attitudes and purchase intentions.

Fourth, this study was limited to only three factors influencing consumers' attitudes and purchase intentions in terms of celebrity endorsement, other factors might have influenced the results in this study as mentioned before. This is not unsurprising, considering the numerous factors that influence celebrity endorsement's effectiveness and make it a very difficult advertising approach (Schimmelpfennig & Hunt, 2019). Nevertheless, the understanding of the impact of

different factors among each other of celebrity endorsement on consumers' attitudes and purchase intentions may be beneficial for further research.

Finally, as mentioned before, an endorsed product by a SMIs is usually part of a larger message and is included in a social media post through textual or visual narratives, such as an Instagram post or a vlog (Jiménez-Castillo & Sánchez-Fernández, 2019). The manipulations in this study all followed the same format, ensuring that the manipulations were identical, however, it does not represent SMIs endorsing products in real life. As a result, future research should focus on using representative SMI formats to illustrate real-world advertising. Furthermore, while academic understanding of SMIs as endorsers is currently limited, future research is encouraged to further explore SMIs endorsement in the nowadays digital world.

## **Conclusion**

The purpose of this study was to examine the effects of advertisement type (endorser versus non-endorser), endorser type (traditional celebrity versus SMIs), and level of endorser-product congruency (high versus low) on the relationship between consumers' ad attitudes, brand attitudes, and purchase intentions. The study showed that ad attitudes, brand attitudes, and purchase intentions are all important components of measuring consumer behavior. The relationship between ad attitudes and purchase intentions, which is mediated by brand attitudes, is of particular interest. As a result, this study emphasizes the need of measuring all three components in the online environment to gather relevant and full information about consumer buying behavior. Especially in the digital world of influencer marketing, which is a marketing approach that relies on the power of influential individuals (Brown & Hayes, 2008), ad attitudes, brand attitudes, and purchase intentions should all be measured individually and together in a relationship by marketers.

Furthermore, although the results of this study only showed effects of high endorser-product congruency advertisements on consumers' ad attitudes and endorser advertisements on

consumers' brand attitudes, academic knowledge suggests that the level of congruency and the use of human endorsers are still important factors in celebrity endorsement. Whereas many studies have demonstrated that human faces and the level of congruency have a unique persuasive power to attract attention, communicate important information, and generate favorable advertisement perceptions (Davies & Slater, 2015; Frischen et al., 2007; Henderson et al., 2005; Itier & Batty, 2009; Kamins & Gupta, 1994). This emphasizes the importance of using human faces in advertisements and ensuring a high level of endorser-product congruency for marketers. Moreover, even though the findings of this study revealed no effect of a traditional celebrity or SMIs on consumers' attitudes nor on purchase intentions, it is still possible to conclude, based on academic understanding, that differences in endorser type play a significant role in consumer purchase behavior. However, this relation will need to be investigated further in the future.

## References

- Aaker, D. A. (1996). *Building strong brands*. Amsterdam University Press.  
[https://books.google.nl/books?hl=en&lr=&id=OLa\\_9LePJlYC&oi=fnd&pg=PT11&dq=Aaker,+D.A.+\(1996\),+Building+Strong+Brands,+The+Free+Press,+New+York,+NY.&ots=sDN8XX7Bb4&sig=867ojArD\\_mzinqSLNEZ2y5ZJqtA#v=onepage&q&f=false](https://books.google.nl/books?hl=en&lr=&id=OLa_9LePJlYC&oi=fnd&pg=PT11&dq=Aaker,+D.A.+(1996),+Building+Strong+Brands,+The+Free+Press,+New+York,+NY.&ots=sDN8XX7Bb4&sig=867ojArD_mzinqSLNEZ2y5ZJqtA#v=onepage&q&f=false)
- Abidin, C. (2016). “Aren’t these just young, rich women doing vain things online?”: Influencer selfies as subversive frivolity. *Social Media and Society*, 2(2), 205630511664134.  
<https://doi.org/10.1177/2056305116641342>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-t](https://doi.org/10.1016/0749-5978(91)90020-t)
- Almaida, A., Nurqamar, I., Setiawan, R., & Yulianingsi, Y. (2019). Celebrity Endorsement, Brand Equity, and Consumer Purchasing Decisions. *Proceedings of the Proceedings of the 1st International Conference on Economics, Management, Accounting and Business, ICEMAB 2018, 8–9 October 2018, Medan, North Sumatra, Indonesia*.  
<https://doi.org/10.4108/eai.8-10-2018.2288663>
- Althoff, R. R., & Cohen, N. J. (1999). Eye-movement-based memory effect: A reprocessing effect in face perception. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 25(4), 997–1010. <https://doi.org/10.1037/0278-7393.25.4.997>
- Arora, N., Prashar, S., Parsad, C., & Vijay, T. S. (2019). Mediating role of consumer involvement between celebrity endorsement and consumer evaluation: Comparative study of high and low involvement product. *Asian Academy of Management Journal*, 24(2), 113–142.  
<https://doi.org/10.21315/aamj2019.24.2.6>
- Bagozzi, R. P. (1981). Attitudes, intentions, and behavior: A test of some key hypotheses. *Journal of Personality and Social Psychology*, 41(4), 607–627. <https://doi.org/10.1037/0022-3514.41.4.607>

- Belanche, D., Casaló, L. V., Flavián, M., & Ibáñez-Sánchez, S. (2021). Understanding influencer marketing: The role of congruence between influencers, products, and consumers. *Journal of Business Research*, 132, 186–195. <https://doi.org/10.1016/j.jbusres.2021.03.067>
- Bergkvist, L., & Zhou, K. Q. (2016). Celebrity endorsements: a literature review and research agenda. *International Journal of Advertising*, 35(4), 642–663. <https://doi.org/10.1080/02650487.2015.1137537>
- Biehal, G., Stephens, D., & Curio, E. (1992). Attitude toward the ad and brand choice. *Journal of Advertising*, 21(3), 19–36. <https://doi.org/10.1080/00913367.1992.10673373>
- Brown, D., & Hayes, N. (2008). *Influencer Marketing*. Elsevier Gezondheidszorg. [https://books.google.nl/books?hl=en&lr=&id=\\_IksBgAAQBAJ&oi=fnd&pg=PR3&dq=brown+and+hayes+2008&ots=WEKMUNs8yt&sig=z3gQVKlkfuWiVbPIv1CrAyR6pOs#v=onepage&q=brown%20and%20hayes%202008&f=false](https://books.google.nl/books?hl=en&lr=&id=_IksBgAAQBAJ&oi=fnd&pg=PR3&dq=brown+and+hayes+2008&ots=WEKMUNs8yt&sig=z3gQVKlkfuWiVbPIv1CrAyR6pOs#v=onepage&q=brown%20and%20hayes%202008&f=false)
- Campbell, C., & Farrell, J. R. (2020). More than meets the eye: The functional components underlying influencer marketing. *Business Horizons*, 63(4), 469–479. <https://doi.org/10.1016/j.bushor.2020.03.003>
- Campbell, C., & Grimm, P. E. (2019). The challenges native advertising poses: Exploring potential federal trade commission responses and identifying research needs. *Journal of Public Policy & Marketing*, 38(1), 110–123. <https://doi.org/10.1177/0743915618818576>
- Chen, A., Lu, Y., & Wang, B. (2017). Customers' purchase decision-making process in social commerce: A social learning perspective. *International Journal of Information Management*, 37(6), 627–638. <https://doi.org/10.1016/j.ijinfomgt.2017.05.001>
- Chen, C. Y., Lee, L., & Yap, A. J. (2016). Control deprivation motivates acquisition of utilitarian products. *Journal of Consumer Research*, 43, 1031–1047. <https://doi.org/10.1093/jcr/ucw068>
- Cho, C. H. (2013). Why do people avoid advertising on the internet? *Journal of Advertising*, 33(4), 89–97. <https://doi.org/10.1080/00913367.2004.10639175>

- Choi, S. M., & Rifon, N. J. (2012). It is a match: The impact of congruence between celebrity image and consumer ideal self on endorsement effectiveness. *Psychology & Marketing*, 29(9), 639–650. <https://doi.org/10.1002/mar.20550>
- Davies, F., & Slater, S. (2015). Unpacking celebrity brands through unpaid market communications. *Journal of Marketing Management*, 31(5–6), 665–684. <https://doi.org/10.1080/0267257x.2014.1000941>
- De Veirman, M., Cauberghe, V., & Hudders, L. (2017). Marketing through Instagram influencers: the impact of number of followers and product divergence on brand attitude. *International Journal of Advertising*, 36(5), 798–828. <https://doi.org/10.1080/02650487.2017.1348035>
- Dibble, J. L., Hartmann, T., & Rosaen, S. F. (2015). Parasocial Interaction and Parasocial Relationship: Conceptual Clarification and a Critical Assessment of Measures. *Human Communication Research*, 42(1), 21–44. <https://doi.org/10.1111/hcre.12063>
- Djafarova, E., & Rushworth, C. (2017). Exploring the credibility of online celebrities' Instagram profiles in influencing the purchase decisions of young female users. *Computers in Human Behavior*, 68, 1–7. <https://doi.org/10.1016/j.chb.2016.11.009>
- Erdogan, B. Z. (1999). Celebrity Endorsement: A Literature Review. *Journal of Marketing Management*, 15(4), 291–314. <https://doi.org/10.1362/026725799784870379>
- Erdogan, B. Z., Baker, M. J., & Tagg, S. (2001). Selecting Celebrity Endorsers: The Practitioner's Perspective. *Journal of Advertising Research*, 41(3), 39–48. <https://doi.org/10.2501/jar-41-3-39-48>
- Evans, N. J., & Bang, H. (2018). Extending expectancy violations theory to multiplayer online games: The structure and effects of expectations on attitude toward the advertising, attitude toward the brand, and purchase intent. *Journal of Promotion Management*, 25(4), 589–608. <https://doi.org/10.1080/10496491.2018.1500411>
- Evans, N. J., Phua, J., Lim, J., & Jun, H. (2017). Disclosing Instagram influencer advertising: The effects of disclosure language on advertising recognition, attitudes, and behavioral intent.



- Journal of Interactive Advertising*, 17(2), 138–149.  
<https://doi.org/10.1080/15252019.2017.1366885>
- Friedman, H. H., & Friedman, I. C. (1976). Whom do students trust? *Journal of Communication*, 26(2), 48–49. <https://doi.org/10.1111/j.1460-2466.1976.tb01379.x>
- Frischen, A., Bayliss, A. P., & Tipper, S. P. (2007). Gaze cueing of attention: Visual attention, social cognition, and individual differences. *Psychological Bulletin*, 133(4), 694–724.  
<https://doi.org/10.1037/0033-2909.133.4.694>
- Gardner, R., Lalonde, R., & Moorcroft, R. (1985). The role of attitudes and motivation in second language learning: Correlational and experimental considerations. *Language Learning*, 35(2), 207–227. <https://doi.org/10.1111/j.1467-1770.1985.tb01025.x>
- Gilal, N. G., Gilal, F. G., Zhang, J., Gilal, R. G., Gong, Z., & Gilal, W. G. (2020). The role of endorsers in bringing defunct brands back to life: Theory and evidence. *Journal of Product & Brand Management*, 30(5), 671–690. <https://doi.org/10.1108/jpbm-03-2019-2315>
- Glucksman, M. (2017). Rise of social media influencer marketing on lifestyle branding: A case study of Lucie Fink. *Elon journal of undergraduate research in communications*, 8(2), 77–87.  
[https://www.elon.edu/u/academics/communications/journal/wp-content/uploads/sites/153/2017/12/08\\_Lifestyle\\_Branding\\_Glucksman.pdf](https://www.elon.edu/u/academics/communications/journal/wp-content/uploads/sites/153/2017/12/08_Lifestyle_Branding_Glucksman.pdf)
- Graeff, T. R. (1996). Using promotional messages to manage the effects of brand and self-image on brand evaluations. *Journal of Consumer Marketing*, 13(3), 4–18.  
<https://doi.org/10.1108/07363769610118921>
- Gresham, L. G., & Shimp, T. A. (1985). Attitude toward the advertisement and brand attitudes: A classical conditioning perspective. *Journal of Advertising*, 14(1), 10–49.  
<https://doi.org/10.1080/00913367.1985.10672924>
- Hayes, A. F. (2022). Introduction to mediation, moderation, and conditional process analysis, third edition: A Regression-Based approach (methodology in the social sciences) (Third ed., Vol. 3). The Guilford Press

- Henderson, J. M., Williams, C. C., & Falk, R. J. (2005). Eye movements are functional during face learning. *Memory & Cognition*, 33(1), 98–106. <https://doi.org/10.3758/bf03195300>
- Hoffner, C., & Buchanan, M. (2005). Young Adults' Wishful Identification with Television Characters: The Role of Perceived Similarity and Character Attributes. *Media Psychology*, 7(4), 325–351. [https://doi.org/10.1207/s1532785xmep0704\\_2](https://doi.org/10.1207/s1532785xmep0704_2)
- Holbrook, M. B., & Hirschman, E. C. (1982). The experiential aspects of consumption: Consumer fantasies, feelings, and fun. *Journal of Consumer Research*, 9(2), 132. <https://doi.org/10.1086/208906>
- Itier, R. J., & Batty, M. (2009). Neural bases of eye and gaze processing: The core of social cognition. *Neuroscience & Biobehavioral Reviews*, 33(6), 843–863. <https://doi.org/10.1016/j.neubiorev.2009.02.004>
- Jiménez-Castillo, D., & Sánchez-Fernández, R. (2019). The role of digital influencers in brand recommendation: Examining their impact on engagement, expected value and purchase intention. *International Journal of Information Management*, 49, 366–376. <https://doi.org/10.1016/j.ijinfomgt.2019.07.009>
- Jin, S. V., Muqaddam, A., & Ryu, E. (2019). Instafamous and social media influencer marketing. *Marketing Intelligence & Planning*, 37(5), 567–579. <https://doi.org/10.1108/mip-09-2018-0375>
- Kamins, M. A., Brand, M. J., Hoeke, S. A., & Moe, J. C. (1989). Two-Sided versus One-Sided celebrity endorsements: The impact on advertising effectiveness and credibility. *Journal of Advertising*, 18(2), 4–10. <https://doi.org/10.1080/00913367.1989.10673146>
- Kamins, M. A., & Gupta, K. (1994). Congruence between spokesperson and product type: A matchup hypothesis perspective. *Psychology and Marketing*, 11(6), 569–586. <https://doi.org/10.1002/mar.4220110605>

- Keel, A., & Nataraajan, R. (2012). Celebrity Endorsements and Beyond: New Avenues for Celebrity Branding. *Psychology & Marketing*, 29(9), 690–703.  
<https://doi.org/10.1002/mar.20555>
- Khamis, S., Ang, L., & Welling, R. (2016). Self-branding, ‘micro-celebrity’ and the rise of Social Media Influencers. *Celebrity Studies*, 8(2), 191–208.  
<https://doi.org/10.1080/19392397.2016.1218292>
- Knoll, J., & Matthes, J. (2017). The effectiveness of celebrity endorsements: a meta-analysis. *Journal of the Academy of Marketing Science*, 45(1), 55–75.  
<https://doi.org/10.1007/s11747-016-0503-8>
- Kobia, C., & Liu, C. (2017). Why forward viral fashion messages? The moderating roles of consumers’ fashion traits and message orientation. *Journal of Internet Commerce*, 16(3), 287–308. <https://doi.org/10.1080/15332861.2017.1324651>
- Lafferty, B. A., Goldsmith, R. E., & Newell, S. J. (2002). The dual credibility model: The influence of corporate and endorser credibility on attitudes and purchase intentions. *Journal of Marketing Theory and Practice*, 10(3), 1–11.  
<https://doi.org/10.1080/10696679.2002.11501916>
- Lee, Y., & Koo, J. (2016). Can a Celebrity Serve as an Issue-Relevant Argument in the Elaboration Likelihood Model? *Psychology & Marketing*, 33(3), 195–208.  
<https://doi.org/10.1002/mar.20865>
- Lim, E. A. C., & Ang, S. H. (2008). Hedonic vs. Utilitarian consumption: A cross-cultural perspective based on cultural conditioning. *Journal of Business Research*, 61(3), 225–232.  
<https://doi.org/10.1016/j.jbusres.2007.06.004>
- López, I., & Ruiz, S. (2011). Explaining website effectiveness: The hedonic–utilitarian dual mediation hypothesis. *Electronic Commerce Research and Applications*, 10(1), 49–58.  
<https://doi.org/10.1016/j.elerap.2010.04.003>

- MacKenzie, S. B., Lutz, R. J., & Belch, G. E. (1986). The role of attitude toward the ad as a mediator of advertising effectiveness: A test of competing explanations. *Journal of Marketing Research*, 23(2), 130. <https://doi.org/10.2307/3151660>
- Mandler, G. (1982). *The structure of value: Accounting for taste* (1ste edition). Psychology Press. <https://doi.org/10.4324/9781315802756-7>
- McCombes, S. (2020, 2 October). *An introduction to sampling methods*. Scribbr. Geraadpleegd op 11 januari 2021, van <https://www.scribbr.com/methodology/sampling-methods/>
- McCracken, G. (1989). Who is the Celebrity Endorser? Cultural Foundations of the Endorsement Process. *Journal of Consumer Research*, 16(3), 310. <https://doi.org/10.1086/209217>
- Misra, S., & Beatty, S. E. (1990). Celebrity spokesperson and brand congruence. *Journal of Business Research*, 21(2), 159–173. [https://doi.org/10.1016/0148-2963\(90\)90050-n](https://doi.org/10.1016/0148-2963(90)90050-n)
- Mitchell, A. A., & Olson, J. C. (1981). Are product attribute beliefs the only mediator of advertising effects on brand attitude? *Journal of Marketing Research*, 18(3), 318–332. <https://doi.org/10.2307/3150973>
- Oliver, R. L. (1980). A cognitive model of the antecedents and consequences of satisfaction decisions. *Journal of Marketing Research*, 17(4), 460–469. <https://doi.org/10.2307/3150499>
- Petty, R. E., Cacioppo, J. T., & Schumann, D. (1983). Central and Peripheral Routes to Advertising Effectiveness: The Moderating Role of Involvement. *Journal of Consumer Research*, 10(2), 135. <https://doi.org/10.1086/208954>
- Rahman, S. U., Saleem, S., Akhtar, S., Ali, T., & Khan, M. A. (2014). Consumers' adoption of apparel fashion: The role of innovativeness, involvement, and social values. *International Journal of Marketing Studies*, 6(3), 49–64. <https://doi.org/10.5539/ijms.v6n3p49>
- Ruiz-Gomez, A. (2019). Digital fame and fortune in the age of social media: A classification of social media influencers. *ad Research ESIC International Journal of Communication Research*, 19(19), 08–29. <https://doi.org/10.7263/adresic-019-01>

- Schimmelpfennig, C., & Hunt, J. B. (2019). Fifty years of celebrity endorser research: Support for a comprehensive celebrity endorsement strategy framework. *Psychology & Marketing*, 37(3), 488–505. <https://doi.org/10.1002/mar.21315>
- Schouten, A. P., Janssen, L., & Verspaget, M. (2019). Celebrity vs. Influencer endorsements in advertising: the role of identification, credibility, and Product-Endorser fit. *International Journal of Advertising*, 39(2), 258–281. <https://doi.org/10.1080/02650487.2019.1634898>
- Seno, D., & Lukas, B. A. (2007). The equity effect of product endorsement by celebrities. *European Journal of Marketing*, 41(1/2), 121–134. <https://doi.org/10.1108/03090560710718148>
- Sirgy, M. (1985). Using self-congruity and ideal congruity to predict purchase motivation. *Journal of Business Research*, 13(3), 195–206. [https://doi.org/10.1016/0148-2963\(85\)90026-8](https://doi.org/10.1016/0148-2963(85)90026-8)
- Sirgy, M. J. (1982). Self-Concept in consumer behavior: A critical review. *Journal of Consumer Research*, 9(3), 287–300. <https://doi.org/10.1086/208924>
- Spears, N., & Singh, S. N. (2004). Measuring attitude toward the brand and purchase intentions. *Journal of Current Issues & Research in Advertising*, 26(2), 53–66. <https://doi.org/10.1080/10641734.2004.10505164>
- Stafford, M. R., Stafford, T. F., & Day, E. (2002). A contingency approach: The effects of spokesperson type and service type on service advertising perceptions. *Journal of Advertising*, 31(2), 17–35. <https://doi.org/10.1080/00913367.2002.10673664>
- Starnage. (2021). *Top 1000 Instagram influencers in Netherlands in 2021*. Geraadpleegd op 26 november 2021, van <https://starnage.com/app/global/influencer/ranking/netherlands>
- Statista. (2021a). *Social media usage in the Netherlands*. <https://www-statista-com.ezproxy2.utwente.nl/study/37903/social-media-usage-in-the-netherlands-statista-dossier/>

- Statista. (2021b, July 17). *Instagram accounts with the most followers worldwide as of July 2021*. Statista. Geraadpleegd op 26 november 2021, van <https://login.ezproxy2.utwente.nl/login?qurl=https://www.statista.com%2fstatistics%2f421169%2fmost-followers-instagram%2f>
- Statista. (2021c, October 15). *Instagram user share in the Netherlands 2021, by age and gender*. Geraadpleegd op 1 december 2021, van <https://login.ezproxy2.utwente.nl/login?qurl=https://www.statista.com%2fstatistics%2f946096%2finstagram-user-distribution-in-the-netherlands-by-age-group-and-gender%2f>
- Tesser, A. (1978). Self-Generated attitude change. *Advances in Experimental Social Psychology*, 289–338. [https://doi.org/10.1016/s0065-2601\(08\)60010-6](https://doi.org/10.1016/s0065-2601(08)60010-6)
- Tom, G., Clark, R., Elmer, L., Grech, E., Masetti, J., & Sandhar, H. (1992). The Use of Created Versus Celebrity Spokespersons in Advertisements. *Journal of Consumer Marketing*, 9(4), 45–51. <https://doi.org/10.1108/07363769210037088>
- Torbarina, M., Jelenc, L., & Brkljačić, I. (2020). Increasing consumer engagement on social networks: Social media influencer's followers 'Like' to see a face in a post. *Market-Tržište*, 32(SI), 67–81. <https://doi.org/10.22598/mt/2020.32.spec-issue.67>
- Tran, G. A., & Strutton, D. (2014). Has reality television come of age as a promotional platform? Modeling the endorsement effectiveness of celebrealty and reality stars. *Psychology & Marketing*, 31(4), 294–305. <https://doi.org/10.1002/mar.20695>
- Trivedi, J. P. (2018). Measuring the comparative efficacy of an attractive celebrity influencer vis-à-vis an expert influencer - a fashion industry perspective. *International Journal of Electronic Customer Relationship Management*, 11(3), 256. <https://doi.org/10.1504/ijecrm.2018.093771>
- Van Rullen, R. (2006). On second glance: Still no high-level pop-out effect for faces. *Vision Research*, 46(18), 3017–3027. <https://doi.org/10.1016/j.visres.2005.07.009>
- Verhoeven, N. (2014). *Wat is onderzoek?* (5de edition). Boom Lemma.

- Wakefield, K. L., & Barnes, J. H. (1996). Retailing hedonic consumption: A model of sales promotion of a leisure service. *Journal of Retailing*, 72(4), 409–427.  
[https://doi.org/10.1016/s0022-4359\(96\)90021-4](https://doi.org/10.1016/s0022-4359(96)90021-4)
- Wei, P. S., & Lu, H. P. (2013). An examination of the celebrity endorsements and online customer reviews influence female consumers' shopping behavior. *Computers in Human Behavior*, 29(1), 193–201. <https://doi.org/10.1016/j.chb.2012.08.005>
- Yoo, B., Donthu, N., & Lee, S. (2000). An examination of selected marketing mix elements and brand equity. *Journal of the Academy of Marketing Science*, 28(2), 195–211.  
<https://doi.org/10.1177/0092070300282002>
- Zhu, Y. Q., & Kanjanamekanant, K. (2021). No trespassing: exploring privacy boundaries in personalized advertisement and its effects on ad attitude and purchase intentions on social media. *Information & Management*, 58(2), 1–11.  
<https://doi.org/10.1016/j.im.2020.103314>

## Appendices

### Appendix A

Longlist most popular SMIs on Instagram in the Netherlands

Celebrity type	Congruency	Name	Expertise	Number of followers Instagram
SMIs	High	Nikkie de Jager	Beauty	15,1
		Negin Mirsalehi	Fashion	6,8
		Mimi Eswaratti	Beauty	1,6
		Rianne Meijer	Fashion	1,5
		Mikky Kiemeneij	Lifestyle	1,5
		Demira van der Zeeuw	Lifestyle	1,4
		Monica Geuze	Vlogger	1,3
		Anna Nooshin	Fashion	1,0
		Juultje Tieleman	Beauty	0,988
		Noor de Groot	Fashion	0,751
SMIs	Low	Liza Koshy	Youtuber	19,4
		Yolanda Gampp	Food	2,7
		Demi Bagby	Fitness	2,6
		Nochtli Peralta Alvarez	Fitness	1
		Nienke Helthuis	Youtuber	1,1
		Laura Brijde	Travel	0,82
		Dionne Slagter (onnedi)	Youtuber	0,581
		Guusje van Geel	Fitness	0,558
		Marije Zuurveld	Youtuber	0,469
		Elise & Nina - Chickslovefood	Food	0,228
		Paola – Cravings in Amsterdam	Food	0,12
Traditional celebrity	High	Kylie Jenner	Reality show, fashion	284



Low	Ariana Grande	Singer, fashion	278
	Selena Gomez	Singer, fashion	275
	Kim Kardashian	Reality show, fashion	266
	Beyonce	Singer	220
	Kendall Jenner	Reality show	201
	Khloe Kardashian	Reality show	199
	Taylor Swift	Singer	187
	Miley Cyrus	Singer	153
	Doutzen Kroes	Model	7
	Billie Eilish	Singer	96,6
	Emma Watson	Actrice, feminist, sustainability	62,4
	Millie Bobby Brown	Actrice	46,9
	Greta Thunberg	Activist, sustainability	13,9
	Willow Smith	Singer	9,5
	Simone Biles	Athlete, athletics	6,9
	Lieke Martens	Athlete, soccer	1,3
	Kiki Bertens	Athlete	0,891
	Geraldine Kemper	Tv presenter, travel	0,628
	Dafne Schippers	Athlete, sprints	0,395

---

*Note.* This information is gathered from (Starngage, 2021; Statista, 2021a; Statista, 2021b).

## Appendix B

### Pre-test results

	Traditional celebrity vs. SMIs		Familiarity		Congruency	
	Mean	Std.	Mean	Std.	Mean	Std.
	Deviation		Deviation		Deviation	
Ariana Grande	1.3	0.7	4.1	0.6	4.3	0.6
Beyonce	1.3	1.0	4.3	0.7	3.7	1.1
Kylie Jenner	4.0	1.4	3.6	1.0	3.5	0.8
Selena Gomez	1.3	0.9	4.0	0.7	3.9	0.8
Kim Kardashian	3.7	1.5	3.9	1.0	3.3	1.3
Doutzen Kroes	1.4	0.7	3.9	0.8	4.1	0.8
Khloe Kardashian	3.6	1.6	3.4	1.1	3.4	1.2
Kendall Jenner	3.1	1.5	3.7	1.1	3.9	0.9
Miley Cyrus	1.3	0.7	4.1	0.7	3.1	1.1
Taylor Swift	1.0	0.2	4.2	0.7	3.6	1.1
Dafne Schippers	1.4	0.6	3.3	1.2	2.3	1.2
Billie Eilish	1.3	0.7	3.7	1.0	2.4	1.3
Emma Watson	1.2	0.5	4.0	0.6	3.6	1.0
Greta Thunberg	2.8	1.5	3.2	1.2	1.2	0.6
Christina Curry	2.4	1.0	2.1	1.0	2.3	1.0
Kiki Bertens	2.1	1.0	2.5	1.3	2.4	1.0
Lieke Martens	1.7	0.9	3.4	0.8	2.5	1.1
Millie Bobby Brown	2.2	1.2	2.3	1.5	3.0	1.1
Simone Biles	1.6	0.9	3.2	1.4	2.0	1.0
Willow Smith	2.5	1.3	2.7	1.2	2.8	0.9
Anna Nooshin	4.5	1.0	3.3	1.1	3.4	1.1
Demira van der Zeeuw (Dee)	4.0	1.1	2.6	1.4	3.3	1.2
Juultje Tieleman	4.1	0.9	2.0	1.3	3.1	1.2
Mimi Eswaratti	3.4	0.7	1.0	0.2	2.9	0.9
Monica Geuze	4.3	1.2	3.5	1.2	3.5	0.8
Negin Mirsalehi	3.7	1.0	1.7	1.2	3.4	1.1
Nikkie de Jager	4.2	1.3	4.1	0.7	3.5	1.1
Noor de Groot	4.0	0.9	1.4	1.0	2.8	1.0
Rianne Meijer	3.9	1.1	1.5	0.8	2.8	0.8

Mikky Kiemeney	3.9	1.0	2.6	1.3	3.3	1.1
Elise Gruppen-	3.9	1.0	1.5	0.9	1.8	0.8
Schouwerwou						
Demi Bagby	3.6	0.8	1.2	0.9	2.2	1.1
Dionne Slagter	4.0	0.9	2.7	1.2	2.2	1.0
Guusje Geel	3.9	1.0	1.0	0.0	2.0	0.8
Marije Zuurveld	3.9	1.0	1.7	1.1	2.6	0.9
Laura Brijde	3.4	0.9	1.1	0.4	2.6	1.2
Nienke Helthuis	3.3	1.0	1.0	0.0	2.2	1.0
Nochtli Peralta	3.9	0.9	1.5	1.0	1.7	0.8
Alvarez						
Paola	3.4	1.0	1.0	0.2	2.5	1.1
Liza Koshy	3.6	1.1	2.2	1.3	2.4	1.0

---

*Note.* Traditional celebrity vs. SMIs had a scale from (1) as a traditional celebrity, (2) slightly as a traditional celebrity, (3) nor as a traditional celebrity, nor as a social media influencer, (4) slightly as a social media influencer, and (5) as a social media influencer. Familiarity had a scale from (1) not familiar at all, (2) slightly familiar, (3) moderately familiar, (4) very familiar, and (5) extremely familiar. Congruence had a scale from (1) extremely bad match, (2) somewhat bad match, (3) neither good nor bad match, (4) somewhat good match, (5) extremely good match.

## Appendix C

### Main survey

Thank you for taking part in this study. This online experiment is part of my Communication Science master's thesis project. The goal of this study is to look into the effect of promoting online female perfume on female consumer's attitudes. As a respondent in this study you are of great value to both academics and practitioners of marketing now that the marketing world increasingly strives to create impact in a variety of ways.

Since this study focuses on female perfume, only women between the ages of 18 and 30 will be asked to participate. It will take around 5 to 10 minutes to complete the survey, and your participation is completely voluntary.

You can withdraw from this study at any time during or after the survey has started. The information gathered in this online experiment will only be utilized for this study and will not be shared with anyone else. Furthermore, participation is anonymous, and all information will be kept private.

You can contact me through email at [r.vanderwielen@student.utwente.nl](mailto:r.vanderwielen@student.utwente.nl) if you have any questions about the online experiment or your participation.

Consent By selecting "I agree", you are consenting to the conditions described above.

I agree

I disagree

Q1: What is your gender?

- ☐ Male
- ☐ Female
- ☐ Other/prefer not to say

Q2: What is your age in years?

You will be presented with some perfume advertisements followed by some related questions. Please look at the pictures first and answer the questions afterwards.

On the next page, you will be presented with some questions about the Chanel Coco Mademoiselle perfume.

Q3: To what extent do you agree or disagree with the following statements about **the advertisement of Chanel Coco Mademoiselle**?

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I think the advertisement is good					
I like the advertisement					
I consider the advertisement as pleasant					
I think the advertisement is interesting					
I think the advertisement is favorable					

On the next page, you will be presented with some questions about the brand Chanel.

Q4: To what extent do you agree or disagree with the following statements about the **brand Chanel**?

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I think the brand is good					
I like the brand					
I consider the brand as pleasant					
I think the brand is interesting					
I think the brand is favorable					

On the following page, you will be presented with the last questions of this survey about your intentions to buy the perfume.

Q5: To what extent do you agree or disagree with the following statements about your **purchase intentions**?

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I would consider buying this perfume					
It is possible that I would buy this perfume					
I am willing to buy this perfume					
I am certain that I would buy this perfume					

Q6 On the next page, you will be presented with some questions about the advertisement you saw in the beginning of the survey.

Q7: What brand was shown in the presented advertisement?

- ☐ Yves Saint Laurent
- ☐ Chanel
- ☐ Lancôme

Q8: Did the advertisement contain a person?

- ☐ Yes
- ☐ Can't remember
- ☐ No

Q9: How would you describe the person in de advertisement?

**Traditional celebrities** only considers famous individuals who created value for themselves through music, sports, or movies, before participating in social media activities.

**Social media influencers** are individuals who got famous and have gained recognitions as a result of their social media presence.

	1	2	3	4	5	
--	---	---	---	---	---	--

Traditional  
celebrity

Social media  
influencer

Q10: What do you think about the match or fit between the person in the advertisement and the perfume Chanel Coco Mademoiselle?

	1	2	3	4	5	
Bad match						Good match

Q11: Have you ever purchased the perfume Chanel Coco Mademoiselle?

- ☐ Yes, recently
- ☐ Yes, in the past
- ☐ No

Q12 These were the last questions. If you have any comments or remarks concerning this survey, please indicate them below.