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Master Thesis Economic and Business - Marketing

*“Does the type of advertising content influence the consumers’ brand attitude?”*



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The views stated in this thesis are those of the author and not necessarily those of the supervisor, second assessor, Erasmus School of Economics or Erasmus University Rotterdam.

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## **Chapter 1: Introduction**

In the first part of the thesis, the researcher will discuss the main idea of the research that needs to be conducted. The research question and sub questions will be discussed, the academic and managerial relevance of the subject will be addressed. Furthermore, the structure of the thesis will be addressed.

### **1.1 Problem statement and research question**

This research studies the relationship between the type of advertising content (prominent and subtle) and the consumers' brand attitude. Moreover, the researcher investigates whether this possible effect is mediated by source credibility and/or persuasive knowledge. Furthermore, it is investigated if persuasive knowledge is moderated by educational level. Persuasion knowledge and different types of content have been researched by multiple researchers; however, they are hardly ever specified to the new innovations of subtle or prominent advertising. Besides, different mediators or moderators have been used. Furthermore, the introduction of codes of conduct for the visibility of disclosures of advertising and recognizability of the relevant relationship in different countries arise. Hence, advertising must be clearly recognizable as such (Stichting Reclame Code, 2019). The prominent and subtle advertising content types of the present in relation with brand attitude could possibly differ from the past.

The following research question and sub questions are formulated in order to complete the research.

The research question is:

*“Does the type of advertising content influence the consumers' brand attitude?”*

The sub questions to answer the research question are:

Sub question 1: *“Does source credibility mediate the influence of type of advertising content on consumers' brand attitude?”*

Sub question 2: *“Does persuasive knowledge mediate the influence of type of advertising content on consumers' brand attitude?”*

Sub question 3: *“Does education level affect the relationship of persuasive knowledge on brand attitude?”*

## **1.2 Managerial relevance**

This study is relevant for managers and businesses, because prominent and subtle advertising content is used a lot in marketing (departments). It is important to keep researching new forms of advertising on social media channels regarding to brand attitude. Besides, persuasive knowledge of consumers could be important for managers and businesses, and this requires consumer insights. Furthermore, approximately 3.6 billion internet users are using social media networks. These numbers are still expected to rise as the use of mobile device and mobile social networks gain grip on society (Clement, 2020). To optimize marketing activities and new forms of communication and advertising the results of this study are important. Managers could anticipate on the findings and use this in their advantage. This study shows if the type of advertising content has influence on consumers' brand attitude.

## **1.3 Academic relevance**

Subtle and prominent advertising (type of content) has been investigated by many researchers. They investigated the characteristics of this variable and the effects of using this (van Reijmersdal, 2009; Evans & Park, 2015; Petty & Andrews, 2008; Matteo & Dal Zotto, 2015; Kim, Lee, Hwang, & Jeong, 2016). Specifically, Boerdam and van Reijmersdal, researched the effects of disclosing sponsored content for consumers (Boerman & van Reijmersdal, 2016). Findings show that awareness of the disclosure can increase brand memory, if a consumer is aware and has a high level of persuasion knowledge. However, this study solely examined sponsored/subtle content. Furthermore, Homer (2009) studied the effects of subtle and prominent product placements and repetition interact of this to impact brand attitude. However, the product placements that were examined were examples that are used in television and movies. Researchers Tutaj and van Reijmersdal have done a similar kind of study, investigating the effects of persuasion knowledge and online advertising formats that are sponsored content and banner ads (subtle and prominent advertising content). This was tested on audience reactions. However, the examples for subtle and prominent advertising content, which are types of content, differ and were mostly used back in time (2012) (Van Reijmersdal & Tutaj, 2012). Besides, researcher Becker-Olsen investigated the effects of sponsored content and banner advertising as well (Becker-Olsen, 2003). Furthermore, previous studies have not analysed these variables in a mediating setting between type of advertising content and brand attitude with mediating variables that are source credibility and persuasive knowledge. For that reason, it is important to investigate the mediating effect of persuasive knowledge and source credibility on the relation between type of advertising content and brand attitude and the moderated

mediating variable education level. Although all of these variables have been included in previous studies one way or another, they have never been applied in the setting of a relatively new type of subtle advertising content, which is content of social media influencers, particularly in combination with the mediating and moderated mediating variables previously mentioned. Besides that, this has not been investigated in relation with the consumers' brand attitude.

#### **1.4 Thesis structure**

The structure of this thesis is as follows. The next chapter consists of a literature review involving the relevant literature of the variables that are tested, the formulated hypotheses and the conceptual model of this research. Moreover, chapter 3 is dedicated to the methodology of this research and the regression formula is presented. At the end of this chapter the pre-test of the questionnaire is described. The results of the quantitative research are described in chapter 4. This chapter consist of several statistical tests in order to accept or reject the hypotheses that are formulated. Lastly, in chapter 5 the general discussion is given, along with the academic & managerial implications, limitations and recommendations for further research. The Appendices are attached after this chapter.

## **Chapter 2: Literature review**

To get a better understanding of the subject of this thesis, this chapter consists of a literature review with the relevant literature of the variables. The literature reviews consists of the following variables: type of advertising content (subtle and prominent), source credibility, persuasive knowledge, education level, brand attitude of consumers and the phenomenon social media influencing. Furthermore, the hypotheses and conceptual model of the research are described. The most important subjects and findings that concern the research question are presented here.

### **2.1 Type of advertising content (prominent and subtle advertising)**

There are multiple advertising formats available, that are varying from subtle advertising to prominent advertising types. Furthermore, different types of online advertising formats vary in their allocation of editorial and commercial content. The subtle advertising content type consists of integrated ad formats such as sponsorships. With sponsored content, the focus is put on thoughts of corporate level. Components are credibility, category leadership, and trust (Becker-Olsen, 2003; Tutaj & van Reijmersdal, 2012). Covert advertising can be viewed as a form of subtle advertising. Covert advertisement is an ad which has the appearance of something other than advertising (Evans & Park, 2015). The purpose of this type of advertising is to appear more in the media in which it is placed and less like an advertisement (Petty & Andrews, 2008). The lines between commercial content and non-commercial content are faded with the use of sponsored (subtle advertising) content. With this type of format, the commercial source and intent are hidden (Boerman & van Reijmersdal, 2016). The reason for this is that sponsored content is made to appear like editorial content or entertainment (Boerman, van Reijmersdal, Rozendaal, & Dima, 2018). Therefore, the lines between journalistic information and strategic communication are vague (Matteo & Dal Zotto, 2015). This can lead to the fact that consumers might not recognize the sponsored content format as persuasion. Hence, consumers could possibly not use their cognitive defenses when facing persuasion (Nebenzahl & Jaffe, 1998). The consumers' barriers of reception will be lower and hence, advertising tolerance will increase (Tutaj & van Reijmersdal, 2012). Furthermore, a benefit of sponsored content in comparison with prominent type of content is that this subtle type of content is less easy to block. Moreover, sponsored content is associated with positive reactions from readers when compared with prominent content (van Reijmersdal, Neijens, & Smit, 2005). Because readers have less irritation, this could be linked to more brand benefit (Tutaj & van Reijmersdal, 2012).



Moderate repetition levels of subtle product placements will result in relatively positive consumer attitudes with little incremental impact when compared to prominent brand placements (Homer, 2009). Examples of subtle advertising are brand placements in video games and TV shows, paid reviews on blogs of products, new articles that are sponsored, and social media posts that are commissioned by a brand (Boerman, van Reijmersdal, Rozendaal, & Dima, 2018; van Reijmersdal, Neijens, & Smit, 2009).

Prominent advertising types of content generally contain elements that are prominent brand related. Elements that are brand related include pictures of the brand, persuasive messages, and unique selling points. Besides, advertisements also include non-brand elements that do not entirely have to be related to the brand. The non-brand elements are also known as execution elements and include for instance layout and design, music, and graphics (Smith & Yang, 2004; Kim & Leckenby, 2002). Consumers are more likely to recall a product or attribute with the use of prominent advertising formats (Kim, Lee, Hwang, & Jeong, 2016). Prominent brand placement is more deeply processed, resulting in increased memory (van Reijmersdal, 2009). Moreover, advertisers are able to make it less likely for consumers to recall other attributes (Gardner, 1983). Prior research suggests that prominent advertisements have a negative effect on behavioral and attitudinal outcomes. Furthermore, when brands that are already known by the consumer repeat the prominent brand placement/ads this results in a negative impact on brand attitude (Homer, 2009). The prominent type of content consists of commercial ads, for instance, banners and pop-ups and has a clear persuasive intent. Moreover, the source can be identified easily (Becker-Olsen, 2003).

## **2.2 Source credibility**

Source credibility consists of two dimensions that commonly have been identified, namely expertise and trustworthiness. The dimension expertise is referring to the extent to which a person is perceived to be capable of making a correct assertion. Trustworthiness is the dimension that refers to the degree a person perceives the assertion made by a communicator to be the one that the speaker considers as valid (Hovland, Janis, & Kelley, 1953). Furthermore, it was found that factor-analytic studies that proposed other dimensions of source credibility were criticized for random selection of scales and the use of similar names for factors containing different scales. Using certain credibility factor structures as if it was generalizable beyond the procedures (raters, sources, and factoring) that generated them, was criticized as well

(Cronkhite & Liska, 1976). Therefore, the source credibility variable of this literature review only consists of the dimensions: expertise and trustworthiness.

Moreover, the intention of the recipient to use suggestions and information made by the source is influenced by the degree of perceived credibility (Bannister, 1986). The acceptance or rejection of the suggestions of the source are influenced by the degree of perceived credibility as well (Suzuki, 1978). Furthermore, (Pornpitakpan, 2004), implicates that high credibility sources are more persuasive than low credibility sources in changing attitudes and gaining in behavioral compliance. The information that is provided by a credible source, for instance, social media influencers, could affect consumer beliefs, attitudes, opinions and behavior (Wang, Kao, & Ngamsiriudom, 2017). Besides, sources that are credible are more persuasive compared to sources of low credibility (Ohanian, 1990). The variable source credibility is used in many previous studies that investigated brand attitude (Lutz, MacKenzie, & Belch, 1983; Goldsmith, Lafferty, & Newell, 2000).

### **2.3 Persuasive knowledge**

The Persuasion Knowledge Model (PKM) of (Friestad & Wright, 1994) presumes that persuasion knowledge of people is developmentally contingent. The knowledge a consumer has available regarding persuasion coping purposes includes what a consumer believes that is generally known by others about how to persuade and what he or she believes about how to persuade others. The development of persuasion knowledge depends on the level of basic cognitive skills and the increases in information processing capabilities. Besides, the accumulated experience of what occurs in people's social interactions and the exposure to discourse about persuasion, psychological events, and advertising are important as well. The PKM presumes that people that are exposed to a persuasive message will activate and perform strategies to defend themselves against that persuasive message. Furthermore, in terms of persuasion by means of advertising, PKM presumes that coping skills of consumers are constantly activated upon recognition of advertising attempts (Friestad & Wright, 1994; Evans & Park, 2015). For instance, consumer perceptions of advertisements as part of a marketing strategy tactics are dependent on the truthfulness of advertisements (Meline, 1996). Persuasive knowledge can be assessed through rating scales. Depending on the nature of the questions, the scales generally use multiple items that are assessed by a seven-point Likert or a semantic differential scale (Ham, Nelson, & Das, 2015).

Ham, Nelson and Das conclude that most people that have persuasion knowledge are convinced that advertising is a persuasion tactic. Furthermore, different levels of persuasion knowledge can be activated by the use of component, format and persuasion details. If tactics are perceived to have persuasive intentions, the change of meaning principle will affect the message. This has implications for how customers interpret the actions of the persuasive agents (Cowley & Barron, 2008). Besides, persuasion knowledge outcome is influenced when consumers' have knowledge about the goals, tactics, strategies, motives, and appropriateness & effectiveness of the persuasion tactic that is being used (Kim, Lee, Hwang, & Jeong, 2016). If an action is perceived to be a persuasion tactic, the change of meaning occurs (Friestad & Wright, 1994). The change of meaning could result in disruptive message processing, for instance, discounting and disengagement (Kim, Lee, Hwang, & Jeong, 2016).

#### **2.4 Education level**

The influence of education level in the persuasive process of adults is investigated. Findings show that level of education and perceived knowledge play a role in the level of persuasion (Alexander, Murphy, Buehl, & Sperl, 1998). Furthermore, researchers Friestad and Wright mention that persuasive knowledge is also constructed by education (Friestad & Wright, 1994). For instance, the attempts to teach children in school about mass media and marketing. In addition to a higher degree of education such as professors that teach marketing and psychology. Besides, knowledge about psychological language and concepts matters. Accordingly, researchers Brucks, Armstrong and Goldberg described that children need to develop thorough knowledge about advertising tactics and learn to access that knowledge to cope with advertising (Brucks & Armstrong, 1988). Education level will be tested as moderated mediating variable in this study.

#### **2.5 Brand attitude**

Brand attitude is referred to the overall brand evaluation of a buyer regarding its perceived ability to meet a currently relevant motivation. Brand attitude subsists of two components, namely cognitive and affective. The cognitive component guides behavior and is also known as logical belief. This is the reason for the brand attitude that is comprised of specific benefit beliefs. The affective component is also known as an emotional feeling and energizes the behavior. This component can be divided into informational or transformational motivation. A distinction has been made to the consumer's underlying behavioral motivations that are associated with the need for a category. The informational motivation is linked to the need to

satisfy a negative behavioral motivation. Whereas the transformational part of the component desires to enhance a positive behavioral motivation (Percy & Rossiter, 1992).

Brand attitude can be seen as a relative construct. A person is searching for the brand that best fits the underlying motivation than the alternative available brands on the market that the buyer is aware of (Percy & Rossiter, 1992). The brand attitude largely depends on the consumer's own perception of a brand and is argued to be a reliable predictor of consumer behavior towards the brand (Shimp, 2010).

Besides, brand attitude is used as an association to form brand image. A consumer's overall evaluation of a brand or object is the brand attitude. The constructs brand attitude and brand image are hypothesized to influence actions towards the object (Faircloth, Capella, & Alford, 2001). Positive brand associations are expected to result in a positive brand image (Aaker, 1991). Brand associations that are positive, are strong, unique and favorable (Keller, 1993). Furthermore, attitudes are functioning as a filter to see how individuals are perceiving certain objects (Lutz, 1991; Faircloth, Capella, & Alford, 2001). Brand attitude is relatively enduring and is a unidimensional summary evaluation that is likely to energize behavior (Machleit, Allen, & Madden, 1993). The ability to discriminate between brands is possible with the use of brand attitude measurements (Spears & Singh, 2004).

## **2.6 Social media influencing**

With the use of social media, consumers are enabled to communicate with their peers and influence each other. This phenomenon is called peer communication (Kozinets, de Valck, Wojnicki, & Wilner, 2010).

Social media channels accommodate users with distinctive content and provide these users with useful indicators of popularity and engagement. Followers of an ordinary user could evolve in to fans and this leads to online fame. This phenomenon entails the practices of micro influencing (Khamis, Ang, & Welling, 2017). Micro influencers can be referred to as people that use social media who have much influence on other users despite their limited number of followers. An influencer can be defined as a social media user who is actively recognized by others in the social media community and not just passively followed (Rakoczy, Bouzeghoub, Gancarski, & Wegrzyn-Wolska, 2018). Social media influencers update their followers on a regular basis with the latest information to engage them (Liu, Jin, Briones, & Kuch, 2012). Social media

influencers publish content containing products or services of a brand. They express their opinion and offer tips on the product usage (Bernritter, Verlegh, & Smit, 2016). To achieve good company reputation and business goals, endorsement in marketing is important. Compared to other marketing strategies, social media influencers were able to establish themselves as potential endorsers in the last couple of years. Therefore, social media influencers can be seen as the most cost-effective and productive marketing trend (Harrison, 2017; Lim, Radzol, Cheah, & Wong, 2017). Furthermore, social media influencers can show convincing results in customer persuasion and media coverage (Booth & Matic, 2011). The messages that are spread by social media influencers are often considered to be more credible and convincing to customers (Talaverna, 2015). SMIs are notably attractive for brands, therefore, marketers developed a new communication practice called influencer marketing (De Veirman, Cauberghe, & Hudders, 2017). This marketing practice is defined as the promotion of brands via the use of specific key individuals exercise influence over potential buyers (Brown & Hayes, 2008). The messages SMIs communicate are perceived as authentic communication (Scott, 2015). However, the collaborations with brands may bring the authenticity of the SMIs into question. In particular, when SMIs are sidetracked by commercial opportunities to work with brands they were not interested in beforehand. Influencer marketing is also referred to as sponsored or native advertising. Different types of brand encroachment within influencer marketing occur, varying from minimal to maximal encroachment. With minimal brand encroachment, marketers send free products to SMIs and hope that they will provide information to followers about the sampled products. In the case of maximum encroachment, SMIs post content that is fully determined (contractually) by the marketer, a payment is offered in return (Audrezet, de Kerviler, & Moulard, 2020).

However, ambiguity often exists regarding the extent to which the content is under the control of the influencer or comes, at least partly, proposed by brands (Liljander & Gummerus, 2015). Hence, it may occur that consumers are experiencing difficulties to differentiate messages that are, and which are not tied to influencer marketing (Bhatnagar, Aksoy, & Malko, 2004).

## 2.7 Conceptual model

The literature review led to the following conceptual model that is shown in Figure 2.1.

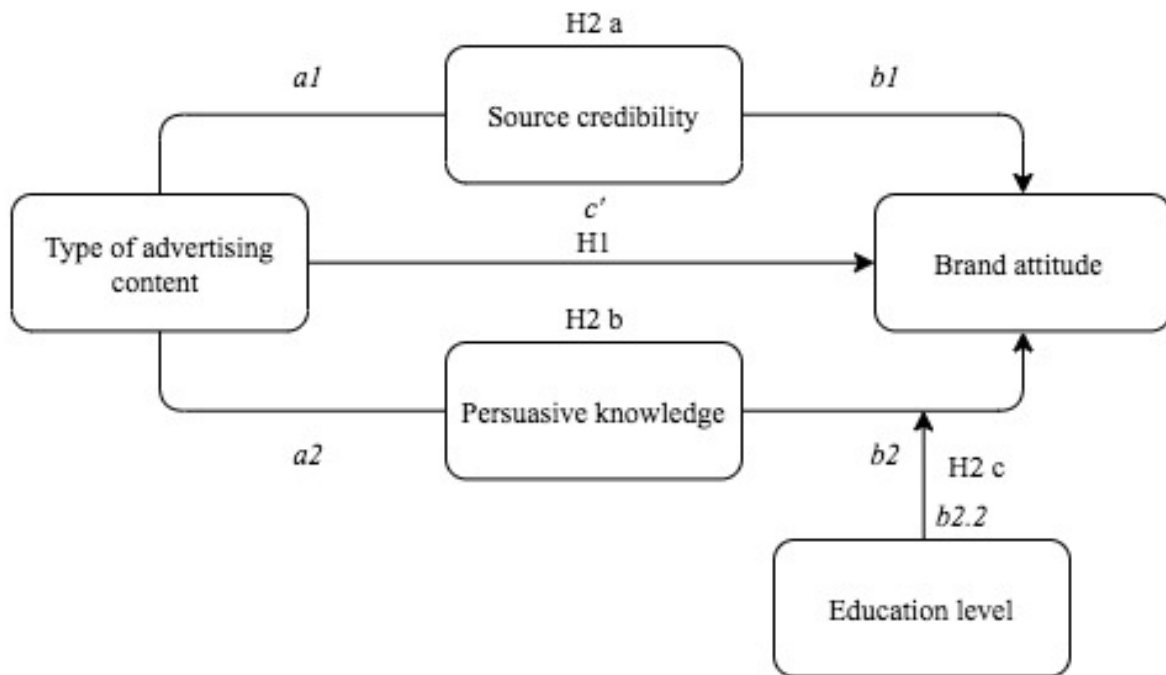


Figure 2.1: Conceptual model

The main effect of this conceptual model is the type of advertising content on the brand attitude of consumers. The researcher takes two mediators into account that might explain this possible main effect. The mediators are source credibility and persuasive knowledge. Besides, the moderated mediating variable education level is investigated to determine if this variable has an effect on persuasive knowledge. If the main effect occurs, it is possible that both, one or none of the mediators explain this effect.

The relationships between the mediating, moderated mediating, independent and dependent variables led to the following hypotheses:

H1: *“The type of advertising content does have a significant influence on the consumers’ brand attitude”.*

H2: *“The type of advertising content does have a significant influence on the consumers’ brand attitude, this is explained by the two mediators”.*

H2 a: *“The type of advertising content does have a significant influence on the consumers’ brand attitude, this is mediated by source credibility.”*

H2 b: *“The type of advertising content does have a significant influence on the consumers’ brand attitude, this is mediated by persuasive knowledge.”*

H2 c: *“The effect of persuasive knowledge on brand attitude is moderated by the education level of the consumers.”*

## **Chapter 3: Methodology**

### **3.1 Survey**

The researcher wants to investigate the impact of prominent and subtle advertising content on consumer's brand attitude. Subtle (sponsored) advertising content is appointed as content that is published by a social influencer. The product, service or brand that is promoted by the social influencer is from an external organization. Furthermore, in this research the example of subtle (sponsored) advertising content is indicated with one of the following keywords: advertising, adv., #ad, partnership, partner or #partner. Prominent advertising content is appointed as the content of a product, service or brand that is published by the organization itself. Besides, the subtle and prominent advertising content examples of this study are shown in Figures 6.1 and 6.2 of the Appendix.

To test the hypotheses and the (moderated) mediating effect of source credibility, persuasive knowledge, and education level, a survey is used. The survey is an online experiment and has a between-subjects design. Researchers Shimp, Stuart and Engle also used a survey experiment to test variation in the conditioned stimulus (brand familiarity) and context (Shimp, Stuart, & Engle, 1991). Besides, Bearden, Hardesty and Rose used a survey to investigate various dimensions of consumer self-confidence (Bearden, Hardesty, & Rose, 2001). Moreover, Okazaki, Mueller and Charles conducted a survey to measure soft-sell versus hard-sell advertising appeals.

The survey consists of 10 questions per condition, with multiple items and four different topics. Each respondent is shown one condition of the advertising content examples, either prominent or subtle. The randomization function in Qualtrics is used to make sure the advertising examples are randomly assigned. The advertising example/condition shown will vary per respondent. The variables type of content, source credibility, persuasive knowledge, education level, and brand attitude are tested in this survey. An extensive review on this is described in §3.3 measurables.

### **3.2 Sampling**

A pre-test is conducted before distributing the final survey. The pre-test process resulted in a few changes that had to be made before the distribution of the final survey. Therefore, the process of the pre-test is described in §3.5. The questionnaire is especially distributed on the social media channels Instagram, Facebook, LinkedIn, and WhatsApp. The research is related



to two different types of advertising content, namely prominent and subtle. The examples of the two types that are shown in the survey were published on the social media channel Instagram. Hence, the distribution of the survey is through social media channels.

However, multiple biases could occur while distributing the survey. For instance, nonresponse bias, judgement bias and common method bias (Suchman, 1962; Cull, O'Connor, Sharp, & Tang, 2005; Vella, 1998). To avoid the bias of judgement, that is, people will judge and criticize different because they know what is expected from them when they are finished with answering the questions about one of the conditions (prominent or subtle advertising content), the conditions that are prominent and subtle advertising examples are randomly assigned (Okazaki, Mueller, & Taylor, 2010). The respondent will only see one condition/example. Henceforth, the researcher has chosen a between-subjects design. Besides, the researcher will guard for the nonresponse bias by checking if there are no missing values to assure every respondent understands the questions (Suchman, 1962). Furthermore, the researcher will use multiple social media channels to distribute the survey. Moreover, the researcher guards for a common method bias by using a Likert-scale and semantic differential scale (MacKenzie & Podsakoff, 2012).

Because of the two conditions of this research (prominent and subtle advertising content), the minimum sample size is 80. However, the researcher aims for a sample size that is higher, around 120 respondents. However, a factor analysis is probably needed to structure the data from the questionnaire. To perform a factor analysis the number of required respondents is at least 200. Furthermore, the scree plot test that is used to determine how many factors to retain is only reliable with a sample size of at least 200. With a larger sample size, the error in the data will be diminished. Hence, exploratory factor analysis performs best with larger sample sizes (Yong & Pearce, 2013). In conclusion, the sample size aim is a minimum of 200.

### **3.3 Measurables**

In this study, five main variables are measured. An extensive review points out different ways of testing these variables. The review per variable can be found in this paragraph. The researcher chose to use a 5-point semantic differential scale. The semantic differential scale developed by Osgood, Suci and Tannenbaum is a flexible approach to measure attitude and other sentiments. The approach employs direct ratings of concepts (objects) on a bipolar scale.

Different scales are used, and every scale is defined by a pair of adjectives. The adjectives have contrasting meanings (Osgood, Tannenbaum, & Suci, 1957). For instance, a question for brand attitude will be “overall my feeling about [the brand] is unfavorable/favorable”. The respondent is required to answer on a semantic differential scale between for example 1= unfavorable and 5= favorable. Furthermore, the researcher chose to use the Likert-scale approach to test the variable persuasive knowledge. A 5-point Likert-scale is used to test this. For instance, a statement to test the variable persuasive knowledge will be "I think advertising's aim is to inform the consumer.". The respondent is required to answer on a Likert-scale between 1= strongly disagree and 5= strongly agree (Likert, 1932).

The variables of this research are tested with the use of 16 items. Furthermore, the researcher also tests multiple control variables, which are gender, age, type of social media use and use of social media in hours. Education level will be used as a moderated mediation variable to test the possible effect on the possible mediating effect between persuasive knowledge and brand attitude. The items of the research are shown Table 6.1, chapter methodology of the Appendix.

#### *Brand attitude:*

According to (Berger & Mitchell, 1989), brand attitude is the most widely examined construct in consumer behavior. Many researchers describe different ways to test the brand attitude.

Faircloth, Capella and Alford used a 7-point scale for two items on a semantic differential scale, namely extremely like/dislike and extremely good/bad (Faircloth, Capella, & Alford, 2001). Spears and Singh argue that a standard psychometrically validated scale for the measurement of brand attitude does not exist. Hence, it seems like every study chooses a different set of items (Spears & Singh, 2004). According to Anand and Sternthal, brand attitude is measured with the use of four items, specifically: dislike/like, unpleasant/pleasant, bad/good, and unenjoyable/enjoyable (Anand & Sternthal, 1990). Other researchers, such as Shimp, Stuart and Engle, use a summated score of 7-point semantic differential items. Namely, good/bad, like/dislike, high quality/poor quality, superior/inferior, pleasant/unpleasant, interesting/boring and attractive/unattractive. Furthermore, they used an evaluative item to measure the overall feeling about the brand (“Overall my feeling about [the brand] is favorable-unfavorable”) (Shimp, Stuart, & Engle, 1991). Moreover, Mitchell and Olson use a 7-point semantic differential scale to measure brand attitude. The adjectives that are used to test the variable are: bad/good, unpleasant/pleasant, negative/positive and unfavorable/favorable (Mitchell & Olson, 1981). The items that are used by Spears and Singh to test brand attitude are bad/good, unappealing/appealing, unfavorable/favorable, unpleasant/pleasant, unlikeable/likeable, dis-

agreeable/agreeable, and unsatisfactory/satisfactory. The instruction that was given regarding the attitude towards the brand was “Please describe your overall feelings about the brand described in the ad you just read”. The instruction had to be answered with the use of the following items: unappealing/appealing, bad/good, unfavorable/favorable, unlikeable/likeable, and unpleasant/pleasant (Spears & Singh, 2004).

5 items will be used to test brand attitude in this research. Namely, good/bad, likeable/unlikeable, pleasant/unpleasant, appealing/unappealing, and interesting/boring. The question that is formulated to test these items is: “Please describe your overall feelings about the brand in the advertisement you just saw”. A 5-point semantic differential bipolar scale is used to test the items.

#### *Persuasive knowledge:*

Persuasive knowledge is researched as followed in different research papers. The model persuasion knowledge has a multi-dimensional nature. Hence, researchers must create their own scales that suit the particular research context (Ham, Nelson, & Das, 2015).

Obermillen and Spangenberg focused on advertising skepticism with their scale. The scale is developed of 9 items and consist of Likert-style statements (5-point Likert-scale, 1= strongly agree and 5= strongly disagree). Ad skepticism is similar to the persuasion knowledge concept; however, it is not identical. According to Obermillen and Spangenberg, compared to ad skepticism, persuasion knowledge is a more general concept. Despite the fact of the conceptual difference, ad skepticism is being used to measure persuasion knowledge due to the conceptual similarity towards inferring manipulative intent (Obermiller & Spangenberg, 1998; Escalas, 2007). The items are, for example, “Advertising is a reliable source of information about the quality and performance of products” and “Advertising’s aim is to inform the consumer” (Obermiller & Spangenberg, 1998). A research towards self-confidence of persuasion knowledge uses a different measure. Bearden, Hardesty and Rose proposed a 6-item scale to measure persuasion knowledge independently or combined with other items. The 5-point scale to assess the items is: 1= extremely uncharacteristic and 5= extremely characteristic. Subsequently, the items are for example “I know when a marketer is pressuring me to buy;” “I can see through sales gimmicks used to get consumers to buy;” (Bearden, Hardesty, & Rose, 2001). Furthermore, another research of Carlson, Bearden and Hardesty focuses on subjective pricing tactic persuasion knowledge (Carlson, Bearden, & Hardesty, 2007). The researcher used

two different scales to measure this. The scales can be deployed into persuasion knowledge in general instead of subjective pricing tactics. For instance, the item “Please rate your knowledge of marketers’ pricing tactics as compared to most of the people you know” with the 7-point scale 1= one of the least knowledgeable and 7= one of the most knowledgeable. The items that are assessed with a 7-point Likert-scale (1= strongly disagree and 7= strongly agree) are for example, “In general, I am quite knowledgeable about marketers’ pricing tactics;” “I am knowledgeable of the different pricing tactics that marketers can use to make a product offer look attractive;” and “I have little knowledge regarding the pricing tactics that marketers use”.

To research persuasive knowledge in this research, 6 items will be used. A 5-point Likert-scale is used to test the items, varying from 1= strongly disagree 5= strongly agree. The statements that are questioned are shown in Table 6.1 “survey design” in Chapter methodology of the Appendix.

*Source credibility:*

As mentioned in the chapter literature review, §2.2 source credibility, source credibility consists of two dimensions, namely expertise and trustworthiness (Hovland, Janis, & Kelley, 1953). Trustworthiness is a construct that is important in attitude-change and persuasion research. Hence, a reliable measurement requires a series of items. Expertise is the second dimension to measure source credibility. This dimension is commonly being measured with adjectives like: informed/uninformed, trained/untrained, and educated/uneducated (Ohanian, 1990). According to Ohanian, there are five items per dimension to measure the dimensions trustworthiness and expertise that result in testing source credibility. The items that concern the trustworthiness dimension are: honest/dishonest, reliable/unreliable, sincere/insincere dependable/undependable, and trustworthy/untrustworthy. Moreover, the items that apply to the dimension expertise are: experienced/inexperienced, knowledgeable/unknowledgeable, expert/not an expert, skilled/unskilled, and qualified/unqualified. Besides, the scale is adaptable to a variety of situations.

Furthermore, DeSarbo and Harshman used a scale to test source credibility with the use of 5 items for expertness and trustworthiness. Four items are accounted to the expertness dimension, which are: sophisticated/naïve, superficial/profound, careless/careful, and expert/novice. The item for trustworthiness is disreputable/reputable. The items were tested on a 7-point scale (DeSarbo & Harshman, 1985).

To test source credibility in this research, 7 items will be used. The items could be divided into two dimensions, namely trustworthiness with the items; trustworthy-untrustworthy, dependable-undependable and reliable-unreliable. For the second dimensions, that is expertise, the items informed/uninformed, superficial/profound, qualified/unqualified, and knowledgeable/unknowledgeable are used. The question that is formulated to test these items is: “Could you evaluate the advertisement you just have seen on the following characteristics?”. A 5-point semantic differential bipolar scale is used to test the items.

*Type of advertising content:*

Okazaki, Muller and Taylor created a measurement scale to test soft sell and hard sell advertising appeals. The soft sell advertising appeals can be seen as subtle/sponsored content and the hard sell advertising appeals is prominent content. The subtle (soft sell) content has three dimensions that are a relatively independent source of appeal and share the characteristics of being soft sell. The dimensions are feeling, implicitness and image. Besides, the prominent (hard sell) content consists of formative dimensions like thinking, explicitness, and fact. Each dimension has proposed items and researchers are enabled to determine which items are of relative importance. First, the items of the dimensions for the subtle (soft sell) advertising. The items for the dimension feeling are creative, instinctive, imaginative, and abstract. For the dimension implicitness; insinuation, appealing, subjective, and expressive. Besides, the items for the last dimension, image, are entertaining, interpretive, playful, and impression-based. Continuing with the items of the dimensions for prominent (hard sell) advertising. First, the items for the dimension thinking; rational, logical, analytic, factual and concrete. For the dimension explicitness: precise, explanation, convincing, persuasion, and instructive and the items for the last dimension, fact, are educational, descriptive, realistic, informative, and evidence-based. The items were indicated on a 7-point semantic differential scale (Okazaki, Mueller, & Taylor, 2010).

*Education level:*

Researchers Boerdam, Van Reijmersdal, Rozendaal and Dima measured level of education to develop a persuasion knowledge scale for sponsored content (Boerman, van Reijmersdal, Rozendaal, & Dima, 2018). The respondents were asked to indicate their highest level of education completed. The answer categories varied from less than High School to a PhD degree. To test education level in this study, the question “What is the highest degree or level of

education you have obtained? (If you are still studying, select the study you currently follow)” will be asked on an ordinal scale. The answer possibilities range from no degree to PhD degree and a complete overview can be found in Table 6.1 “survey design” in chapter methodology of the Appendix.

*Control variables:*

For this study, three control variables will be used in order to perform the linear regression analysis. The control variables are age, gender, and weekly hours spent on social media (frequency). The variables are shortly discussed. The variable age is questioned as “What is your age?” on an ordinal scale, varying from 17 years old and younger to 66 years and older. Besides, gender is asked as “What is your gender?” on a nominal scale, with the answer categories: male, female and other. Moreover, there is controlled for the frequency that respondents weekly spent their time on social media (Snijder, 2014). The question “How many hours a week on average are you active on social media?” is asked on an ordinal scale. The scales are divided as follows: never 0, rarely 1-7, sometimes 8-14, often 15-21 and (very often 22 >).

**3.4 Regression formula**

The stepwise approach of Baron and Kenny is used to give structure for the possible effect(s) of the mediating variables (Baron & Kenny, 1986). This study investigates two mediating variables, namely: source credibility and persuasive knowledge. As described in §mediation the researcher chose to test these variables in different models. The method of Hayes is used to test the mediation effects (Preacher & Hayes, 2004).

**Step 1:**

$$Brand\ attitude = \beta_0 + \beta_1 TypeOfContent + \beta_2 Age + \beta_3 Gender + \beta_4 SocialMediaUsage + \varepsilon$$

**Step 2:**

$$Source\ credibility = \beta_0 + \beta_1 TypeOfContent + \beta_2 Age + \beta_3 Gender + \beta_4 HoursSocialMedia + \varepsilon$$

$$Persuasive\ knowledge = \beta_0 + \beta_1 TypeOfContent + \beta_2 Age + \beta_3 Gender + \beta_4 HoursSocialMedia + \varepsilon$$

**Step 3:**

$$\text{Brand attitude} = \beta_0 + \beta_1 \text{TypeOfContent} + \beta_2 \text{SourceCredibility} + \beta_3 \text{Age} + \beta_4 \text{Gender} + \beta_5 \text{HoursSocialMedia} + \varepsilon$$

$$\text{Brand attitude} = \beta_0 + \beta_1 \text{TypeOfContent} + \beta_2 \text{PersuasiveKnowledge} * \text{EducationLevel} + \beta_3 \text{Age} + \beta_4 \text{Gender} + \beta_5 \text{HoursSocialMedia} + \varepsilon$$

**3.5 Pre-test**

A pre-test is conducted to test whether the results are valid and usable for the main research. Besides, last changes can be made to solve the bottlenecks after conducting this pre-test. The pre-test was distributed via WhatsApp and this resulted in 15 respondents. The pre-test was finished by every respondent, so this means that the design of the survey was clear to everyone. However, a few textual changes were made after analyzing the pre-test. Furthermore, the instruction “on a scale of 1 to 5” was added to give a clear instruction about how to answer the statements and questions with corresponding adjectives on a 5-point semantic differential- and Likert-scale. Besides, the order of the dimensions expertise and trustworthiness is changed. At first, the dimension that was shown first was trustworthiness and after this the dimension expertise. However, the order is changed, because the expertise dimension is easier to interpret, so the respondent knows to the answer the second dimension which is trustworthiness. Furthermore, two changes have been made regarding the adjectives in the dimensions expertise and trustworthiness. The translation for the adjective uneducated/educated in the dimension expertise was not properly understood in Dutch. Research has been done, but a suitable translation in the context of this survey question does not exist. Hence, the adjective uneducated/educated was changed in to superficial/profound. This adjective was easier to interpret in Dutch. Moreover, the Dutch translation of the adjective undependable/dependable in the trustworthiness dimension is changed. The reason for this was because some respondents found it confusing to see the difference between the Dutch translated adjectives. In Dutch the two adjectives undependable/dependable and unreliable/reliable are nearly the same. Lastly, the within-subjects design was changed into a between-subjects design. This adjustment allowed the researcher to test the variables in a more effective way. Furthermore, the within-subject design could cause a bias that respondents will answer the repeated questions for both subtle and prominent advertising content differently because it is clear what is expected from them.

## **Chapter 4: Results**

In this chapter, the results from the online survey experiment are analysed. The data will be inspected on irregularity, missing variables and other outliers at first. Before performing an analysis, a few assumptions must be made. Subsequently, the data characteristics will be analysed and discussed. Followed by the factor analysis that is conducted and will be described. After this, Cronbach's alpha will be discussed for each factor to ensure the reliability of the data. Finally, the linear regression is performed, and the results of the regression, mediation, and moderated mediation analysis (with all the control variables) are described. The reader should bear in mind that the researcher used an alpha of .05 ( $\alpha=.05$ ).

### **4.1 Data description**

The survey was online available for 1 week and is distributed on multiple social media channels as mentioned in §3.1 survey. This distribution led to 212 respondents on the survey. However, 4 respondents only tapped the first answer option to check if the survey structure was correct, so this data is erased. Besides, 2 respondents indicated that they never used social media, hence this data is also erased. This results in 206 useable respondents,  $N=206$ . The sample is divided into  $N=122$  for prominent and  $N=84$  for the subtle advertising content type.

The data set consists of 60.7% ( $N=125$ ) out of women and 39.3% ( $N=81$ ) of men. The youngest and also biggest group of participants are between the age of 18 and 23 with 33% ( $N=68$ ). Other important big groups are participants between the age of 54 and 59 with 23.8% ( $N=49$ ), 48 – 53 with 13.1% ( $N=27$ ), and participants between 24 – 29 years old with 11.7% ( $N=24$ ). The Tables regarding the gender and age distribution can be found in chapter results of the Appendix, Tables 6.2 and 6.3.

The education level of the respondents is diverse, varying from no degree to master's degree. The biggest group of respondents, 28.2% ( $N=58$ ) has a bachelor's degree or is currently studying for this. Followed by community college with 24.8% ( $N=51$ ) and master's degree with 14.6% ( $N=30$ ). The table regarding the education level can be found in chapter results of the Appendix, Table 6.4.

Furthermore, the average number of hours spent on social media per week was examined. The biggest group of respondents ( $N=90$ ), 43.7%, spends between 15 and 21 hours per week on



average on social media channels. This category is defined as “often”. Followed by the category between 8 and 14 hours, (N=65) with 31.6%, which is defined as “sometimes”. The top three social media channels that are used the most are WhatsApp (97.1%), Facebook (85.9%), and Instagram (76.2%). The table of the results regarding the hours per week on average spent on social media and most used social media channels can be found in chapter results of the Appendix, Table 6.5.

Lastly, the respondents were asked if they had ever seen advertising/brands on social media channels. 98.5% (N=203) indicated that they had ever seen advertising/brands on social media and the other 1.5% (N=3) had never seen this. The results are shown in Table 6.7 of chapter results in the Appendix.

#### **4.2 Factor analysis**

Before analysing all the data, a factor analysis is used to structure and summarize the data. The variables will be regrouped into a few sets of components that are based on shared variance. Hence, patterns in a set of variables could be understood easily (Yong & Pearce, 2013; Child, 2006). The exploratory factor analysis method is used to find structure in the data. The researcher makes use of the principal component factor analysis to extract the factors. With this analysis, the maximum variance is extracted from the data within each component (Tabachnick, Fidell, & Ullman, 2007).

Furthermore, researchers Tabachnick, Fidell and Ullman describe the use of rotation that must be performed. Oblique rotation is used when variables are considered to be correlated. This type of rotation produces a pattern matrix that consists of factor or item loadings and a factor correlation matrix that incorporates the correlations between the factors. If the factor correlation matrix points out a correlation that is higher than .32, the researcher should perform this rotation. The techniques that are common for oblique rotation are direct oblimin and promax (Tabachnick, Fidell, & Ullman, 2007). If the correlation is lower than .32 the researcher should perform varimax rotation. This rotation is a technique that belongs to orthogonal rotation and involves uncorrelated factors (Yong & Pearce, 2013).

To determine how many factors to retain, the Eigenvalues and scree plot test are used. Kaiser’s criterion can be used to determine which factors to retain by means of Eigenvalues. The rule of thumb is to retain all factors with an Eigenvalue of 1 and higher (Kaiser, 1960). Moreover, a

scree plot is used to confirm the analysis of the Eigenvalue. The number of factors to retain are the points that are above the break that could be seen in the graph (Cattell, 1966).

A few assumptions should be made before doing the factor analysis. The first assumption is that all variables should be interval or ratio measurement. The variables in this research tested on a Likert or semantic scale and therefore can be considered as scale variables. Another assumption is that variables should use the same measurement units. All variables are tested on a 5-point scale. Furthermore, the rule of thumb for sufficient degrees of freedom. There must be enough observations for a more stable estimate. 10 observations per variable are required with a minimum of 100 observations in total (Suhr, 2006; Yong & Pearce, 2013; Comrey & Lee, 1992; Tabachnick, Fidell, & Ullman, 2007). This assumption is met because the survey includes 4 observed variables, and the total sample size is 206 respondents.

Moreover, the appropriateness of the data has to be considered first. The correlation among variables will be tested with the use of the Pearson correlation matrix. This test can be used for continuous variables (numerical data) and points out if the items of a variable are usable for the factor analysis. If an item occurs to be irrelevant, the item can be deleted for measuring the variable. The Pearson correlation coefficient can range between values from -1 and +1. The value 0 shows that the variables are not linear related to each other (Li & Ji, 2005; Bolboaca & Jäntschi, 2006). To determine if variables are correlated with each other, the rule of thumb of  $\pm .30$  is used (Krehbiel, 2004). Three different matrices have been analysed, covering the variables source credibility, brand attitude, and persuasive knowledge for both the prominent and subtle advertising examples (Tables 6.8, 6.9, and 6.10). The analysis of the first 2 tables show that every item of the variables are significant correlated with each other. The correlations are above the  $.30$  rule of thumb. However, the Pearson correlation matrix (Table 6.10) for the variable persuasive knowledge shows that not all variables are significant correlated with each other. Some items are not significantly correlated and do not meet  $.30$  rule of thumb. The item that seems not to be significant with the other items is "I think advertising's aim is to inform the consumer.". Hence, the researcher chose to leave out this item to ensure reliability.

The outcomes of the factor analysis can be found in Tables 4.1, 4.2, 4.3 of this chapter and Tables 6.11 up and including 6.16 in chapter results of the Appendix. First, the factor analysis for the variable source credibility. The KMO and Bartlett's test is used to test the adequacy. The KMO test is used to test the sample sufficiency and Bartlett's test, tests the assumption that

variances are equal across groups (Kaiser, 1974; Dyer & Keating, 1980). As shown in Table 6.11 and 6.12 (chapter results. of the Appendix), the KMO for the source credibility variable is higher than the desired .5, namely .850. Moreover, the Bartlett’s test results in a significance level of .000, which is considered significant with  $\alpha=.05$ . The factor analysis resulted in 1 factor with an Eigenvalue higher than 1 (4.559), hence no rotation is required (Table 4.1 and Figure 6.3, Appendix). Therefore, the factor will be called source credibility. All the items the questions regarding source credibility will fall under these factors. The component matrix is shown in Table 4.1 for additional information.

Table 4.1 Component matrix for source credibility

<b>Component Matrix<sup>a</sup></b>	
	<b>Component</b>
	1
Evaluate advertisement uninformed-informed	.760
Evaluate advertisement superficial-profound	.729
Evaluate advertisement unqualified-qualified	.856
Evaluate advertisement unknowledgeable-knowledgeable	.846
Evaluate advertisement undependable-dependable	.832
Evaluate advertisement untrustworthy-trustworthy	.771
Evaluate advertisement unreliable-reliable	.844
<b>Extraction Method: Principal Component Analysis.</b>	
<b>a. 1 components extracted.</b>	

Furthermore, the variable brand attitude. The factor analysis resulted in 1 factor; hence no rotation is required. The KMO test resulted in .827, that is higher than the desired .5. Besides, Bartlett’s test resulted in a significance level of .000, which is lower than  $\alpha=.05$ . The factor analysis resulted in 1 factor and the Eigenvalue is higher than 1, namely 3.820 (Table 4.2 and Figure 6.4, Appendix). Hence, all the questions regarding brand attitude will fall under the factor named brand attitude. The component matrix is shown in Table 4.2 for additional information.

Table 4.2 Component matrix for brand attitude

<b>Component Matrix<sup>a</sup></b>	
	<b>Component</b>
	<b>1</b>
Overall feelings advertisement bad-good	.861
Overall feelings advertisement unlikeable-likeable	.900
Overall feelings advertisement unpleasant-pleasant	.888
Overall feelings advertisement unappealing-appealing	.892
Overall feelings advertisement boring-interesting	.827
<b>Extraction Method: Principal Component Analysis.</b>	
<b>a. 1 components extracted.</b>	

Finally, factor analysis for the variable persuasion knowledge. As shown in Table 6.15 of the Appendix, the KMO and Bartlett's is used. The KMO test gave a .789 which is more than sufficient, and Bartlett's test resulted in a sig. of .000, which is lower than  $\alpha=.05$ . Furthermore, the factor analysis resulted in 1 factor with an Eigenvalue of 2.832, that is higher than 1. Henceforth, all the questions that are asked regarding the variable persuasive knowledge will fall under one factor. The factor is called persuasive knowledge. Because there is only 1 factor, no rotation is needed. Moreover, the item "I have little knowledge regarding the tactics that marketers use." is inversed worded. The item has a negative worded component that is "little knowledge". Hence, the researcher has reversed scaled this in the program Statistical Package for the Social Sciences (SPSS), so that every item is worded positively.

Table 4.3 Component matrix for persuasive knowledge

<b>Component Matrix<sup>a</sup></b>	
	<b>Component</b>
	<b>1</b>
Agree to what extent "I know when a marketer is pressuring me to buy."	0.639
Agree to what extent "I can see through sales gimmicks used to get consumers to buy."	0.739

Agree to what extent "In general, I am quite knowledgeable about marketers' tactics."	0.841
Agree to what extent "I am knowledgeable of the different tactics that marketers can use to make a product/service look attractive."	0.766
Agree to what extent "I have knowledge regarding the tactics that marketers use."	0.763

---

**Extraction Method: Principal Component Analysis.**

---

**a. 1 components extracted.**

---

### 4.3 Cronbach's alpha

Cronbach's alpha measures the internal consistency of a test or variables. Internal consistency represents the degree to which all the items measure the same concept or construct. When a factor is consistent, respondents have the same response patterns for each question in the corresponding factor. The measurement is expressed as a number between 0 and 1. Cronbach's alpha is calculated and discussed separately for each factor (Tavakol & Dennick, 2011). The rule of thumb for internal consistency is  $\alpha > .70$  as acceptable and  $\alpha > .80$  as good. Researchers Bland and Altman mention that alpha values between .70 to .80 are satisfactory (Bland & Altman, 1997). However, value alpha values between .60 and .70 can be considered as questionable. Values of  $\alpha < .60$  are considered as poor and  $\alpha > .90$  is excellent (George & Mallery, 2003). The results of Cronbach's alpha reliability analyses are shown in Table 4.4 of this chapter.

Firstly, the Cronbach's alpha for the variable source credibility. The variable consists of 1 factor, named: source credibility. The result for this factor is  $\alpha = .910$ , which is considered as excellent. Hence, the internal consistency of this factor is excellent.

Moreover, the variable brand attitude. Again, the variable consists of 1 factor: brand attitude. The result of brand attitude is an  $\alpha$  of .919, which is considered as excellent. Hence, this factor is internal consistent.

Lastly, the reliability analysis for the variable persuasive knowledge. This variable consists of 1 factor, namely: persuasive knowledge. The result for the factor is an  $\alpha$  of .806, which is considered as good. Hence, the internal consistency for this factor is good.

Table 4.4 Reliability analysis Cronbach's alpha all factors

<b>Reliability analysis</b>			
<b>Factors</b>	<b>Cronbach's Alpha</b>	<b>Cronbach's Alpha based on standardized items</b>	<b>N of items</b>
Source credibility	.910	.910	7
Brand attitude	.919	.919	5
Persuasive knowledge	.804	.806	5

To conclude, all the factors are excellent or good. The variables source credibility, brand attitude, and persuasive knowledge are all internal consistent. Therefore, the reliability of this research is guaranteed (George & Mallery, 2003).

#### **4.4 Assumptions**

##### *Linear regression*

Before performing a linear regression on the data, a few assumptions should be made. This section will describe and discuss the assumptions.

First, the researcher should test if there is a linear function between the independent and dependent variables. However, the independent variable is recoded as a dummy variable. This dummy variable only has two categories and takes the values subtle = 0 and prominent = 1. Therefore, the function is linear because a dummy variable is per definition already linear (Hardy, 1993).

Furthermore, in order to perform a linear regression, the independent and dependent variable(s) should be quantitative variables. All the variables are tested with the use of a survey (online) and are tested on a 5-point semantic or Likert-scale. These scales can be specified as interval scales and therefore, the variables are considered as quantitative.

The third assumption is that the dependent variable should be continuous, and the independent variable can be either categorical or continuous. The researcher uses a 5-point semantic scale for the dependent variable brand attitude and, therefore, it is considered as continuous. Besides, the independent, categorical variable that is type of advertising content, is recoded as a dummy

variable. As mentioned earlier, the dummy variable takes the values subtle = 0 and prominent = 1 (Casson & Farmer , 2014).

Moreover, the linear relation between the independent and dependent variables is checked for multicollinearity. This is done by checking the variance inflation factor (VIF). To check the absence of multicollinearity, the threshold of the VIF value has to be below 10 and for the best case below 5. As can be seen in Table 6.17, Appendix chapter results, the VIF value is 1. This is below the threshold of 10 and therefore, this assumption is met (Alin, 2010).

Moreover, the assumption that the dependent variable should be normally distributed (Edwards & Lambert, 2007). To test the normality the skewness and kurtosis are analysed. The skewness and kurtosis show that the data is normally distributed because the calculations of the statistic divided by the standard error are between and  $-1.96$  and  $+1.96$  (skewness:  $-.211 / .169$  and kurtosis:  $-.125 / .337$ ) (Cramer, 1998). However, the Kolmogorov-Smirnov and Shapiro-Wilk test is also used to test the normality assumption (Kolmogorov, 1933; Shapiro & Wilk, 1965). The results of the two tests are below  $\alpha=.05$  (.028 and .005). Therefore, the null hypothesis is rejected, which means the variable is not normally distributed. The results can be found in Table 6.18 and 6.19 of the Appendix. However, the “central limit theorem” states that data can be considered normally distributed for studies with a large sample size. The sample size has to be  $> 30$  (Chang, Wu, Ho, & Chen, 2008; Field, 2013). The sample size of this study meets this requirement, because  $N=206$ . Hence, the assumption is met.

### *Mediation*

This research investigates the possible mediating effect(s) of the variables source credibility and persuasive knowledge. Therefore, the researcher must perform a Pearson correlation matrix to analyse if the variables are correlated with each other. This will test the no-interaction assumption between the two mediating variables (Keele, 2015). As can be seen in Table 4.5, the variables are not significantly correlated with each other. The significance is .6, that is greater than  $\alpha=.05$ . Hence, multicollinearity could not occur, because the variables are not significantly correlated with each other.

Nevertheless, the researcher chose to perform the mediator effects tests separately, to avoid strong assumptions for mediation analysis (Keele, 2015). Therefore, two mediation analyses will be performed.

Table 4.5 Pearson correlation matrix mediating variables

<b>Correlations</b>			
		<b>Source credibility</b>	<b>Persuasive knowledge</b>
<b>Source credibility</b>	Pearson Correlation	1	.037
	Sig. (2- tailed)		.600
	N	206	206
<b>Persuasive knowledge</b>	Pearson Correlation	.037	1
	Sig. (2- tailed)	.600	
	N	206	206

To conclude, the mediation analyses could be performed. The researcher chose to test both of the mediator effects separately. With this form of analysis, the researcher avoids strong assumptions for mediating analysis with multiple mediating variables. Besides, the effect of the moderated mediation variable “education level” on the mediating variable “persuasive knowledge” will be tested at a later stage. By doing this, the researcher is able to interpret the results more accurately and easier.

#### **4.5 Linear regression**

This analysis consists of three parts, namely the direct effect, the mediating and moderating effect(s). First, the direct effect should be justified to be able to analyse the mediation effects. The main (direct) effect should occur before this effect can be explained. Furthermore, the mediation effect of persuasive knowledge should occur before analysing a possible moderation effect on this variable. A linear regression is performed with the following control variables: gender, age and average weekly hours spent on social media.

##### *Direct effect*

The linear regression is analysed on the dependent variable brand attitude and the independent variable type of advertising content. As mentioned before, the linear regression included two control variables, namely, gender and age. The results of the linear regression are shown in Table 4.6. The results indicate that the overall model is significant  $.000 < a = .05$ . Furthermore,



the independent variable “type of advertising content” has a positive significant effect on the dependent variable “brand attitude”, that is  $B = .618$ , Sig.  $.000$ .

Table 4.6 Linear regression analysis type of advertising content on brand attitude with covariates gender, age and average weekly hours spent on social media

<b>Coefficients<sup>a</sup></b>				
<b>Model 1</b>				
	Unstandardized Coefficients		Standardized Coefficients	t
	B	Std. Error	Beta	
<b>(Constant)</b>	-1.990*	.432		-4.602
<b>Type of advertising content</b>	.681*	.130	.335	5.250
<b>Gender</b>	.504*	.131	.247	3.852
<b>Age</b>	-.004	.026	-.011	-.154
<b>Hours social media usage per week</b>	.232*	.080	.200	2.911
<b>N</b>	202			
<b>R<sup>2</sup></b>	.192			
<b>Adjusted R<sup>2</sup></b>	.176			
<b>* p &lt; .01</b>				
<b>a. Dependent Variable: Brand attitude</b>				

In conclusion, the results of the linear regression analysis show that the total direct effect between the independent variable “type of advertising content” and the dependent variable “brand attitude” is significant and hence, occurs. Therefore, H1 “The type of content does have a significant influence on the consumers’ brand attitude” can be supported.

Moreover, the researcher investigates which type of content has a higher impact on brand attitude. At first, the factor brand attitude and the independent variable type of advertising content are used for descriptive statistics to investigate the means of the type of advertising content. As shown in Table 4.7, the mean for the subtle advertising content is negative (-.3604113). For the prominent advertising, the mean is higher, namely .2481520. Therefore, the prominent advertising content type has a more positive effect on the “type of advertising

content” coefficient (.681 shown in Table 4.6) that describes the main effect between type of advertising content and brand attitude.

Table 4.7 Descriptive statistics: means for subtle and prominent advertising content

<b>Brand attitude</b>			
<b>Type of advertising content</b>	<b>Mean</b>	<b>N</b>	<b>Std. Deviation</b>
Subtle	-.3604113	84	.94658191
Prominent	.2481520	122	.96297827
Total	.0000000	206	1.00000000

In addition, to confirm the statement that prominent advertising content has a more positive explaining effect on the main effect, the separate brand attitude items are tested with type of advertising content. Table 4.8 shows that the means of the prominent advertising type of content per brand attitude item are higher compared to the means per item of the subtle advertising content. Hence, this descriptive statistic points out that prominent advertising content has a higher positive influence on the main effect (type of advertising content on brand attitude).

Table 4.8 Descriptive statistics: means for subtle and prominent advertising content per item

<b>Type of advertising content</b>		Feelings bad-good	Feelings unlikeable-likeable	Feelings unpleasant-pleasant	Feelings unappealing-appealing	Feelings boring-interesting
<b>Subtle</b>	Mean	2.7619	2.9524	2.9643	2.6429	2.5952
	N	84	84	84	84	84
	Std. Deviation	1.02521	.89044	.85653	.98962	1.05418
<b>Prominent</b>	Mean	3.4508	3.5246	3.3770	3.3361	2.9426
	N	122	122	122	122	122
	Std. Deviation	1.06097	.92005	.92108	1.00914	1.15207
<b>Total</b>	Mean	3.1699	3.2913	3.2087	3.0534	2.8010
	N	206	206	206	206	206
	Std. Deviation	1.09779	.94875	.91605	1.05556	1.12367

#### 4.6 Mediation

In order to test the other hypotheses, a mediation analysis is used. The mediating variables source credibility and persuasive knowledge are tested on the significant effect between “type of advertising content” and “brand attitude”. The regression formula in §3.4 is used to give structure and lay-out on this analysis by means of the principles of the researchers Baron and Kenny (Baron & Kenny, 1986). A mediation effect occurs when the indirect effect is significant (Preacher & Hayes, 2004). As mentioned before, two separate mediation analyses are performed. The researcher investigated the effects using the SPSS macro called PROCESS of researcher Hayes. The results of the first mediation analysis with the covariates are shown in Table 4.9. This analysis includes the mediating variable source credibility.

An effect can be considered significantly different if the 95% confidence interval does not include zero (Preacher & Hayes, 2004). As shown in Table 4.9 the LLCI and ULCI of the indirect effects are .1675 and .5369. Therefore, the variable source credibility positively mediates the effect between “type of advertising content” and “brand attitude”. Besides, the direct effect of the mediating variable “source credibility” is significant (LLCI .1434 and ULCI .5264).

Table 4.9 Mediation analysis 1 (source credibility on type of advertising content & brand attitude)

Total effect X on Y					
Effect	se	t	p	LLCI	ULCI
.6806	.1296	5.2502	.0000	.4250	.9362
Direct effect of X on Y					
Effect	se	t	p	LLCI	ULCI
.3344	.0969	3.4521	.0007	.1434	.5254
Indirect effect(s) of X on Y					
	Effect	BootSE	BootLLCI	BootULCI	
Source credibility	.3461	.0940	.1675	.5369	

As mentioned before, the direct effect is significant. To determine how many of the direct effect is mediated and thus explained by the variable source credibility, an additional analysis is performed. The results are shown in Table 4.10. The component Ind1 shows the effect of the indirect path from “type of advertising content” to “source credibility” to “brand attitude”. The

result of this effect is .3468, which means that the mediation variable “source credibility” explains 34.68% of this direct effect.

Table 4.10 Mediation analysis total indirect effect (mediator source credibility on type of advertising content & brand attitude)

<b>Total effect of X on Y</b>					
Effect	se	t	p	LLCI	ULCI
.6806	.1296	5.2502	.0000	.4250	.9362
<b>Direct effect of X on Y</b>					
Effect	se	t	p	LLCI	ULCI
.3384	.0969	3.4906	.0006	.1472	.5295
<b>Indirect effect(s) of X on Y</b>					
	Effect	BootSE	BootLLCI	BootULCI	
Total	.3422	.0941	.1623	.5276	
<b>Ind1</b>	<b>.3468</b>	.0941	.1657	.5312	
Ind2	-.0040	.0102	-.0307	.0117	
Ind3	-.0007	.0028	-.0064	.0055	

Moreover, a moderated mediation analysis (conditional process test) is performed. This analysis includes the mediating variable persuasive knowledge and examines if this possible effect is moderated by education level. The results are shown in Table 4.11. The regression of a2 path (type of advertising content to persuasive knowledge) shows that the first part of the possible mediating effect is not significant. The LLCI is -.1822 and the ULCI is .3799, so the confidence interval includes 0. Henceforth, this effect is not significant. Furthermore, the b2 path (persuasive knowledge to brand attitude) is also insignificant (LLCI -.1208 and ULCI .0344). In conclusion, the variable “persuasive knowledge” does not significantly mediate the effect between “type of advertising content” and “brand attitude”.

Besides, the moderated mediation shows whether the indirect effect is moderated by education level. The confidence interval does include 0 (BootLLCI -.0265 and BootULCI .0132). Therefore, education level does not significantly affect the relationship between persuasive knowledge and brand attitude.

Table 4.11 Moderated mediation analysis (persuasive knowledge and education level on type of advertising content & brand attitude)

<b>a1 path, outcome variable: persuasive knowledge</b>						
Model	coeff	se	t	p	LLCI	ULCI
Type of content	.0988	.1425	.6933	.4889	-.1822	.3799
Covariates gender, age and weekly hours spent on social media included in model						
<b>b1 path, outcome variable: brand attitude</b>						
Model	coeff	se	t	p	LLCI	ULCI
Persuasive knowledge	.1670	.1919	.8701	.3853	-.2115	.5455
<b>b1.1 path, outcome variable: brand attitude</b>						
Model	coeff	se	t	p	LLCI	ULCI
Int_1*	-.0432	.0393	-1.0978	.2736	-.1208	.0344
*Int_1 = persuasive knowledge * education level						
Covariates gender, age and weekly hours spent on social media included in model						
<b>Conditional indirect effects of X on Y</b>						
Education level	Effect	BootSE	BootLLCI	BootULCI		
3	.0037	.0171	-.0299	.0444		
5	-.0048	.0143	-.0383	.0227		
6	-.0091	.0208	-.0580	.0289		
<b>Index of moderated mediation</b>						
	Index	BootSE	BootLLCI	BootULCI		
Education level	-.0043	.0095	-.0265	.0132		

To conclude, hypothesis H2 can be rejected because there is only one significant mediating effect, namely source credibility. The effect for the other mediating variable persuasive knowledge is insignificant and therefore, type of advertising content and brand attitude are not explained by two mediators. However, if the hypothesis is specified in to two hypotheses that contain only one mediator, some hypotheses can be supported. For instance, hypothesis H2a because there occurs a positively significant mediating effect of source credibility. This

mediating variable explains 34.68% of the direct effect. Nevertheless, H2b and c can be rejected because the mediating effect of persuasive knowledge is insignificant. Besides, this indirect effect is not significantly moderated by education level.

#### **4.7 Control variables**

The following control variables are included in the linear regression, mediating, and moderated mediation analyses: gender, age, and average weekly hours spent on social media.

## Chapter 5: General discussion

In this chapter, the conclusion of the research question and sub questions are described as well as the discussion of the academic and managerial implications. Finally, this chapter will end with limitations and further research.

Firstly, Table 5.1 shows whether the hypotheses of this study are supported or rejected.

Table 5.1 Supported or rejected hypotheses

<b>Hypothesis number</b>	<b>Hypothesis</b>	<b>Supported or Rejected</b>
H1	The type of advertising content does have a significant influence on the consumers' brand attitude.	Supported
H2	The type of advertising content does have a significant influence on the consumers' brand attitude, this is explained by the two mediators.	Rejected
H2 a	The type of advertising content does have a significant influence on the consumers' brand attitude, this is mediated by source credibility.	Supported
H2 b	The type of advertising content does have a significant influence on the consumers' brand attitude, this is mediated by persuasive knowledge.	Rejected
H2 c	The effect of persuasive knowledge on brand attitude is moderated by the education level of the consumers.	Rejected

The main effect from type of advertising content to brand attitude has occurred. Hence, hypothesis 1 can be supported and the research question: "Does the type of advertising content influence consumers' brand attitude?" can be answered. Type of advertising content does significantly influence consumers' brand attitude. This answer could be specified by investigating which type of content has a higher impact on brand attitude. Tables 4.7 and 4.8 in Chapter 4 show that the prominent advertising content, compared to subtle advertising content,

has a more positive or higher positive influence on the main effect between type of advertising content and brand attitude.

Some studies have shown that subtle advertising content compared to prominent advertising content would have a more positive outcome (van Reijmersdal, Neijens, & Smit, 2005; Homer, 2009; Tutaj & van Reijmersdal, 2012). The researcher expected that this was also the case in the current study. However, the results show that prominent advertising content has a more positive influence on the main effect compared to subtle advertising content. Although the findings differ from findings in previous studies, these previous studies investigated other variables, for instance brand benefit.

Furthermore, hypothesis 2 can be rejected, because only 1 of the mediating variables has a significant effect on the effect of type of advertising content on the brand attitude. This mediating variable is source credibility. Hence, hypothesis 2a can be supported. Sub question 1 can therefore be answered with yes.

Besides, it was expected that persuasive knowledge had a significant mediating effect on type of advertising content and brand attitude. However, persuasive knowledge does not significantly mediate this relationship. Thus, hypothesis 2b can be rejected and sub question 2 can be answered with no. Furthermore, it was expected that education level (for instance, high or low), would significantly affect the effect of the mediating variable persuasive knowledge on the main effect (type of advertising content and brand attitude). The persuasion knowledge is influenced when consumers have knowledge about the persuasion tactic that is being used. This regards knowledge about motives, goals, strategies etcetera (Kim, Lee, Hwang, & Jeong, 2016). However, the level of education does not significantly affect persuasive knowledge on the relationship between type of advertising content and brand attitude. Hence, hypothesis 2c can be rejected and sub question 3 can be answered with no.

The model of the direct effect (type of advertising content on brand attitude) shows two significant control variables. The control variables, gender and average weekly hours spent on social media are significantly related to brand attitude.



## **5. 1 Academic and managerial implications**

### *Academic implications*

As described in the paragraph academic relevance, many researchers have investigated type of advertising content (van Reijmersdal, 2009; Evans & Park, 2015; Petty & Andrews, 2008; Matteo & Dal Zotto, 2015; Kim, Lee, Hwang, & Jeong, 2016). However, these studies did not investigate type of advertising content on brand attitude in a mediating setting of source credibility and persuasive knowledge. Moreover, the moderated mediation variable education level on persuasive knowledge had not been used before. Boerman and van Reijmersdal investigated that awareness and a high level of persuasive knowledge can increase brand memory (Boerman & van Reijmersdal, 2016). Hence, this study investigated if education level could moderate on persuasive knowledge. Results show that persuasive knowledge is not significantly moderated by education level.

Furthermore, previous studies that researched type of advertising content did not investigate the brand attitude with the use of social media influencers and Instagram stories feature. The studies of (Van Reijmersdal & Tutaj, 2012; Becker-Olsen, 2003) researched other forms of prominent and subtle advertising content. Those studies were focused on commercial ads such as banner advertising and pop-ups for prominent advertising content. Besides, subtle advertising content consists of integrated advertising formats such as sponsorships. Previous studies investigated that subtle advertising content has a more positive influence on for instance brand benefit

(van Reijmersdal, Neijens, & Smit, 2005; Homer, 2009; Tutaj & van Reijmersdal, 2012). The results of this study show that this is not applicable for brand attitude. Here, prominent advertising content has a more positive influence on brand attitude.

### *Managerial implications*

The current study is useful for managers and businesses because the findings are applicable for marketing departments. As mentioned before, 3.6 billion internet users are using social media channels and these numbers are still expected to rise (Clement, 2020). For that reason, it is important for marketing managers to know in which way marketing is the most effective in terms of brand attitude.

Firstly, results show that type of advertising content has a significant influence on brand attitude. Brand attitude is important for businesses, in particular (marketing) managers. Because, specifically, brand attitude is the overall brand evaluation of a consumer and largely depends on the perception of a brand of the consumer itself (Shimp, 2010; Percy & Rossiter, 1992). It is important for businesses and marketing managers that consumers have a positive brand attitude. Results show that prominent advertising content has a more positive influence on brand attitude, compared to subtle advertising content. This finding is important for marketing managers and the marketing departments that are allocated beneath them. If the goal is to increase positive brand attitude, with the use of this insight, marketing campaigns could be filled in differently with the use of prominent advertising content. Prominent type of advertising content is proven to have a more positive influence compared to subtle advertising content.

Furthermore, the source must be credible, because source credibility has a significant mediating effect on the main effect (type of advertising content on brand attitude). A credible source is more persuasive compared to a low credible source (Ohanian, 1990). The information that is provided could for instance affect consumer beliefs and attitudes (Wang, Kao, & Ngamsiriudom, 2017). A company that creates a new marketing campaign must be aware of this.

Nevertheless, this study has made use of prominent and subtle advertising content examples which were published on the social media channel Instagram, namely the Instagram Stories feature. The results of this study are applicable to a relatively new form of advertising on social media channels. This research investigates the dependent variable brand attitude and therefore, the results are only applicable if managers are interested in increasing a positive brand attitude. If managers would like to increase for example brand image, the manager has to investigate whether these findings are applicable as well. Moreover, managers could test if the findings are also applicable to other social media channels, for instance Facebook.

Lastly, as mentioned before, the current study used two advertising content examples that are published on the Instagram stories feature. The prominent and subtle advertising content examples are focused on a specific product category, namely skincare. Furthermore, the examples show a corresponding brand, that is Biodermal. It is possible that the findings of this research are not applicable to a completely different product category like cars. Managers who

work with a completely different product category should check if the findings are applicable to their products. This will also be described in §5.2 further research, in which the researcher elaborates on the research that needs to be done in order to make the findings complete for businesses.

## **5.2 Limitations and further research**

Some limitations must be taken into account when assessing this study. Firstly, the language barrier that could have occurred in designing and answering the survey. This issue relates to the variable source credibility, in particular the trustworthiness dimension. The adjectives that are tested in this survey are: untrustworthy/trustworthy, undependable/dependable and unreliable/reliable. In Dutch the translations for the adjectives in this dimension are nearly similar to each other in their meaning. Hence, it could have occurred that some respondents found this distracting. However, the researcher chose to use the Dutch translations that are most suitable per adjective.

Moreover, the researcher used one item to test the persuasive knowledge variable that contains a negatively worded statement. This concerns the following statement: "I have little knowledge regarding the tactics that marketers use.". The component that is negatively worded is "little knowledge". As mentioned before, the researcher has reversed worded this in SPSS to ensure every item (in the factor) is formulated positively. However, respondents might be distracted by this statement or did not notice this which could have influenced the results.

Besides, the distribution of the education level in this study is not generalizable for the Dutch population. The distribution in the sample of respondents with a bachelor or master's degree are higher than the distribution of these education levels in the Dutch population (Centraal Bureau voor de Statistiek, 2021). Therefore, caution should be taken when the results are extended to other contexts.

Furthermore, the prominent and subtle advertising content examples are focused on a specific product category, namely skincare. Besides, the examples are limited to a specific brand (Biodermal) to make a good comparison. Future researchers might choose to focus on other product categories and brands and investigate if the findings are generalizable. Moreover, future research could be deployed by investigating two different product categories or brands

at the same time. The researcher could investigate if the findings correspond with each other. Besides, further research could explore whether the findings are also replicated on other social media channels, for instance YouTube or Facebook.

Moreover, the subtle advertising content example was published on the Instagram account of social media influencer Julia Mekkes. However, the pre-test did not test whether the respondents were familiar with social media influencers or this social media influencer: Julia Mekkes specifically. This is a limitation and could have influenced the results of this study. Hence, future researchers could consider to first test if the respondents are familiar with the phenomenon social media influencers or a social media influencer in particular. This could be done with a pre-test.

Finally, this research investigates type of advertising content on brand attitude with two mediating variables that are: source credibility and persuasive knowledge. Besides, the moderated mediating variable education level is used to test whether the mediating variable persuasive knowledge is influenced by the level of education. Further research could be done by investigating whether there are other important mediating and/or moderation variables, such as purchase intention, attitude towards advertisements and gender. This could contribute to the knowledge and understanding of this subject.

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## Appendix

### Chapter: Methodology

Table 6.1 Survey design

Subject/part	Variables	Measurement	Scale	No. of items	Question
<b>Prominent and subtle advertising content</b> <i>(show 1 of the examples)</i>	Prominent or subtle (type of content)	-	-	1	You will now see an advertisement that is placed on the social media channel Instagram. Please take your time to read and study this statement carefully.
<b>Source credibility</b>	Expertise	Uninformed/informed, superficial/profound, unqualified/qualified, Unknowledgeable, knowledgeable	Semantic differential scale	7	On a scale from 1 to 5, could you evaluate the advertisement you just have seen on the following characteristics?
	Trustworthiness	Undependable/dependable, untrustworthy/trustworthy, Unreliable/reliable	Semantic differential scale		
<b>Brand attitude</b>	Brand attitude	Bad/good, unlikeable/likeable, unpleasant/pleasant, unappealing/appealing, boring/interesting	Semantic differential scale	5	On a scale from 1 to 5, please describe your overall feelings about the brand in the advertisement you have just seen
<b>Persuasion knowledge of the respondent</b>		"I think advertising's aim is to inform the consumer."	5-point Likert-scale (1=strongly disagree,		Indicate on a scale from 1 to 5, to what extent you agree with the

		"I know when a marketer is pressuring me to buy."	5= strongly agree)	following statements:	
		"I can see through sales gimmicks used to get consumers to buy."			
		"In general, I am quite knowledgeable about marketers' tactics."			
		"I have little knowledge regarding the tactics that marketers use."			
		"I am knowledgeable of the different tactics that marketers can use to make a product/service look attractive."			
<b>Demographics/ control variables</b>	1. Gender	Men, woman	Nominal	5	What is your gender?
	2. Age		Ordinal		How old are you?
	3. Educational level	No schooling completed, primary school, high school, MBO, Associate (HBO), Bachelor's degree (HBO or WO), HBO + (Master in HBO), Master's degree (WO), PDH, Doctorate degree	Ordinal		What is the highest degree or level of education you have obtained? (If you are still studying, select the study you currently follow)
	4. Type of social media use	Instagram, Facebook, Snapchat, WhatsApp, LinkedIn, Pinterest, Twitter, TikTok	Ordinal		Which social media channel(s) do you use? (Multiple answers possible)
	5. Use of social media in hours	(never 0), (rarely 1-7), (sometimes 8-14), (often 15-21) (very often 22 >)	Ordinal		How many hours a week on average are

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you active on  
social media?

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Figure 6.1 Subtle advertising content example survey



Figure 6.2 Prominent advertising content example survey



## Chapter: Results

### Data description

Table 6.2 Gender data set

<b>What is your gender?</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
<b>Valid</b>	Male	81	39.3	39.3	39.3
	Female	125	60.7	60.7	100
	Total	206	100	100	

Table 6.3 Age data set

<b>How old are you?</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
<b>Valid</b>	18-23	68	33	33	33
	24-29	24	11.7	11.7	44.7
	30-35	7	3.4	3.4	48.1
	36-41	10	4.9	4.9	52.9
	42-47	8	3.9	3.9	56.8
	48-53	27	13.1	13.1	69.9
	54-59	49	23.8	23.8	93.7
	60-65	10	4.9	4.9	98.5
	66 and older	3	1.5	1.5	100
	Total	206	100	100	

Table 6.4 Education level data set

<b>What is the highest degree or level of education you have obtained? (If you are still studying, select the study you currently follow)</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
<b>Valid</b>	High school	22	10.7	10.7	10.7
	Community college (MBO)	51	24.8	24.8	35.4
	Associate degree (HBO)	24	11.7	11.7	47.1

Bachelor's degree (HBO or WO)	58	28.2	28.2	75.2
HBO+ (Master in HBO)	20	9.7	9.7	85.0
Master's degree (WO)	30	14.6	14.6	99.5
No degree	1	.5	.5	100.0
Total	206	100.0	100.0	

Table 6.5 Average weekly hours spent on social media

<b>How many hours a week on average are you active on social media?</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
<b>Valid</b>	Rarely (1-7 hours)	34	16.5	16.5	16.5
	Sometimes (8-14 hours)	65	31.6	31.6	48.1
	Often (15-21 hours)	90	43.7	43.7	91.7
	Very often (22 hours or more)	17	8.3	8.3	100
	Total	206	100	100	

Table 6.6 Top three most used social media channels

<b>Social media channel</b>	<b>Frequency*</b>	<b>Percentage</b>
Facebook	177	85.9
Instagram	157	76.2
WhatsApp	200	97.1

\*Sample size: 206

Table 6.7 Noticed presence of advertising/brands on social media channels

<b>Have you ever seen advertising/brands on social media channels?</b>					
		Frequency	Percent	Valid Percent	Cumulative Percent
<b>Valid</b>	Yes	203	98.5	98.5	98.5
	No	3	1.5	1.5	100
	Total	206	100	100	

Factor analysis

Table 6.8 Pearson correlation matrix for the variable source credibility

Correlations		Evaluate advertisement uninformed-informed	Evaluate advertisement superficial-profound	Evaluate advertisement unqualified-qualified	Evaluate advertisement unknowledgeable-knowledgeable	Evaluate advertisement undependable-dependable	Evaluate advertisement untrustworthy-trustworthy	Evaluate advertisement unreliable-reliable
Evaluate advertisement uninformed-informed	Pearson Correlation	1	.617**	.652**	.591**	.505**	.466**	.492**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	206	206	206	206	206	206	206
Evaluate advertisement superficial-profound	Pearson Correlation	.617**	1	.640**	.621**	.421**	.432**	.434**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
	N	206	206	206	206	206	206	206
Evaluate advertisement unqualified-qualified	Pearson Correlation	.652**	.640**	1	.808**	.596**	.501**	.615**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	206	206	206	206	206	206	206
Evaluate advertisement unknowledgeable-knowledgeable	Pearson Correlation	.591**	.621**	.808**	1	.628**	.517**	.588**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	206	206	206	206	206	206	206
Evaluate advertisement undependable-dependable	Pearson Correlation	.505**	.421**	.596**	.628**	1	.674**	.840**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	206	206	206	206	206	206	206
Evaluate advertisement untrustworthy-trustworthy	Pearson Correlation	.466**	.432**	.501**	.517**	.674**	1	.768**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	N	206	206	206	206	206	206	206
Evaluate advertisement unreliable-reliable	Pearson Correlation	.492**	.434**	.615**	.588**	.840**	.768**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	206	206	206	206	206	206	206

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 6.9 Pearson correlation matrix for the variable brand attitude

Correlations		Overall feelings advertisement bad-good	Overall feelings advertisement unlikeable-likeable	Overall feelings advertisement unpleasant-pleasant	Overall feelings advertisement unappealing-appealing	Overall feelings advertisement boring-interesting
Overall feelings advertisement bad-good	Pearson Correlation	1	.828**	.678**	.670**	.585**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	206	206	206	206	206
Overall feelings advertisement unlikeable-likeable	Pearson Correlation	.828**	1	.783**	.691**	.622**
	Sig. (2-tailed)	.000		.000	.000	.000
	N	206	206	206	206	206
Overall feelings advertisement unpleasant-pleasant	Pearson Correlation	.678**	.783**	1	.760**	.652**
	Sig. (2-tailed)	.000	.000		.000	.000
	N	206	206	206	206	206
Overall feelings advertisement unappealing-appealing	Pearson Correlation	.670**	.691**	.760**	1	.774**
	Sig. (2-tailed)	.000	.000	.000		.000
	N	206	206	206	206	206
Overall feelings advertisement boring-interesting	Pearson Correlation	.585**	.622**	.652**	.774**	1
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	206	206	206	206	206

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Table 6.10 Pearson correlation matrix for the variable persuasive knowledge

Correlations							
		Agree to what extent "I think advertising's aim is to inform the consumer."	Agree to what extent "I know when a marketer is pressuring me to buy."	Agree to what extent "I can see through sales gimmicks used to get consumers to buy."	Agree to what extent "In general, I am quite knowledgeable about marketers' tactics."	Agree to what extent "I have little knowledge regarding the tactics that marketers use."	Agree to what extent "I am knowledgeable of the different tactics that marketers can use to make a product/service look attractive."
Agree to what extent "I think advertising's aim is to inform the consumer."	Pearson Correlation	1	0.060	.152*	-0.026	0.073	-0.028
	Sig. (2-tailed)		0.391	0.029	0.713	0.3	0.690
	N	206	206	206	206	206	206
Agree to what extent "I know when a marketer is pressuring me to buy."	Pearson Correlation	0.060	1	.520**	.378**	-.279**	.335**
	Sig. (2-tailed)	0.391		.000	.000	.000	.000
	N	206	206	206	206	206	206
Agree to what extent "I can see through sales gimmicks used to get consumers to buy."	Pearson Correlation	.152*	.520**	1	.513**	-.397**	.376**
	Sig. (2-tailed)	0.029	.000		.000	.000	.000
	N	206	206	206	206	206	206
Agree to what extent "In general, I am quite knowledgeable about marketers' tactics."	Pearson Correlation	-0.026	.378**	.513**	1	-.611**	.594**
	Sig. (2-tailed)	0.713	.000	.000		.000	.000
	N	206	206	206	206	206	206
Agree to what extent "I have little knowledge regarding the tactics that marketers use."	Pearson Correlation	0.073	-.279**	-.397**	-.611**	1	-.539**
	Sig. (2-tailed)	0.300	.000	.000	.000		.000
	N	206	206	206	206	206	206
Agree to what extent "I am knowledgeable of the different tactics that marketers can use to make a product/service look attractive."	Pearson Correlation	-0.028	.335**	.376**	.594**	-.539**	1
	Sig. (2-tailed)	0.690	.000	.000	.000	.000	
	N	206	206	206	206	206	206

\*. Correlation is significant at the 0.05 level (2-tailed).  
 \*\*. Correlation is significant at the 0.01 level (2-tailed).

### Factor analysis: source credibility

Table 6.11 KMO and Bartlett's Test for source credibility

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.850
Bartlett's Test of Sphericity	Approx. Chi-Square	1035.008
	df	21
	Sig.	.000

Table 6.12 Total variance explained (eigenvalue) for source credibility

Total Variance Explained		
Component	Initial Eigenvalues	Extraction Sums of Squared Loadings

	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
<b>1</b>	4.559	65.123	65.123	4.559	65.123	65.123
<b>2</b>	.963	13.755	78.878			
<b>3</b>	.470	6.715	85.593			
<b>4</b>	.390	5.577	91.17			
<b>5</b>	.290	4.139	95.309			
<b>6</b>	.204	2.909	98.218			
<b>7</b>	.125	1.782	100			

Extraction Method: Principal Component Analysis.

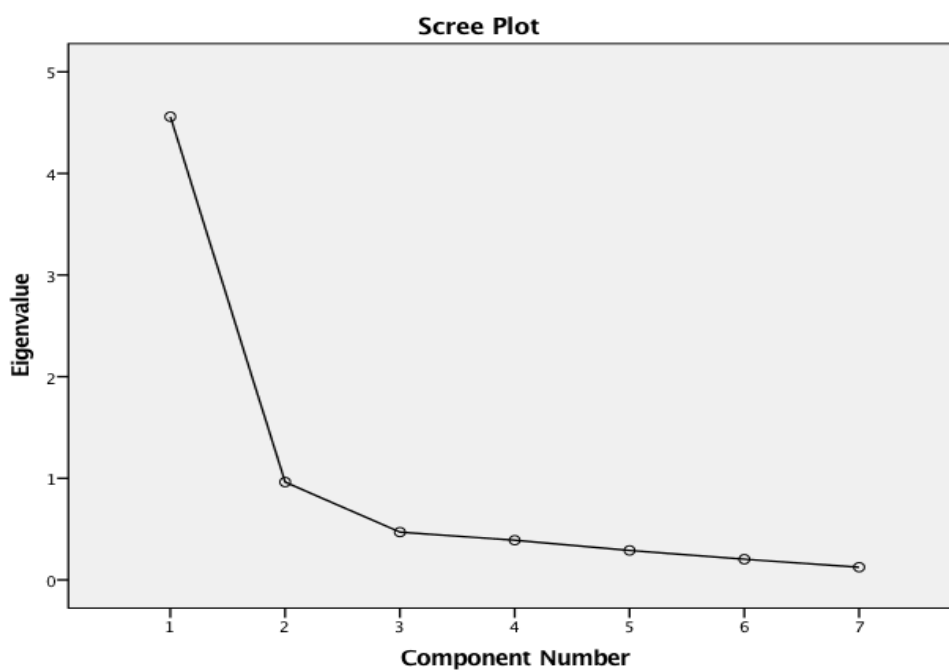


Figure 6.3 Scree plot for the variable source credibility

### Factor analysis: brand attitude

Table 6.13 KMO and Bartlett's Test for brand attitude

<b>KMO and Bartlett's Test</b>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.827
Bartlett's Test of Sphericity	Approx. Chi-Square	818.785
	df	10
	Sig.	0

Table 6.14 Total variance explained (eigenvalue) for brand attitude

<b>Total Variance Explained</b>						
<b>Component</b>	<b>Initial Eigenvalues</b>			<b>Extraction Sums of Squared Loadings</b>		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
<b>1</b>	3.82	76.405	76.405	3.82	76.405	76.405
<b>2</b>	.528	10.566	86.971			
<b>3</b>	.308	6.154	93.124			
<b>4</b>	.208	4.160	97.285			
<b>5</b>	.136	2.715	100			

Extraction Method: Principal Component Analysis.

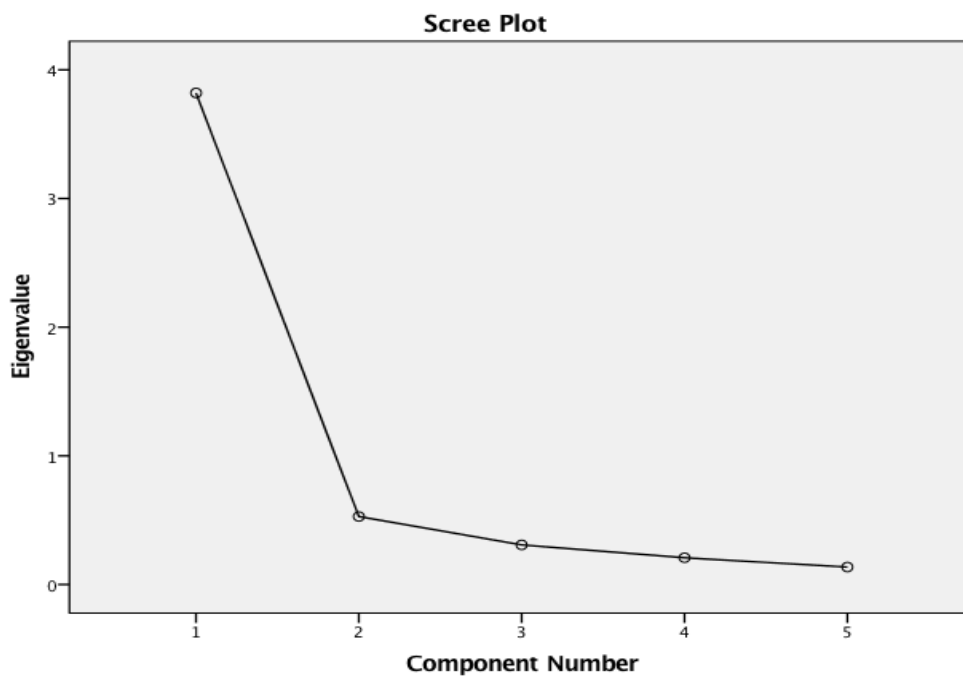


Figure 6.4 Scree Plot for brand attitude

### Factor analysis: persuasive knowledge

Table 6.15 KMO and Barlett's Test for persuasive knowledge

<b>KMO and Bartlett's Test</b>	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.789

Bartlett's Test of Sphericity	Approx. Chi-Square	335.791
	df	10
	Sig.	0

Table 6.16 Total variance explained (eigenvalue) for persuasive knowledge

<b>Total Variance Explained</b>						
<b>Component</b>	<b>Initial Eigenvalues</b>			<b>Extraction Sums of Squared Loadings</b>		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
<b>1</b>	2.832	56.638	56.638	2.832	56.638	56.638
<b>2</b>	.880	17.608	74.246			
<b>3</b>	.508	10.157	84.402			
<b>4</b>	.430	8.602	93.005			
<b>5</b>	.350	6.995	100			

**Extraction Method: Principal Component Analysis.**

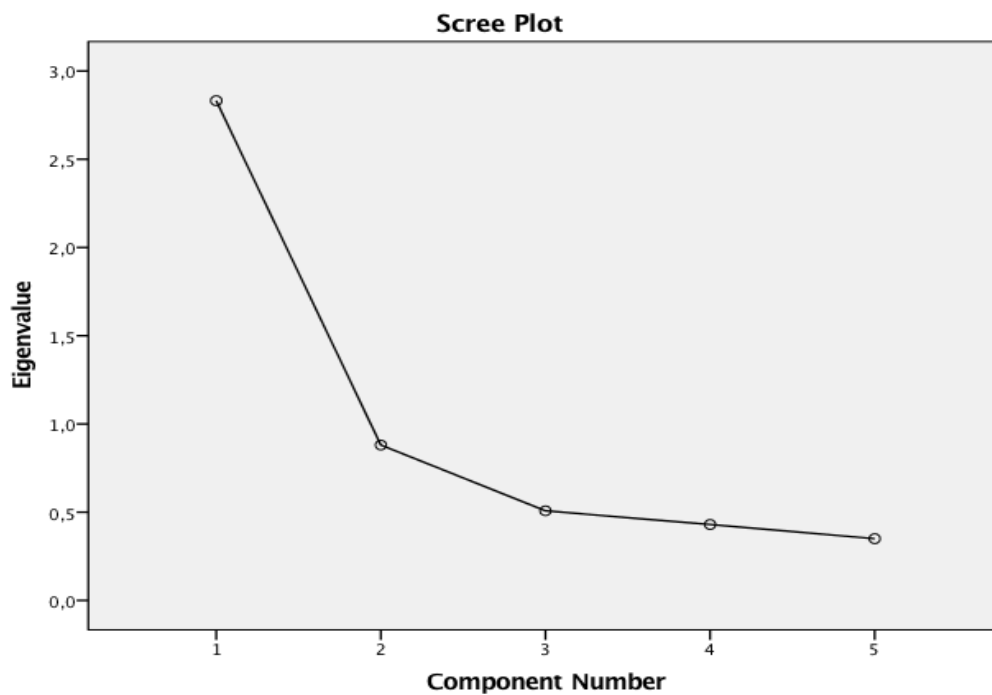


Figure 6.5 Scree Plot for persuasive knowledge

*Assumptions linear regression*

Table 6.17 Type of advertising content and brand attitude, multicollinearity absence

<b>Coefficients<sup>a</sup></b>			
<b>Model</b>	<b>Sig.</b>	<b>Collinearity Statistics</b>	
		Tolerance	VIF
<b>1</b> (Constant)	.001		
Type of advertising content	.000	1	1

a. Dependent Variable: Brand attitude

Table 6.18 Test of normality skewness and kurtosis

<b>Descriptives</b>				
		<b>Statistic</b>	<b>Std. Error</b>	
<b>Brand attitude</b>	Mean	.0000000	.06967330	
	95% Confidence Interval for Mean	Lower Bound	-.1373681	
		Upper Bound	.1373681	
	5% Trimmed Mean	.0077534		
	Median	-.0037040		
	Variance	1.000		
	Std. Deviation	1.00000000		
	Minimum	-2.37637		
	Maximum	2.10903		
	Range	4.48541		
	Interquartile Range	1.28582		
	Skewness	-.211	.169	
	Kurtosis	-.125	.337	



Table 6.19 Test of normality Kolmogorov-Smirnov and Shapiro-Wilk

<b>Tests of Normality</b>						
	<b>Kolmogorov-Smirnov<sup>a</sup></b>			<b>Shapiro-Wilk</b>		
	Statistic	df	Sig.	Statistic	df	Sig.
<b>Brand attitude</b>	.066	206	.028	.980	206	.005
a. Lilliefors Significance Correction						