

Susceptibility differences towards Facebook advertising
A cross-generational comparison between baby boomers and
digital natives

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ABSTRACT

With the rising popularity of social media and the increased time people currently spend online, many new possibilities to reach consumers became available for brands and advertisers. Many brands have a main focus on younger audiences (i.e., adolescents and young adults) in their online advertising strategies, as they spend a lot of time on social media, are interested in new technology and can easily be targeted through the World Wide Web. However, the overall population currently reaches a higher average age than ever, so it is important to consider older audiences as well, besides the more digitalized generations. These 'older' generations were raised with television as an important medium, did not grow up in a digitalized world, and rather exist of digital immigrants. This is expected to influence their online advertising susceptibility. As digital natives are more used to living in a digitalized world and as being surrounded by advertising is common to them due to the popularity of social networking sites, it is expected that they are less annoyed by online advertising and more susceptible to it. To discover whether these expectations in differences hold between younger and older audiences and their susceptibility towards advertising on social media, the social networking site Facebook was used. A comparison was made between the baby boomers and digital natives, by measuring participants' brand attitude and purchase intention after being exposed to advertising. More positive brand attitudes and higher purchase intentions indicated being more susceptible to advertising. In order to study these attitudinal and behavioural stages of advertising susceptibility, the hierarchy-of-effects model was used. The experiment was conducted through an online survey. An effect of generation on advertising susceptibility was expected to occur and differences in advertising literacy were taken into account as mediating effect. Advertising literacy refers to people's understanding of advertising and to what extent they dislike or are sceptic towards it. For advertising literacy, both participants' conceptual advertising literacy and attitudinal advertising literacy were measured. The results showed that baby boomers scored higher on conceptual advertising literacy than digital natives, while the latter cohort had more positive brand attitudes after exposure to advertising. Further generational differences were not found in the analysis, though the results showed that for the respondents combined, a significant negative relation was found between attitudinal advertising literacy and both brand attitude and purchase intention. This indicates that respondents that showed to be sceptic towards advertising or disliked it, held more negative attitudes towards the brand and were less likely to purchase from the brand.

KEYWORDS: *Advertising susceptibility, baby boomers, digital natives, advertising literacy, social networking sites*

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1. Introduction

As our social media usage has increased in the recent years, people are currently also more and more exposed to advertising on these platforms. Previous research often studied the way younger audiences (i.e., minors) are susceptible to these forms of advertising. However, older audiences (i.e., 50+) are becoming increasingly relevant to study for marketers and retailers as well, as they hold a large part of the consuming population and the overall population currently reaches a higher average age. Besides that, older audiences often have a more significant amount of money to spend than younger audiences, which also makes them interesting for brands (Moschis, 2012). Previous research has been conducted on the differences in recalling advertising between younger and older audiences (i.e., adults between 18-25 years old and adults of 60-85 years old), though this referred to television advertising only and did not include online advertising (van der Goot, Reijmersdal, & Kleemans, 2015, 2016). Other studies focussed on advertising on social media and its effect on younger audiences, but left out the comparison to an older generation (Chia, 2010; Vanwesenbeeck, Walrave, & Ponnet, 2016). In an attempt to study the subject of advertising susceptibility differences between generations and to fill the gap by adding new insights to the existing literature, this study has focused on the differences between the generations of baby boomers and digital natives and their susceptibility towards advertising on social networking sites. To gain more insight in how people understand advertising, advertising literacy, referring to people's understanding and scepticism towards advertising, is considered as well (Malmelin, 2010).

Though some scholars refer to millennials (born between 1977 and 1994) as being digital natives (Loroz & Helgeson, 2013), other studies define them as being part of both generation Y and Z. This last generation exists of people born from the mid-1990s to the mid-2000s (Reid & van Niekerk, 2014). Generation Y and Z differ from each other as the former is currently the second-largest cohort in society after the generation of baby boomers, grew up to a large extent in economic prosperity, and are the first ones to get familiar with the Internet at a relatively young age (Bolton et al., 2013; Eisner, 2005). Generation Z on the other hand consists of people that were born only after the World Wide Web came into existence. They spend large amounts of their time online, which causes them to inefficiently browse the Internet (Rosenfeld & Loertscher, 2007). Moreover they are technologically savvy, interested in innovation and influenced by the economic distress they faced at an early age (Priporas, Stylos, & Fotiadis, 2017). For the purpose of this study, only the 'digital natives' born between 1990 and 2000 were included. The digital natives differ from

both generation Y and Z, as for the majority of them, the Internet already existed when they were young and during their early school years (unlike for everyone in generation Y), and are currently 18 years old at youngest, so they are able to participate in the experiment (unlike everyone in generation Z).

The term of digital natives was already introduced in 2001, when it was explained as “native speakers of the digital language of computers, video games and the Internet” (Prensky, 2001, pp. 2). This as opposed to older generations, who are referred to as ‘digital immigrants’, as they did not get acquainted with the Internet until they reached an older age. They cope with the Internet differently from digital natives, as they had to adapt to this new way of socializing at a later stage in life. Moreover, they are not as used to the fast way of information exchange as young people are today. Being a digital immigrant could be compared to learning a new language at an older age and not losing the initial accent (Prensky, 2001). One of the generations that is part of the group of digital immigrants are the baby boomers, the post-World War II generation born between 1946 and 1964 (Loroz & Helgeson, 2013). This generation differs from the younger one, as digital natives grew up in a changed society due to developed technologies, globalization and new media. As they have been surrounded with digital devices since their youth, they are far more familiarized with new technologies and social media platforms than their parents; the baby boomers who grew up with traditional media (Bolton et al., 2013). The generation of baby boomers has been selected because they are currently the largest generational cohort in society (Loroz & Helgeson, 2013) and as they have significant spending power, they are important to be considered by advertisers.

Besides the increased importance of looking at older audiences and their susceptibility towards online advertising, it has not become less interesting to conduct an analysis that also includes a younger, ‘digitalized’ audience. As the younger audience of digital natives that was analysed in this study has encountered the Internet and advertising on several different online platforms around them since a very young age, they might be susceptible to a different extent or perceive advertising differently from older audiences. The younger audience was studied as a benchmark, to be able to make a comparison and to see how two various generations may cope differently with advertising through social media. Because of this familiarity with online communities, digital natives can be expected to be more aware of advertising, though baby boomers can be expected to be more sceptic towards it (Loroz & Helgeson, 2013).

For the purpose of this study, people from both generations participated in an experiment, where they were exposed to advertised content on a social networking

site (from now on referred to as SNS). SNS are online communities on which users can create a personal profile and interact with others. Among younger generations such as digital natives, SNS are very popular (Maurer & Wiegmann, 2011). After exposure to the stimulus material, their brand attitude, and purchase intention were measured. Besides that, their advertising literacy was taken into account as mediator, to see if the two generations differ in the way they recognize and understand advertising or their scepticism towards it.

Advertising susceptibility

In order to understand the emotions and behaviour of consumers, the think-feel-do theory, as part of the hierarchy-of-effects model, has been used. This model explains that audiences react in an ordered way, which is called the persuasive hierarchy. This exists of cognition, affection, and behaviour, or think-feel-do (Wijaya, 2012). Within this framework, brand attitude formation, brand liking, purchase intention, and brand awareness are often studied (Vakratsas & Ambler, 1999). The hierarchy-of-effects model was suitable to use, as this study measures brand attitude and purchase intention which are both part of the model. According to the model, after exposure to the stimulus, the first step is to think. At this stage, people become aware of the brand and gain knowledge about it. Secondly, a like or preference towards the brand is created: people have a feeling towards the brand that can either be positive or negative. Lastly, the step of behaviour is activated, which indicates an action: the decision is made whether or not to purchase from the brand (Wijaya, 2012). With the use of advertising, brands attempt to persuade their audiences and influence the affective and behavioural steps within the hierarchy-of-effects. By measuring to what extent people's attitudes towards the brand and intentions to purchase are changed due to advertising, this study measured to what extent people are susceptible to the persuasive intent of advertising.

In academic literature, the way children are affected by advertising and to what extent they understand the meaning of it has been up for debate very often. As young children's skills to be critical towards advertising have not been fully developed yet, it is discussed whether they are likely to be more vulnerable to the persuasive intentions of advertising (Rozendaal, Lapierre, van Reijmersdal, & Buijzen, 2011). The concept of advertising literacy is often taken into account, which entails the way advertising is being understood by its audience (Malmelin, 2010). While studying advertising literacy and children is an often-researched subject, the way older generations perceive advertising has been studied less. In current academic literature, a gap can be noticed in studying the influence of advertising on

older audiences. This study has made a comparison between baby boomers' and digital natives' advertising susceptibility in an attempt to fill the gap and gain more knowledge about the differences in advertising susceptibility between the generations. Advertising literacy refers to the way people recognize or understand advertising and commercial messages and are critical or sceptic towards it (Malmelin, 2010), while advertising susceptibility looks at the way people's attitudes and behaviour are influenced by it. The two concepts are linked in this study, as it will be studied whether advertising literacy is a mediator for advertising susceptibility.

The comparison was made whilst taking two types of advertising literacy into account. The first type of advertising literacy that will be considered is conceptual advertising literacy. This type of advertising literacy refers to people's recognition of an advertisement. Conceptual advertising literacy includes whether people are aware of the selling intent and persuasive character that advertising holds, among other dimensions. Besides that, it questions if people recognize the source and targeted audience of the advertisement (Rozendaal et al., 2011). Secondly, attitudinal advertising literacy will be measured. This dimension of advertising literacy refers to the scepticism or disliking that people feel towards advertising (Rozendaal et al., 2011). These two dimensions of advertising literacy have both been used to measure to what extent baby boomers and digital natives understand, recognize and are sceptical towards advertising.

In order to study digital natives versus baby boomers and how generation has an effect on their susceptibility towards advertising on SNS, this study explores the following research question:

Are digital native consumers more susceptible to the effects of SNS advertising than baby boomers and if so, can this mediating effect be attributed to a difference in advertising literacy?

This will be studied with the use of an online experiment in which both baby boomers and digital natives will participate. The differences between the scores on brand attitude and purchase intention of both generations will be observed. Half of the participants will see an advertisement of a brand, of which they will later answer questions regarding purchase intention and brand attitude. The remaining participants will also be exposed to advertising, but from a different brand. Lastly, respondents' conceptual and attitudinal advertising literacy will be measured to see whether the difference in susceptibility is mediated by differences in advertising literacy.

This mediating effect refers to whether generation has an effect on advertising literacy and whether advertising literacy has an effect on advertising susceptibility. An effect of generation on advertising susceptibility is expected to occur, so baby boomers and digital natives are predicted to change their attitudes and behaviours toward a brand differently from one another after advertising exposure. This difference in effect is expected to be generated by advertising literacy, as the generations are also expected to score differently on conceptual and attitudinal advertising literacy. Advertising literacy is therefore also considered, as it is important to be aware of the extent to which people are able to understand, recognize and be critical towards advertising. After establishing the differences in advertising literacy per generation, it can be determined if the changes in attitudes and behaviours were influenced by advertising exposure and generation and whether that difference was mediated by advertising literacy.

Relevance

Studying this subject is academically relevant because a lot of prior research touches upon the influence of advertising on children, though less studies concern older audiences and the differences compared to younger ones. Besides that, previous research relating to this subject mainly focuses on traditional media like television advertising (van der Goot et al., 2015), rather than emphasizing on new media and SNS. As the field of advertising has changed a lot due to the entrance of the Internet and social media, important elements were not included in prior studies focusing on television and research on new media could offer insightful new information.

Besides academic relevance, the societal relevance for studying this topic is also substantial from several viewpoints. From a brand perspective, this research can give new insights in the way advertisements are perceived differently by diverse generations and the ways they make sense of it. This information is highly valuable for brands, as it will give them the opportunity to target the different generations for their advertisements in a more specific and thus effective way. They could gain new insights on how they can influence brand liking and intention to purchase through advertising, which enables them to effectively reach the right audiences. The New York Times already wrote how marketers 'forgot' about baby boomers, as their main focus is currently on millennials (Morrissey, 2017). When baby boomers are targeted, this is often done by senior-related brands, while baby boomers have high income and are very much interested in new technology as well (Morrissey, 2017). As marketers are clearly not taking full advantage of the opportunities they have with

baby boomers, this study will provide highly needed information for marketers to act upon.

From a different perspective, it is also valuable for consumers to learn more about this topic. As consumers, online advertising and marketing techniques constantly influence us as social media and advertising are all around us and we are often exposed to this. People might wonder to what extent they are willing to be influenced by the brands around them, as consumers are not always aware of the effects advertising unconsciously has. This study attempted to gain new insights into this topic, increasing people awareness of their own susceptibility towards advertising so they will be able to act upon it if the results are dissatisfying.

2. Theoretical Framework

2.1 Hierarchy-of-effects model

To understand the way people feel towards a brand or the way they change their behaviours due to advertising, several models have been created through the years. One of the models that is most often used within the field of advertising and persuasive communication is the hierarchy-of-effects theory. Both brand attitude and purchase intention, among others, are part of this model. The model was shaped to explain advertising and persuasive messages and it suggests that audiences react to these messages in three phases: it is cognitive at first, then becomes affective and finally it moves to being behavioural (Wijaya, 2012). This can also be explained as the think-feel-do model, in which people that encounter advertising or persuasive communication first become aware of the brand, which is part of think or cognition. After this, they form an opinion (either positive or negative) about the brand as part of feeling. During the last step the decision will be made whether to purchase from the brand, which belongs to 'do'.

Previous to this model of think-feel-do, other theories have been introduced to explain persuasive communication within the hierarchy-of-effects models. Probably the most well-known example is the AIDA model. AIDA is an acronym for attention, interest, desire and action. The model was created in 1925, indicating that people react to advertising in an ordered way and marketers need to act upon that by first attracting people's attention, then keep their interest and desire and lastly 'action' should take place (Lewis, 1925, as used in Barry & Howard, 1990). According to the model, these are the steps that sales people and marketers should take in order to be successful and create advertising in the most effective way.

After the introduction of the AIDA model, many replications followed with minor adjustments or additions, but all indicating that there is an ordered way in which persuasive communication or advertising comes across most effectively. The order in which the three stages of cognition, affection and behaviour follow upon each other has also been up for discussion. There is no pre-determined starting- or ending point, however the importance to include all three elements to measure the advertising effectiveness, rather than just two of them, has been pointed out (Li & Leckenby, 2004). In this study however, only attitude and behaviour were included. Cognition was not used for the analysis, though it was checked whether people were aware of advertising and its brands through a manipulation check. Something that also needs to be considered is the prior experience that people have with similar products or brands or the stories they have heard about it. This background

knowledge influences the persuasive process as well and it can be an explanation for why people may respond to advertising in different ways (Vakratsas & Ambler, 1999).

In this study, the model of think-feel-do was used in order to explain the persuasive intention of advertising and how people react to it in terms of their advertising susceptibility. It was measured whether generation has an influence on the affective and the behavioural phase of the hierarchy-of-effects model, with advertising literacy as a mediating factor. This was done through first measuring whether being exposed to advertised content will influence people's stage of affection in terms of brand attitude and behaviour through people's intention to purchase from the brand (H1+H2). Also the relation between affection and behaviour was measured (H3). The differences between the generations and their brand attitudes and purchase intentions with or without advertising exposure is also taken into account in the analysis (H4-H9). The final tests analysed advertising literacy differences among generations (H10+H11), the way conceptual advertising literacy and attitudinal advertising literacy are related (H12) and what effect advertising literacy has on brand attitude and purchase intention (H13-H16). This is visualized in the following model:

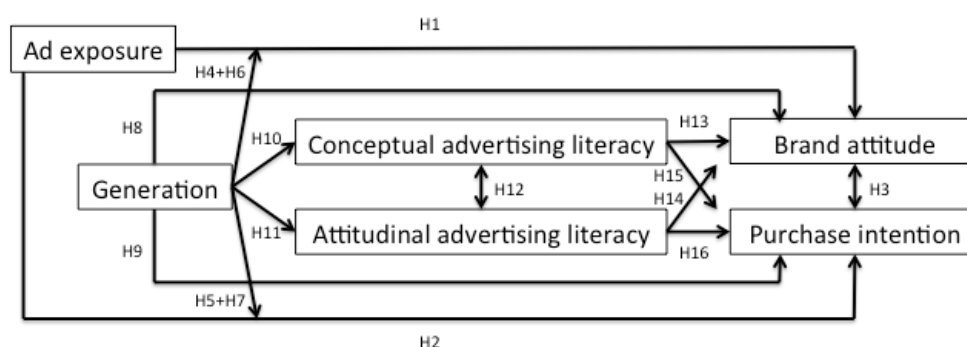


Figure 1

Framework for studying the effect of advertising exposure on brand attitude and purchase intention with advertising literacy as mediator

2.2 Advertising on social networking sites

As the use of traditional media is decreasing while many people spend a lot of time online or have become multichannel users (Ahlers, 2006), brands also started to advertise on the Internet besides their presence on traditional media. The Internet offers many options for advertising, therefore the digitalization of society came along with many more opportunities for brands and advertisers. Also next to paid advertising, which was previously the only way to advertise, unpaid advertising has now become possible through tools like Facebook or viral advertising (Petrescu &

Korgaonkar, 2011). A new place has come into existence, which has become very popular for online advertising. Brands make sure to be present on SNS, as this is where young consumers are present and spend a lot of their time. They are easily reachable through SNS as they often have accounts on several different platforms. SNS are online communities that offer three overall activities: users can create a personal, public profile, users can acquaint themselves with a list of other users, and communication features and applications are provided (Maurer & Wiegmann, 2011). Brands benefit from these platforms and its users by creating online brand profiles and connecting with consumers. On many SNS, brands can measure their consumers' or fans' presence or engagement through likes, retweets, shares, and other, similar tools. Having these 'fans' that are engaged with the brand on SNS is also beneficial for secondary effects, as this widens the brands exposure through the fans' personal networks via their accounts (Lipsman, Mudo, Rich, & Bruich, 2012).

While companies currently have the possibility to target their audiences more specifically and advertise through personal messages, the role of the consumer and their opportunities have also changed in comparison to traditional media. Through traditional media, audiences are moreover receivers of media. It is often a one-way-communication, in which the audience mainly listens and the relation is asymmetric (Enli, 2008). The popularity of the Internet changed the relation between media and audiences, as it transformed into a multi-way conversation. Companies can still use the technique of one-to-many communication, but this should be combined with other tools, more appropriate for the Internet (Tulen, 2008). Consumer-to-consumer messages have become of great importance, as consumers are now able to generate and spread their own content just as easily (Mangold & Faulds, 2009). It has given the consumer a new power that it didn't have when media was only available in the traditional way.

Advertising on SNS is often seen by brands as a cost-effective and popular method to send a message to their audiences (Hsieh & Chen, 2011). Especially as most people own their personal smartphone, tablet, and laptop nowadays and look at screens throughout the day, it has never been easier to reach people with advertising through several channels at any time (Leppäniemi & Karjalainen, 2005). The collaboration between SNS and brands is for both parties very profitable. As SNS offer brands the possibility to be at the same place at the same time as their consumers, giving them the opportunity to interact with them and discover all of their habits and preferences, brands can target their consumers more precisely and effectively (Maurer & Wiegmann, 2011). On the other hand, SNS depend on the profit that comes from advertising, often enabling them to keep offering their services

to the public for free. However, despite the popularity of digital devices and SNS and the benefits that both parties theoretically would have, many questions are currently raised about the effectiveness of advertising on SNS.

One of the obstacles, making it harder for brands to effectively advertise through SNS like Facebook, is the reason why people are on Facebook in the first place. Facebook is mainly used to keep in touch with friends and relatives, rather than for information seeking or other purposes. Even though people still 'like' brand pages, Facebook is not very likely to actually influence their buying behaviour (Maurer & Wiegmann, 2011). This could also be due to the fact that many people do not consider brand pages to be advertising or are simply not aware of Facebook advertising at all (Maurer & Wiegmann, 2011). However, brands continue to advertise on Facebook and other SNS, in order to attract the consumers' attention and develop (partly) free advertising (Dehghani & Tumer, 2015). Word-of-mouth is still highly important in influencing people's purchase intentions, so brands are recommended to make more use of this specific advertising tool. What is very important for brands is to be authentic and transparent. Building a relationship in which the consumer trusts the brand increases the chance of those users becoming fans of the brand and then sharing it with others (Maurer & Wiegmann, 2011).

Brands usually implement an online advertising strategy, as the use of Internet advertising has proven to be effective and a necessary part of the advertising mix (Pergelova, Prior, & Rialp, 2010). A pitfall for many current brands however, is that they use advertising online in the same way as they would through traditional media. They still perceive the consumer to be a passive receiver of messages and they make use of one-way communication rather than starting a conversation (Brajinik & Gabrielli, 2010). Interactive advertisements on the other hand, seem to be a very effective advertising tool especially on social media, as long as they are designed in an attractive and usable manner (Shen, Chiou, Hsiao, Wang, & Li, 2016). As this tactic is however not used at any occasion and static, non-interactive advertisements still occur as well, the choice was made for a non-interactive advertisement in the current study.

2.3 Advertising on Facebook

2.3.1. Facebook Ads

One of the social media platforms on which advertising is highly popular among brands is Facebook. Out of all SNS, Facebook is currently the most popular one worldwide and counts, as of April 2018, 2.23 billion monthly active users

(Statista, 2018b). The platform was launched in 2004, with the initial purpose of building a community and connecting students from Ivy League schools: Columbia, Yale, Stanford, and Harvard. However, quickly after Facebook's launch students from other schools joined the community and in 2006, everyone above 13 years old with access to a valid e-mail address was able to create a personal account (Phillips, 2007). While at first it was the founders' goal to solely connect people on Facebook rather than to make profit, it only took a month after Facebook's launch until the first advertisement was sold (Fiegerman, 2013). After this, Facebook became an attractive tool for brands and they often use paid Facebook advertising in an attempt to reach a younger audience. Currently, about 93% of marketers uses one of the tools that Facebook advertising offers. This translates to about 3 million brands using Facebook for advertising globally (Osman, 2017).

One of the brands that is present on Facebook and has created its own online community is Nespresso, a Swiss coffee brand that currently sells its products globally. Nespresso has been very successful for many years due to their business model: Nespresso's focus on customization, quality, and marketing has been proven to be very effective (Matzler, Bailom, von den Eichen, & Kohler, 2013). With their internationally displayed 'Nespresso, what else?' commercials including George Clooney, their advertising soon received a lot of attention. Nespresso is currently also present on multiple SNS: they have several accounts on platforms such as Twitter and Instagram and their Facebook page, on which new content is posted several times a week, counts over 6 million likes. In the current experiment, an advertisement of Nespresso (for the manipulation group) or Senseo (for the control group) will be visible within the stimulus material in the survey, after which all respondents will answer questions about Nespresso.

Facebook advertising isn't solely brands buying banners or pop-ups that Facebook users see while being on the platform. Facebook offers a variety of ways to advertise, which were officially launched in 2007 (Facebook, 2007). *Facebook Ads* was introduced and it unveiled the different ways in which advertising on the platform was possible. As of 2013, Facebook Ads extended and even more ways for brands to use Facebook for marketing or advertising purposes were presented (Facebook, 2017). Brands made use of these new possibilities, as SNS is exactly where they can find their target groups. The first possibility is sending ads to users, based on their personal information, preferences, and online behaviour. This is highly beneficial for brands, as they are now able to send personalized advertisements to specific groups of consumers. This makes their advertising more efficient, as they can be sure that whoever sees their advertising is part of their target audience. This form of

advertisement usually includes a few lines of text and an image and based on the brand's budget, the advertisement is placed in a timeline or elsewhere, showing to a certain amount of people. When filtering for an advertisement's audience, brands can choose exactly whom they want the advertisement to see based on demographics such as age, place of residence, gender and more, enabling them to target their audience very specifically (Facebook, 2007, 2008, 2017). This form of advertisement can appear at different places. It is possible to be viewed as a post in a users' timeline, in between posts from the users' Facebook friends. The other option is for the advertisement to appear on the right side of the screen. In this case, the advertisement remains at the same spot even though the user scrolls through their timeline, a brand page or group page. For both of these placements, a text stating 'Sponsored' will appear above the sponsored content.

Besides this form of advertising, Facebook introduced the possibility to build a Facebook 'Page' in 2008. Companies can make their own online profile page, which is free of charge (Toner, 2013). Users can show their affection for a brand by liking the brand page and interaction with the brand becomes easily accessible through liking, commenting or sharing content. This enables brands to build an online brand community and it allows people to dedicate themselves to a brand online (de Vries, Gensler, & Leeflang, 2012). Through their pages, brands are able to interact with their consumers, build relationships and create an online community of 'fans' (Cvijikj & Michahelles, 2013).

Another important marketing tool is the use of Social Plugins, through which companies can reach valuable insights into people's behaviour and activities on Facebook, which can help in properly targeting audiences. It can be seen as a free of charge word-of-mouth system, allowing users to share their favourite brands with other users (Facebook, 2007). The last two methods that were added are Sponsored Stories and Facebook Applications. Sponsored Stories enables brands to share their online advertising 'story', which is often a small video or picture with text, right after a user clicked on his or her friends' story. Contrary to a Facebook page, this service is paid for. The last method enables companies to advertise on the applications created by Facebook (Cvijikj & Michahelles, 2013).

Out of all possibilities of Facebook Ads, the choice was made for this study to focus on the Facebook advertisement that brands pay for to appear next to the regular screen. This can appear in people's timelines, but also on the right side of a Facebook page or group page. A group differs from a timeline, as a timeline is a user's homepage on Facebook and it shows content that friends post, like, share, or comment. A group has a specific topic and only members of the group can post and

see its content. For the stimulus material, it was decided to pick a Facebook group page with a topic related to the cover story of the survey. Within a group, only the people who are already interested in the topic will become members. The selected advertisement appears on the right side of someone's screen of the Facebook group and as the user scrolls through the group, it remains to be in the same spot. Above the advertisement, a small text showing 'Sponsored' is visible. During the current experiment, respondents will be exposed to a Facebook group for people that like coffee, named 'World of Coffee'. This is a closed group (so you have to be accepted in order to become a member and see the content) and people from all over the world can join it and see its content (after acceptance). The stimulus material shows a few regular posts from the Facebook group page and the sponsored coffee advertisement from Nespresso (or Senseo) has been added to the right side of the screen, for it to appear as real as possible (see Figure 2). One of the questions that follow upon the timeline will be whether the participant has recognized any form of advertising on the timeline, enabling to measure respondents' awareness of advertising on the group page.

2.3.2 Effectiveness of advertising

When the Internet had only just made its entrance into people's lives, research already showed online advertising to be effectively increasing people's brand attitudes and intent to purchase (Briggs & Hollis, 1997). Banner advertisements in particular were shown to be successful for that purpose. Hwang, Yoon and Park (2011) studied the effect of website advertisements on brand attitudes and purchase intentions within the field of restaurants. Their findings showed consumers' cognitive and affective responses to advertisements had a positive effect on both brand attitude and purchase intention. Especially when the information in the advertisement was of high quality, this positively changed attitudes and behaviour. Another study which focused on Facebook advertising found a significant relation between advertising on the platform and brand image and brand equity (Dehghani & Tumer, 2015). As brand image and -equity were positively influenced by advertising, this also increased consumers' intent to purchase from the advertised brand. Brand equity refers to the commercial value of the brand that the product benefits from (Dehghani & Tumer, 2015). A well-known brand name is therefore often beneficial for its products. Another previous study has also shown the effectiveness of exposure to online advertising and its influence on people's behaviour. Manchanda, Dubé, Goh and Chintagunta (2006) found that exposure to banner advertising increases purchase intentions. As advertising is mainly

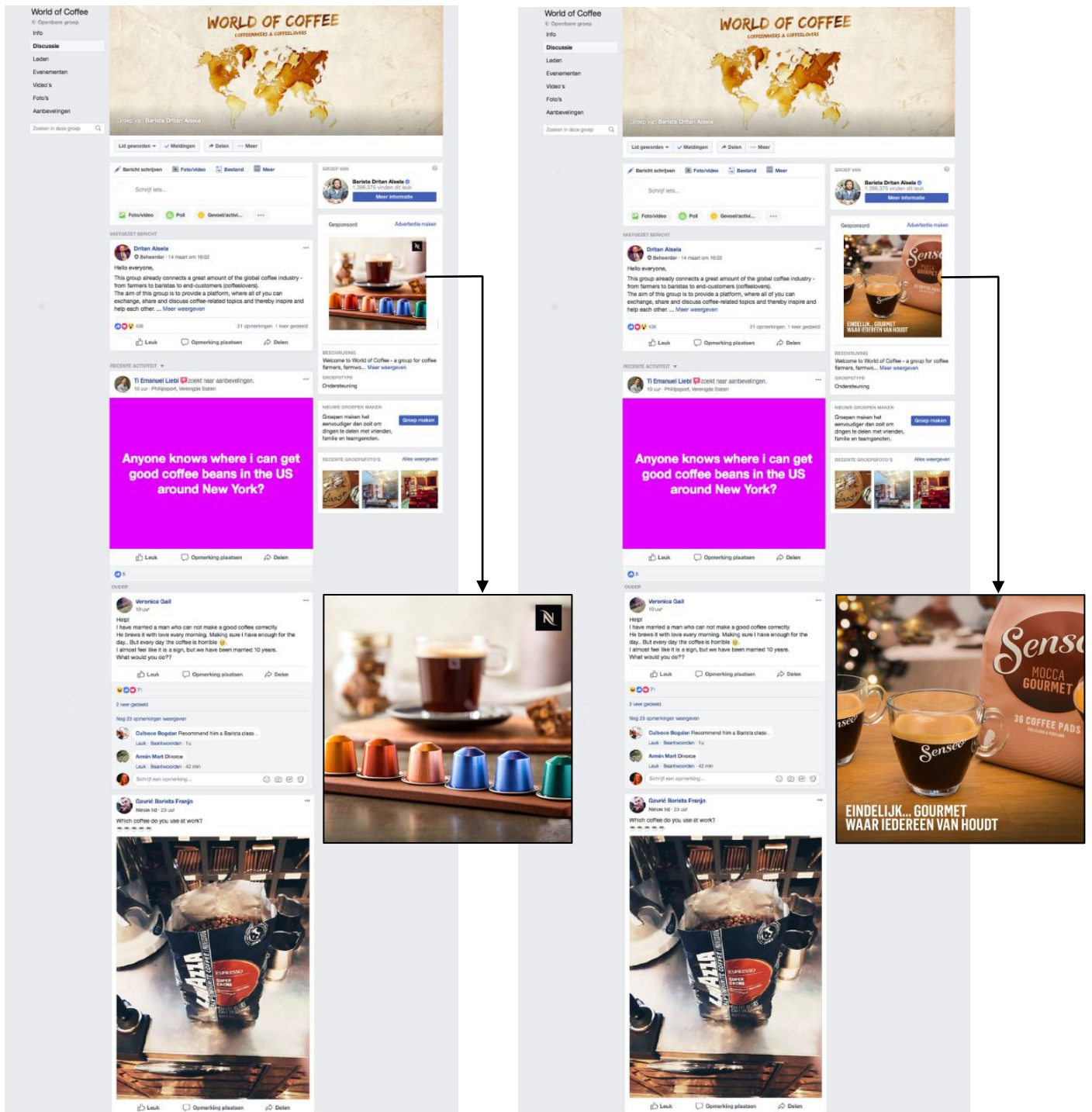


Figure 2

Stimulus material including the Nespresso and Senseo advertisement, as will be shown to respondents in the survey.

a building tool or reminder for brands, they found that the banner increased purchase probabilities, as people that had been exposed to the banner were more likely to purchase from the brand within the week. To test if similar significant relations between advertising exposure and brand attitude and purchase intention are found in the current study, the following hypotheses were formulated:

Hypothesis 1 (H1): Respondents that have been exposed to the Nespresso advertisement will score higher on brand attitude (i.e., more positive) towards Nespresso than respondents that have been exposed to the Senseo advertisement.

Hypothesis 2 (H2): Respondents that have been exposed to the Nespresso advertisement will score higher on purchase intention (i.e., more positive) towards Nespresso than respondents that have been exposed to the Senseo advertisement.

Studies showed that a high brand attitude also positively influences a high purchase intention. This is in line with the hierarchy-of-effects model, which theorizes that consumers react to persuasive communication and advertising in an affectional way prior to giving a behavioural response (Wijaya, 2012). Previous research found that consumers that liked the brand or product and therefore scored high on brand attitude, showed to be more likely to purchase from that same brand or extended products (Chen & Liu, 2004; Wu & Lo, 2009; Xu & Pinel, 2007). As previous studies have shown the positive relation between brand attitude and purchase intention, the following was hypothesized:

Hypothesis 3 (H3): Respondents that score high on brand attitude (i.e., more positive) also score high on purchase intention.

2.4 Baby boomers vs. digital natives

As previously mentioned, baby boomers belong to the post-war generation that was born between 1946 and 1964 (Loroz & Helgeson, 2013). The generation of baby boomers currently holds a large part of society and because of that as well as their current age, they have a significant spending power. They differ on various matters from the later generation of digital natives, who were born between 1990 and 2000. For people that were born in 1990 and after, having access to the Internet is very natural, as access became available and more common in the 1990s (DutchCowboys, 2016). That is why the choice was made to not necessarily focus on one of the fixed generations, such as generation Y or Z, but on digital natives that were born in 1990 or after. It is often said that digital natives belong to the generation

of millennials, but as these were born from 1977 until 1994, the oldest millennials will by far not be as used to the Internet as a millennial who was born in 1990 or after. In 1996, the Internet through ISDN (ISDN enabled the possibility to use the Internet and a telephone at the same time) was accessible for common Dutch households for the first time, which increased the amount of people with Internet access. Four years later in 2000, unlimited use of the Internet for a fixed price per month was introduced. (DutchCowboys, 2016). Therefore the use of the Internet became relatively easy when the generation of digital natives was six years old or younger and they had only reached a maximum age of ten years old when unlimited Internet was offered. Whereas in 1996, only 9.6% had a connection to the Internet in the Netherlands, this percentage had grown to 44% of the Dutch population in the year 2000 and it was already 81% in 2005 (Brasser, 2014). Consequently, by the time the oldest digital native (born in 1990 or after) was only ten years old, almost half of the Dutch population had access to the Internet. As these people grew up with the presence of the Internet and have had access to it both at home from a young age and during their school years, this generation is very well acquainted with the web. As only respondents that have reached adulthood will be included in this study, only the people that are 18 years old or older at the time of participation will be taken into account. Therefore in this study, digital natives are denoted as those born from 1990 to 2000 and are currently between 18 and 28 years old.

The reason for selecting digital natives is because they truly understand this digital age, as they were born into a digitalized society. They are very technologically advanced (Williams, Crittenden, Keo, & McCarty, 2012) and often prefer the use of social media for interaction (Bolton et al., 2013). Because of this preference and active presence on social media, brands make sure they are present at that same place: on SNS. This generation was therefore selected as a benchmark, in order to make an interesting comparison with the older generation of baby boomers, which have gotten used to the digitalization of society in a very different manner. As baby boomers have not been dealing with digital devices since their youth onwards, they are usually less familiarized with the new technologies, unlike digital natives who often participate on several social media platforms (Bolton et al., 2013). The differences in media landscapes and technologies during the childhoods of the different generations might have changed the way people are influenced by advertising nowadays and the way they perceive advertising through online platforms.

Differences between these generations have been previously studied regarding different subjects as well. It has for instance been found that digital natives

are strongly independent and materialistic. Baby boomers on the other hand are more often still dedicated to a religion, which values are regularly opposed to materialism (Loroz & Helgeson, 2013). Another study also conducted a comparison between baby boomers and a younger generation. They found that baby boomers are overall more rational regarding purchasing and their perceptions of advertising, while the younger generation (generation Y) makes decisions more based on their emotions (Parment, 2013).

It was also shown that digital natives, particularly generation Y born up until 1994, are more likely to have positive attitudes in general towards advertising than baby boomers (Loroz & Helgeson, 2013). The attitudes of both baby boomers and digital natives towards advertising have been studied more often. A study that analysed baby boomers' attitudes towards product placement found that baby boomers do not really care about product placement in entertainment such as television, movies or Internet sites. Only a small majority of the sample valued to know how the entertaining content that they were exposed to was actually influencing them through the product placement (Schmoll, Hafer, Hilt, & Reilley, 2006). Only when the entertaining content was influenced by advertising, it caused the majority of them to care about advertising and how it is influential. Another study found that baby boomers do not consider marketing to be beneficial for society. They perceive it to be useless and sometimes even offensive, and leading to higher prices (Roberts & Manolis, 2000). They are, however, very much aware of the persuasive manoeuvres in marketing and advertising.

Overall it can be said that thus far, it has been found that baby boomers tend to be more sceptical towards advertising than the younger generation, while the latter is more positive towards online advertising as they are very often present on social media platforms. However, both generations are very interesting for brands and marketers, as they are currently the first and second largest consumer groups and have significant purchasing behaviour (Parment, 2013). As mentioned, baby boomers were shown to have less positive attitudes towards advertising than younger generations. They often think of it as being useless or even offensive and they are well aware of the persuasive intent of advertising (Roberts & Manolis, 2000). Previous research has measured the effects of product placement on attitude and intended behaviour. In this case it was observed that the older respondents that were included in the study (55+), showed the least favourable attitudes and intended behaviours after being exposed to advertising (de Gregorio & Sung, 2010). As previous research has shown less positive attitudes towards advertising for baby

boomers, negatively influencing attitude and behaviour, the following hypotheses were stated:

Hypothesis 4 (H4): Baby boomers that have been exposed to the Nespresso advertisement score lower on brand attitude (i.e., more negative) than baby boomers that have been exposed the Senseo advertisement.

Hypothesis 5 (H5): Baby boomers that have been exposed to the Nespresso advertisement score lower on purchase intention (i.e., more negative) than baby boomers that have been exposed the Senseo advertisement.

Previous research has also looked at college students and whether advertising would influence their brand attitude. The focus was on nostalgic advertising. The results showed that nostalgic advertisements led to more favourable attitudes towards the advertised brand. Besides that, also the students' intention to purchase from the advertised brand increased (Pascal, Spratt, & Muehling, 2002). This outcome indicates that young adults' brand attitude and purchase intention is influenced by advertising

More recent studies also found this effect for young people, which were to a large extent part of the digital natives as described in the current study. Dehghani and Tumer (2015) analysed whether Facebook advertising influences students' attitudes and behaviour. The analysis showed that the respondents' brand equity, brand image and purchase intention were all positively influenced by advertising on Facebook. For millennials, Facebook advertising was also shown to have a positive effect on purchase intention and purchase perceptions (Duffet, 2015), and YouTube advertising showed to be of a significant influence on purchase intention among young adults as well (Dehghani, Niaki, Ramezani, & Sali, 2016). As previous studies have found positive effects of (online) advertising on young adults' brand attitudes and purchase intentions, the following is hypothesized for the current analysis:

Hypothesis 6 (H6): Digital natives that have been exposed to the Nespresso advertisement score higher on brand attitude (i.e., more positive) than digital natives that have been exposed the Senseo advertisement.

Hypothesis 7 (H7): Digital natives that have been exposed to the Nespresso advertisement score higher on purchase intention (i.e., more positive) than digital natives that have been exposed the Senseo advertisement.

As previously mentioned, digital natives and baby boomers differ from each other in many ways and especially in the field of the Internet and SNS. Purchase behaviours of digital natives born between 1981 and 2000 are to a greater extent influenced by social media than any of the older generations, including baby boomers (Ordun, 2015). When baby boomers were compared to younger generations, it was found that marketing and advertising influenced the younger generations' attitudes more positively than those of baby boomers (Roberts & Manolis, 2000). Part of the reason for this was that the younger generations were less likely to perceive the advertisements as being offensive in comparison to baby boomers. These results are similar to other research, which found that generation Y has an overall more positive attitude towards advertising in comparison to baby boomers. Also in terms of attitude towards purchase, the younger generations had a more positive score to various types of advertising (Loroz & Helgeson, 2013). Based on the previously stated findings, the following hypotheses were formulated to test the differences between baby boomers and digital natives:

Hypothesis 8 (H8): Baby boomers' scores on brand attitude after being exposed to the Nespresso advertisement are lower (i.e., more negative) than digital natives' scores on brand attitude after being exposed to the Nespresso advertisement.

Hypothesis 9 (H9): Baby boomers' scores on purchase intention after being exposed to the Nespresso advertisement are lower (i.e., more negative) than digital natives' scores on purchase intention after being exposed to the Nespresso advertisement.

2.5 Advertising literacy

Prior research has measured to what extent adult consumers or children are able to recognize advertising and how they understand its intentions. This is often done in terms of advertising literacy. From the viewpoint of the consumer, advertising literacy is explained as people's ability to understand media phenomena and messages with a commercial intent (Malmelin, 2010). As people develop more analytical skills as they grow up, this ability changes and matures over time. Advertising literacy is conceptualized more in-depth by Rozendaal and colleagues (2011). The concept of advertising literacy was divided into three separate dimensions: conceptual advertising literacy, attitudinal advertising literacy, and advertising literacy performance. For this study, only the first two dimensions are relevant.

Conceptual advertising literacy is explained as being able to understand and recognize advertising messages and exists of the following seven components: recognition of advertising, understanding the selling intent, recognition of the advertising's source, perception of the intended audience, understanding the persuasive intent, understanding the persuasive tactics, and understanding of advertising's bias (Rozendaal et al., 2011). *Attitudinal advertising literacy* is explained as the ability to be critical towards advertising messages and exists of the following two components: scepticism towards advertising and disliking of advertising. Though only few studies have analysed conceptual advertising literacy or attitudinal advertising literacy with the components as conceptualized by Rozendaal and colleagues (2011), multiple scholars have found significant relations as they studied being aware of advertising or being aware of the persuasive/selling intent of advertising and disliking or annoyance towards advertising.

For baby boomers and digital natives, different outcomes are expected to occur for both their scores on conceptual advertising literacy and attitudinal advertising literacy. For digital natives, who are used to living in a digitalized world and even prefer interaction through social media (Bolton et al., 2013), being on Facebook is very normal and easy to process. This is different for baby boomers, who are digital immigrants, as for them being surrounded by this digitalized world is like speaking a second language (Prensky, 2001). As digital natives are more familiar with the platform, it is expected that they will be more aware of the presence of advertising, as they do not need to use their senses for discovering the platform. Also, as the generation of millennials was born into a world with advertising all around them and through all of the many available platforms, instead of perceiving advertising as obtrusive or annoying, it is rather normal to them. This explains their overall positive attitude towards advertising in general (Loroz & Helgeson, 2013).

Baby boomers and their attitudes towards advertising have also been previously studied. What was found is that baby boomers perceived advertising more negative than younger generations did (Roberts & Manolis, 2000). Van der Goot, Rozendaal, Oprea, Ketelaar, and Smit (2016) found a similar result for advertising on websites and social media in particular. While generation Y had the most positive attitudes towards this kind of advertising, an older generation (born between 1958 and 1977) held less favourable attitudes towards advertising online. Similar results were found for mobile advertising. Based on the different backgrounds of baby boomers and digital natives, the following hypotheses were formulated:

Hypothesis 10 (H10): Digital natives score higher on conceptual advertising literacy (i.e., are more aware of advertising) than baby boomers.

Hypothesis 11 (H11): Baby boomers score higher on attitudinal advertising literacy (i.e., are more critical towards advertising) than digital natives.

Robertson and Rossiter (1974) already looked at the relation between being aware of the persuasive intent of advertising and scepticism and disliking of advertising, but only for children in specific. One of the outcomes of the analysis was that being able to recognize the persuasive intent, which is part of conceptual advertising literacy, would decrease the extent to which the child believes and likes the advertisement. As the ability to recognize advertising and its intents increases with the respondents' age, so did the influence. Similar results were found in studies with adult respondents. In a study conducted by Tutaj and van Reijmersdal (2012) was found that the better a respondent is aware of the selling and persuasive intent of advertising, the more annoyance they will feel towards the advertisement. To see if these findings hold in the current study and whether the two dimensions of advertising literacy are related, the following was hypothesized:

Hypothesis 12 (H12): Respondents that score high on conceptual advertising literacy also score high on attitudinal advertising literacy.

What will also be included in the analysis of this study is whether respondents' advertising literacy influences their advertising susceptibility in terms of brand attitude and purchase intention. Scholars have previously studied whether being aware of advertising and its intentions and scepticism towards it influences brand attitudes and intentions to purchase from a brand. A high score on persuasion knowledge for instance, will also influence people's opinion towards a brand. Kirmani and Zhu (2007) found that people who were aware of the persuasion or manipulation in advertising would assess the advertised brand less favourably. Cowley and Barron (2008) found a similar outcome for the relation between conceptual advertising literacy and brand attitude. The results indicated that as soon as respondents were aware of the persuasive intent of product placement within a movie, their brand attitude was much more negative in comparison to brand attitude of respondents that were not aware of the persuasive intention of advertising. For the influence of attitudinal advertising literacy, also negative relations with brand attitude were found in empirical studies. Similar results were found when not only respondents' awareness of advertising was measured, but also respondents'

scepticism toward advertising and its influence on their opinion on the brand. It was found that students that showed to be sceptical toward advertising scored lower on brand attitude (Chen & Leu, 2011). To test if the ability to recognize and be sceptic towards advertising negatively influences brand attitude, the following was hypothesized:

Hypothesis 13 (H13): Respondents that score high on conceptual advertising literacy score low on brand attitude.

Hypothesis 14 (H14): Respondents that score high on attitudinal advertising literacy score low on brand attitude.

The previously mentioned Robertson and Rossiter (1974) found, besides a relation between being aware of advertising and being sceptic of advertising, that the more aware a child was of the persuasive intent of advertising, the less likely they were to want the product from the advertisement. This indicates that a high conceptual advertising score negatively influences behaviour towards the brand. Research also showed that children that saw a TV advertisement and were aware of the persuasive intentions of the advertisement, were less likely to request the product (Panic, Cauberghe, & de Pelsmacker, 2013). Their behaviour was therefore negatively influenced by their awareness of the persuasive intent. As children are often believed to be more susceptible to the persuasive intent of advertising, many other studies also focus on that effect. In a study for adolescents, a negative relation was also found between attitudinal advertising literacy and purchase intention (Vanwesenbeeck et al., 2016). The respondents that had a critical attitude towards the advertising were also less likely to request purchase. In order to be able to test if the negative relation between advertising literacy and intended behaviours also holds in the current study, the following hypotheses were formulated:

Hypothesis 15 (H15): Respondents that score high on conceptual advertising literacy score low on purchase intention.

Hypothesis 16 (H16): Respondents that score high on attitudinal advertising literacy score low on purchase intention.

3. Methodology

3.1 Research design and stimulus material

This quantitative study contained a quasi-experimental design, which proposes a 2 (generations: baby boomers vs. digital natives) x 2 (advertising exposure: Nespresso advertisement vs. Senseo advertisement) factorial between subjects design. Though an experiment can be explained as a test that is run with controlled and randomized conditions, a quasi-experiment slightly differs from this conceptualization. The first factor of generation (baby boomers vs. digital natives) is quasi-experimental as pre-existing groups were used. The condition of age is in the current experiment not controlled, as this group is made up of existing characteristics, which can therefore not be assigned randomly (Shadish, Cook, & Campbell, 2002). The second factor of advertising exposure (advertisement Nespresso vs. advertisement Senseo) was created by randomly assigning participants to groups, therefore this part of the experiment was true experimental. A total of four conditions was therefore used, of which participants were non-randomly assigned to the condition of generation, but randomly to advertising exposure. As two groups filled out the questionnaire after having seen the Nespresso advertisement, while the other two groups of participants answered the same questions about the brand, but after being exposed to a different advertisement (i.e., a Senseo advertisement), it can be measured what the influence of advertising has been on respondents' purchase intention and brand attitude towards the brand Nespresso. The table below shows an overview of the conditions used in the current study:

Table 1

Overview of the Conditions

		Condition	
		Nespresso	Senseo
Generation	Baby Boomers	C1	C2
	Digital Natives	C3	D4

For the stimulus material, an advertisement from Nestlé's coffee brand *Nespresso* was selected. Nespresso was selected because the brand is well known by most people and coffee as a product is similarly popular for both baby boomers and digital natives. In 2017, 68% of people above the age of 60 were considered to be coffee consumers. For consumers in the age of 25 to 39, this was 63% and from

18 to 24, this was 50% (Statista, 2018d). In the previous study, people were considered to be coffee consumers if they had been drinking coffee in the past day. Moreover the analysis was conducted in the Netherlands, which is the country that had the highest coffee consumption rate worldwide in 2015 (Statista, 2015). This also points out the popularity of coffee among the Dutch population. Participants that partake in the experiment have been exposed to an international Facebook group that is dedicated to coffee: 'World of Coffee'. They were able to see a small description of the intention of the group, along with three random posts that are visible in the group and posted by group members. On the right side, an advertisement of Nespresso (for the manipulation group) was visible, as a sponsored post. The stimulus material can be found in Figure 2 in the theoretical framework. The Nespresso advertisement contains a Nespresso coffee cup with coffee and six of the well-known Nespresso capsules, along with the brand's logo in the upper right corner. The advertisement was presented in a subtle manner, so it was possible to test whether people were actually aware of the presence of advertising.

Besides the fact that coffee is a favourable product for people of different ages, the brand Nespresso was also selected because of its global popularity. The brand gained popularity due to its strong business model, building on convenience, digitalization in distribution and the long-lasting espresso culture (Matzler et al., 2013). Besides that, Nespresso actively advertises on SNS, which ensures internal validity in the current study. The manipulation group was exposed to the Nespresso advertisement, in order to see if that affects their brand attitude and purchase intention. The control group will see the exact same stimulus material, but with a different advertisement. For them, the advertisement will be from coffee brand Senseo instead of Nespresso. The Senseo advertisement was chosen so respondents are still able to answer questions regarding advertising literacy, but they are not influenced by Nespresso advertising before answering questions about the brand. Senseo is part of Dutch coffee brand Douwe Egberts. The coffee machines and related coffee pads are highly popular in the Netherlands, where the products were introduced in 2001. In 2007, the brand had sold over 800.000 machines and they had captured 10% of the Dutch coffee market (Lincoln & Thomassen, 2007). After these successes, they also introduced their brand to the rest of the world, where Senseo gained popularity as well.

In order to check if people paid attention to the stimulus material and were aware of the advertising, there were two checks included right after respondents were exposed to the Facebook group page. These questions were posed as a manipulation check, to see if people actually saw the material and paid attention to it.

The first question asked respondents what the subject of the Facebook group was. Of the 151 participants that filled out the survey, 144 passed this manipulation check (95.4%) and were included in the analysis. The second question was whether respondents had seen advertising on the Facebook page, and if yes, of what brand(s). Of the 144 respondents, 79 answered to have seen advertising on the Facebook group page (54.9%) and only 53 respondents were able to name one of the brands they had seen in an advertisement (36.8%). People that did not pass the second check were however not excluded from the study, so the analysis was done with 144 complete responses.

3.2 Sampling

The experiment was designed with the use of *Qualtrics*. It was created in the Dutch language, so people that do not speak English very well could also be reached and were able to participate in the experiment without language as a barrier. The questionnaire was distributed online from April 7th until April 28th. Participants were recruited through convenience sampling and snowball sampling. This was done by specifically asking people that met the criteria to participate in the experiment. They were also asked to distribute the survey to people in their networks who also met the criteria. This was done via online platforms such as Facebook and WhatsApp. Collecting data was also done offline by walking around in a sports club and asking people to fill out the survey on a phone. In addition, the survey was posted in several Facebook groups to gather participants that met the right criteria. The Facebook groups in which the survey was posted targeted the selected generations. Groups in which the survey was placed were 'Koffie Pauze', 'Koffie Kletsen', 'Koffie Gezellig en zo', and '50plus Club Nederland'. These were selected as they are all Dutch Facebook groups for either people that are interested in coffee or that are 50 years and older. This would increase the possibility that group members entered in the experiment, because the cover story would match their interest in coffee (coffee groups) and because their age category was specifically targeted (50+ groups). In addition, a variety of people are members of these groups, as they differ in terms of age (for the coffee groups), gender and educational background. This increased the diversity of the sample. After three weeks, all four conditions contained a satisfactory amount of responses, therefore data gathering was complete and the survey closed.

As mentioned, the respondents that were eligible to participate in the experiment were from two different generations: baby boomers and digital natives. The respondents as part of baby boomers consisted of people currently aged between 53 and 72 as they were born between 1946 and 1964. The digital native

respondents were between 18 and 28 at the moment of participation, as they were born between 1990 and 2000. Of each generation, a minimum of 60 participants was needed, adding up to a minimum total of 120 participants. After data collection was completed, a total of 213 people had started the survey and agreed to participate in the study. Of these 213 respondents, 151 completed the entire survey. The other responses were excluded from the survey as they did not meet the age requirements ($N = 36$) or did not finish all the questions ($N = 26$). Of the 151 complete responses, 71 were part of the baby boom generation and 80 were part of the digital natives. Some respondents did not pass the manipulation check, therefore only 144 responses were included in the analysis, of which 64 baby boomers (44.4%) and 80 digital natives (55.6%).

The observed age range of the baby boomers was between 53 and 70, with an average age of 58.94 ($SD = 4.05$) and digital natives had an age range from 18 to 27 with an average age of 22.83 ($SD = 1.83$). Within the baby boomer respondents, 32 were female and 32 were male (resulting in a 50-50 distribution). For digital natives, 61 respondents were female (76.3%) and 19 were male (23.8%). The highest level of education for baby boomers that was selected most often was HBO bachelor or master (48.4%), followed by WO bachelor or master (21.9%). For digital natives, WO bachelor or master was most often mentioned (75.0%), followed by HBO bachelor or master (21.3%).

3.3 Procedure

After completion of the survey, it was pre-tested by two respondents. Their responses were not included in the analysis of the data. The changes made after the pre-tests were adding an introductory text to introduce the questions that determine whether people were suitable to participate, before the questions regarding age followed. Besides that, a grammatical error was fixed and another piece of text was included above the stimulus material, so people were more aware of the fact that they could only click to the next page after 30 seconds. After completion of the pre-tests and the incorporation of feedback, the data collection started. The survey was distributed online and within three weeks, all conditions met the requirement of minimum respondents.

When participants decided to enter in the experiment, the survey started with a cover story stating that this study looks at people's morning rituals and whether this includes coffee and social media. Also consent for participation in the study had to be agreed upon. The first thing that was checked was whether respondents met the criterion for age. They were introduced to these questions by stating that the

questions would look at whether they were eligible to participate. Two questions regarding the participants' year of birth and current age were asked, because this assigned them to a generation condition or excluded them from the experiment. After having asked about participants' age in years, year of birth in six categories (1945 or before, 1946-1964, 1965-1977, 1978- 1989, 1990-2000, and 2000 or after), gender (male, female, or other), nationality and highest education level followed in five categories (high school, MBO, HBO, WO, and other), some questions were posed to keep up the cover story. These questions were for instance 'Do you drink coffee in the morning?' on a scale from (1) Yes, always to (4) No, never, 'Do you ever buy coffee beans or –cups?' (Yes/No) and 'What social media platforms do you use in the morning?', where respondents were able to choose from several platforms (Facebook, Instagram, WhatsApp, LinkedIn and Other). These questions were not relevant for the outcome of the study, as they did not measure any of the selected variables. For all the questions in the survey, please see Appendix A.

After these questions, people were introduced to the stimulus material. An introductory text was given. This text stated that a Facebook group would be shown to the participant and that the researcher would like to know what they think of it. The respondents were told they had 30 seconds to scroll through the group, after which they would be able to click to the next page. The stimulus material that was shown existed of an image of the Facebook group page 'World of Coffee'. On this page, it was repeated that clicking onto the next page was only possible after 30 seconds. The manipulation group and the control group were exposed to the same page, apart from the advertisement. This was a Nespresso advertisement for the manipulation group and a Senseo advertisement for the control group. Please see Figure 2 in the theoretical framework for the stimulus material. The first questions that followed after the stimulus material was whether the respondents had been able to see the page, what the subject of the group was and whether they had seen advertising. These questions were posed as a manipulation check, to see if people actually saw the material and paid attention to it. What followed was an introductory text about advertising on Facebook. This entailed information about how companies use Facebook advertising to reach potential customers. After this, the questions regarding advertising literacy were posed. Lastly, questions about brand attitude and purchase intention regarding Nespresso, and whether respondents had ever bought Nespresso coffee were posed. The survey ended with the possibility for participants to leave their e-mail, so they had the opportunity to win Simon Lévelt coupon with the value of 20 euros that would be raffled after the data collection.

3.4 Measurements

The complete survey is included in Appendix A. Below is an overview of the variables that were included. The main variables that were measured and analysed are (1) brand attitude, (2) purchase intention, (3) conceptual advertising literacy, and (4) attitudinal advertising literacy. For the variables with at least three items, factor analyses were conducted, followed by a reliability test. A factor analysis was done to prepare the variables for hypothesis testing and to see if the data could be reduced by merging variables. Factor analyses were appropriate as the KMO test was at least .60 and Bartlett's test below .05, as this means enough variance was explained between items (Pallant, 2001). Factors with an Eigenvalue of at least 1.0 were included and it explained a certain percentage of variance. After this, it was checked whether the factors were reliable through reliability tests. These showed whether all variables and items should be kept, or should be excluded for a reliable analysis. Cronbach's α should be at least .70, but as .60 is the lenient criterion, variables with Cronbach's $\alpha > .60$ were also considered for analysis (Pallant, 2001).

3.4.1 Brand attitude

Brand attitude was measured on a 5-item, 5-point semantic differential scale as adapted from Spears and Singh (2004), as it was reliable in previous research ($\alpha = .95$). This scale measures people's opinion or attitude towards a brand, by asking people to indicate their liking towards that brand in the following opposing scales: (1) Unappealing vs. (5) Appealing, (1) Bad vs. (5) Good, (1) Unpleasant vs. (5) Pleasant, (1) Unfavourable vs. (5) Favourable, and (1) Unlikeable vs. (5) Likeable. For each of the scales, higher scores represented a more favourable brand attitude.

The five items which were Likert-scale based were entered into a factor analysis using Principal Components extraction with Varimax rotation based on Eigenvalues (> 1.00), $KMO = .84$, $\chi^2 (N = 144, 10) = 449.80$, $p < .001$. The resulting scale explained 70.7% of the variance in brand attitude. The one factor found included all five items. A reliability test showed Cronbach's $\alpha = .89$. A new variable was created for brand attitude based on the means of all five items.

Baby boomers scored a mean of 3.50 on brand attitude ($SD = 0.83$), which indicates an overall more positive feeling of baby boomers towards the brand Nespresso. For digital natives, a mean of 3.81 was scored ($SD = 0.73$), so the younger generation is even more positive towards Nespresso than the older generation.

3.4.2. Purchase intention

Respondents' purchase intention was measured on a 7-item, 5-point semantic differential scale as adapted from Spears and Singh (2004). In previous research, this scale was demonstrated to be reliable ($\alpha = .96$). It measures people's intention to purchase a product or brand after being exposed to the advertisement. The respondents were asked "Please indicate what the chance is that you will buy Nespresso in the future" and had to respond to the following opposing scales: (1) Unlikely vs. (5) Likely, (1) Impossible vs. (5) Possible, (1) Never vs. (5) Definitely, (1) Certainly not vs. (5) Certainly, (1) Definitely do not intend to buy vs. (5) Definitely intend to buy, (1) Very low purchase interest vs. (5) Very high purchase interest, and (1) Probably not vs. (5) Probably.

The seven items which were Likert-scale based were entered into a factor analysis using Principal Components extraction with Varimax rotation based on Eigenvalues (> 1.00), $KMO = .94$, $\chi^2 (N = 144, 21) = 1561.30$, $p < .001$. The resulting scale explained 89.1% of the variance in purchase intention. The one factor found included all seven items. A reliability test showed Cronbach's $\alpha = .98$. A new variable based on the means of all seven items was created for purchase intention.

Baby boomers scored a mean of 2.85 on purchase intention ($SD = 1.32$), which indicates an overall more positive intention of baby boomers to buy from the brand Nespresso, as it is above the scale mid-point. For digital natives, the mean score was 3.12 ($SD = 1.18$), so the younger generation is even more likely to buy from Nespresso than the older generation.

3.4.3 Conceptual advertising literacy

In order to measure people's conceptual and attitudinal advertising literacy, scales based on Rozendaal, Oprea, and Buijzen (2016) were used. As these scales were developed to measure children's advertising literacy, they were adapted in order to fit the generations in this study. Some items were deleted or altered and instead of measuring on a 4-point scale, five points were used. Whereas for children, it is common to push them into a direction rather than giving them the option to choose neutral, it is more in line with common practice to add a neutral option for adults. This allows capturing more variance in comparison to using a 4-point scale.

Conceptual advertising literacy was measured on two subtopics. The first topic is *Understanding selling intent* and it exists of the question 'Is Facebook advertising there to make you buy the advertised products?' on a scale from (1) No, certainly not to (5) Yes, for sure. For baby boomers, this subscale's mean was 4.42 ($SD = 0.97$) and for digital natives the mean was 3.80 ($SD = 1.18$). The second topic

is *Understanding persuasive intent*, which includes the following questions: 'Is Facebook advertising there to make you want to have the advertised products?' and 'Is Facebook advertising there to make you think positively about the advertised products?' on a scale from (1) No, certainly not to (5) Yes, for sure. The two questions from this subtopic showed a strong positive correlation of .73. For baby boomers, this subscale's mean was 4.48 ($SD = 0.84$) and for digital natives the mean was 4.17 ($SD = 0.96$).

A new variable, existing of the three items was created for conceptual advertising literacy, based on the means of the two subscales. This was possible as the first and second subscale of conceptual advertising literacy showed a very strong correlation of .83. As the subscales were combined into one variable, baby boomers scored a mean of 4.45 ($SD = 0.88$), which indicates that baby boomers are aware of advertising. For digital natives, a mean score of 3.98 was found ($SD = 1.01$), so the younger generation is less aware of the intentions of advertising.

3.4.4 Attitudinal advertising literacy

Scales based on Rozendaal and colleagues (2016) were also used to measure attitudinal advertising literacy. Some items for attitudinal advertising literacy had to be recoded, as they were not all formulated in the same direction. Therefore, in order to prepare the data for analysis, some items were reverse coded. The reverse coded items are marked (R).

Attitudinal advertising literacy was measured with the use of three subtopics. The first topic is *Understanding advertising's bias*, which included the following items: 'How often do you think Facebook advertising is real?' (R), 'How often do you think Facebook advertising is fake?', 'How often do you think Facebook advertising only tells good things about the advertised products?' (R), 'How often do you think Facebook advertising only tells bad things about the advertised products?', and 'How often do you think that what you see in Facebook advertising is like things are in reality?' (R), from (1) Never to (5) Very often. This subscale's five items which were Likert-scale based were entered into a factor analysis using Principal Components extraction with Varimax rotation based on Eigenvalues (> 1.00), $KMO = .56$, $\chi^2 (N = 144, 10) = 112.02$, $p < .001$. The resulting scale explained 66.5% of the variance in the subscale *Understanding advertising's bias*.

Facebook advertising real vs. fake is the first factor, which included three items. These items were 'How often do you think Facebook advertising is real?', 'How often do you think Facebook advertising is fake?' and 'How often do you think that what you see in Facebook advertising is like things are in reality?'. Cronbach's α

= .67. A new variable with the three items was created. *Facebook advertising positive* vs. *negative* is the second factor, which included two items. These items were 'How often do you think Facebook advertising only tells good things about the advertised products?' and 'How often do you think Facebook advertising only tells bad things about the advertised products?'. Cronbach's α = .67. A new variable with the two items was created. For baby boomers, this subscale's mean (existing of the two factors' means merged) was 2.43 (SD = 0.45) and for digital natives the mean was 2.49 (SD = 0.43).

The second topic is *Scepticism toward advertising*. This topic contains the items 'How often do you think Facebook advertising is truthful?' (R), 'How often do you think Facebook advertising tells things that are not true?', 'How often do you think Facebook advertising tells the truth?' (R), 'How often do you think Facebook advertising lies?' and 'How often do you think you can believe Facebook advertising?' (R), all on a scale from 1 (Never) to 5 (Very often). The five items which were Likert-scale based were entered into a factor analysis using Principal Components extraction with Varimax rotation based on Eigenvalues (> 1.00), KMO = .77, χ^2 (N = 144, 10) = 223.35, p < .001. The resulting scale explained 54.8% of the variance in the subscale *Scepticism toward advertising*. The one factor found included all five items. A reliability test showed Cronbach's α = .78. A new variable was created for the subscale based on the means of all five items. For baby boomers, this subscale's mean was 3.48 (SD = 0.70) and for digital natives the mean was 3.32 (SD = 0.59).

The last topic was *Disliking of advertising*, including the following items: 'How often do you think Facebook advertising is nice?' (R), 'How often do you think Facebook advertising is funny?' (R), 'How often do you think Facebook advertising is boring?', 'How often do you think Facebook advertising is stupid?' and 'How often do you think Facebook advertising is irritating?', from (1) Never to (5) Very often. This subscale's five items which were Likert-scale based were entered into a factor analysis using Principal Components extraction with Varimax rotation based on Eigenvalues (> 1.00), KMO = .68, χ^2 (N = 144, 10) = 301.54, p < .001. The resulting scale explained 81.0% of the variance in the subscale *Disliking of advertising*.

Facebook advertising positive is the first factor, which included two items. These items were 'How often do you think Facebook advertising is nice?' and 'How often do you think Facebook advertising is funny?' Cronbach's α = .82. A new variable with the two items was created. *Facebook advertising negative* is the second factor, which included three items. These items were 'How often do you think Facebook advertising is boring?', 'How often do you think Facebook advertising is

stupid?’ and ‘How often do you think Facebook advertising is irritating?’. Cronbach’s $\alpha = .86$. A new variable with the three items was created. For baby boomers, this subscale’s mean (existing of the two factors’ means merged) was 3.68 ($SD = 0.80$) and for digital natives the mean was 3.58 ($SD = 0.71$).

The three subscales of attitudinal advertising literacy which were Likert-scale based were entered into a factor analysis using Principal Components extraction with Varimax rotation based on Eigenvalues (> 1.00), $KMO = .54$, $\chi^2 (N = 144, 3) = 47.19$, $p < .001$. The resulting scale explained 54.1% of the variance in the scale attitudinal advertising literacy. The one factor found included all three subscales, yet a reliability test showed a Cronbach’s $\alpha = .54$. For the complete analysis of the hypotheses containing attitudinal advertising literacy per factor, please consult Appendix C. As for the regular analysis, the factors were merged and a new variable was created for the scale based on the means of all three subscales of advertising literacy. Correlation analyses showed negligible relations for the two factors of both subscale one and subscale three. Despite the negligible relation, the factors were still merged into one variable, as this was also done by Rozendaal and colleagues (2016). However, the three overall subscales of attitudinal advertising literacy did show correlations. *Understanding advertising’s bias* (subscale one) and *Scepticism toward advertising* (subscale two) correlated moderately (.45). For *Scepticism toward advertising* (subscale two) and *Disliking of advertising* (subscale three) a moderate correlation of .32 was found. Lastly subscales one and three, *Understanding advertising’s bias* and *Disliking of advertising*, showed a weak correlation of .14.

Baby boomers scored a mean of 3.20 on attitudinal advertising literacy, consisting of the three subtopics merged ($SD = 0.46$), which indicates an overall higher score on advertising literacy than the scale mid-point. For digital natives, a mean score of 3.13 was found ($SD = 0.44$), so the younger generation is slightly less sceptic towards advertising. An overview of the subtopics and factor analyses of conceptual advertising literacy and attitudinal advertising literacy is given in Table 4, which can be found in Appendix B.

Table 2*Statistics per Condition*

		Mean	Standard Deviation	Minimum Range	Maximum Range
Brand	C1: Nespresso – Baby Boomers	3.42	0.90	1.00	5.00
Attitude	C2: Nespresso – Digital Natives	3.81	0.67	2.60	5.00
	C3: Senseo – Baby Boomers	3.59	0.76	1.60	5.00
	C4: Senseo – Digital Natives	3.80	0.80	1.20	5.00
Purchase	C1: Nespresso – Baby Boomers	2.59	1.20	1.00	5.00
Intention	C2: Nespresso – Digital Natives	2.87	1.21	1.00	5.00
	C3: Senseo – Baby Boomers	3.13	1.41	1.00	5.00
	C4: Senseo – Digital Natives	3.38	1.11	1.00	5.00
Conceptual	C1: Nespresso – Baby Boomers	4.36	1.02	1.00	5.00
Advertising	C2: Nespresso – Digital Natives	3.86	1.16	1.00	5.00
Literacy	C3: Senseo – Baby Boomers	4.55	0.71	2.00	5.00
	C4: Senseo – Digital Natives	4.13	0.81	2.00	5.00
Attitudinal	C1: Nespresso – Baby Boomers	3.22	0.48	2.21	4.33
Advertising	C2: Nespresso – Digital Natives	3.01	0.46	1.89	4.09
Literacy	C3: Senseo – Baby Boomers	3.17	0.44	2.31	3.98
	C4: Senseo – Digital Natives	3.18	0.42	2.23	4.24

Note: C1 consisted of 33 respondents, C2 consisted of 42 respondents, C3 existed of 31 respondents and C4 consisted of 38 respondents.

4. Results

SPSS was used to analyse the data and to be able to reject or accept the previously formulated hypotheses. The results that were found after the analyses are presented in the following section. The main variables that were used in this study were brand attitude, purchase intention, conceptual advertising literacy, and attitudinal advertising literacy. Besides that, comparisons were made between the generations (baby boomers vs. digital natives) and advertising exposure (Nespresso vs. Senseo). Brand attitude, purchase intention, conceptual advertising literacy, and attitudinal advertising literacy were measured on a continuous level. Generation and advertising exposure were measured on a categorical level. For the hypotheses H1, H2, H4, H5, H6, H7, H8, H9, H10 and H11, the independent variable was one of the categorical variables and the dependent variable was continuous, therefore independent-samples *t*-tests were conducted. For the outcomes of these tests, the effect sizes were determined with eta square (η^2) and interpreted as negligible ($< .01$), small ($.01$ up to $.06$), moderate ($.06$ up to $.14$), or large ($> .14$) (Pallant, 2001). As for hypotheses H13, H14, H15 and H16, both the independent and the dependent variable were continuous and simple regression analyses were conducted. The effect sizes for these test were determined with the use of beta (β). H3 and H12 were formulated to test whether two variables correlate, therefore correlation analyses were used. The effect sizes of the outcomes of both regression analyses and correlations were interpreted on a scale of negligible ($< .1$), weak ($.1$ up to $.3$), moderate ($.3$ up to $.6$), strong ($.6$ up to $.8$), and very strong ($> .8$) (Taylor, 1990). As this study measured the variables at one single point in time during one survey, it was not possible to find causal effects. Therefore only associations were discovered in this study.

4.1 Influence of advertising exposure on brand attitude and purchase intention

The first hypothesis stated that it was expected that seeing the Nespresso advertisement would lead to a more positive brand attitude towards Nespresso in comparison to respondents that had seen the Senseo advertisement. The *t*-test showed that there was no significant difference between respondents that have been exposed to the Nespresso advertisement ($M = 3.64$, $SD = 0.80$) and people that were exposed to the Senseo advertisement ($M = 3.70$, $SD = .78$), $t(142) = -0.51$, $p = .612$. The effect size was negligible ($\eta^2 = .00$). From this outcome, it can be concluded that seeing the advertisement of Nespresso on the Facebook page did not necessarily influence respondents' liking of the brand Nespresso. H1 was therefore rejected.

The second hypothesis stated that respondents that had seen the Nespresso advertisement were expected to score higher on purchase intention in comparison to respondents that were exposed to the Senseo advertisement. The t -test showed that respondents that had been exposed to the Senseo advertisement had a significantly more positive intention to purchase from Nespresso ($M = 3.27$, $SD = 1.20$) than people that had been exposed to the Nespresso advertisement ($M = 2.75$, $SD = 1.25$), $t(142) = -2.54$, $p = .012$. The effect size was small ($\eta^2 = .04$). Therefore it can be said that seeing the Senseo advertisement led to a higher purchase intention towards Nespresso than respondents that were exposed to the Nespresso advertisement in this sample. As a significant difference was found in the opposite direction, H2 was rejected.

The third hypothesis stated that a high score on brand attitude would lead to a high score for purchase intention as well. A correlation analysis was conducted to test whether brand attitude and purchase intention are related. The analysis showed a positive, moderate relation (.56). The relationship was found to be significant ($p = .005$). As the two variables were found to be positively related, a high score on brand attitude means that a similar score for purchase intention can be expected. H3 was therefore accepted.

4.2 Effects of brand attitude and purchase intention per generation

The fourth hypothesis was stated to expect a lower score on brand attitude for baby boomers that had seen the Nespresso advertisement, compared to baby boomers that had seen the Senseo advertisement. The t -test showed no significant difference in scores for baby boomers that had been exposed to the Nespresso advertisement ($M = 3.42$, $SD = 0.90$) and baby boomers that had been exposed to the Senseo advertisement ($M = 3.59$, $SD = 0.76$) and their brand attitude, $t(62) = -0.80$, $p = .423$. The effect size was small ($\eta^2 = .01$). Therefore based on this sample, it can be concluded that seeing the Nespresso advertisement did not lead to a higher liking of the brand Nespresso for baby boomers. H4 was rejected.

The fifth hypothesis also only considered baby boomers and compared the purchase intention scores of baby boomers that were exposed to the Nespresso advertisement to those who had been exposed to the Senseo advertisement. The prior group was expected to score lower on purchase intention. The t -test showed that baby boomers that had been exposed to Nespresso did not have a significant lower score on purchase intention ($M = 2.59$, $SD = 1.20$) than baby boomers that had been exposed to Senseo ($M = 3.13$, $SD = 1.41$), $t(59,13) = -1.63$, $p = .108$. The effect size is small ($\eta^2 = .04$). After this analysis, it became clear that there is no significant

difference in purchase intention scores towards Nespresso for baby boomers that have or have not been exposed to the Nespresso advertising and H5 was rejected.

The sixth hypothesis concerned digital natives and an expectation was formulated that seeing the Nespresso advertisement would lead to a higher brand attitude in comparison to the digital natives that have seen the Senseo advertisement. The *t*-test showed no significant difference found in scores for digital natives that had been exposed to the Nespresso advertisement ($M = 3.81$, $SD = 0.67$) and digital natives that had been exposed to the Senseo advertisement ($M = 3.80$, $SD = 0.80$) and their brand attitude, $t(78) = 0.06$, $p = .954$. The effect size was negligible ($\eta^2 = .00$). The same outcome for digital natives as for baby boomers was found, so for neither generation the brand attitude towards Nespresso was influenced by whether respondents had seen the Nespresso advertisement before giving their opinion towards the brand. H6 was therefore also rejected.

The seventh hypothesis tested a similar relation as H6, but for purchase intention instead of brand attitude. It was expected that digital natives that had seen the Nespresso advertisement would score higher on purchase intention than those who had seen the Senseo advertisement. The *t*-test showed a significant difference in the opposite direction, as digital natives that had been exposed to Nespresso scored lower on purchase intention ($M = 2.87$, $SD = 1.21$) than digital natives that had been exposed to Senseo ($M = 3.38$, $SD = 1.11$), $t(78) = -1.96$, $p = .027$ (one-tailed). The effect size was small ($\eta^2 = .05$). Therefore it can be concluded that digital natives, that were exposed to the Nespresso advertisement were less likely to purchase from Nespresso than digital natives that had seen the Senseo advertisement. H7 was rejected.

By testing the eighth hypothesis, the mean scores of brand attitude of baby boomers and digital natives that were all exposed to the Nespresso advertisement were compared. The *t*-test showed that baby boomers scored significantly lower on brand attitude after being exposed to advertised content ($M = 3.42$, $SD = 0.90$) than digital natives' scores on brand attitude after being exposed to the advertised content ($M = 3.81$, $SD = 0.67$), $t(57.17) = -2.09$, $p = .042$. The effect size was moderate ($\eta^2 = .06$). Therefore it can be concluded that for this sample, digital natives' brand attitude was more positive towards Nespresso than the brand attitude of baby boomers towards the same brand, after being exposed to the same stimulus. H8 was accepted.

The ninth hypothesis stated an expectation that baby boomers would score lower on purchase intention than digital natives, of whom all were exposed to the Nespresso advertisement. The *t*-test showed no significant difference between baby

boomers' scores ($M = 2.59$, $SD = 1.20$) and digital natives' scores ($M = 2.87$, $SD = 1.21$) on purchase intention after being exposed to the advertisement, $t(73) = -1.00$, $p = .319$. The effect size was small ($\eta^2 = .01$). This means that there was no difference between the younger and the older generation and their intention to purchase from Nespresso, after they were exposed to the Nespresso advertisement. H9 was therefore rejected.

4.3 Advertising literacy

The tenth hypothesis expected a higher score for digital natives in comparison to baby boomers and their scores on conceptual advertising literacy. The t -test showed that baby boomers scored significantly higher on conceptual advertising literacy ($M = 4.45$, $SD = 0.89$) than digital natives ($M = 3.98$, $SD = 1.01$), $t(142) = 2.90$, $p = .004$. The effect size was moderate ($\eta^2 = .06$). The outcome of this analysis concludes that the older generation scores higher on conceptual advertising literacy and is therefore more aware of the presence of advertising. H10 was still rejected, as the opposite outcome was expected.

The eleventh hypothesis stated that baby boomers were expected to score higher on attitudinal advertising literacy than digital natives. The t -test showed that baby boomers do not score significantly higher on attitudinal advertising literacy ($M = 3.20$, $SD = 0.46$) than digital natives ($M = 3.13$, $SD = 0.44$), $t(142) = 0.87$, $p = .384$. The effect size was small ($\eta^2 = .01$). As there was no significant difference between the two generations, it can be concluded that baby boomers and digital natives do not differ from each other in terms of their age influencing their disliking or scepticism towards advertising. H11 was rejected.

The twelfth hypothesis predicted that respondents that score high on conceptual advertising literacy would also score high on attitudinal advertising literacy. A correlation analysis was conducted to test whether conceptual advertising literacy and attitudinal advertising literacy are related. The analysis showed a negative, but negligible correlation ($-.08$). The relationship was not found to be significant ($p = .365$). As there was a negative, negligible relation found between the two variables that was also not significant, a high score on conceptual advertising literacy does not automatically lead to a high attitudinal advertising literacy, as conceptual advertising literacy is not associated to attitudinal advertising literacy in this analysis. H12 was therefore also rejected.

After that, a regression analysis was conducted to test the thirteenth hypothesis. This hypothesis stated that a high score on conceptual advertising literacy would lead to a low score on brand attitude. A linear regression was

conducted with brand attitude as a criterium. The predictor was conceptual advertising literacy. The model was not found to be significant, $F(1, 142) = 0.00$, $p = .952$, $R^2 = .00$. Conceptual advertising literacy was not found to be a significant predictor for brand attitude ($\beta = -.01$, $p = .952$) and the effect size was negligible. What can be concluded from this outcome is that respondents that score high on conceptual advertising literacy do not automatically score low on brand attitude, as the conceptual advertising literacy score is not associated with the brand attitude score. H13 was therefore rejected.

The fourteenth hypothesis stated that respondents with a high score on attitudinal advertising literacy were expected to score low on brand attitude. A linear regression was conducted with brand attitude as a criterium. The predictor was attitudinal advertising literacy. The model was found to be significant, $F(1, 142) = 5.72$, $p = .018$, $R^2 = .04$. Attitudinal advertising literacy was found to be a significant predictor for brand attitude ($\beta = -.20$, $p = .018$), but still the effect size is weak. This entails that a high score on attitudinal advertising literacy is an overall prediction for a lower score for brand attitude, as the two variables are negatively related. H14 is accepted.

The fifteenth hypothesis explored whether conceptual advertising literacy would predict respondents' score on purchase intention. A negative relation between the variables was expected. A linear regression was conducted with purchase intention as a criterium. The predictor was conceptual advertising literacy. The model was not found to be significant, $F(1, 142) = 0.37$, $p = .547$, $R^2 = .00$. Conceptual advertising literacy was not found to be a significant predictor for purchase intention ($\beta = .05$, $p = .547$) and the effect size was negligible. This outcome explained that a certain score for conceptual advertising literacy would not predict respondents' score for purchase intention and H15 was rejected.

The sixteenth and final hypothesis stated that respondents that score high on attitudinal advertising literacy would score low on purchase intention. A linear regression was conducted with purchase intention as a criterium. The predictor was attitudinal advertising literacy. The model was found to be significant, $F(1, 142) = 8.28$, $p = .005$, $R^2 = .06$. Attitudinal advertising literacy was found to be a significant predictor for purchase intention ($\beta = -.24$, $p = .005$), but still the effect size is weak. What can be concluded from this outcome is that respondents that score high on attitudinal advertising literacy will score lower on purchase intention, as the two variables are negatively related. H16 was accepted.

Table 3*Overview of the Hypotheses Outcomes*

Hypothesis	Independent Variable	Dependent Variable	Expected Direction	Observed Direction	Accepted	Rejected
H1	Advertising Exposure	Brand Attitude	+	0		X
H2	Advertising Exposure	Purchase Intention	+	-**		X
H3	Brand Attitude	Purchase Intention	+	+	X	
H4	Advertising Exposure	Brand Attitude	-	0		X
H5	Advertising Exposure	Purchase Intention	-	0		X
H6	Advertising Exposure	Brand Attitude	+	0		X
H7	Advertising Exposure	Purchase Intention	+	-		X
H8	Generation	Brand Attitude	--****	--	X	
H9	Generation	Purchase Intention	--	0		X
H10	Generation	Conceptual Advertising Literacy	--	++****		X
H11	Generation	Attitudinal Advertising Literacy	++	0		X
H12	Conceptual Advertising Literacy	Attitudinal Advertising Literacy	+	0		X
H13	Conceptual Advertising Literacy	Brand Attitude	-	0		X
H14	Attitudinal Advertising Literacy	Brand Attitude	-	-	X	
H15	Conceptual Advertising Literacy	Purchase Intention	-	0		X
H16	Attitudinal Advertising Literacy	Purchase Intention	-	-	X	

Note: In the case of correlation and regression analyses, a + indicates a positive relationship and a - indicates a negative relationship (H13-H16).

*For t-tests, a + indicates a higher score for respondents that were exposed to the Nespresso advertisement.

**For t-tests, a - indicates a higher score for respondents that were exposed to the Senseo advertisement.

*** A ++ indicates a higher score for baby boomers.

**** A -- indicates a higher score for digital natives.

5. Conclusion & Discussion

5.1 Conclusion

With the analysis of the stated hypotheses, it was attempted to formulate an answer to this study's main research question: *Are digital native consumers more susceptible to the effects of Facebook advertising than baby boomers and if so, can this mediating effect be attributed to a difference in advertising literacy?* Out of the 16 hypotheses that were formulated, seven significant results were found, though some were expected to be significant in the opposite direction. In total, four hypotheses were accepted while the other twelve had to be rejected due to unexpected outcomes.

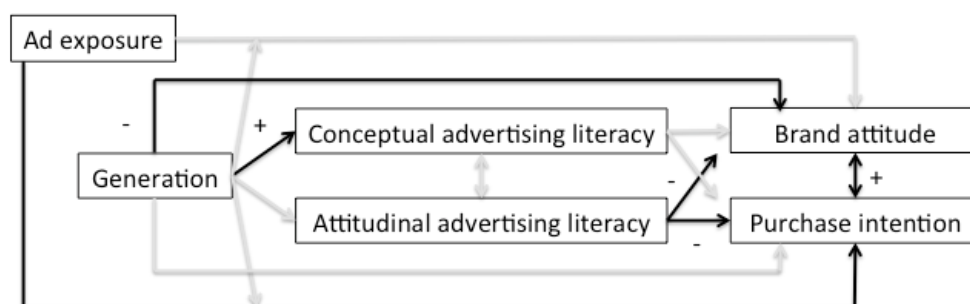


Figure 3

Significant effects found after studying the effect of advertising exposure on brand attitude and purchase intention with advertising literacy as mediator.

The outcomes of the hypotheses showed that although expectations were formulated to find significant differences between the generations, only two significant generational differences were detected between baby boomers and digital natives and their advertising susceptibility. Digital natives showed higher scores on brand attitude in comparison to baby boomers after being exposed to the same advertisement of Nespresso. Secondly, baby boomers scored higher on conceptual advertising literacy, indicating that they are more aware of the selling and persuasive intents of advertising. The other hypotheses that were tested and which showed significant results were not related to the generations separately, but were hypotheses formulated for all respondents combined. Two significant results found were regarding the influence of advertising exposure on purchase intention, which were both significant in the opposite direction from what was expected. For the sample combined, it was found that respondents that were exposed to the

Nespresso advertisement were less likely to purchase from Nespresso than the respondents that had seen the Senseo advertisement. For the digital natives, a similar outcome occurred, while this was not the case for baby boomers. Another finding related to advertising susceptibility showed the significant correlation between brand attitude and purchase intention. A positive relation between the two variables showed that a high score for brand attitude would lead to a similar score for purchase intention. The final two results that showed to be significant were for attitudinal advertising literacy. This dimension of advertising literacy was negatively related to both brand attitude and purchase intention, meaning that respondents that were sceptic towards advertising or disliked it, scored lower on both brand attitude and purchase intention. For the remaining hypotheses that were formulated, a significant relation was not found. This means that for the majority of the variables, there was no difference found between baby boomers and digital natives and their advertising susceptibility, mediated by advertising literacy.

5.2 Discussion

5.2.1 Influence of advertising exposure on brand attitude and purchase intention

The first aim of the study was to find the relation between being exposed to the Nespresso advertisement in comparison to the Senseo advertisement and brand attitude or purchase intention towards Nespresso. The results showed that though there is no significant difference between respondents that have or have not seen the Nespresso advertisement towards brand attitude, there was a difference for their purchase intention. Respondents that had been exposed to the Senseo advertisement scored higher on purchase intention towards Nespresso than those who had seen the Nespresso advertisement. A reason for this unexpected outcome might be that Internet advertising was proven often to lead to annoyance for people as they perceive the advertisement as intrusion (McCoy, Everard, Polak, & Galletta 2007). This can explain why people that had not seen Nespresso advertising were less annoyed and therefore were more likely to purchase from Nespresso than those that had seen the advertisement and felt intruded by it. Brand attitude and purchase intention were found to be positively and significantly associated in the current analysis, so a high score on brand attitude means that overall, people have high intentions to purchase from the brand as well. This is in line with findings of previous studies (Chen & Liu, 2004; Wu & Lo, 2009; Xu & Pinel, 2009).

5.2.2 Effects of brand attitude and purchase intention per generation

The second aim was to analyse the relation between the generations and their differences in brand attitude and purchase intention towards Nespresso after seeing the advertisements. The results showed that digital natives scored significantly higher on brand attitude after having seen the Nespresso advertisement in comparison to baby boomers. When the scores on brand attitude were measured for baby boomers and digital natives separately, there was no significant difference in brand attitude for either respondents that had seen the Nespresso or the Senseo advertisement. What this study does not take into account however, while it could be of influence on respondent's brand attitude, is the attitude towards the advertisement, next to the attitude towards the brand. This could have been a reason why both baby boomers and digital natives separately did not show higher scores on brand attitude after exposure to the Nespresso advertisement. Previous research showed that attitude towards the advertisement mediates the attitude towards the brand (Lutz, MacKenzie, & Belch, 1983). Therefore when respondents did not like the advertising for Nespresso or Senseo, their brand attitude score might have been influenced by this even while they might like the brand on its own.

In the case of purchase intention, there was only a significant difference found for digital natives. For digital natives and their scores on purchase intention, the same was found as for the sample combined: the digital natives that were exposed to Senseo were more likely to purchase from Nespresso than the ones that had seen the Nespresso advertisement. The reason for this unexpected outcome could be similar as for H2. Advertising can also lead to annoyance as people can feel intruded by it (McCoy, Everard, Polak, & Galletta 2007), which might have caused respondents that had seen the Nespresso advertisement feel more annoyed, leading to a lower score on purchase intention.

Although not predicted, the lack of significance for the majority of the outcomes might not be entirely unexpected. The main goal of advertising is to increase sales, though a shift in attitude or behaviour is not often seen over a short period of time. As the effect of advertising is often long-term and people need to be exposed to advertising repeatedly prior to it being effective (Lavidge & Steiner, 1961), this study might have had a time span that is too short in order to see a significant effect for brand attitude and purchase intention, though effects might have been found when respondents' brand attitudes and purchase intentions were measured over time.

Lastly, the effect of generation on respondents' purchase intention towards Nespresso was measured. This showed that there was no significant relation

between the two. This result was not consistent with the literature, but a reason why baby boomers scored higher than expected (instead of a lower score than digital natives) on purchase intention after being exposed to the Nespresso advertisement, might be because Nespresso is a coffee brand that is slightly more expensive than for instance a coffee from a store brand. Therefore it might be a reason why it is more attractive to purchase for baby boomers, who are older and often have more money to spend (Statista, 2018a).

5.2.3 Advertising literacy

The final hypotheses were formulated to test the effects of generation on advertising literacy and whether advertising literacy predicts attitude or intentional behaviour. Though it was expected that digital natives would score higher on conceptual advertising literacy than baby boomers, the analysis revealed the opposite. Baby boomers scored significantly higher on this dimension of advertising literacy and are therefore more aware of the presence of advertising. Although not hypothesized in the current study, previous research found that baby boomers are well aware of the presence of advertising and also understand its intentions, and are therefore well advertising literate (Haynes, 2004, as used in Reisenwitz & Iyer, 2007), though this did not concern online advertising specifically. As digital natives are more used to being online than baby boomers are, it is also possible that online advertising is so normal to them that they are less aware of the presence of advertising on Facebook and its intentions (Prensky, 2001), which explains their lower score on conceptual advertising literacy. This is the opposite of what was hypothesized, as the expectation was that digital natives' familiarity with Facebook would increase their awareness of advertising on SNS.

For both the effects of generation on conceptual advertising literacy and attitudinal advertising literacy, a significant difference was expected to occur, though only a significant difference in the opposite direction was found for conceptual advertising literacy. Also in the extra analyses in which all factors for attitudinal advertising literacy were tested separately (see Appendix C), none of the tests showed a significant relation for H11. A reason for the lack of a significant difference between generation and attitudinal advertising literacy, might be that older consumers are currently already quite used to Facebook as an online platform. There are currently 26.5 million Facebook users in the US in the age cohort of 55 to 64 (Statista, 2018c). Though this is less than the cohort of 18 to 24 (39.4 million), it does imply that a large amount of baby boomers are active on the medium. If they are already used to the online community of Facebook, that might explain why their

attitudinal advertising literacy does not differ as much as expected from digital natives, as they are currently both present on the medium and surrounded by its ads. This might cause their disliking of advertising to be not as different from one another as expected.

For both purchase intention and brand attitude, it was expected that these would be lower when respondents' score on advertising literacy was higher. For the analyses including attitudinal advertising literacy, these expectations were confirmed. In the case of conceptual advertising literacy however, no significant relation between the variables was found. For these analyses, it was only measured whether advertising literacy predicts either brand attitude or purchase intention, while other factors could have had an influence as well. It is previously found that brand attitude formation depends on many factors, besides only being aware of advertising and its intentions. An emotional or interactive advertisement for instance, can lead to a more positive brand attitude (Yoo & MacInnis, 2005). It is possible that as the advertisement in the current study was static, this mainly influenced respondents' opinion. In that case it might be so that respondents' opinion of the advertisement, rather than their opinion of the brand itself, has formed their attitude towards Nespresso. In order to improve this, future research could include different types of advertisements or measure attitude towards the advertising as well. When similar tests were conducted for attitudinal advertising literacy's relationship with brand attitude and purchase intention, a negative relation was visible; for both brand attitude and purchase intention, a low score can be expected whenever a respondent has a high attitudinal advertising literacy and is thus sceptic towards advertising. This outcome is similar to what was hypothesized based on previous theories.

Lastly, it was expected that a high score on conceptual advertising literacy would also lead to a high score on attitudinal advertising literacy. Based on the outcome of the analysis, these are not related. This finding was in line with previous research, as this prior study also did not find a correlation between conceptual advertising literacy and attitudinal advertising literacy either. The relation was previously studied by Oprea and Rozendaal (2017), who measured the relation between the two concepts among children of several ages, but for none of the ages a correlation was found.

5.3 Limitations and implications for future research

As with most studies, this thesis also suffered some limitations. One of the methodological limitations is related to the sample's diversity. Although the sample of baby boomers was equal in terms of gender and exactly the same amount of males

as females participated in the experiment, for digital natives this was different. The extent of females was much larger than the number of males, so the quality of the study's sample could have been improved if this was more equal. In terms of diversity, the sample could have been improved on other levels as well. For both baby boomers and digital natives, the highest education level that was selected most often were either HBO or WO. This indicates that the sample is overall highly educated. This makes it more difficult to generalize the results of the study to the Dutch population, as not the majority of Dutch population has followed either HBO or WO education (CBS, 2013). Another remark that must be noted is that though the study did not solely focus on Dutch people, almost all respondents were Dutch due to the survey being in the Dutch language. As only one respondent did not have the Dutch nationality, the majority was from the Netherlands (99.3%) and therefore the results can only be applied to Dutch society.

There were also some limitations of the study regarding the stimulus material. Even though the survey was distributed in the Dutch language, the stimulus material that was selected was of an international Facebook group. The group 'World of Coffee' is a closed group, but anyone who is interested in coffee or coffee beans is able to send a request to become a member. Communication is solely in English. It could have been slightly more difficult for people whose mother tongue is Dutch to be completely aware of the content that was visible in the stimulus material, as this was in the English language. Besides the issue of language of the Facebook group, another concern was about the advertisements that were visible within the stimulus material. The manipulation check showed that only 54.9% was aware of advertising in the stimulus material and even less respondents (36.8%) were able to name the brand of which advertising was visible. It is quite difficult to see whether respondents are susceptible to advertising and to see changes in attitudes and behaviours when the respondents were not aware of the Nespresso or Senseo advertisement in the Facebook group.

The advertisement could also have been of influence on the responses for the brand attitude and purchase intention questions. Whether the respondents liked or disliked the advertisement might have had an effect on their change in attitudes or behaviours. Besides that, interactive advertisements were proven to be effective (Yoo & MacInnis, 2005), but the advertisements used were static. It might have been better to use an interactive advertisement rather than static ones, or a combination of those to see if differences occur. Another flaw is that this analysis measured people's intention to purchase from the brand immediately after being exposed to advertising.

Waiting a little longer might have been more effective, as advertising is a process that works best with repetition and over time (Manchanda et al., 2006).

In order to prepare the data for analysis and to see what data could be merged, factor analyses were conducted for different variables. Although factor analyses are only appropriate with a large sample ($N = 150$), the sample in the current study only contained 144 responses. This amount was slightly too small for a factor analysis, but the analyses were still conducted. Although a higher amount of responses would therefore have improved the quality of those specific analyses, the KMO and Bartlett's tests showed that factor analyses were still allowed. A final limitation that the study suffered was related to the baby boomers. This generation is less technologically savvy in comparison to younger generations, as was noticeable in responses to the survey. Some of them declared to have had troubles zooming in and because of that, they were unable to carefully study the stimulus material. As digital natives are more used to technological devices, the survey was easier for them to complete as technology was no interference for them.

Future research could benefit from enlarging the sample and distributing the survey in more various places. By doing this, the sample may become more diverse and it is therefore more suitable to generalize the results onto an entire population. Besides that, more insights into the topic could be gained by adding more variables to measure advertising susceptibility and what mediates change. By adding the measurement of attitude towards the advertisement, it would be clear to what extent change in behaviour or attitude is mediated by the content of the advertisement. More time in between seeing the advertisement (or seeing several advertisements) and answering questions regarding brand attitude and purchase behaviour might also give more clarity, as advertising is part of a process (Lavidge & Steiner, 1961). Having time in between seeing the advertisement and answering the questions, as well as repetitively seeing advertising, may cause a more significant change in both attitudes and behaviour towards the brand.

Besides the new insights that were gained, which can be added to the current knowledge on the topic of advertising susceptibility and advertising literacy and implemented by advertisers and brands, this thesis has other strengths. The choice for Facebook as used SNS was very appropriate, as not only almost all digital natives in the sample (98.8%) use or had used this platform, but also the majority of baby boomers (78.1%) has (had) a Facebook profile. As they were familiar with the medium and thus its advertising, the quality of the study was improved as getting to know the platform was no interference. Besides that, none of the respondents had to be excluded based on their knowledge of the used brand, as they all declared to be

familiar with Nespresso. Lastly, the analysis confirmed the appropriate use of the hierarchy-of-effects model. This model theorizes that consumers respond to persuasive communication and advertising in an ordered way and an affectional response comes alongside a behavioural response. The analysis found a correlation between brand attitude and purchase intention, which indicates that the two responses are related, as they are supposed to be according to the hierarchy-of-effects model.

This study attempted to make a contribution to the current knowledge on the differences between younger and older audiences' advertising susceptibility. These new insights can be used for marketers and advertisers in order to be able to more specifically and effectively target their audiences through advertising. One of the main findings gives us more understanding on the differences in conceptual advertising literacy. Baby boomers score higher on the conceptual dimensions, which indicates that they are better aware of both the selling and persuasive intent of advertising. Another main finding regarding generational differences concerned digital natives. They were shown to be more susceptible to advertising in this sample, as they had higher scores on brand attitude after seeing the advertisement in comparison to baby boomers.

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Appendices

Appendix A: Survey

Screen1: Beste deelnemer,

Bedankt voor uw deelname in dit onderzoek. Dit onderzoek staat in het kader van het afronden van de Masteropleiding Media & Business aan de Erasmus Universiteit Rotterdam. Deze enquête gaat over het nuttigen van koffie en social media en of het gebruik hiervan tot uw ochtendritueel behoort. U wordt daarom gevraagd enkele vragen te beantwoorden over uw koffiegewoontes en -voorkeuren en uw activiteiten op social media.

Het invullen van de enquête is geheel vrijwillig, dus u kunt op elk moment de enquête verlaten. De door u verstrekte gegevens zullen uitsluitend voor dit onderzoek worden gebruikt. De resultaten zullen geanonimiseerd worden verwerkt, dus uw anonimiteit is gegarandeerd. Het invullen van de enquête zal ongeveer 5 tot 10 minuten duren.

Mocht u vragen of opmerkingen hebben tijdens of na het invullen van de enquête, dan kunt u contact opnemen met Lisanne Bos (383092lb@student.eur.nl).

Onder de deelnemers wordt een Simon Lévelt cadeaubon t.w.v. 20 euro verloot. Als u hier kans op wilt maken, laat dan aan het einde van de enquête uw e-mailadres achter.

Bij voorbaat dank voor uw medewerking.

☐ Ik begrijp bovenstaande en doe mee aan het onderzoek

Screen2: Voordat de enquête begint willen we u twee vragen stellen om vast te stellen of u tot de doelgroep van dit onderzoek behoort.

Q1: In welk tijdsvak bent u geboren?

- ☐ 1945 of eerder
- ☐ 1946-1964
- ☐ 1965-1977
- ☐ 1978-1989
- ☐ 1990-2000
- ☐ 2001 of later

Skip To: End of Survey If In welk tijdsvak bent u geboren? = 1945 of eerder

Skip To: End of Survey If In welk tijdsvak bent u geboren? = 1965-1977

Skip To: End of Survey If In welk tijdsvak bent u geboren? = 1978-1989

Skip To: End of Survey If In welk tijdsvak bent u geboren? = 2001 of later

Q2: Wat is uw leeftijd?

▼ 17 jaar of of jonger (1) ... 86 jaar of ouder (70)

Screen3: Bedankt voor het beantwoorden van deze vragen. U past binnen de doelgroep en u kunt nu verder met de enquête.

Q3: Wat is uw geslacht?

- ☐ Man
- ☐ Vrouw
- ☐ Overig

Q4: Wat is uw nationaliteit?

Q5: Wat is het hoogste onderwijsniveau dat u heeft gevolgd?

- ☐ Middelbare school
 - ☐ MBO
 - ☐ HBO bachelor of master
 - ☐ WO bachelor of master
 - ☐ Anders, namelijk...
-

Q6: Drinkt u koffie in de ochtend?

- ☐ Ja, altijd (1)
 - ☐ Ja, soms (2)
 - ☐ Nee, bijna nooit (3)
 - ☐ Nee, nooit (4)
-

Q7: Hoeveel koppen koffie drinkt u gemiddeld op een weekdag?

- ☐ 0
 - ☐ 1-2
 - ☐ 3-4
 - ☐ 5-6
 - ☐ 7 of meer
-

Q8: Hoeveel koppen koffie drinkt u gemiddeld op een weekenddag?

- ☐ 0
 - ☐ 1-2
 - ☐ 3-4
 - ☐ 5-6
 - ☐ 7 of meer
-

Q9: Koopt u wel eens koffie in een supermarkt of speciaalzaak (koffiebonen, -pads of -cups of gemalen koffie)?

- ☐ Ja
 - ☐ Nee
-

Screen4: Naast uw koffiegewoonten zijn we ook benieuwd naar uw social media gebruik. De volgende vragen zullen daarover gaan.

Q10: Gebruikt u social media in de ochtend?

- ☐ Ja
 - ☐ Nee
-

Display This Question:

If Gebruikt u social media in de ochtend? = Ja

Q11: Welke van de volgende social media gebruikt u in de ochtend? U kunt meerdere antwoorden geven.

- ☐ Facebook
 - ☐ Instagram
 - ☐ WhatsApp
 - ☐ LinkedIn
 - ☐ Anders, namelijk...
-

Q12: Heeft u een Facebook account?

- ☐ Ja
 - ☐ Nee, maar wel gehad
 - ☐ Nee, nooit gehad
-

Display This Question:

If Heeft u een Facebook account? = Ja

Q13: Hoe vaak gebruikt u Facebook?

- ☐ Nooit
 - ☐ Een aantal keer per maand
 - ☐ Een aantal keer per week
 - ☐ Een aantal keer per dag
-

Screen5 Op de volgende pagina ziet u een voorbeeld van een besloten Facebook groep. We willen graag weten wat u van deze Facebook groep vindt. Scroll daarom alstublieft op uw gemak door de Facebook groep. Na 30 seconden kunt u doorklikken naar de volgende pagina.

Na 30 seconden verschijnt onderaan de pagina een rode pijl. U kunt dan doorklikken naar de volgende pagina.

Stimulus material is shown. For stimulus material, please see Figure 2.

Q14: Heeft u de vorige pagina bekeken?

- ☐ Ja
- ☐ Nee

Skip To: End of Survey If Heeft u de vorige pagina bekeken? = Nee

Q15: Wat was het onderwerp van de Facebook groep die u heeft gezien?

Q16: Zou u overwegen om lid te worden van deze Facebook groep?

- ☐ Ja, zeker
 - ☐ Ja, misschien
 - ☐ Nee, waarschijnlijk niet
 - ☐ Nee, zeker niet
-

Q17: Heeft u één of meerdere reclames gezien op de pagina en zo ja, voor welk(e) merk(en)?

Screen6: Organisaties en bedrijven maken vaak reclame op social media, zoals op Facebook, om potentiële klanten aan te spreken. De volgende vragen gaan over reclame die op Facebook te zien is.

Q18: Is het de bedoeling van Facebook om...

	Nee, zeker niet				Ja, zeker
U de producten in de reclame te laten kopen?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
U de producten in reclame te laten willen hebben?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
U positief te laten denken over de reclame producten?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q19: Hoe vaak denkt u dat...

	Nooit				Erg vaak
Reclame realiteit is?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reclame nep is?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reclame alleen de positieve kanten van een product laat zien?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Reclame alleen de negatieve kanten van een product laat zien?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Wat u bij Facebook reclame ziet is zoals het in het echt is?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q20: Hoe vaak denkt u dat...

	Nooit				Erg vaak
Facebook reclame waarheidsgetrouw is?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Facebook reclame dingen laat zien die niet waar zijn?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Facebook reclame de waarheid laat zien?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Facebook reclame liegt?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
U Facebook reclame kan geloven?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q21: Hoe vaak vindt u Facebook reclame...

	Nooit				Erg vaak
Leuk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Grappig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Saai	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Stom	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Irritant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Screen7: Eén van de merken die veel wordt besproken in de Facebook groep is Nespresso. De volgende vragen zullen over dit merk gaan.

Q22 Kent u het merk Nespresso?

- ☐ Ja
- ☐ Nee

Skip To: End of Survey If Kent u het merk Nespresso? = Nee

Q23: Geef alstublieft uw mening over het koffiemark Nespresso aan de hand van de volgende stellingen. Nespresso is naar mijn mening...

	1	2	3	4	5	
Onaantrekkelijk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Aantrekkelijk
Slecht	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Goed
Onplezierig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Plezierig
Ongunstig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Gunstig
Onprettig	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Prettig

Q24: Geef bij de volgende stellingen alstublieft aan wat de kans is dat u Nespresso koffie koopt in de toekomst. De volgende vragen lijken misschien erg op elkaar. Toch is het belangrijk voor het onderzoek dat u ze allemaal invult.

	1	2	3	4	5	
Geen kans	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Grote kans
Onmogelijk	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Mogelijk
Nooit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Altijd
Zeker niet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Zeker wel
Zeker niet van plan om te kopen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Zeker wel van plan om te kopen
Zeer lage kans om te kopen	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Zeer hoge kans om te kopen
Waarschijnlijk niet	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Waarschijnlijk wel

Q25: Koopt u wel eens koffie van het merk Nespresso, of heeft u dat in het verleden wel eens gedaan?

- ☐ Ja, erg vaak
 - ☐ Ja, af en toe
 - ☐ Nee, bijna nooit
 - ☐ Nee, nooit
-

Screen8: U heeft de enquête afgerond. Bedankt voor uw moeite en tijd. Uw hulp is zeer gewaardeerd! Als u vragen of opmerkingen heeft over de enquête, laat dat alstublieft hieronder weten.

Screen9: Als u een update wilt ontvangen over de resultaten van het onderzoek, laat dan alstublieft uw e-mailadres hieronder achter. Uw e-mailadres wordt apart bewaard van uw gegeven antwoorden in de enquête en wordt verwijderd zodra contact met u is opgenomen. Laat alstublieft ook uw e-mailadres hier achter als u kans wilt maken op de Simon Lévelt cadeaubon t.w.v. 20 euro.

Appendix B: Subtopics and factors for advertising literacy

Table 4

Overview of Subtopics and Factors for the Scales Conceptual Advertising Literacy and Attitudinal Advertising Literacy

Scale	Subtopics	Factor 1	Factor 2
Conceptual Advertising Literacy	Understanding Selling	-	-
	Intent		
	Understanding	-	-
Attitudinal Advertising Literacy	Persuasive Intent		
	Understanding	Facebook Advertising Real	Facebook Advertising
	Advertising's Bias	vs. Fake (3 items)	Positive vs. Negative (2 items)
	Scepticism towards	Scepticism towards (5 items)	-
	Disliking of Advertising	Facebook Advertising Positive (2 items)	Facebook Advertising Negative (3 items)

Appendix C: Extra analyses attitudinal advertising literacy

The scale of attitudinal advertising literacy consisted of three subtopics, which were divided into five factors after a factor analysis was conducted. The first factor is *Facebook advertising real vs. fake* and the second is *Facebook advertising positive vs. negative*. Both of these factors were part of the subtopic of attitudinal advertising literacy: 'Understanding advertising's bias'. The third factor is *Scepticism towards advertising*. The fourth and fifth factors were part of subtopic three, which was 'Disliking of advertising'. These factors are *Facebook advertising positive* (factor four) and *Facebook advertising negative* (factor five). Correlation analyses showed negligible or weak relations between the two factors of subtopic one (.01) and the two factors of subtopic three (.24). The factors were still merged, as this was also done in Rozendaal and colleagues (2016). For the completeness of the study, analyses for the hypotheses including attitudinal advertising literacy were conducted with the use of the separate subtopics, to see if this changed the outcomes. The hypotheses including attitudinal advertising literacy were H11, H12, H14 and H16 and all of these were analysed separately for the five factors of attitudinal advertising literacy.

H11

The first *t*-test showed that baby boomers do not score significantly higher on Facebook advertising real vs. fake ($M = 3.61$, $SD = 0.80$) than digital natives ($M = 3.60$, $SD = 0.57$), $t(110,24) = 0.08$, $p = .937$.

The second *t*-test showed that baby boomers do not score significantly higher on Facebook advertising positive vs. negative ($M = 1.24$, $SD = 0.47$) than digital natives ($M = 1.39$, $SD = 0.61$), $t(141,91) = -1.62$, $p = .108$.

The third *t*-test showed that baby boomers do not score significantly higher on scepticism towards advertising ($M = 3.48$, $SD = 0.70$) than digital natives ($M = 3.32$, $SD = 0.59$), $t(123,24) = 1.47$, $p = .145$.

The fourth *t*-test showed that baby boomers score significantly higher on Facebook advertising positive ($M = 3.92$, $SD = 0.89$) than digital natives ($M = 3.44$, $SD = 0.85$), $t(142) = 3.32$, $p = .001$.

The fifth *t*-test showed that baby boomers do not score significantly higher on Facebook advertising negative ($M = 3.44$, $SD = 1.21$) than digital natives ($M = 3.71$, $SD = 0.79$), $t(103,68) = -1.57$, $p = .119$.

H12

The first correlation analysis showed a positive, negligible relation (.04). The relation between conceptual advertising literacy and Facebook advertising real vs. fake was not found to be significant ($p = .665$).

The second correlation analysis showed a negative, weak relation (-.11). The relation between conceptual advertising literacy and Facebook advertising positive vs. negative was not found to be significant ($p = .212$).

The third correlation analysis showed a negative, negligible relation (-.03). The relation between conceptual advertising literacy and scepticism towards advertising was not found to be significant ($p = .766$).

The fourth correlation analysis showed a negative, negligible relation (-.06). The relation between conceptual advertising literacy and Facebook advertising positive was not found to be significant ($p = .520$).

The fifth correlation analysis showed a negative, negligible relation (-.09). The relation between conceptual advertising literacy and Facebook advertising negative was not found to be significant ($p = .279$).

H14

The first model was found to be significant, $F(1, 142) = 6.24$, $p = .014$, $R^2 = .04$. Facebook advertising real vs. fake was found to be a significant predictor for brand attitude ($\beta = -.21$, $p = .014$).

The second model was not found to be significant, $F(1, 142) = 0.69$, $p = .409$, $R^2 = .01$. Facebook advertising positive vs. negative was not found to be a significant predictor for brand attitude ($\beta = -.07$, $p = .409$).

The third model was found to be significant, $F(1, 142) = 4.26$, $p = .041$, $R^2 = .03$. Scepticism towards advertising was found to be a significant predictor for brand attitude ($\beta = -.17$, $p = .041$).

The fourth model was found to be significant, $F(1, 142) = 5.94$, $p = .016$, $R^2 = .04$. Facebook advertising positive was found to be a significant predictor for brand attitude ($\beta = -.20$, $p = .016$).

The fifth model was not found to be significant, $F(1, 142) = 0.30$, $p = .583$, $R^2 = .00$. Facebook advertising negative was not found to be a significant predictor for brand attitude ($\beta = .05$, $p = .583$).

H16

The first model was found to be significant, $F(1, 142) = 5.76$, $p = .018$, $R^2 = .04$. Facebook advertising real vs. fake was found to be a significant predictor for purchase intention ($\beta = -.20$, $p = .018$).

The second model was not found to be significant, $F(1, 142) = 0.24$, $p = .628$, $R^2 = .00$. Facebook advertising positive vs. negative was not found to be a significant predictor for purchase intention ($\beta = -.04$, $p = .628$).

The third model was not found to be significant, $F(1, 142) = 3.44$, $p = .066$, $R^2 = .02$. Scepticism towards advertising was not found to be a significant predictor for purchase intention ($\beta = -.15$, $p = .066$).

The fourth model was not found to be significant, $F(1, 142) = 3.69$, $p = .057$, $R^2 = .03$. Facebook advertising positive was not found to be a significant predictor for purchase intention ($\beta = -.16$, $p = .057$).

The fifth model was not found to be significant, $F(1, 142) = 2.66$, $p = .105$, $R^2 = .02$. Facebook advertising negative was not found to be a significant predictor for purchase intention ($\beta = -.14$, $p = .105$).

After running similar tests for the hypotheses containing attitudinal advertising literacy, but with the use of the separate subscales rather than the merged scale of attitudinal advertising literacy, some differences in the outcomes occurred. For H11, factor four was significant ($p = .001$), while the other tests, like in the original analysis, still did not show any significant relations. H12 was initially rejected as it was not significant, which was still the case when the separate analyses were conducted as none of those showed significance as well. H14 initially already showed a significant relationship between attitudinal advertising literacy and brand attitude. This significance was unaltered for factor one ($p = .014$), factor three ($p = .041$) and factor four ($p = .016$). With the use of factor two and factor five, the effect was not significant. H16 showed a significant effect in the initial analysis, but it only showed significance between attitudinal advertising literacy and purchase intention for factor one ($p = .018$). For the remaining analyses, a significant effect was not found in the extra analyses.