

The Never-Ending Hedonic Treadmill of Advertising in The Digital Age

An Empirical Study on The Effects of Social Media Advertising on Compulsive Buying,
Customer Satisfaction and Life Satisfaction in Young Adults

Student Name: Ka Yin Olivia Yuen

Student Number: 482357

Supervisor: Dr. Lijie Zheng

Master Media Studies - Media & Business

Erasmus School of History, Culture and Communication

Erasmus University Rotterdam

Master Thesis 2021

June 2021

The Never-Ending Hedonic Treadmill of Advertising in The Digital Age:
An Empirical Study on The Effects of Social Media Advertising on Compulsive Buying,
Customer Satisfaction and Life Satisfaction in Young Adults

ABSTRACT

Nowadays, young adults have become heavy digital media users, especially when it comes to social media. This is not surprising, since they belong to a generation that grew up with modern technology. As smartphones become increasingly popular, young adults spend more time on social media as it has become more accessible. The rise of digital media had led businesses and marketers to advance their marketing strategy and to put their focus on social media advertising to reach young adults. Although it is a good opportunity for businesses to flourish, there are also some repercussions. Extensive studies revealed various effects of advertising exposure, such as compulsive buying, customer satisfaction, and life satisfaction. The reasoning behind such effects can be explained through the cultivation theory. However, as social media, and in particular advertising, is relatively new, limited research has been done examining this phenomenon in relation to these effects. Therefore, this present study aims to answer the research question: “To what extent and how does social media advertising affect compulsive buying, customer satisfaction, and life satisfaction among young adults aged between 18 and 35 years old in the Netherlands nowadays?” By using a deductive approach, several hypotheses were formed to answer the research question. A questionnaire was developed to collect the data of respondents. The respondents were reached by using convenience and snowball sampling, in which they could fill in the self-report survey. This resulted in 152 valid respondents from young adults aged between 18 and 35 years old, who lived in the Netherlands, use social media, and have ever purchased something from social media advertisements. Then, various regression analyses (e.g., simple and multiple) were conducted to analyse the results. The results revealed social media advertising, which was measured by social media advertising exposure and social media advertising purchase likelihood, had a significant positive influence on compulsive buying. Moreover, while social media advertising exposure affected customer satisfaction positively, social media advertising purchase likelihood did not. Surprisingly, both social media advertising exposure and social media advertising purchase likelihood did not influence life satisfaction. Furthermore, this study examined the chain of events further between the effects (e.g.,

compulsive buying, customer satisfaction, and life satisfaction), it was found that only customer satisfaction affected life satisfaction positively. Moreover, gender did not moderate the relationship between social media advertising exposure and compulsive buying, customer satisfaction, and life satisfaction. Although not all relationships were found to be significant, some of these effects, e.g., this present study provides a steppingstone into the effects of social media advertising concerning the cultivation theory.

KEYWORDS: Social Media Advertising, Compulsive Buying, Consumer Satisfaction, Life Satisfaction, Young Adults

PREFACE

My journey of writing this thesis has its ups and downs, especially given the fact that it was during a global pandemic, I could have never done it with the support of all the people that helped me along the way.

First of all, I would like to express my deep gratitude to supervisors, Dr. Suzanna Oprea and Dr. Lijie Zheng, for guiding me through the process of writing this thesis. Due to their supervision, comments and feedback, I was able to continuously improve my thesis.

Furthermore, I would like to thank all my friends and family that believed me and supported me, it really meant a lot to me.

Special thanks to my boyfriend, Earl, for being there for me in times of despair and motivating me, that I am more than capable enough to write this thesis.

I would also like to thank my dear friend, Aholi, for proofreading my thesis and providing comments and feedback, which helped me improve my thesis even more.

During this global pandemic with limited access to the university and library, it has definitely not been easy to be motivated and to write consistently. Therefore, I would like to thank my brother-in-law for providing me the environment and allow me to work in his office space to write my thesis.

I am grateful to all of you.

Table of Contents

Abstract and Keywords

Preface

1. Introduction.....	7
1.1 <i>Scientific and Societal Relevance.....</i>	<i>9</i>
1.2 <i>Chapter Outline.....</i>	<i>10</i>
2. Theoretical framework.....	12
2.1 <i>Cultivation Theory.....</i>	<i>12</i>
2.2 <i>Digital Advertising and Social Media Advertising.....</i>	<i>13</i>
2.3 <i>The Influence of Social Media Advertising on Compulsive Buying.....</i>	<i>18</i>
2.4 <i>The Influence of Social Media Advertising on Customer Satisfaction.....</i>	<i>19</i>
2.5 <i>The Influence of Social Media Advertising on Life Satisfaction.....</i>	<i>21</i>
2.6 <i>The Relationship between Compulsive Buying, Customer Satisfaction, and Life Satisfaction.....</i>	<i>22</i>
2.7 <i>Gender as moderator.....</i>	<i>23</i>
2.8 <i>Theoretical Model.....</i>	<i>25</i>
3. Methodology.....	27
3.1 <i>Research Method.....</i>	<i>27</i>
3.2 <i>Sampling Strategy.....</i>	<i>28</i>
3.3 <i>Data Collection.....</i>	<i>28</i>

3.4 Survey Structure	29
3.5 Measurements.....	30
3.5.1 Social media advertising	30
3.5.2 Compulsive buying	32
3.5.3 Customer Satisfaction	32
3.5.4 Life satisfaction.....	33
3.6 Analyses.....	33
4. Results	36
4.1 Sample Description	36
4.2 Descriptive statistics of all variables	37
4.2.1 Social media usage.....	37
4.2.2 Social media advertising exposure.....	37
4.2.3 Social media advertising purchase likelihood.....	38
4.3 Factor analyses and Reliability.....	39
4.3.1 Compulsive buying	39
4.3.2 Customer satisfaction.....	40
4.3.3 Life satisfaction.....	42
4.4 Social Media Advertising Exposure and Social Media Advertising Purchase Likelihood on Compulsive Buying (H1-H2).....	43
4.5 Social Media Advertising Exposure and Social Media Advertising Purchase Likelihood on Customer Satisfaction (H3-H4).....	43

4.6 Social Media Advertising Exposure and Social Media Advertising Purchase Likelihood on Life Satisfaction (H5-H6)	44
4.7 Influence of Compulsive Buying, Customer Satisfaction, and Life Satisfaction (H7-H8)	44
4.8 Gender as a moderator (H9-H11).....	45
4.8.1 Social Media Advertising Exposure on Compulsive Buying moderated by gender (H9)	45
4.8.2 Social Media Advertising Exposure on Customer Satisfaction moderated by gender (H10)....	45
4.8.3 Social Media Advertising Exposure on Life Satisfaction moderated by gender (H11).....	45
4.9 Results Overview	46
5. Conclusion & Discussion	48
5.1 Main findings & Theoretical implications	48
5.2 General Conclusion.....	50
5.3 Practical implications	50
5.4 Strengths & Limitations.....	51
5.5 Future research	53
References	55
Appendix A	70

1. Introduction

In this digital age, a rise in media consumption is seen among young adults. It is not surprising that young adults are heavy digital media users, especially for social media. They are now exposed to a variety of mass media, ranging from traditional advertising to digital advertising. (Auxier & Anderson, 2021; Anderson & Jiang, 2018; Van der Veer et al., 2020). This is to be expected, as they are a generation that grew up with modern technology, such as smartphones. For the younger generation, consuming media content has become an integral part of their everyday life (Bashir & Bhat., 2017; Circella et al., 2016; Johnson, 2021). For instance, in a survey study in 2019, results have shown that 48% of young adults aged between 18 and 29 in the United States were almost constantly using social media every day (Johnson, 2021). Moreover, a third of all internet users were between the ages of 25 and 34 years, making them the largest group of all internet users. When looking in the Netherlands specifically, a survey study in 2019 showed that 92.1% from the age group 18 to 25 years old along with 80.5% from the age group between 25 and 35 years old, uses social media (Tankovska, 2021). The rise of social media usage is also due to the wide use of smartphones, which makes consuming media content more accessible for young adults (Pew Research Center, 2021; Vogels, 2019).

Aside from owning a smartphone, young adults often also own a tablet or laptop, and thus, have constant access to media content (Anderson, 2015; Pew Research Center, 2021; Vogels, 2019). This is not surprising, as other studies have shown that young adults are more likely to be early adopters of new technology (Albarran et al., 2007; Circella et al., 2016; Kennedy & Funk, 2016; Tobbin & Adjei, 2012; Zijlstra et al., 2020). It is clear that young adults like to consume media content, especially when it comes to digital media content.

The surge of digitalization changed the advertising landscape for good and digital advertising made its appearance. Advertising through traditional media is no longer dominant, and slowly shifted to the digital space. Advertising is thus entering a new era, in where advertisements are now mainly done through digital media, specifically, social media platforms such as Facebook and Instagram (Van der Veer et al., 2020). This new form of advertising is referred to as digital media advertising or digital advertising. In this age, digital advertising has become more common, especially for businesses and marketers, as they have noticed that more people consuming digital media (Van der Veer et al., 2020). Specifically, it might be helpful for marketers and businesses to reach younger consumers on social media, for instance through

influencer marketing, personalized advertising, and brand advertising. These different types of social media advertisements are discussed in more detail in the next chapter (2.2).

While adopting social media advertisements offers a great opportunity for businesses to grow, at the same time, it certainly also comes with consequences on the consumers' side. For instance, extensive research has shown the diverse effects of advertising exposure, e.g., compulsive buying (Ahmad & Mahfooz, 2019; Lee et al., 2016; Sharif & Yeoh, 2018), customer satisfaction (Bakator et al., 2019; Lee & Park, 2014; Nwokah & Ngirika, 2018), and life satisfaction (Buijzen and Valkenburg 2003; Michel et al., 2019; Oprea et al., 2016; Oprea et al., 2012; Sirgy et al., 2012; Wilczek, 2018; Zhou et al., 2002). When it comes to the different effects of advertising, this can be further divided into intended effects and unintended effects. Intended effects of advertising can refer to brand awareness, brand attitudes, or purchase intention, while unintended effects refer to the more negative effects of advertising exposure, such as materialism, consumerism, or life dissatisfaction (Al Abbas et al., 2019; Buijzen & Valkenburg, 2003). Although a large body of studies examined the effects of traditional media advertising, studies looking at the effects of digital advertising, and in particular, social media advertising, is very limited, as this area is still in a relatively early stage (Xu, 2020). Considering that traditional media advertising and digital advertising are comparable in certain aspects, it is likely that digital advertising may also lead to certain effects. Therefore, it is important to examine the effects of social media advertising as well.

This study decided to focus on three effects, namely compulsive buying, customer satisfaction, and life satisfaction. In the case of compulsive buying, few studies demonstrated that media usage can lead to compulsive behaviors. Research showed a positive relationship between excessive social media use and compulsive buying (Ahmad & Mahfooz, 2019; Lee et al., 2016; Sharif & Yeoh, 2018). The more people were exposed to social media (advertising), the more likely they were to compulsively buy products or services. Moreover, other studies investigated the link between social media exposure and customer satisfaction. Results revealed that there is a positive relationship between advertising and customer satisfaction (Bakator et al., 2019; Lee & Park, 2014; Nwokah & Ngirika, 2018). Furthermore, extensive research has shown that (traditional) advertising is associated with a decrease in life satisfaction (Buijzen and Valkenburg 2003; Michel et al., 2019; Oprea et al., 2016; Oprea et al., 2012; Sirgy et al., 2012; Wilczek, 2018; Zhou et al., 2002).

Businesses and marketers will persistently increase their social media advertising exposure. While young adults are browsing on their social media feeds, at the same time, they are exposed to social media advertisements. These social media advertisements contain a high value of information, for instance, showing how a certain product works. This can influence their buying behavior and be more easily persuaded to buy the products they encounter online. Although an increase in exposure to social media advertisements can lead to young adults being more satisfied with their products, at the same time, these advertisements' exposure can decrease the satisfaction of life of young adults. This suggests that due to this constant social media advertising, young adults are hopping on this hedonic treadmill and will never be satisfied with what they have. The hedonic treadmill theory refers to individuals quickly adjust their relatively stable state of satisfaction after a significant positive or negative experience in life and that these experiences are always relative to their prior experience (Brickman & Campbell, 1971). This implies that although buying products seem to bring joy and satisfaction, this state of happiness is only temporary.

1.1 Scientific and Societal Relevance

An important aspect of this study is the scientific and societal relevance it holds. This study aims to contribute to the various fields, particularly, the field of mass communication. While academics have examined mass communication, specifically cultivation theory extensively, the focus was mainly on traditional media (advertising). Some of these advertising effects can be explained through the cultivation theory, which refers to when people start to perceive the depicted media world as their own world (Gerbner, 1969). This study, however, enlarges the scope of cultivation by focusing on the relatively new and rapidly expanding phenomena, digital media advertising, and more so on social media advertising. Social media advertising, in the context of cultivation, has not been examined enough, according to the researcher's understanding. Therefore, this present research aims to address the gap in research by focusing on the effects of media advertisements i.e., compulsive buying, customer satisfaction, and life satisfaction. As aforementioned, social media is fully integrated into young adults' daily life, at the same time, they are exposed to social media advertisements. Moreover, as previously mentioned, past studies focused on the effects of advertising in general, on children, or students, and research focusing on young adults is limited. Furthermore, as young

adults are one of the biggest groups of social media users in the Netherlands, which makes them vulnerable more likely to be the target of social media advertisements, and therefore, it is of high importance to stress the cultivation effects of social media advertisements.

This paper also contributes to the field of marketing communication, particularly digital advertising. Advertising is a key strategy for businesses and marketers to emotionally persuade consumers to purchase products (Priya et al., 2010). While young adults are heavy users of social media and making them more exposed to social media advertisements, at the same time, it can offer great perspectives for businesses and marketers to reach them. This is relevant, as it is important for businesses to have competitive advantages. Furthermore, this paper investigates whether gender affects the relationship between social media advertising and the effects. Moreover, this present study also aims to explore the chain of effects further, by investigating the relationships between the effects. Thus, the following research question is proposed:

“To what extent and how does social media advertising affect compulsive buying, customer satisfaction, and life satisfaction among young adults aged between 18 and 35 years old in the Netherlands nowadays?”

1.2 Chapter Outline

After this introduction, chapter two explains the theoretical framework, which functions as a guideline for data collection. In the second chapter, definitions are given to the concepts of compulsive buying, customer satisfaction, and life satisfaction. Moreover, previous research is discussed that has examined the relationships between (social media) advertising and the aforementioned concepts. Furthermore, this study will be moderated by the variable gender. For the third chapter, the methodology is discussed. A quantitative research method is adopted, namely, a self-report survey, to collect the data and to answer the research question. In this chapter, the method and the scales that are used in the survey are further explained. Moreover, the data collection strategy, sample, and analyses are described in this chapter as well. Then, in the fourth chapter, the outcomes of the statistical tests are presented, along with the hypotheses of the intermediated effects and the mediated effects. At last, in the fifth and final chapter, which is the conclusion and discussion chapter, the main findings and theoretical implications of this study are discussed. By considering previous research, conclusions are drawn based on the

researcher's interpretation. Then, a short general conclusion is presented, followed by the limitations and strengths of this study. At last, recommendations for future research are given.

2. Theoretical framework

In this chapter, first, the cultivation theory is presented, which this study derives in. Then, digital advertising and social media advertising are discussed, along with the relevant types of social media advertisements. Afterwards, the influence of social media advertising on the different effects (compulsive buying 2.3), customer satisfaction 2.4, life satisfaction 2.5) are presented in the following sections. In 2.6, the relationships between the aforementioned effects are discussed as well. In 2.7, the use of gender as a moderator for this study is explained and at last, a theoretical model is visualized based on the literature and hypotheses used for this study.

2.1 Cultivation Theory

To explain the effects of digital advertisement, specifically, social media advertisements, the cultivation theory is adopted, as proposed by Gerbner (1969). The cultivation theory refers that mass media is able to influence people's attitudes and beliefs over time. At that time, other media theories were dominant, for instance, McLuhan's (1964) theory on the two media types "hot" and "cool" in where the medium is the message and how this can shape the society. What distinguishes cultivation theory from other media theories dominant at that time was that instead of focusing on the message elements Gerbner emphasized the macrosystem approach, meaning the messages were spread across the entire media landscape (Potter, 2014). Therefore, the effect of these messages is on a larger scope and brought to the public as people were continually exposed to media messages in their day-to-day lives (Potter, 2014). Moreover, Gerbner argued that there were mass-produced meanings to some of these messages that were prevalent and spread across the whole mass media landscape (Potter, 2014). Furthermore, Gerbner claimed that these prevalent meanings were depicted throughout all media cultivated public perception (Potter, 2014). Thus, Gerbner refers to mass media "as the common culture through which communities cultivate shared and public notions about facts, values, and contingencies of human existence" (Gerbner, 1969, p.138). For instance, a person who often watches crime shows on television may perceive their world as fearful and dangerous. Research further reveals that the more people are exposed to mass media, the more likely they are to have mainstream beliefs (Gerbner, 1969). To put it in other words, as we are continually exposed to mass media, depending on our surroundings, it will also likely influence how we perceive things in our lives, the way it is depicted in the media. For instance, a person who often watches crime shows on

television may perceive their world as fearful and dangerous. Research further reveals that the more people are exposed to mass media, the more likely they are to have mainstream beliefs (Gerbner, 1969).

Although the cultivation theory was first introduced by Gerbner in the 1960s, critical analyses by Morgan and Shanahan (2010) and Potter (2014) revealed that many scholars have contributed to the cultivation theory, resulting in over 500 published studies (Morgan & Shanahan, 2010) and remains relevant today.

As for traditional media as well as digital media, particularly social media, people are still going to be continually exposed to these mainstream beliefs portrayed in media, as their standard way of living. While cultivation theory has been widely used in empirical research on advertising exposure and the effects, they were mostly focused on traditional media (advertising) (Bottemly et al., 2010; Chan & Cai, 2009; Minnebo & Eggermont, 2007; Oprea et al., 2016; Oprea et al. 2012; Potter, 2014; Sirgy et al., 2012; Shanahan & Morgan, 1999; Shrum et al., 2010). As social media advertising is still relatively a new form of advertising, not a lot of research has been done particularly on social media (advertising) and its effects (Chinchanachokchai & de Gregorio, 2020; Stein et al., 2019). Therefore, for this study, it would be interesting to study digital media, such as advertisements through social media.

2.2 Digital Advertising and Social Media Advertising

Before defining digital advertising, it is important to first look at what advertising is. Over the years, advertising received different definitions from scholars (Moriarty et al., 2014; Arens et al., 2011). However, according to Odun and Otulu (2016), although there are certain differences, these definitions essentially contain the same four components, e.g., being a paid form of communication, having an identified sponsor, being persuasive in nature, and having messages conveyed through different mass media. Regarding digital advertising, Lee and Cho (2019) referred to it as “a message of persuasion that interacts with consumers through digital media” (p. 335). Furthermore, digital media, aside from traditional online media, e.g., the internet, should also include all interactive media, both offline and online, e.g., smartphones, tablets, and social media platforms (Lee & Cho, 2019).

To go more in-depth into the differences between traditional advertising and digital advertising, there are six differences to consider (Eisend, 2018). The first one is interaction and

user activity. As traditional advertising is more passive, digital advertising, on the other hand, allows for more interaction opportunities between consumers and businesses, and other consumers. Thus, traditional advertising can be seen as more one-way communication (push mechanism), while digital advertising is a two-way communication (push and pull mechanism) (Eisend, 2018). The second is flexibility, digital advertising is now available at any time, anywhere, and is connected to real-time. This makes it adaptable to every situation, and thus, flexible, compared to traditional advertising. The third aspect is personalization, targeting, and reach, as digital advertising has more of a personalized one-to-one approach focusing on targeting individuals, such as through cookies, in contrast to a one-to-many approach with traditional advertising. The fourth is measurability, as opposed to traditional advertising, digital advertising uses new technologies, which allows marketers and businesses more easily to track data from consumers and thus able to measure their behavior. The fifth is credibility versus control. While traditional advertising offers more control regarding a brand, digital advertising is able to gain more credibility through e.g., online word of mouth. Although the latter offers more credibility, at the same time, as it is less controlled, it is also able to harm the brand. At last, it is claimed that digital advertising is cost-efficient, compared to traditional advertising. However, research has shown mixed insights regarding the cost efficiency of digital advertising (Eisend, 2018).

In the past, marketers had to rely on traditional media for advertising, such as through television and radio to reach consumers. Slowly, it shifted towards a digital environment and the consumption of media was not limited to certain timeframes anymore. The growth of digital media over the last decades, specifically, the emergence of social media platforms, such as Facebook and Instagram, changed the advertising landscape for marketers. Social media is defined as a form of digital interaction where users can create online communities to share their information, thoughts, opinion, and other content (The Merriam-Webster Dictionary, n.d.). Young adults are now continually exposed to media consumption, as they can consume media at any moment in any place, and therefore can be easily targeted through digital advertising, particularly social media advertising. Moreover, digital advertising makes use of advanced technologies that are interactive, making it possible to have a seamless and enjoyable brand experience for consumers (Muhammed et al., 2017). As a result, this will motivate young adults to consume even more digital media. Furthermore, studies have shown young adults like to

multitask between social media, which increases their daily exposure daily even more (Cotton et al., 2014; Luo et al., 2020). According to Oprea (2014), the amount of time spent on social media corresponds to the exposure of social media advertising, therefore, to measure social media advertising exposure, social media usage can be surrogated.

In order to maintain the pace of the increased media usage of consumers, businesses need to increase their exposure fast and accordingly. Therefore, for digital advertising to be effective, it needs to collect and analyze consumers' behavior, making it data-driven (Lee & Cho, 2019). Digital advertising relies heavily on social media platforms to curate these data, as consumers use social media frequently and for various reasons (Mutinga, et al. 2011), therefore leaving a digital footprint. Digital footprint refers to traces of data that consumers leave online as they use the internet (Micheli et al., 2018). For marketers and businesses, consumers' digital footprints are valuable, as they contain their values, social and cultural identity, occupational and geographical attachments (Muhammed et al., 2017). Through data mining, consumers' digital footprints can be changed into valuable data for marketeers, which then can be used for digital advertising (Lee & Cho, 2019; Muhammed et al., 2017). This leads to privacy concerns of consumers using digital media (Lee & Cho, 2019; Muhammed et al., 2017). Regardless of these concerns, consumers still find themselves using digital media, specifically social media (IAB Netherlands & Deloitte, 2020; Van der Veer et al., 2020).

However, along with exposure to other digital media content, putting young adults often in a highly saturated media environment, which can lead to being more selective on what kind of media they want to consume (Barger et al., 2016). To keep up with the strong competition, businesses need to find new ways to stand out to young adults. Businesses can do this by implementing social media strategies such as increasing engagement by posting on their social networks also referred to as brand advertising (Rauschnabel et al., 2012), or through personalized advertising (Boerman et al., 2017), or influencer marketing (Childers et al., 2019), to increase brand recognition and brand awareness. Although these strategies are a good way for businesses to optimize their advertising exposure, it is important to take into account that they need to be cautious as to how to implement them correctly, as it can lose the consumers' trust and credibility (Bleier & Eisenbeiss., 2015; Boerman et al., 2017; Matthes et al., 2007).

As young adults are one of the biggest groups using digital media, whether it is on their smartphone, laptop, or tablet, it is inevitable that they are continuously exposed to digital

advertising. It is no wonder businesses and marketers are expanding and pushing their advertisements on digital media platforms. For instance, in the annual Ad Spend Report in the Netherlands by IAB Netherlands and Deloitte (2020), it was reported the amount spent on digital advertising grew from €1.158 million in 2012 to a €2.209 million in 2019. More particularly, the amount for social media advertising spent doubled from €206 million in 2016 to €452 million in 2019 in the Netherlands. This significant increase can also be explained due to the increase in smartphone usage, and thus leading to an increased growth rate of 21% in mobile advertising.

Social media advertisements allow businesses and brands to be more appealing to young adults. Not only do they increase brand awareness and exposure, but also influence consumers' purchase decisions (Sprout Social, 2020). There are various approaches for social media advertisements, however, this study will discuss the three main types used in social media.

First, influencer marketing is an effective way for businesses to extend their customer base to reach young adults. According to the two-step theory of communication, the first step is where the new media sends a message to opinion leaders, the opinion leaders, then, convey the message further to the public, as the second step (Childers et al., 2019). In the social media advertising sphere and influencer marketing, influencers have become opinion leaders, and act as the middlemen between a brand and the consumer. Furthermore, traditionally, "word of mouth" was always considered to be a discussion among consumers in real life about products (Childers et al., 2019). However, these discussions have shifted to digital media, specifically on social media. Since influencers have a significant number of followers, they have the capability to have a "word of mouth" on their social media feeds, in which the message of a brand they collaborated with, is spread to their followers (Childers et al., 2019). Although influencer marketing is relatively a new market in advertising, it has grown vastly from 1.7 billion dollars in 2016 to 9.7 billion in 2020 (Santora, 2021). Moreover, Saima & Khan (2020) has shown that influencer marketing has a significant effect on consumers' purchase intention. Thus, influencer marketing can impact brand awareness and the purchase decisions of young adults.

Personalized advertising can be a useful strategy to increase a brand's awareness and exposure. It is often seamlessly incorporated into a user's social media feed. What makes personalized advertisements unique is that they are based on a user's online activities and personal data (Boerman et al., 2017). As aforementioned, companies can curate consumers' data and turn them into valuable data to target consumers based on personal interests or background

characteristics (Boerman et al., 2017). Research has found that personalized advertisements based on personal interests are found to be an effective way to target consumers (Boerman et al., 2017). Moreover, according to Bleier & Eisenbeiss (2015), the level of trust in a certain brand is important for personalized advertisements to influence the purchase decision of consumers. Furthermore, personalized advertisements make the shopping experience for consumers easier, as it is seamlessly incorporated in their social media feed and does not them to visit the webshop of the brand. In a study by Segment (2017) among 1006 respondents who were 18 years and older, consumers revealed that they prefer a personalized shopping experience and are prepared to increase their budget when brands provide tailored product recommendations. Additionally, according to Segment (2017), tailored recommendations led to almost 49% of the surveyed consumers buy more impulsively. As young adults spend a lot of time on social media, brand awareness and exposure and purchase likelihood of products can be expanded through personalized advertising.

Brand advertising can be done in different ways, however, the first step is for the brand to have its own page or also known as a fan page on social media platforms. On these pages, brands have several options to engage with their (potential) customers. The features of social media make it possible for brands to see what kind of people are interested in their brand and the products they offer (Sprout Social, 2020). In the case of Facebook, brands or businesses can create a fan page on Facebook. Facebook users who are interested in the brand or business can “like” the page so they will be notified of any new update or posts, which appears on their own feed. Moreover, Facebook also has a “wall” space where both brands and interested users can post things (i.e., texts, videos, or pictures). This is a common function used by marketers on a daily basis to sustain the engagement of the customer and to keep them involved (de Vries et al., 2012; Rauschnabel et al., 2012). Posts made by brands carry advertisement messages, therefore it is important that they are seen by customers, since this may strengthen their relationship with the brand (de Vries et al., 2012; Rauschnabel et al., 2012). It was found shown that brand pages are an extremely useful strategy for marketing (Sprout Social, 2020). Specifically, in a study by Sprout Social (2020), it was revealed that consumers are loyal to the brand they follow on social media as 89% of the consumers buy things from them. Moreover, 75% of the consumers increase their spending with that brand they follow on social media (Sprout Social, 2020). Therefore, there is a relationship between brand pages, likes, and purchase behavior.

As mentioned continuously throughout this section, it is clear that social media advertising is important when it comes to digital media (advertising). More so, as it is evident that young adults consist as one of the biggest groups that use social media frequently (Anderson & Jiang, 2018; Auxier & Anderson, 2021; Circella et al., 2016; IAB Netherlands & Deloitte, 2020; Johnson, 2021), hence why marketers and businesses target young adults for social media advertisements, as they can be easily reached. To gain more insight into social media advertising in general, this study, therefore, specifically looks at social media advertising exposure and the frequency of young adults' purchases based on the aforementioned three types of social media advertising on different social platforms that are mostly used among young adults. The latter is further referred to as social media advertising purchase likelihood.

Thus, for this study, it is decided to specifically focus on social media advertising and the effects among young adults. In the following sections, the relationships between social media advertising and compulsive buying (2.3), customer satisfaction (2.4), and life satisfaction (2.5) will be discussed.

2.3 The Influence of Social Media Advertising on Compulsive Buying

Social media advertising is expected to grow, and businesses will continue to use social media advertising, excessive amount of exposure can lead consumers to compulsive buying. According to O'Guin & Faber (1989), compulsive buying is often defined as a "chronic, repetitive purchasing behavior that occurs as a response to negative events or feelings" (p.149). While Kellett & Bolton (2009) refer to compulsive buying as "an irresistible–uncontrollable urge, resulting in excessive, expensive and time-consuming retail activity; typically prompted by negative affectivity and resulting in gross social, personal and/or financial difficulties" (p.83).

Moreover, consumers who buy compulsively, essentially buy a disproportionate number of products they do not need and simply cannot afford (Hoyer & MacInnis, 2007). Furthermore, O'Guin and Faber (1992) state that compulsive buying is a response that helps to cope with things such as uncomfortable life experiences, internal flaws, or negative emotions as well as other emotions e.g., stress and anxiety. In order to relieve these feelings, compulsive buyers are stimulated to buy products as their emotions fluctuate or self-esteem is elevated, thus gaining value from the buying process instead of the product itself (Faber & O'Guinn, 1988; O'Guin & Faber, 1989). In other words, compulsive buyers react on strong and uncontrollable impulses to

purchase things, without looking at the ramifications. Moreover, research has shown materialism to be an influencing factor for compulsive buying behavior (Kasser et al., 2004; Yurchisin & Johnson, 2004).

According to Valence et al. (1988), the circumstances as to why consumers resort to compulsive buying can be divided into two main groups. The first group consists of culture, commercial environment, and advertising, while the second group includes family environment, genetic factors, situational variables, and biological dysfunction (Valence et al., 1988). Focusing further on the first group of circumstances, researchers were eager to find out the relationship between advertising and compulsive buying (Ahmad & Mahfooz, 2019; Kwak et al., 2002; Roberts et al., 2003).

For example, in a recent study of Ahmad and Mahfooz (2019), they studied the effect of viewership on compulsive buying behavior by analyzing both traditional and digital advertising among 267 people. The results reveal that there is a significant relationship between both advertising viewership and information on compulsive behavior. More specifically, it was found that digital advertising viewership has an influence on compulsive buying behavior. Furthermore, it was shown that materialism had a greater impact on digital advertising and viewership. Therefore, this study suggests that social media advertising has an effect on compulsive buying.

To conduct this research further, this study focuses on the direct relationship between social media advertising and compulsive buying behavior among young adults. Therefore, based on the literature in this section, this leads to the first hypothesis as:

H1: Social media advertising exposure has a positive effect on compulsive buying.

H2: Social media advertising purchase likelihood has a positive effect on compulsive buying.

2.4 The Influence of Social Media Advertising on Customer Satisfaction

Customers are extremely valuable to businesses, as they can provide opinions from which businesses can derive. To get informed about the customer's needs, businesses need to create meaningful interactions with their customers. Then, it is important for businesses to reflect on customers' feedback, to maintain a better relationship with their customers. According to Krivobokova (2009), customer satisfaction is a key aspect to maintain a profitable business. Customer satisfaction is defined by Oliver (2010) as "a judgment that a product/service or feature, or the product or service itself, provided (or is providing) a pleasurable level of

consumption-related fulfillment, including levels of under-or-over fulfilment” (p.8). Another definition of customer satisfaction, according to Jahanshani et al. (2011), is “the result of a customer’s perception of the value received in a transaction or relationship - where value equals perceived service quality relative to price and customer acquisition costs” (p. 255). In other words, customer satisfaction can be seen as the evaluation from the customer that is determined after buying products or services by comparing them with their own set of standards of customer satisfaction.

Despite ample research has been done on customer satisfaction, particularly from a marketing perspective (Stock, 2010; Cannon & Perreault, 1999), not much research has explored the relationship between digital advertising and customer satisfaction (Bakator et al., 2019; Lee & Park, 2014; Nwokah & Ngirika, 2018). For instance, Bakator et al. (2012) analyzed the relationship between advertising on customer satisfaction among 432 customers in Serbia. The findings show that there high and positive relationship between advertising and customer satisfaction. This can be explained due to the extensive amount of digital information and digital advertisements being distributed on the internet.

In another study, Nwokah & Ngirika (2018) examined the relationship between digital advertising and customer satisfaction of electronic retailing firms among 383 respondents in Nigeria. This research reveals that there a positive relationship between digital advertising and customer satisfaction, and thus online advertising has a significant effect on customer satisfaction. Furthermore, regarding digital advertising, it was found that there was a positive and significant effect of web banners on customer satisfaction.

Research has shown that advertising positively influences customer satisfaction and only a few studies analyzed specifically the relationship between digital advertising and customer satisfaction. Therefore, it is expected that the more customers are exposed to digital advertising, the more satisfied they are. However, not a lot of studies focus specifically on both social media advertising and young adults. Thus, building on this, two additional hypotheses are formed:

H3: Social media advertising exposure has a positive effect on customer satisfaction.

H4: Social media advertising purchase likelihood has a positive effect on customer satisfaction.

2.5 The Influence of Social Media Advertising on Life Satisfaction

According to Veenhoven (1996), life satisfaction is referred to as “the degree to which a person positively evaluates the overall quality of his/her life as-a-whole. In other words, how much the person likes the life he/she leads.” (p. 6). Although, life satisfaction is also often referred as happiness or subjective well-being, according to Veenhoven (1996), life satisfaction remains as the most suitable definition, since it stresses the subjective nature and overall evaluation of life.

Previous research has found that there is a relationship between digital media use and life satisfaction (Bao et al., 2019; Hawi & Samaha, 2016; Marttila et al., 2021). For instance, a study by Bao et al. (2019) the impact of social media browsing on life satisfaction was analyzed among 30,591 Chinese respondents. Results showed that social media usage lowers the level of life satisfaction. More specifically, one hour increase in social media usage will reduce the level of life satisfaction by 0.24 on a 1 to 5 scale. Consequently, in a study that researched the relationship between social media addiction, self-esteem, and life satisfaction among 396 university students, a direct relationship was found between social media addiction and life satisfaction (Hawi & Samaha, 2016). This also aligns with a recent study of Marttila et al. (2021), who analyzed whether the effects of excessive social media use on loneliness and life satisfaction change over time among 5012 Finish citizens. The findings revealed that excessive social media use negatively affected life satisfaction. Moreover, loneliness appeared to be a factor for the decrease in life satisfaction of excessive social media use.

Furthermore, a large body of studies has investigated the relationship between advertising and life satisfaction (Buijzen and Valkenburg 2003; Michel et al., 2019; Oprea et al., 2016; Oprea et al., 2012; Sirgy et al., 2012; Wilczek, 2018; Zhou et al., 2002). However, the studies were primarily focused on the effects of traditional advertising and life satisfaction (Sirgy et al., 2012; Zhou et al., 2002), some of them were focused on children (Buijzen and Valkenburg 2003; Oprea et al., 2016; Oprea et al., 2012), and others were conducted on a national level (Michel et al., 2019). For instance, in a longitudinal study by Michel et al. (2019), the relationship between national advertising and national well-being was analyzed. The data was collected from 1980 to 2011 yearly from 900.000 citizens across 27 countries in Europe through pooled cross-sectional surveys. The study revealed that when there is an increase in advertisements, the lesser increase there is in life satisfaction. Moreover, the study showed that the decrease in life satisfaction along

with the surge in advertising is only apparent after a few years. Furthermore, the longer it takes for the advertising effect to become apparent, the lower the levels of life satisfaction will be.

Although there are ample studies examining the effects of traditional advertising on life satisfaction, not a lot of research has been done analyzing the effects of digital advertising, or more specifically, social media advertising. As previous research revealed that the more people are exposed to traditional advertising, the lesser they are satisfied with their life. Thus, building on this, the fifth and sixth hypothesis of this study is as follows:

H5: Social media advertising exposure has a negative effect on life satisfaction.

H6: Social media advertising purchase likelihood has a negative effect on life satisfaction.

2.6 The Relationship between Compulsive Buying, Customer Satisfaction, and Life Satisfaction

As forementioned, a vast number of researchers looked at the direct relationships between advertising exposure and compulsive buying (Ahmad & Mahfooz, 2019; Kwak et al., 2002; Roberts et al., 2003), customer satisfaction (Bakator et al., 2019; Lee & Park, 2014; Nwokah & Ngirika, 2018), and life satisfaction (Buijzen and Valkenburg 2003; Michel et al., 2019; Oprea et al., 2016; Oprea et al., 2012; Sirgy et al., 2012; Wilczek, 2018; Zhou et al., 2002). However, researchers also need to take into consideration that these aforementioned variables are able to influence each other as well.

Social media advertisements make shopping very appealing and only one click away and products can be purchased. As the products shown in the social media advertisements are not tied to a physical store, allowing for a variety of products to be displayed on a small screen. Nowadays, the demanding and hectic lifestyle has compelled individuals to gravitate towards goods or services that may revitalize them, turning them into their guilty pleasure (Shah & Tandon, 2020). This leads to young adults being more drawn to leisure activities, not only to fulfill their needs but also to relieve mental stress and to obtain a sense of satisfaction despite it being accompanied by addiction (Granaro et al., 2016). Eventually, young adults' leisure has materialized as their needs have multiplied (Cotte & Ratneshwar, 2003). In order to satisfy their increasing needs, they may resort to purchasing more products compulsively to calm young adult minds. Additionally, customer satisfaction heavily emphasizes the buyer's likelihood to repurchase a certain service or product. For instance, a study by Shah & Tandon (2020) revealed

that the relationship between compulsive buying and customer satisfaction is significant, and the habits of compulsive buying are associated with high levels of satisfaction. Moreover, although ample research has been done on both compulsive buying and customer satisfaction, the linkage between those two is rather limited. Therefore, this study finds it important to investigate the relationship between compulsive buying and customer satisfaction further, to gain more insight into the satisfaction of compulsive buyers, specifically in the context of social media advertisements.

Furthermore, Sirgy et al. (1998) claimed that life satisfaction is linked with different aspects contributing to life satisfaction. As young adults tend to buy more products and as the products all serve different purposes, their consumption of goods can be also considered as an important life aspect. Therefore, for this study, it is proposed that the more satisfied customers are with their purchased products, the higher their overall satisfaction is with life. For instance, in a study by Van Raaij (1981), results revealed that purchase satisfaction influences life satisfaction. Furthermore, Frank and Enkawa (2009) demonstrated how differences in the average score of customer satisfaction in a country impact life satisfaction. Additionally, in a study by Herbas-Torrico et al. (2010), results revealed that there is a positive linkage between customer satisfaction and life satisfaction. Therefore, this study further examines the relationship between customer satisfaction and life satisfaction. This study aims to explore the chain of events further, resulting in the following hypotheses:

H7: Compulsive buying has a positive effect on customer satisfaction.

H8: Customer satisfaction has a positive effect on life satisfaction

2.7 Gender as moderator

In cultivation research, gender role stereotyping in media and advertising is a contentious topic in the commercial world (Kwak et al., 2002; Morgan & Shanahan, 2008). However, although gender has been widely examined research, it is important to note that there are biases in the neuroscience of differences between men and women, that favor the reinforcement of problematic gender stereotypes, also referred to as neurosexism (Fine, 2008). As cultivation of media and advertising can twist peoples' view of the real world, this can also be implied for gender roles. Gender roles are portrayed in a variety of ways in the media. For instance, Cheng (1997) discovered that in the US and China, more men were represented in professional roles in

television advertisements, while women were portrayed in nonprofessional roles and decorative roles.

Moreover, Dholakia et al. (1995) revealed the level of shopping responsibility was considered to be a women's job along with the type of products that had to be purchased. Since women are more likely to watch television advertisements as well as deeply engaged in purchase decisions, their impression of the actual world may differ significantly from men's view of a materialistic society. This implies that there might be differences between men and women. As a result, women are more likely to be affected by advertisements than males.

In the field of marketing communications, gender has been largely used as moderators (Marinković et al., 2019; Lin et al., 2017; Osei-Frimpong, 2019; Shoham & Brencic, 2003). According to Bhaduri & Ha-Brookshire, (2015). Some differences were found between men and women in how they process and assess their information. For instance, while women look for the connections between new information and the pre-existing information, men only depend only on the information they know (Bhaduri & Ha-Brookshire, 2015). Furthermore, women were considered to be more instinctive and emotional, whereas men are more analytic and logical in nature (Akbaroc, 2020). Therefore, in decision-making situations, women are more inclined to follow their intuition when making purchase decisions (Kwak et al., 2002; Meyrowitz et al., 1987; Shao et al., 2019). Moreover, research revealed that women have a more positive attitude towards online shopping in comparison with men (Dittmar et al., 2004). This suggests that there are differences between men and women when it comes to purchase behavior and purchase decisions.

In regard to media exposure, some studies have shown gender plays an important role. For instance, Kwak et al. (2002) investigated the relationship between television shows and advertising and fear of crime and materialistic society among 1434 undergraduate students in the United States and South Korea. Research revealed that women were more likely to have a higher level of fear of crime after continuous exposure to television shows compared to men in both countries. Moreover, exposure to television advertising also led to stronger perceptions of materialistic society for women than men in both countries. Furthermore, results also revealed that heavy television advertising viewers tend to have higher compulsive buying tendencies. As women tend to be more affected by advertisements, they might purchase products more compulsively. Furthermore, in another study by Shoham & Brencic (2003), gender, specifically

women, was found to be a significant predictor for compulsive buying. Thus, this study aims to further investigate whether gender moderates the relationship between social media advertising exposure and compulsive buying.

For customer satisfaction, Kincl & Štrach (2018) examined whether there were differences in gender in online customer satisfaction. The results of the experiment between 15 men and 14 females revealed that there were significant differences found between these two groups. For instance, although the levels of dissatisfaction were similar, women were found to be less satisfied in their assessments compared to men. Furthermore, in a study by Marinkovic et al. (2019), results also showed that there were gender differences in customer satisfaction. However, research studying the moderation effect for gender between advertising exposure and customer satisfaction is very limited. Therefore, this study also aims to contribute by further examining this relationship.

For life satisfaction, Orben et al. (2019) researched the enduring effect of social media on life satisfaction among 12,672 adolescents. It was found that social media use was a predictor of decreased life satisfaction for women. In another study by Moksnes & Espnes (2013), gender was significantly associated with life satisfaction, as boys scored higher than girls for life satisfaction. Hence, this study intends to examine whether gender moderates the relationship between social media advertising exposure and life satisfaction.

Thus, building on this, this study examines if gender moderates the relationship between social media advertising exposure and compulsive buying, customer satisfaction, and life satisfaction. Therefore, the following hypotheses are proposed:

H9: Gender will moderate the relationship between social media advertising exposure and compulsive buying.

H10: Gender will moderate the relationship between social media advertising exposure and customer satisfaction.

H11: Gender will moderate the relationship between social media advertising exposure and life satisfaction.

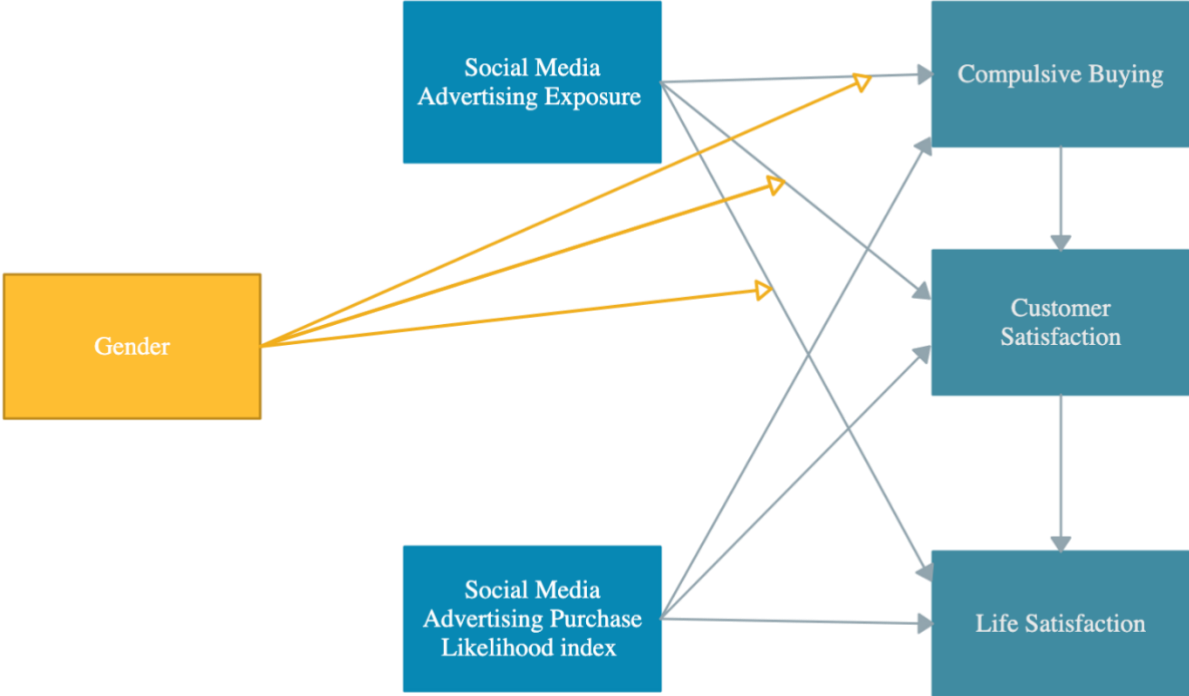
2.8 Theoretical Model

Based on the aforementioned literature and proposed hypotheses a theoretical model is visualized, as seen in Figure 2.1. The theoretical model shows the proposed relationships

between the variables. Social media advertising, which is further divided into social media advertising exposure and social media advertising purchase likelihood, has a direct relationship with compulsive buying, customer satisfaction, and life satisfaction. Moreover, the chain of events will be further investigated, leading to a direct relationship between compulsive buying and customer satisfaction, and between customer satisfaction and life satisfaction. The moderator, gender, shown in yellow, moderates the relationship between social media advertising exposure and compulsive buying, customer satisfaction, and life satisfaction.

Figure 2.1

Theoretical Model



3. Methodology

In this section, first, what kind of research method is used for this study is discussed. Then, the sampling strategy to collect data is presented along with the description of the process of data collection. Afterwards, the survey structure is explained in detail and then the measurements used for the survey are discussed as well. At last, an description of all the analyses conducted in this study is presented in 3.5.

3.1 Research Method

As this study focuses on different concepts such as social media advertising, compulsive buying, customer satisfaction, and life satisfaction, it was decided to use a deductive approach.

A deductive method is centered on establishing hypotheses based on existing theory or phenomenon, in which then a research model is made to test the hypotheses in certain conditions (Wilson, 2014). Moreover, according to Gulati (2009), deductive approach is based on reasoning from a case study to the general. If the case study appears to imply a causal association or linkage, it may be accurate in many other cases. Deductive approach can be used to investigate whether an association or linkage can be obtained in more general situations (Gulati, 2009). Moreover, deductive reasoning is commonly used in studies using quantitative data due to the several hypotheses that need to be tested quantitative methods i.e., regression analyses (Dudovskiy, n.d.). A deductive approach allows for complex concepts consisting of various aspects to be measured (Gallhofer & Saris, 2014). For instance, the concept of life satisfaction can be operationalized by taking the mean score of the different indicators for life satisfaction i.e., in this case, statements such as “In most ways my life is close to my ideal” and “I am satisfied with my life”. Therefore, due to the nature of this study, a deductive approach was used.

As this study has a quantitative nature, it seemed most fitting to use a survey method to collect data. Due to the geo location of the location, it was decided to measure these different complex concepts in young adults that live in the Netherlands. The benefit of using this method is that in a short time frame, a relatively large sample can be collected, in which the results may act as the representative of the population (Matthews & Ross, 2010). Moreover, a self-report survey was used to collect data. Therefore, to answer the research question, a quantitative method allows to examine the effects of one variable, i.e., social media advertising exposure and social

media advertising purchase likelihood on other variables such as compulsive buying, customer satisfaction, and life satisfaction.

3.2 Sampling Strategy

It is generally known that a probability sampling method is the best way to get a representative sample (Sarstedt et al., 2017). However, due to several reasons, such as time constraint and reaching the requirement of at least 150 respondents for the final sample size, a non-probability sampling method was chosen for this study. Specifically, convenience and snowball sampling were used to reach the respondents for the survey (Levy & Lemeshow, 2008; Mooi et al., 2018; Sarstedt et al., 2017). A drawback from using this sampling method, is that not every individual in the population has a fair chance to be included in the sample (Levy & Lemeshow, 2008; Sarstedt et al., 2017). However, as the units had to be in a certain age range (18-35), living in the Netherlands, active on social media, purchasing something from social media advertisements, this was not an issue for this study. Hence, it was suitable to use convenience and snowball sampling, as the researcher's environment consists of people who fit in these criteria and can be further distributed. The aim for this study was to acquire at least 150 respondents who fit in the aforementioned criteria.

3.3 Data Collection

As briefly mentioned in the previous section, prior to the distribution of the survey, a pre-test was conducted among five people who did not fit in the sample criteria and obtained through convenience sampling. The survey was pre-tested on different electronic devices, such as PC, laptop, tablet, and mobile phone.

The process of the pre-test was done in three steps. First, after giving the link to the survey, digitally, the respondents of the pre-test were formally introduced to the survey, as how it would be presented for the real administration. Then, respondents were asked to fill in the survey completely. At last, the five respondents of the pre-test were questioned after completion of the survey. During this process, respondents were asked whether the information and questions were formulated clearly, their thoughts and experience while filling in the survey, and how the survey looked like on their device. Then, adjustments have been made accordingly based on the feedback of the pre-test. For instance, the scale regarding social media usage, when respondents were asked how often they use it, the highest answer options given was "always". However, it

was unclear for respondents when to select this option. Thus, it has been changed to “very frequently”. Moreover, filter options were added when respondents never used a certain electronic device and were referred to the next question. At last, for one scale, consumer satisfaction, different values were given for the scale, in order to align with the other Likert scales presented in the survey.

The survey was distributed digitally on 21st of April 2021, on the researcher’s personal Facebook, Instagram, LinkedIn, and WhatsApp, along with a message explaining the purpose of the survey, as well sample criteria for the study, and at last the link was provided at the end of the message. Moreover, through WhatsApp, respondents were also asked to kindly to share the survey with their friends. As the survey was designed in Qualtrics, the survey was completed online on an electronic device of choice of the respondents. This could be either on a mobile phone, laptop, PC, and tablet and the survey was pre-tested on these different devices to ensure there were no problems. The data collection was closed for responses on 31st of May 2021.

3.4 Survey Structure

As one of the requirements for this study was young adults to be living in the Netherlands, which included both Dutch and non-Dutch citizens. As most dutch people’s english proficiency is sufficient, therefore, it was decided to present the survey in English. The first things respondents see after they clicked on the link, is the introduction page to the survey, in where explanation and information was provided about the study, researcher, and a form of consent. At last, respondents were thanked for their participation and had to click on “consent” if they agreed with participating in the research, which will lead them to the next part of the survey. On the following two screens, general questions were asked about the respondents. For instance, what their age was followed by a dropdown menu, whether they lived in the Netherlands, and if they used social media. These questions determined whether respondents were eligible for the study, in case they did not meet the sample criteria (selected one of the following answer options: 17 years and younger, 36 years and older, do not live in the Netherlands, and never used social media), they were directed to the end of the survey. Then, the respondents were asked about their gender with the answer options “male”, “female”, “other”, and “prefer not to say”. The answer options for educational level were “Primary school”, “Secondary school/ High school”, “Vocational degree (MBO)”, “University of Applied Sciences degree (HBO)”,

“Bachelor’s degree (university)”, “Master’s degree (university)”, “Ph.D., MBA, or other equivalent”, and “Other, namely” in where the respondents were able to fill in their answer.

Afterwards, respondents were directed to the first block of question of the survey that consisted of different scales, which is explained further in section of this chapter “measurements” (3.5). At the end of the first block regarding social media and advertising, after the respondents were introduced to the different kinds of SMA, a control question was asked, whether they have ever purchased something from these advertisements. If they selected the answer “no”, they were directed to the life satisfaction scale, and then towards the end of the survey. When respondents reached the end of the survey, they were thanked and given the option to leave a message. At the end of this page a button was provided to click on in order to store their responses. After this screen, respondents were able to leave close the survey. The full survey can be found in Appendix A.

3.5 Measurements

Social media advertising exposure, social media advertising purchase likelihood, compulsive buying, customer satisfaction, life satisfaction scales, and gender, were used to measure as the independent, dependent, and moderator variable(s) of this study. The scales that were carefully chosen for this study were pre-validated scales and have been used by other researchers that conducted similar research in the field. As there are has been no concrete scales designed yet for accurately measuring social media advertising exposure and social media advertising purchase likelihood, therefore, leading to two exceptions in this study. Thus, the two exceptions, with no pre-validated measures, were the scales used for social media advertising exposure and social media advertising purchase likelihood.

The different scales and required changes made to the scales are presented in detail in the following sections of this chapter. Furthermore, factor analyses were conducted for the scales, resulted into one or two factors which are, then, named each respectively, along with the conducted reliability tests. However, in order to investigate the overall score of the scales, all the factors of each scale were loaded into one factor for the regression analysis.

3.5.1 Social media advertising

In order to indicate social media advertising, two separate scales were measured, namely, social media advertising exposure, and social media advertising purchase likelihood. As for the

first part of the scale, social media advertising exposure, it was partly derived from the scale by Bruggeman et al. (2019). Adjustments have been made to this scale, to fit the flow of the survey better and will be further explained in the following section “Social media advertising exposure” (3.5.1.1).

3.5.1.1 Social media advertising exposure

For social media advertising exposure, a scale was developed for the social media platforms based on the report by Van der Veer et al. (2020), in where the most used social media platforms among adults in the Netherlands for advertising were stated. Therefore, Facebook, Instagram, YouTube, Snapchat, and TikTok were the chosen social media platforms for this study. Respondents were asked how much time on average they spend on each of the aforementioned social media platforms. This question was further grouped and asked in the case for PC, laptop, and tablet, and for mobile phone. The platforms that were selected are: Facebook, Instagram, YouTube, Twitter, and TikTok. The answer options were derived from the Bruggeman et al. (2019), and a “never” answer option was added. As a result, this part consisted of five items per group devices with a 6-point Likert scale: 1. Never, 2. 0 to 1 (hours) per day, 3. 1 to 2 hour(s) per day, 4. 2 to 3 hours per day, 5. 3 to 4 hours per day, and 6. More than 4 hours per day.

3.5.1.2 Social media advertising purchase likelihood

The scale social media advertising purchase likelihood was made based on three different forms of social media advertising, namely, Influencer Marketing (IM), Personalized Advertising (PA), and Brand Advertising (BA), which is described in more detail in chapter four, section 4.2.3. To determine the social media advertising purchase likelihood, the same five social media platforms are used as in the scale for social media advertising exposure: Facebook, Instagram, YouTube, Snapchat, and TikTok. Respondents were asked to answer how likely they were to buy something for each of the social media platforms, regarding the three different types of Social Media Advertisements (SMA). This scale, therefore, was presented three times and consisted of five items answered on a 6-point Likert scale: 1. Never, 2. Very rarely, 3. Rarely, 4. Occasionally, 5. Frequently, 6. Very frequently.

3.5.2 Compulsive buying

To measure compulsive buying, the scale of Maccarrone-Eaglen & Schofield (2017) was used. This scale is derived from the validated scales of compulsive buying by Faber & O'Guinn (1989), Valence et al. (1988), and Ridgway et al. (2008) and is a two-dimensional model of compulsive buying with total of seven items. Their compulsive buying scale was found to be reliable and valid (Maccarrone-Eaglen & Schofield, 2017). The overall scale measured self-control impaired spending consisted of four items, and compulsive purchasing, consisted of three items. The seven items were formulated in the form of a statement in where respondents could answer on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Example items of the compulsive buying scale are "I often buy things even though I can't afford them" and "Much of my life centers around buying things". This scale was asked after proposing the situation in where respondents had to answer based on their latest purchase bought from SMA.

3.5.3 Customer Satisfaction

An altered version of the Satisfaction scale by Mano & Oliver (1993), was used to measure Customer Satisfaction and was originally constructed by Westbrook & Oliver (1981). The scale with twelve items was found to be unidimensional and reliable (Mano & Oliver, 1993). This scale was originally created to measure satisfaction regarding cars purchase, however, Mano & Oliver (1993) adapted the scale to be applicable for any kind of product a respondent was thinking about. Moreover, for this study, this scale has been further adjusted to measure respondents' latest purchased item after exposed to SMA, which was mentioned before the respondents were answering the statements regarding customer satisfaction. In order to fit the study, the blank space in where the purchased item the respondent had in mind could be filled in was filled in with the word "item". Furthermore, one item has been added to the scale "I'm satisfied with all my purchases in general", to measure the overall satisfaction of the customer of all their products they have bought. This resulted a total of thirteen items in the customer satisfaction scale. Some example items of this scale are "This item is exactly what I need" and "I am satisfied with my decision to buy this item". Furthermore, to improve the coherency and readability of the survey, the values of the five-point Likert scale was changed in Qualtrics, ranging from 1 (strongly disagree) to 5 (strongly agree). Moreover, when the data was exported

into SPSS, the values were ranging from 6 (strongly disagree) to 10 (strongly agree). Hence, in SPSS the values were changed again to the values 1 (strongly agree) to 5 (strongly agree). Moreover, five items of the scale were reversed to make the scale unidimensional for further analysis.

3.5.4 Life satisfaction

The Satisfaction With Life Scale of Diener et al. (1985) was used to measure life satisfaction. The scale has been widely used and proven to be reliable (Pavot & Diener, 1993). This resulted a total of five items in the life satisfaction scale. The five items were formulated in the form of a statement in where respondents could answer on a seven-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). Some example items of this scale are “In most ways my life is close to my ideal” and “I am satisfied with my life”.

3.6 Analyses

In order to conduct the analyses in SPSS, the data was exported from Qualtrics. Prior to performing the analysis, the data was cleaned. Respondents who were directed to the end of the survey due to being younger than 18 and older than 35 years old were removed. Moreover, respondents that did not live in the Netherlands or did not use social media were removed as well. Furthermore, respondents who have never purchased anything from SMA were also excluded from the dataset. Additionally, any missing values were not included in the calculations for the dataset. At last, data screening was done to exclude any outliers for the final dataset.

With the raw data, the variables needed to test the model were computed using various ways. Specifically, for social media adverting exposure, first, for each social media platform per group of devices, the value 1 was subtracted. Then, for the first group pc, laptop, and tablet, the average time spent on each social media platform was calculated and a new variable created, in where the hours spent on the social media platforms on the two devices were added and then divided by two. For the second group of devices, mobile phone, the average time spent on each social media platform was added. Then, the sum of each respective group was added into a new variable to create the total social media advertising exposure score, which was used for further analysis. For social media advertising purchase likelihood, first, the averages likelihood to purchase for each type of advertisements (IM, PA, and BA) were calculated in a new variable, by

adding the values for the five social media platforms and divided by five. Then, a new variable was computed by adding the averages of the three types of SMA, and then divided by three, which became the social media advertising purchase likelihood used for further analysis. For the other variables, including compulsive buying, customer satisfaction, and life satisfaction, the score for each of the variable was computed by summing up the scores of all items and divided by the number of items the scale consisted of. Specifically, for customer satisfaction, the scores were summed up with eight original items and 5 reversed items and then divided by the thirteen.

Then, various analyses were carried out before conducting statistical analyses, such as descriptive statistics of the sample (4.1) and variables (4.2), factor analyses (4.3), and reliability tests of the scales (4.3), which the results are reported in chapter four.

To test the hypotheses, multiple regression analysis was performed for hypotheses H1 and H2 to see if the independent variables social media advertising exposure and social media advertising purchase likelihood had an influence on the dependent variable compulsive buying. For H3 and H4, simple regression analyses were performed separately for the two aforementioned independent variables and customer satisfaction as the dependent variable. To test H5, a simple regression was conducted in where compulsive buying was entered as the independent variable and customer satisfaction as the dependent variable. Then, H6 was tested with a simple regression, in which customer satisfaction acted as the independent variable and life satisfaction as the dependent variable (see section 4.4-4.7).

Moreover, a moderator, gender, was included in this study and moderated H1, H3, and H5. The strength of an effect between the independent variable(s) and dependent variable(s) is influenced by a moderator variable. Prior to running the analyses for the moderator, gender, a new variable for gender was computed, in which new values were given for male (0) and female (1) and is further referred as gender dummy. Moreover, standardized values were created of the variables, as the interaction variable compromises of different scales from the variables. Thus, resulting into the standardized values of the mean scores of social media advertising exposure, which is referred later with “Z” before the variable, i.e., Zsocial media advertising exposure. Furthermore, the interaction variables Zsocial media advertising exposure*gender dummy, was created. At last, to test whether gender acted as a moderator between the variables, the standardized values of the variables, the interaction variable were entered accordingly to the hypotheses, along with the gender dummy as the independent variables in multiple regression

analyses, and either compulsive buying, customer satisfaction, and life satisfaction were entered as the dependent variable. For instance, to test whether gender moderated the relationship between social media advertising exposure and compulsive buying, the variables entered were Zsocial media advertising exposure, gender dummy, and Zsocial media advertising exposure*gender dummy. The results of gender as moderator can be seen in section 4.8.

4. Results

Prior to conducting the statistical analyses, general information on the sample of this study is provided. Then, for all the variables, social media advertising, compulsive buying, customer satisfaction, and life satisfaction, descriptive statistics are presented. Then for the pre-validated scales, compulsive buying, customer satisfaction, and life satisfaction, factor analyses and reliability tests were conducted. Then, to answer the research question, the following sections provides a detailed explanation of the outcomes of all the statistical analyses performed in SPSS. First, the results of the different (i.e., simple, multiple) regression analyses are reported to test the aforementioned hypotheses. Then, the results are presented for all the earlier stated hypotheses moderated by gender. At last, an overview of all the tested hypotheses is presented in table 4.9 and figure 4.9.

4.1 Sample Description

The final sample consisted of 152 respondents. This is obtained from the original raw data by removing people who didn't fit the sampling criteria including age (younger than 18 years old and older than 35 years old), gender identification (did not identify as male or female), location (not living in the Netherlands), social media use (never), and purchase from SMA (never). Moreover, for data screening, outliers who derived more than 3 times from the standard deviation for total hours spent on social media were excluded from the analysis as well.

As a result, the target of acquiring at least 150 respondents in the cleaned dataset was achieved. In table 4.1 is an overview of the demographics, i.e., age, gender, educational level of the total respondents used for this study.

Table 4.1

Overview of respondents' age and educational level (N = 152)

Answer options	Frequency	Percentage
Male	44	28.9
Female	108	71.1
Secondary school/High school	5	3.3
Vocational degree (MBO)	15	9.9

University of Applied Sciences degree (HBO)	36	23.7
Bachelor's degree (university)	43	28.3
Master's degree (university)	52	34.2
Other	1	.7

4.2 Descriptive statistics of all variables

4.2.1 Social media usage

In current study, three different kinds of devices were taken into account, PC/laptop, tablet, and mobile phone. From the data, it can be seen that young adults use different devices with different patterns. First, for pc and laptop, the average of self-reported frequency is 4.82 ($SD = .57$), which is close to “almost every day”. In terms of the hours, among all 151 people who have claimed to use this device, the average is 4.48 hours per day ($SD = .99$). For tablet, 69 people have claimed to use this device, and the average of self-reported frequency is 1.91 ($SD = 1.27$), which is “almost never”. The hours spent on a tablet was 1.67 per day ($SD = .98$). For mobile phone, assuming that everyone uses a mobile phone on a daily basis, only the hours spent per day was reported, which is 4.93 ($SD = 1.08$). The results showed that the average hours spent, and standard deviations were relatively high for mobile phones, and PC or laptop. On the other hand, the average time spent of tablet was considered low.

4.2.2 Social media advertising exposure

For social media advertising exposure, first, regarding the first group of devices (i.e., PC, laptop, and tablet), the average hour spent on each social media platform are as follows: Facebook 1.77 ($SD = .80$), Instagram 1.89 ($SD = 1.06$), YouTube 2.82 ($SD = 1.27$), Snapchat 1.27 ($SD = .53$), and TikTok 1.27 ($SD = .74$). For the second group of devices, mobile phone, the average hour spent on each social media platform are as follows: Facebook 1.90 ($SD = .74$), Instagram 2.80 ($SD = 1.15$), YouTube 2.59 ($SD = 1.18$), Snapchat 1.62 ($SD = .70$), and TikTok 1.89 ($SD = 1.26$). As for pc, laptop, and/or tablet use, respondents spent most time on YouTube, Instagram, and Facebook, and less time on TikTok and Snapchat. For mobile phone, respondents spent most time on Instagram and YouTube, and less time on Facebook, TikTok, and Snapchat.

After computing several variables mentioned in section 3.6, the total sum of hours for social media advertising exposure (including both groups of devices on all social media platforms) is 9.78 ($SD = 4.56$).

4.2.3 Social media advertising purchase likelihood

First, respondents were asked how often they see the three types of SMA on their social media. The average of self-reported frequency for IM is 5.76 ($SD = 1.45$), PA is 6.14 ($SD = 1.49$), and BA is 5.25 ($SD = 1.85$). On average, respondents see sponsored posts from influencers and brand advertisements more than once a week, and personalized advertisements is seen more than a few times a week. Personalized advertisements are seen more often compared to sponsored posts from influencers and brand advertisements.

Then, this followed up with the question how often they buy products after they have seen in on their social media for the three types of SMA. The average of self-reported frequency for IM is 1.82 ($SD = .82$), PA is 2.09 ($SD = .78$), and BA is 2.25 ($SD = 1.04$). The scores for brand advertisements and personalized advertisements were “Almost never” and is higher than for influencer marketing to purchase something after being exposed to.

Afterwards, respondents were asked to answer how likely they were to buy something for each of the social media platforms (Facebook, Instagram, YouTube, Snapchat, and TikTok), regarding the three different types of SMA. These blocks of questions were used to determine the score of social media advertising purchase likelihood.

For the first type of social media advertising, influencer marketing, the average of self-reported frequency for Facebook is 1.56 ($SD = .90$), 2.47 for Instagram ($SD = 1.22$), 2.11 for YouTube ($SD = 1.14$), 1.06 for Snapchat ($SD = .26$), and 1.66 for TikTok ($SD = 1.17$). For influencer marketing, Instagram and YouTube scored highest in where respondents answered most with “Very rarely” and “Rarely” and were most likely to buy something from. TikTok and Facebook also scored relatively high, and respondents were least likely to buy something from Snapchat.

For the second type of social media advertising, personalized advertising, the average of self-reported frequency for Facebook is 1.68 ($SD = .98$), 2.51 for Instagram ($SD = 1.12$), 1.64 for YouTube ($SD = .95$), 1.06 for Snapchat ($SD = .29$), and 1.39 for TikTok ($SD = .89$). For personalized advertising, respondents were most likely to buy something from Instagram, as

respondents answered most often “Very rarely” and “Rarely”. Respondents would also very likely buy something from Facebook, YouTube, and Tiktok and less likely from Snapchat.

For the third type of social media advertising, brand advertising, the average of self-reported frequency for Facebook is 1.58 ($SD = .94$), 2.52 for Instagram ($SD = 1.25$), 1.59 for YouTube ($SD = .87$), 1.09 for Snapchat ($SD = .50$), and 1.37 for TikTok ($SD = .88$). For brand advertising, Instagram scored highest as a platform in where respondents answered most often with “Very rarely” and “Rarely” where people would purchase products from. Youtube, Facebook, and Tiktok also scored relatively high, and Snapchat was the least likely platform to purchase something after exposed to brand advertisements.

Finally, the social media advertising purchase likelihood was computed after the analyses were run mentioned in section 3.6, resulting in the average score social media advertising purchase likelihood (of all three different SMA) is 1.69 ($SD = .52$) and is used for further analysis.

4.3 Factor analyses and Reliability

4.3.1 Compulsive buying

A confirmatory analysis was run and the seven items measuring compulsive buying were loaded into one factor analysis, used Principal Components extraction with Direct Oblimin with Kaiser Normalization rotation based on Eigenvalues (> 1.00), $KMO = .85$, $\chi^2 (N = 152, 21) = 440.22$, $p < .001$. The scales explained 68.6% of the variance in compulsive buying. Table 4.3.1 illustrates the factor loadings of the individual items onto the two found factors, explained variance, and Cronbach’s alpha. The items were loaded onto two factors:

Self-control Impaired Spending. The first factor included four items, which were associated with the lack of self-control to buy things without considering the amount of money they possess. The reliability of *Self-control Impaired Spending*, comprised of four items, was strong: $\alpha = .80$

Compulsive Purchasing. The second factor included three items and were associated with the strong feeling of needing to purchase things. A reliability test resulted in a Cronbach’s alpha coefficient of .82. Then, a new variable was computed to measure compulsive buying based on the average score of all seven items. On this scale, respondents scored a mean of 2.25 ($SD = .88$), suggesting that on average, respondents had a relatively low compulsive buying behavior.

Table 4.3.1*Factor and reliability analyses for compulsive buying scale (N = 152)*

Item	<i>Self-control Impaired Spending</i>	<i>Compulsive Purchasing</i>
Please select the one which best indicates how you feel about the statement.		
I am a reckless spender.	.82	
I often buy things even though I can't afford them.	.77	
When I have money, I cannot help but spend part or the whole of it.	.77	
I have often bought a product that I did not need, while knowing that I have very little money left.	.68	
For me, shopping is a way of facing the stress of my daily life and relaxing.		.87
I sometimes feel that something inside pushes me to go shopping.		.85
Much of my life centers around buying things.		.69
<i>R</i> ²	.55	.14
Cronbach's α	.80	.82

4.3.2 Customer satisfaction

As aforementioned, the scale was proven to be a unidimensional measuring Customer Satisfaction as a concept with one factor. Although 5 items were found to be reverse coded, they still measure the same concept for Customer Satisfaction as the other eight items. Thus, a confirmatory factor analysis was run and the thirteen items measuring compulsive buying were loaded into one factor analysis, which used Principal Components extraction with Direct Oblimin with Kaiser Normalization rotation based on Eigenvalues (> 1.00), $KMO = .91$, $\chi^2 (N = 152, 78) = 1100.13$, $p < .001$. The resulting scale explained 61.7% of the variance in customer satisfaction. In this study, two factors were found with an Eigenvalue greater than one. The application of the two found factors founded in the study will be reflected in 5.4. Then, the

factor loadings of the thirteen individual items, explained variance, and Cronbach's alpha are shown in table 4.3.2.

Afterwards, a new variable was computed to measure customer satisfaction based on the average score of all thirteen items (eight items and five reversed items). On this scale, respondents scored a mean of 3.61 ($SD = .71$), suggesting that on average, respondents were very satisfied with their latest purchased products.

Table 4.3.2

Factor and reliability analyses for customer satisfaction scale (N = 152)

Item	<i>Customer Satisfaction</i>
Please select for each statement that best indicates how you feel about how satisfied you are with the latest item/product you have bought after seeing these social media advertisements.	
I have truly enjoyed this item.	.84
I am satisfied with my decision to buy this item.	.82
Owning this item has been a good experience.	.80
My choice to buy this item was a wise one	.76
I'm sure it was the right thing to buy this item.	.75
I am not happy that I bought this item.	.74
This item is exactly what I need	.73
This is one of the best items I could have bought	.70
I feel bad about my decision to buy this item.	.70
This item hasn't worked out as well as I thought it would.	.68
Sometimes I have mixed feelings about keeping it.	.62
I'm satisfied with all my purchases in general	.52
If I could do it over again, I'd buy a different make/model.	.44

R^2	.62
Cronbach's α	.91

4.3.3 Life satisfaction

A confirmatory analysis was run and the five items measuring life satisfaction were loaded into one factor analysis, used Principal Components extraction with Direct Oblimin with Kaiser Normalization rotation based on Eigenvalues (> 1.00), $KMO = .87$, $\chi^2 (N = 152, 10) = 379.51$, $p < .001$. The scale explained 67.2% of the variance in life satisfaction. Table 4 presents the factor loadings of the individual items, the explained variance, and Cronbach's alpha. All the items were loaded onto one factor. The reliability test measured a Cronbach's alpha coefficient of .87. Then, a new variable was created to measure life satisfaction based on the average score of all five items. On this scale, respondents scored a mean of 4.54 ($SD = 1.20$), indicating that overall respondents were relative positive about their life.

Table 4.3.3

Factor and reliability analyses for life satisfaction scale (N = 152)

Item	<i>Life satisfaction</i>
Please select the one which best indicates how you feel about the statement.	
I am satisfied with my life.	.88
In most ways my life is close to my ideal.	.88
So far I have gotten the important things I want in life.	.83
The conditions of my life are excellent.	.76
If I could live my life over, I would change almost nothing.	.74
R^2	.67

4.4 Social Media Advertising Exposure and Social Media Advertising Purchase Likelihood on Compulsive Buying (H1-H2)

In order to test whether the independent variables, social media advertising exposure and social media advertising purchase likelihood, have a positive effect on the dependent variable compulsive buying for H1 and H2, a multiple linear regression was carried out. Thus, multiple linear regression with the compulsive buying score as a criterion was conducted. Predictors were social media advertising exposure and social media advertising purchase likelihood. The model was found to be significant, $F(2, 149) = 14.59, p < .001, R^2 = .16$. The analysis showed that social media advertising exposure was found to be a significant predictor ($\beta = .26, t = 3.33, p < .001$) as well as social media advertising purchase likelihood to be a significant predictor ($\beta = .25, t = 3.27, p < .001$) for compulsive buying score. Thus, H1 and H2 are accepted.

4.5 Social Media Advertising Exposure and Social Media Advertising Purchase Likelihood on Customer Satisfaction (H3-H4)

To investigate whether the independent variable social media advertising exposure has a positive influence on the dependent variable customer satisfaction for H3, a simple linear regression was done. Thus, simple linear regression with the customer satisfaction score as a criterion was conducted. Predictor was social media advertising exposure. The model was found to be significant, $F(1, 150) = 6.44, p = .012, R^2 = .04$. The analysis showed that social media advertising exposure was found to be a significant predictor ($\beta = -.20, t = -2.54, p = .012$) for customer satisfaction score. Thus, H3 is accepted.

As suggested by H4, the independent variable social media advertising purchase likelihood would lead to an increase on the dependent variable customer satisfaction. This hypothesis was tested through a simple linear regression. Thus, simple linear regression with the customer satisfaction score as a criterion was conducted. Predictor was social media advertising purchase likelihood. The model was found to be significant, $F(1, 150) = 1.10, p = .296, R^2 = .01$. The analysis showed that social media advertising purchase likelihood was found to be an insignificant predictor ($\beta = .09, t = 1.05, p = .296$) for customer satisfaction score. Thus, H4 is rejected.

4.6 Social Media Advertising Exposure and Social Media Advertising Purchase Likelihood on Life Satisfaction (H5-H6)

H5 aimed to examine whether the independent variable social media advertising exposure has a negative effect on the dependent variable life satisfaction. Therefore, a simple linear regression was carried out with life satisfaction score as a criterion. Predictors were social media advertising exposure. The model was found to be insignificant, $F(1, 150) = 3.31, p = .071, R^2 = .02$. The analysis showed that social media advertising exposure was found to be an insignificant predictor ($\beta = -.15, t = -1.82, p = .071$) for life satisfaction score. Thus, H5 is rejected.

To investigate whether there was a linear relationship between the independent variable social media advertising purchase likelihood exposure and the dependent variable life satisfaction, a simple linear regression was done. Thus, simple linear regression with the life satisfaction score as a criterion was conducted. Predictors were social media advertising purchase likelihood. The model was found to be insignificant, $F(1, 150) = .74, p = .391, R^2 = .00$. The analysis showed that social media advertising purchase likelihood was found to be an insignificant predictor ($\beta = .07, t = .86, p = .391$) for life satisfaction score. Thus, H6 is rejected.

4.7 Influence of Compulsive Buying, Customer Satisfaction, and Life Satisfaction (H7-H8)

To find out whether the independent variable compulsive buying and has a positive effect on the dependent variable customer satisfaction, a simple linear regression was done. Thus, simple linear regression with the customer satisfaction score as a criterion was conducted. Predictor was compulsive buying. The model was found to be insignificant, $F(1, 150) = 2.01, p = .159, R^2 = .01$. The analysis showed that compulsive buying was found to be an insignificant predictor ($\beta = -.12, t = -1.42, p = .159$) for customer satisfaction score. Thus, H7 is rejected.

To examine whether there was a linear relationship between the independent variable customer satisfaction and dependent variable life satisfaction, a simple linear regression was done. Thus, simple linear regression with the life satisfaction score as a criterion was conducted. Predictor was customer satisfaction. The model was found to be insignificant, $F(1, 150) =$

6.77, $p = .010$, $R^2 = .04$. The analysis showed that customer satisfaction was found to be a significant predictor ($\beta = .21$, $t = 2.60$, $p = .010$) for life satisfaction score. Thus, H8 is accepted.

4.8 Gender as a moderator (H9-H11)

4.8.1 Social Media Advertising Exposure on Compulsive Buying moderated by gender (H9)

In order to test H9 and find out whether gender moderated the relationship between social media advertising exposure and compulsive buying, a multiple regression was done. Thus, multiple linear regression with the compulsive buying score as a criterion was conducted. Predictors were Zsocial media advertising exposure, gender dummy and the interaction Zsocial media advertising exposure *gender dummy. The model was found to be significant, $F(3, 148) = 10.54$, $p < .001$, $R^2 = .18$. The analysis showed that gender dummy ($\beta = .27$, $t = 3.61$, $p < .001$) was found to be significant predictor, while Zsocial media advertising exposure ($\beta = .20$, $t = 1.20$, $p = .233$) and the interaction Zsocial media advertising exposure*gender dummy was found to be insignificant predictors ($\beta = .12$, $t = .68$, $p = .496$) for compulsive buying score. However, as the interaction variable Zsocial media advertising exposure*gender dummy was found to be insignificant predictor for compulsive buying, H9 is, therefore, rejected.

4.8.2 Social Media Advertising Exposure on Customer Satisfaction moderated by gender (H10)

To test whether gender moderated the relationship between social media advertising exposure and customer satisfaction for H10, a multiple regression was done. Thus, multiple linear regression with the customer satisfaction score as a criterion was conducted. Predictors were Zsocial media advertising exposure, gender dummy and the interaction Zsocial media advertising exposure *gender dummy. The model was found to be insignificant, $F(3, 148) = 2.54$, $p = .058$, $R^2 = .05$. The analysis showed that Zsocial media advertising exposure ($\beta = -.02$, $t = -.12$, $p = .902$), gender dummy ($\beta = -.01$, $t = -.09$, $p = .932$), and the interaction Zsocial media advertising exposure *gender dummy ($\beta = -.20$, $t = -1.10$, $p = .271$) was found to be insignificant predictors for customer satisfaction. Thus, H10 is rejected.

4.8.3 Social Media Advertising Exposure on Life Satisfaction moderated by gender (H11)

H11 aimed to examine whether gender moderated the relationship between social media advertising exposure and life satisfaction. Thus, multiple linear regression was conducted with

life satisfaction score as a criterion. Predictors were Zsocial media advertising exposure, gender dummy and the interaction Zsocial media advertising exposure *gender dummy. The model was found to be insignificant, $F(3, 148) = 2.28, p = .082, R^2 = .04$. The analysis showed that Zsocial media advertising exposure ($\beta = -.13, t = -.70, p = .483$), gender dummy ($\beta = .15, t = 1.83, p = .072$), and the interaction Zsocial media advertising exposure *gender dummy ($\beta = -.03, t = -.16, p = .871$) was found to be insignificant predictors for life satisfaction. Thus, H11 is rejected.

4.9 Results Overview

The results of this study led to four hypotheses being accepted and seven hypotheses being rejected. In table 4.9, an overview is presented of all the hypotheses with the independent variable(s), dependent variable(s), and whether they were accepted or rejected. Furthermore, an overview of the theoretical model is presented with all the hypotheses in figure 4.9 along with their Beta value and the p value. The moderator, gender, is shown in yellow. The found significant relationships are shown in green, whereas the insignificant relationships are presented in red.

Table 4.9

Overview of all the tested hypotheses

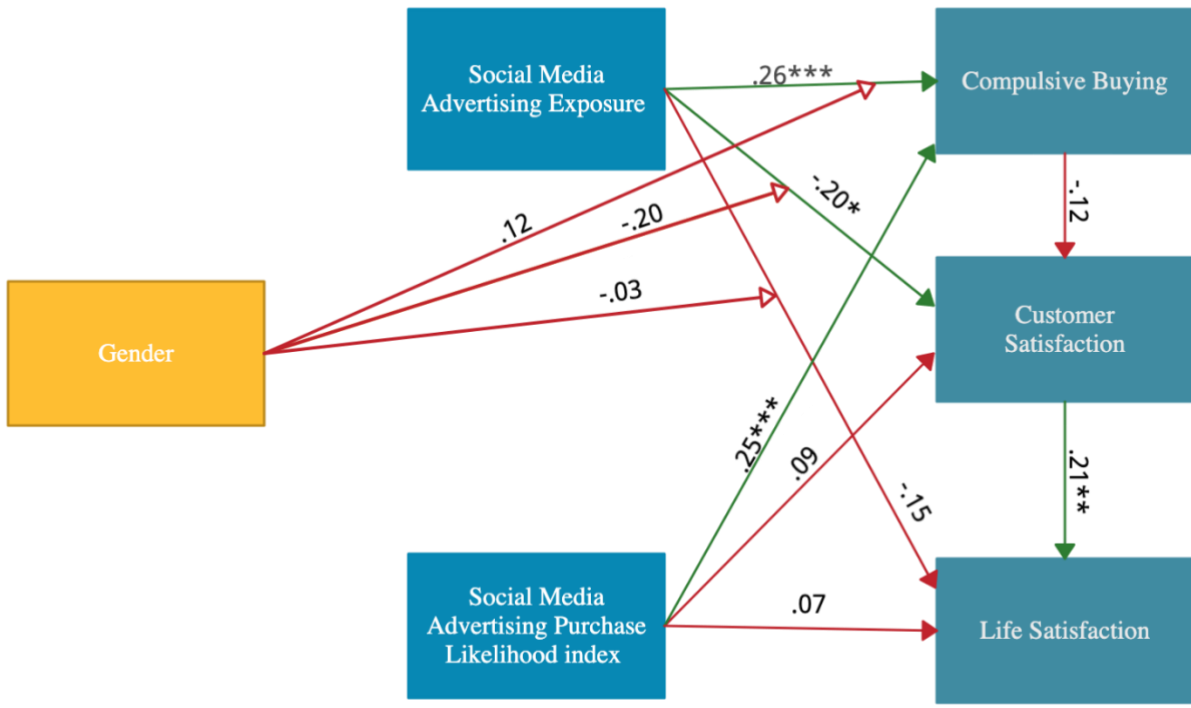
Hypothesis	Independent variable	Dependent variable	Accepted	Rejected
H1	Social media advertising exposure	Compulsive buying	X	
H2	Social media advertising purchase likelihood	Compulsive buying	X	
H3	Social media advertising exposure	Customer Satisfaction	X	
H4	Social media advertising purchase likelihood	Customer Satisfaction		X
H5	Social media advertising exposure	Life Satisfaction		X
H6	Social media advertising purchase likelihood	Life Satisfaction		X
H7	Compulsive buying	Customer satisfaction		X
H8	Customer satisfaction	Life satisfaction	X	
H9	1. Zsocial media advertising exposure and gender dummy 2. Interaction variable (Zsocial media advertising exposure*gender dummy)	Compulsive buying		X
H10	1. Zsocial media advertising exposure and gender dummy	Customer Satisfaction		X

H11

<p>2. Interaction variable (Zsocial media advertising exposure*gender dummy)</p> <p>1. Zsocial media advertising exposure and gender dummy</p> <p>2. Interaction variable (Zsocial media advertising exposure*gender dummy)</p>	<p>Life satisfaction</p> <p style="text-align: right;">X</p>
---	--

Figure 4.9

Theoretical model with the beta and p-value



5. Conclusion & Discussion

In this chapter, the findings are discussed considering previous research and answering the research question of this study. Afterwards, theoretical and practical implications for this study are presented as well. Finally, this section ends with limitations and recommendations for future research.

5.1 Main findings & Theoretical implications

As in this digital age young adults spend more time on social media, they are also more prone to be exposed to social media advertising, which causes certain effects such as compulsive buying, customer satisfaction, and life satisfaction. Therefore it is important to First, for this study, social media advertising exposure was expected to be influencing compulsive buying behavior. The results of the analyses show that both social media advertising exposure and social media advertising purchase likelihood influences compulsive buying behavior positively. Young adults are more likely to have compulsive buying tendencies and wanting to buy things off these social media advertisements. These results are in line with previous findings by Ahmad & Mahfooz (2019), Kwak et al. (2002), and Roberts et al. (2003), thus confirming hypothesis 1. The results suggest that cultivation effects can be applicable outside traditional advertising: the more often young adults are exposed to social media advertisements, the more likely they are to accept the way these advertisements convey. Hence, leading young adults after being exposed to social media advertisements to have higher compulsive buying tendencies.

Secondly, as aforementioned, the findings reveal that social media advertising purchase likelihood affects compulsive buying behavior. The more often young adults buy things from social media advertisements, the higher their compulsive buying behavior is. Therefore, confirming hypothesis 2. This echoes the findings of Ahmad and Mahfooz (2019), Lee et al. (2016), and Sharif and Yeoh, (2018). The results might be explained as more and varied types of advertisements are offered on various social media platforms, triggering young adults to buy more products on these platforms.

Thirdly, results reveal that social media advertising exposure has an effect on customer satisfaction. The more young adults buy are exposed to social media advertisements, the more satisfied they are with their products. These results are in line with the findings of Bakator et al. (2012) and Nwokah & Ngirika (2018), in where social media advertising exposure was found to

be influencing customer satisfaction. The results can be explained due to young adults being more exposed to different kinds of advertisements and accept the information that they receive from these advertisements and be more satisfied with their purchases bought of these social media advertisements. Thus, hypothesis 3 is supported.

However, social media advertising purchase likelihood does not affect customer satisfaction, thus hypothesis 4 was not supported. Although more exposure to social media leads to young adults being more satisfied with their products, it does not necessarily mean that the more products they buy off these social media advertisements, the more satisfied they are with the products.

Furthermore, it was proposed that social media advertising exposure and social media advertising purchase likelihood have a negative influence on life satisfaction. Surprisingly, results show that both social media advertising exposure and social media advertising purchase likelihood had no influence on decreased life satisfaction. In contrast to the study of Michel et al. (2019), this study was not longitudinal and only surveyed the respondents once, which may explain why the cultivation effects of social media advertising on life satisfaction were not found to be significant, as the decrease in life satisfaction was apparent after a few years. Thus, hypotheses 5 and 6 were not supported.

Moreover, exploring the chains of events further of this study, it was proposed that compulsive buying affected customer satisfaction. The findings reveal that compulsive buying does not have an influence on customer satisfaction, and thus rejecting hypothesis 7. A possible explanation could be that as young adults buy things more compulsively, it does not evoke a satisfaction feeling towards their compulsively purchased products.

Regarding the influence of customer satisfaction on life satisfaction, fortunately, customer satisfaction was found to have a positive effect on life satisfaction. Hypothesis 8 is hereby accepted. This means that the more satisfied young adults are with their purchased products off social media advertisements, it contributes to their overall level of happiness. This is in line with the findings of Frank and Enkawa, 2009, Herbas-Torrice et al. (2010), and Raaij (1981).

As for moderation, this study examined the role of gender as the moderator between social media advertising exposure on compulsive buying, customer satisfaction, and life satisfaction. Based on this, hypotheses 9, 10, and 11 were formulated. Results have shown that

gender was not found to be a moderator of the relationships of social media advertising exposure. Although previous research has shown that gender was a significant predictor for compulsive buying (Kwak et al., 2002; Shoham & Brencic, 2003), customer satisfaction (Kincl & Štrach, 2018; Marinkovic et al., 2019), and life satisfaction (Moksnes & Espnes, 2013; Orben et al., 2019), the insignificance could be due to the limited evidence of gender as the moderator for social media advertising exposure. Furthermore, although previous research has found that gender was a predictor for these effects, it could also be due to neurisexism. This will be further discussed in 5.4.

5.2 General Conclusion

All in all, in relation to cultivation, this study has shown that both social media advertising exposure and social media advertising purchase likelihood influence compulsive buying behavior in young adults. This study further revealed that while social media advertising purchase likelihood does not affect customer satisfaction, social media advertising exposure does affect customer satisfaction. Moreover, there was no relationship found between social media exposure and social media advertising purchase likelihood on life satisfaction. Furthermore, regarding the chain effect, young adults' compulsive buying behavior does not increase their satisfaction with the purchased products. However, the level of satisfaction of the purchased products does influence young adults' overall life satisfaction. Although gender was proposed as the moderator for the relationship between social media advertising exposure on compulsive buying, customer satisfaction, and life satisfaction, no moderation effect was found between those relationships.

5.3 Practical implications

This study provides some practical implications regarding to social media advertising in marketing communications for businesses, but also for the consumers. Firstly, this study confirmed that social media usage is very high among young adults and has shown that social media advertising exposure can be effective, as it is noticed by young adults. Considering this, although the ethical issue could then be raised, marketers and businesses could increase their budget for social media advertisements, as young adults spend most of their time on social media, and the most effective way to reach them is through social media. Moreover, this study has shown that social media advertising can influence compulsive buying behavior, which is

beneficial for businesses. Moreover, as young adults enter the loop of these continuous advertising exposure and buy products that were introduced to them through these ads, they appear to be satisfied with their products. Hence, it is important for businesses to continue increase brand awareness on social media through different kinds of advertisements, familiarizing young adults with their products.

For the consumers, young adults, on the other hand, must take into account how much social media they expose themselves to on a daily basis. Young adults are found to be active on multiple social media platforms, which makes them more prone to be targeted to such exposure. As results have shown that high exposure leads to higher compulsive buying tendencies and marketers and businesses will continue to create this sense of materialistic need for the consumers. This can lead to negative consequences for young adults, as it promotes unhealthy buying habits and to be financially irresponsibility, potentially causing financial issues. Moreover, although no evidence is found between the direct relationship of social media advertising and life satisfaction, it is still important to be mindful of other effects potentially caused social media advertising, which can affect young adults' life satisfaction, especially in long term. This aspect will be further discussed in the directions for future research,

5.4 Strengths & Limitations

It is noteworthy to mention that this study comes with both limitations and strengths. By identifying such limitations and providing suggestions how this could be further improved, it is important that future studies can avoid such flaws and can improve the reliability of this study. First of all, a limitation of this study is that the data was collected through self-report survey, making it harder to administer the survey. As young adults could choose a moment of time in their day in where they could fill in the survey, certain distractions or factors might lead to inaccurate responses. For instance, respondents could think to quickly fill in the survey during their lunch break, or on the go, and might not have correctly read the questions before giving their answers. As it was impossible to administer the survey, it also led to a lot of people dropping out mid-way.

Additionally, although choosing Dutch young adults aged between 18 and 35 years old as research sample was relevant due to their high social media usage, at the same time, the generalizability of these findings to other countries are limited. Moreover, as it focuses on young

adults, it brings limitations to the general Dutch population. Also, due to convenience and snowball sampling, the study consisted of an unbalanced ratio of male (28.9%) and female (71.1%), and most of the young adults followed a high educational level (University of Applied Sciences' degree 23.7%, Bachelor's degree 28.3%, and Master's degree 34.2%). As the ratio of the respondents were unbalanced, which might not represent a generalized data of young adults that live in the Netherlands.

Moreover, in this study, the scales social media advertising exposure and social media advertising purchase likelihood was not measured by using pre-validated scales, but through social media exposure on five different social media platforms and their likelihood to buy products of the five social media platforms. This could lead to some questions in the validity of using these scales.

Furthermore, as mentioned briefly in 5.1, gender was not found as a moderator for this study. As it was predicted that gender was a moderator between a few relationships based on previous studies, the issue of neurosexism can be raised. As there were limited literature and studies for gender as a moderator between social media advertising exposure and the effects (compulsive buying, customer satisfaction, and life satisfaction), the researcher might have incorrectly claimed the differences between men and female regarding examining the gender moderation for this study. As gender stereotypes are still evident, even as of today, therefore, neurosexism is an important aspect for researchers to take into account for future research and limit this bias.

Lastly, as briefly discussed in 4.3.2., although the scale was proven to be unidimensional by Mano & Oliver (1993), two factors were found with an Eigenvalue greater than one. When looking further into the two factors, it was divided with positive and negative feelings towards a purchased product. Although the overall customer satisfaction score was taken for this study, it would be more insightful for future study to take one subscale i.e., negative feelings, to examine for example whether the negative scale of customer satisfaction affects, for example, life satisfaction.

However, this research also comes with some strengths. Firstly, although this study did not use pre-validated scales for social media advertising exposure and social media advertising purchase likelihood, it included a wide range of social media platforms and different types of social media advertising. This allowed for more specific data collected of the respondents

regarding their social media advertising exposure and social media advertising purchase likelihood for each respective social media platform. Furthermore, previous research revealed that media usage can be used to measure advertising exposure (Oprea, 2014).

Moreover, this study can be considered to be a steppingstone for cultivation in regard to digital advertising, and specifically social media advertising and the effects, i.e., compulsive buying. However, more research must be done examining these relationships and supporting these findings further.

Thirdly, aside from the social media advertising scales, the Cronbach's alpha of the scales for compulsive buying (.80 and .82), customer satisfaction (.91), and life satisfaction (.87) were proven to be very high. According to DeVellis (2003), the Cronbach's alpha of a scale preferable has to be at least .80 to be used in a study. Therefore, the scales used in this study meet this requirement.

Moreover, for the sample, 152 young adults aged between 18 and 35 years old were included in this study. The sample size met the requirements of at least 150 respondents to conduct a reliable research of the relationships between the variables.

5.5 Future research

This study also opens the way for suggestions for future research. Firstly, future research should further examine digital advertising in relation to the cultivation theory. As digital media and digital advertising continues to grow over the years, it is important to further examine the effects of digital advertising on young adults. For instance, an effect of social media advertising exposure that is found in young adults, is compulsive buying. Moreover, this study mainly focused on the direct relationships between the variables, however, more research needs to be conducted on the possible indirect relationships of the variables. For instance, although no relevant findings direct relationship has been found between social media advertising and life satisfaction, I still would further investigate the relationship between social media advertising and life satisfaction, through for example materialism. This is because previous research for traditional advertising has shown that although no direct relationship on life satisfaction, however, an indirect relationship was found for materialism (Buijzen & Valkenburg, 2003; Oprea et al. 2012; Oprea et al., 2013). Therefore, more research can be done on these indirect relationships of social media advertising exposure on young adults.

Secondly, as aforementioned, no evidence was found for a decrease of life satisfaction after social media advertising exposure. However, future research should take into consideration that the effects of social media advertising in relation to cultivation might not be immediately evident. Therefore, conducting a longitudinal study might gain more insight about the social media advertising effects, i.e., life satisfaction among young adults, as the decrease is only apparent after a few years (Michel et al., 2019).

Thirdly, this study focused three types of social media advertisements on five social media platforms. However, there are also types of social media advertisements as well as other forms of digital advertising such as advergames. It is expected that businesses and marketers will invest more in digital advertising, therefore, researchers need to also examine these advertisements, as young adults are exposed to other forms of digital advertisements as well.

At last, as mentioned in the limitations, this study did not use a pre-validated scale measuring social media advertising exposure and social media advertising purchase likelihood. Moreover, for social media advertising exposure, it was measured through social media exposure, and therefore making it hard to find the difference between those two. Therefore, it is important for future research to develop a new digital advertising or social media advertising exposure scale, allowing researchers to distinguish the differences between digital media effects and digital media advertising effects.

References

- Ahmad, F., & Mahfooz, Y. (2019). Effect of viewership and information on materialism and compulsive buying behavior - A comparative study of television and digital advertising. *Archives of Business Research*, 7(12), 321–331.
<https://dx.doi.org/10.14738/abr.712.7616>
- Akbarov, S. (2020). The impact of social media marketing on consumer - Moderating role of gender and income. *Scholedge International Journal of Multidisciplinary & Allied Studies*, 7(7), 147–163. <https://dx.doi.org/10.19085/sijmas070701>
- Al Abbas, A., Chen, W., & Saberi, M. (2019). The impact of neuromarketing advertising on children: intended and unintended effects. *KnE Social Sciences*. Published.
<https://dx.doi.org/10.18502/kss.v3i25.5187>
- Albarran, A. B., Anderson, T., Bejar, L. G., Bussart, A. L., Daggett, E., Gibson, S., Gorman, M., Greer, D., Guo, M., Horst, J. L., Khalaf, T., Lay, J. P., McCracken, M., Mott, B., & Way, H. (2007). “What happened to our audience?” Radio and new technology uses and gratifications among young adult users. *Journal of Radio Studies*, 14(2), 92–101.
<https://dx.doi.org/10.1080/10955040701583171>
- Anderson, M. (2015, October 29). *The demographics of device ownership*. Pew Research Center.
<https://www.pewresearch.org/internet/2015/10/29/the-demographics-of-device-ownership/>
- Anderson, M., & Jiang, J. (2018, May 31). *Teens, social media & technology 2018*. Pew Research Center. <https://www.pewresearch.org/internet/2018/05/31/teens-social-media-technology-2018/>
- Arens, C., Weigold, M. F., & Arens, C. (2011). *Contemporary advertising and integrated marketing communications*. McGraw-Hill Education.
- Auxier, B., & Anderson, M. (2021, April 7). *Social media use in 2021*. Pew Research Center.
<https://www.pewresearch.org/internet/2021/04/07/social-media-use-in-2021/>
- Awais, M., Samin, T., & Bilal, M. (2012). Valuable internet advertising and customer satisfaction cycle (VIACSC). *International Journal of Computer Science Issues*, 9(1), 375–380.
https://www.researchgate.net/publication/321192968_Valuable_Internet_Advertising_and_Customer_Satisfaction_Cycle_VIACSC

- Backaler, J. (2018). Know the risks: The dark side of influencer collaboration. In J. Backaler (Ed.), *Digital influence* (pp. 137–154). London, UK: Palgrave Macmillan, Cham.
- Bakator, M., Đalić, N., Petrović, N., Paunović, M., & Terek, E. (2019). Transition economy and market factors: The influence of advertising on customer satisfaction in Serbia. *Economic Research-Ekonomska Istraživanja*, 32(1), 2293–2309.
<https://dx.doi.org/10.1080/1331677x.2019.1642787>
- Bao, T., Liang, B., & Riyanto, Y. E. (2019). Social media and life satisfaction: Evidence from chinese time-use survey. *SSRN Electronic Journal*. Published.
<https://dx.doi.org/10.2139/ssrn.3534633>
- Barger, V., Peltier, J. W., & Schultz, D. E. (2016). Social media and consumer engagement: A review and research agenda. *Journal of Research in Interactive Marketing*, 10(4), 268–287. <https://dx.doi.org/10.1108/jrim-06-2016-0065>
- Bashir, H., & Bhat, S. A. (2017). Effects of social media on mental health: A review. *The International Journal of Indian Psychology*, 4(3). <https://dx.doi.org/10.25215/0403.134>
- Berryman, C., Ferguson, C. J., & Negy, C. (2018). Social media use and mental health among young adults. *Psychiatric Quarterly*, 89(2), 307–314. <http://dx.doi.org/10.1007/s11126-017-9535-6>
- Bhaduri, G., & Ha-Brookshire, J. E. (2015). Gender differences in information processing and transparency: Cases of apparel brands' social responsibility claims. *Journal of Product and Brand Management*, 24(5), 504–517. <https://dx.doi.org/10.1108/JPBM-08-2014-0683>
- Bleier, A., & Eisenbeiss, M. (2015). The importance of trust for personalized online advertising. *Journal of Retailing*, 91, 390–409.
<http://dx.doi.org/10.1016/j.jretai.2015.04.001>
- Boerman, S., Kruikemeier, S. & Zuiderveen Borgesius, F. (2017). Online behavioral advertising: A literature review and research agenda. *Journal of Advertising*, 46(3), 363–376,
<http://dx.doi.org/10.1080/00913367.2017.1339368>
- Bottomley, P. A., Nairn, A., Kasser, T., Ferguson, Y. L., & Ormrod, J. (2010). Measuring childhood materialism: Refining and validating schor's consumer involvement scale. *Psychology and Marketing*, 27(7), 717–739. <https://dx.doi.org/10.1002/mar.20353>

- Brickman, P., & Campbell, D. T. (1971). Hedonic relativism and planning the good society. In M. H. Appley (Ed.), *Adaptation level theory: A symposium* (pp. 287–302). Academic Press.
- Bruggeman, H., Van Hiel, A., Van Hal, G., & Van Dongen, S. (2019). Does the use of digital media affect psychological well-being? An empirical test among children aged 9 to 12. *Computers in Human Behavior, 101*, 104–113.
<https://dx.doi.org/10.1016/j.chb.2019.07.015>
- Buijzen, M., & Valkenburg, P. M. (2003). The unintended effects of television advertising. *Communication Research, 30*(5), 483–503.
<https://dx.doi.org/10.1177/0093650203256361>
- Cannon, J. P., & Perreault Jr, W. D. (1999). Buyer–seller relationships in business markets. *Journal of Marketing Research, 36*(4), 439–460.
<https://dx.doi.org/10.2307/3151999>
- Chan, K., & Cai, X. (2009). Influence of television advertising on adolescents in China: An urban-rural comparison. *Young Consumers, 10*(2), 133–145.
<https://dx.doi.org/10.1108/17473610910964714>
- Cheng, H. (1997). ‘Holding up half of the sky’? A sociocultural comparison of gender-role portrayals in Chinese and US advertising. *International Journal of Advertising, 16*(4), 295–319. <https://dx.doi.org/10.1080/02650487.1997.11104698>
- Childers, C. C., Lemon, L. L., & Hoy, M. G. (2019). #Sponsored #Ad: Agency perspective on influencer marketing campaigns. *Journal of Current Issues and Research in Advertising, 40*(3), 258–274. <https://dx.doi.org/10.1080/10641734.2018.1521113>
- Chinchanachokchai, S., & de Gregorio, F. (2020). A consumer socialization approach to understanding advertising avoidance on social media. *Journal of Business Research, 110*, 474–483. <https://dx.doi.org/10.1016/j.jbusres.2020.01.062>
- Circella, G., Fulton, L., Alemi, F., Berliner, R. M., Tiedeman, K., Mokhtarian, P. L., & Handy, S. (2016). *What affects millennials’ mobility? Part I: Investigating the environmental concerns, lifestyles, mobility-related attitudes and adoption of technology of young adults in California*. National Center for Sustainable Transportation.
<https://escholarship.org/uc/item/6wm51523>

- Cotte, J., & Ratneshwar, S. (2003). Choosing leisure services: The effects of consumer timestyle. *Journal of Services Marketing, 17*(6), 558–572.
<https://dx.doi.org/10.1108/08876040310495609>
- Cotten, S.R., Shank, D.B., & Anderson, W.A. (2014). Gender, technology use and ownership, and media-based multitasking among middle school students. *Computers and Human Behavior, 35*, 99-106. <https://dx.doi.org/10.1016/j.chb.2014.02.041>
- De Vellis, R. F. (2003). *Scale development: Theory and implications* (2nd ed.). SAGE Publications.
- de Vries, L., Gensler, S., & Leeflang, P. S. (2012). Popularity of brand posts on brand fan pages: An investigation of the effects of social media marketing. *Journal of Interactive Marketing, 26*(2), 83–91. <https://dx.doi.org/10.1016/j.intmar.2012.01.003>
- Dholakia, R. R., Pederson, B., & Hikmet, N. (1995). Married males and shopping: Are they sleeping partners? *International Journal of Retail and Distribution Management, 23*(3), 27–34.
<https://www.thefreelibrary.com/Married+males+and+shopping%3a+are+they+sleeping+partners%3f-a017085956>
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment, 49*(1), 71–75.
https://dx.doi.org/10.1207/s15327752jpa4901_13
- Dittmar, H., & Drury, J. (2000). Self-image – Is it in the bag? A qualitative comparison between “ordinary” and “excessive” consumers. *Journal of Economic Psychology, 21*(2), 109–142. [https://dx.doi.org/10.1016/s0167-4870\(99\)00039-2](https://dx.doi.org/10.1016/s0167-4870(99)00039-2)
- Dittmar, H., Long, K., & Meek, R. (2004). Buying on the internet: Gender differences in on-line and conventional buying motivations. *Sex Roles, 50*, 423–444.
<https://dx.doi.org/10.1023/b:sers.0000018896.35251.c7>
- Drouin, M., Kaiser, D. H., & Miller, D. A. (2012). Phantom vibrations among undergraduates: Prevalence and associated psychological characteristics. *Computers in Human Behavior, 28*(4), 1490–1496. <https://dx.doi.org/10.1016/j.chb.2012.03.013>

- Dudovskiy, J. (n.d.). *Deductive approach (Deductive reasoning)*. Research Methodology. Retrieved June 18, 2021, from <https://research-methodology.net/research-methodology/research-approach/deductive-approach-2/>
- Eisend, M. (2018). Old meets new: How researchers can use existing knowledge to explain advertising in new media. *International Journal of Advertising*, 37(5), 665-670. <https://dx.doi.org/10.1080/02650487.2018.1493825>
- Faber, R. J., & O'Guinn, T. C. (1988). Compulsive consumption and credit abuse. *Journal of Consumer Policy*, 11(1), 97–109. <https://dx.doi.org/10.1007/bf00411522>
- Faber, R. J., & O'Guinn, T. C. (1989). Classifying compulsive consumers: Advances in the development of a diagnostic tool. *Advances in Consumer Research*, 16(1), 738–744. <https://www.acrwebsite.org/volumes/5965/volumes/v16/NA-16>
- Fine, C. (2008). Will working mothers' brains explode? The popular new genre of neurosexism. *Neuroethics*, 1(1), 69–72. <https://dx.doi.org/10.1007/s12152-007-9004-2>
- Frank, B., & Enkawa, T. (2009). Does economic growth enhance life satisfaction? *International Journal of Sociology and Social Policy*, 29(7/8), 313–329. <https://dx.doi.org/10.1108/01443330910975650>
- Galan, A.A., Cabanas, J.G., Cuevas, A., Calderon, M., & Rumin, R.C. (2019). Large-scale analysis of user exposure to online advertising on Facebook. *IEEE Access*, 7, 11959–11971. <https://dx.doi.org/10.1109/access.2019.2892237>
- Gallhofer, I. N., & Saris, W. E. (Eds.). (2014). *Design, evaluation, and analysis of questionnaires for survey research* (2nd ed.). Wiley. <https://dx.doi.org/10.1002/9781118634646>
- Gerbner, G. (1969). Toward “cultural indicators”: The analysis of mass mediated message systems. *AV Communication Review*, 17(2), 137–148.
- Granero, R., Fernández-Aranda, F., Mestre-Bach, G., Steward, T., Baño, M., del Pino-Gutiérrez, A., Moragas, L., Mallorquí-Bagué, N., Aymamí, N., Gómez-Peña, M., Tárrega, S., Menchón, J. M., & Jiménez-Murcia, S. (2016). Compulsive buying behavior: Clinical comparison with other behavioral addictions. *Frontiers in Psychology*, 7, 1–12. <https://dx.doi.org/10.3389/fpsyg.2016.00914>
- Gulati, P. M. (2009). *Research management: Fundamental & Applied research* (1st ed.). Global India Publications Pvt Ltd.

- Gupta, Shruti. (2013). A literature review of compulsive buying – A marketing perspective. *Journal of Applied Business and Economics*. 14. 43-49.
http://www.na-businesspress.com/JABE/GuptaS_Web14_1_1_.pdf
- Hausman, A. (2004). Modeling the patient-physician service encounter: Improving patient outcomes. *Journal of the Academy of Marketing Science*, 32(4), 403-417.
<https://dx.doi.org/10.1177/0092070304265627>
- Hawi, N. S., & Samaha, M. (2016). The relations among social media addiction, self-esteem, and life satisfaction in university students. *Social Science Computer Review*, 35(5), 576–586.
<https://dx.doi.org/10.1177/0894439316660340>
- Herbas-Torrico, B., Frank, B., Abulaiti, G., & Enkawa, T. (2010, October). *Analysis of the effect of happiness on customer satisfaction*. Asian Network for Quality 8th Congress, Delhi, India. <https://dx.doi.org/10.13140/2.1.3874.8485>
- Herman, E. (2016). *The cultivation effect of social network site use on consumers' brand attitudes, ethnic diversity perceptions and attitudes* [Doctoral dissertation, European University Viadrina]. <https://d-nb.info/1117473112/34>
- Hoyer, W. D., & MacInnis, D. J. (2007). *Consumer behavior* (Fourth ed.): Houghton Mifflin.
- IAB Netherlands & Deloitte. (2020). *Digital advertising spend 2019 the Netherlands*.
https://www.iab.nl/images/Publicaties/Ad_Spend_Study_2019.pdf
- Jahanshahi, A. A., Gashti, M. A. H., Mirdamadi, S. A., Nawaser, K., & Khaksar, S. M. S. (2011). Study the effects of customer service and product quality on customer satisfaction and loyalty. *International Journal of Humanities and Social Science*, 1(7), 253–260.
[http://www.ijhssnet.com/journals/Vol._1_No._7_\[Special_Issue_June_2011\]/33.pdf](http://www.ijhssnet.com/journals/Vol._1_No._7_[Special_Issue_June_2011]/33.pdf)
- Johnson, J. (2021, January 27). *U.S. adults who are online almost constantly 2019, by age*. Statista. <https://www.statista.com/statistics/497050/usa-adults-online-constantly-age/>
- Kasser, T., Ryan, R. M., Couchman, C. E., & Sheldon, K. M. (2004). Materialistic values: Their causes and consequences. *Psychology and Consumer Culture: The Struggle for a Good Life in a Materialistic World.*, 11–28. <https://dx.doi.org/10.1037/10658-002>
- Kaur, R. & Bhatt, L. (2016). Impact of stress on mental health of students: Reason and intervention, *International journal of education*, 5, 30-35.
<http://ijoe.vidyapublications.com/Issues/Vol5/Vol5-5.pdf>

- Kellett, S., & Bolton, J. V. (2009). Compulsive buying: A cognitive-behavioural model. *Clinical Psychology & Psychotherapy*, *16*(2), 83–99. <https://dx.doi.org/10.1002/cpp.585>
- Kennedy, B., & Funk, C. (2016, July 12). *28% of Americans are 'strong' early adopters of technology*. Pew Research Center. <https://www.pewresearch.org/fact-tank/2016/07/12/28-of-americans-are-strong-early-adopters-of-technology/>
- Kincl, T., & Štrach, P. (2018). Gender differences in online customer satisfaction: The asymmetric and nonlinear effect. *Services Marketing Quarterly*, *39*(3), 157–174. <https://dx.doi.org/10.1080/15332969.2018.1471954>
- Kotler, P., & Keller, K. (2012). *Marketing management* (14th ed.). Pearson Education.
- Krivobokova, O. (2009) Evaluating customer satisfaction as an aspect of quality management. *Proceedings of World Academy of Science, Engineering and Technology* *41*, 565-568. <https://dx.doi.org/10.5281/zenodo.1078346>
- Kwak, H., Zinkhan, G. M., & Dominick, J. R. (2002). The moderating role of gender and compulsive buying tendencies in the cultivation effects of TV show and TV advertising: A cross cultural study between the United States and South Korea. *Media Psychology*, *4*(1), 77–111. https://dx.doi.org/10.1207/s1532785xmep0401_04
- Lee, H., & Cho, C. H. (2019). Digital advertising: present and future prospects. *International Journal of Advertising*, *39*(3), 332-341. <https://dx.doi.org/10.1080/02650487.2019.1642015>
- Lee, E. Y., & Park, C. S. (2014). Does advertising exposure prior to customer satisfaction survey enhance customer satisfaction ratings? *Marketing Letters*, *26*(4), 513–523. <https://dx.doi.org/10.1007/s11002-014-9285-2>
- Lee, S., Park, J., & Lee, S. B. (2016). The interplay of Internet addiction and compulsive shopping behaviors. *Social Behavior and Personality: An International Journal*, *44*(11), 1901–1912. <https://dx.doi.org/10.2224/sbp.2016.44.11.1901>
- Leiss, W., Kline, S., Jhally, S., Botterill, J., & Asquith, K. (2018). *Social communication in advertising: Consumption in the mediated marketplace* (4th ed.). Routledge. <https://dx.doi.org/10.4324/9781315106021>
- Levy, P. S., & Lemeshow, S. (2008). *Sampling of populations: Methods and applications* (4th ed.). John Wiley & Sons.

- Lin, X., Featherman, M., & Sarker, S. (2017). Understanding factors affecting users' social networking site continuance: A gender difference perspective. *Information & Management*, 54(3), 383–395. <https://dx.doi.org/10.1016/j.im.2016.09.004>
- Lou, L. L., Yan, Z., Nickerson, A., & McMorris, R. (2012). An examination of the reciprocal relationship of loneliness and Facebook use among first-year college students. *Journal of Educational Computing Research*, 46(1), 105–117. <https://dx.doi.org/10.2190/EC.46.1.e>
- Luo, J., Yeung, P., & Li, H.J. (2020). Relationship between media multitasking and self-esteem among Chinese adolescents: Mediating roles of peer influence and family functioning. *Journal of Child and Family Studies*, 29, 1391–1401. <https://dx.doi.org/10.1007/s10826-019-01613-3>
- MaminaiAimee, R. (2019). A thorough literature review of customer satisfaction definition, factors affecting customer satisfaction and measuring customer satisfaction. *International Journal of Advanced Research*, 7(9), 828–843. <https://dx.doi.org/10.21474/ijar01/9733>
- Maqsood, K., & Javed, I. (2019). Impulse buying, customer's satisfaction and brand loyalty. *Journal of Economic Impact*, 1(2), 40–47. <https://dx.doi.org/10.52223/jei0102192>
- Marinković, V., Dorđević, A., & Kalinić, Z. (2019). The moderating effects of gender on customer satisfaction and continuance intention in mobile commerce: A UTAUT-based perspective. *Technology Analysis & Strategic Management*, 32(3), 306–318. <https://dx.doi.org/10.1080/09537325.2019.1655537>
- Marttila, E., Koivula, A., & Räsänen, P. (2021). Does excessive social media use decrease subjective well-being? A longitudinal analysis of the relationship between problematic use, loneliness and life satisfaction. *Telematics and Informatics*, 59, 1–11. <https://dx.doi.org/10.1016/j.tele.2020.101556>
- Marwick, A. E., & Boyd, D. (2014). Networked privacy: How teenagers negotiate context isocial media. *New Media & Society*, 16(7), 1051–1067. <https://dx.doi.org/10.1177/1461444814543995>
- Matthes, J., Schemer, C., & Wirth, W. (2007). More than meets the eye: Investigating the hidden impact of brand placements in television magazines. *International Journal of Advertising*, 26(4), 477 – 503. <https://dx.doi.org/10.1080/02650487.2007.11073029>
- Matthews, B., & Ross, L. (2010). *Research methods: A practical guide for the social sciences* (1st ed.). Pearson Education.

- McLuhan, M. (1964). *Understanding media: The extensions of man*. Signet Books.
- Michel, C., Sovinsky, M., Proto E., E., & Oswald, A. J. (2019). Advertising as a major source of human dissatisfaction: Cross-national evidence on one million europeans. In M. Rojas (Ed.), *The economics of happiness* (pp. 217–239). Springer Publishing.
https://dx.doi.org/10.1007/978-3-030-15835-4_10
- Micheli, M., Lutz, C., & Büchi, M. (2018). Digital footprints: An emerging dimension of digital inequality. *Journal of Information, Communication & Ethics in Society*, 16, 242–251.
<https://dx.doi.org/10.1108/JICES-02-2018-0014>
- Mikołajczak-Degrauwe, K., & Brengman, M. (2014). The influence of advertising on compulsive buying — The role of persuasion knowledge. *Journal of Behavioral Addictions*, 3(1), 65–73. <https://dx.doi.org/10.1556/jba.2.2013.018>
- Minnebo, J., & Eggermont, S. (2007). Watching the young use illicit drugs: Direct experience, exposure to television and the stereotyping of adolescents' substance use. *Young*, 15(2), 129–144. <https://dx.doi.org/10.1177/110330880701500202>
- Moksnes, U. K., & Espnes, G. A. (2013). Self-esteem and life satisfaction in adolescents—gender and age as potential moderators. *Quality of Life Research*, 22(10), 2921–2928.
<https://dx.doi.org/10.1007/s11136-013-0427-4>
- Mooi, E., Sarstedt, M., & Mooi-Reci, I. (2018). *Market research: The process, data, and methods using stata*. Springer Publishing. <https://dx.doi.org/10.1007/978-981-10-5218-7>
- Morgan, M., & Shanahan, J. (2008). Growing up with television: Cultivation processes. In J. Bryant & M. B. Oliver (Eds.), *Media effects: Advances in theory and research* (3rd ed., pp. 34–49). Routledge.
- Morgan, M., & Shanahan, J. (2010). The state of cultivation. *Journal of Broadcasting & Electronic Media*, 54, 337–355. <https://dx.doi.org/10.1080/08838151003735018>.
- Moriarty, S., Mitchell, N. D., Wells, W. D., Crawford, R., Brennan, L., & Spence-stone, R. (2014). *Advertising: Principles and practice*. Pearson Australia
- Muhammad, S. S., Dey, B. L., & Weerakkody, V. (2017). Analysis of factors that influence customers' willingness to leave big data digital footprints on social media: A systematic review of literature. *Information Systems Frontiers*, 20(3), 559–576.
<https://dx.doi.org/10.1007/s10796-017-9802-y>

- Muntinga, D.G., Moorman, M., & Smit, E.G. (2011) Introducing COBRAs, *International Journal of Advertising*, 30(1), 13-46. <https://dx.doi.org/10.2501/IJA-30-1-013-046>
- Nwokah, N. G., & Ngirika, D. (2018). Online advertising and customer satisfaction of E-tailing firms in Nigeria. *Intelligent Information Management*, 10(01), 16–41. <https://dx.doi.org/10.4236/iim.2018.101002>
- Odun, O. & Utulu, A.U. (2016). Is this new media superior to the traditional media for advertising. *Asian Journal of Economic Modelling*, 4(1), 57-69. <http://dx.doi.org/10.18488/journal.8/2016.4.1/8.1.57.69>
- O’Guinn, T. C., & Faber, R. J. (1989). Compulsive buying: A phenomenological exploration. *Journal of Consumer Research*, 16(2), 147–157. <https://dx.doi.org/10.1086/209204>
- Oliver, R. L. (2010). *Satisfaction: A behavioral perspective on the consumer: A behavioral perspective on the consumer* (2nd ed.). Routledge.
- Oprea, S.J. (2014). *Consumed by consumer culture? Advertising’s impact on children’s materialism and life satisfaction* [Doctoral dissertation, University of Amsterdam]. UvA-DARE. <https://hdl.handle.net/11245/1.410142>
- Oprea, S. J., Buijzen, M., & Valkenburg, P. M. (2012). Lower life satisfaction related to materialism in children frequently exposed to advertising. *Pediatrics*, 130(3), 486–491. <https://dx.doi.org/10.1542/peds.2011-3148>
- Oprea, S. J., Buijzen, M., & van Reijmersdal, E. A. (2016). The impact of advertising on children’s psychological wellbeing and life satisfaction. *European Journal of Marketing*, 50(11), 1975–1992. <https://dx.doi.org/10.1108/ejm-06-2015-0393>
- Oprea, S. J., Buijzen, M., van Reijmersdal, E. A., & Valkenburg, P. M. (2013). Children’s advertising exposure, advertised product desire, and materialism. *Communication Research*, 41(5), 717–735. <https://dx.doi.org/10.1177/0093650213479129>
- Orben, A., Dienlin, T., & Przybylski, A. K. (2019). Social media’s enduring effect on adolescent life satisfaction. *Proceedings of the National Academy of Sciences*, 116(21), 10226–10228. <https://dx.doi.org/10.1073/pnas.1902058116>
- Osei-Frimpong, K. (2019). Understanding consumer motivations in online social brand engagement participation. *International Journal of Retail & Distribution Management*, 47(5), 511–529. <https://dx.doi.org/10.1108/ijrdm-08-2018-0151>

- Pantic, I., Damjanovic, A., Todorovic, J., Topalovic, D., Bojovic-Jovic, D., Ristic, S., & Pantic, S. (2012). Association between online social networking and depression in high school students: Behavioral physiology viewpoint. *Psychiatria Danubina*, 24(1), 90–93.
https://www.researchgate.net/publication/221975813_Association_between_online_social_networking_and_depression_in_high_school_students_Behavioral_physiology_viewpoint
- Pavot, W., & Diener, E. (1993). Review of the satisfaction with life scale. *Journal of Psychological Assessment*, 5(2), 164–172. <https://dx.doi.org/10.1037/1040-3590.5.2.164>
- Pew Research Center. (2021, April 7). *Mobile fact sheet*.
<https://www.pewresearch.org/internet/fact-sheet/mobile/>
- Pittman, M., & Reich, B. (2016). Social media and loneliness: Why an Instagram picture may be worth more than a thousand Twitter words. *Computers in Human Behavior*, 62, 155-167.
<https://dx.doi.org/10.1016/j.chb.2016.03.084>
- Potter, W. J. (2014). A critical analysis of cultivation theory. *Journal of Communication*, 64(6), 1015–1036. <https://dx.doi.org/10.1111/jcom.12128>
- Priya, P., Baisya, K.R., & Sharma, S. (2010). Television advertisements and children's buying behaviour. *Marketing Intelligence & Planning*, 28(2), 151-169.
<https://dx.doi.org/10.1108/02634501011029664>
- Rauschnabel, P., Praxmarer, S., & Ivens, B. (2012). Social media marketing: how design features influence interactions with brand postings on Facebook. In M. Eisend, T. Langner, & S. Okazaki (Eds.), *Advances in advertising research: Current insights and future trends* (Vol. 3, pp. 153–161). Springer Gabler.
https://dx.doi.org/10.1007/978-3-8349-4291-3_12
- Ridgway, N. M., Kukar-Kinney, M., & Monroe, K. B. (2008). An expanded conceptualization and a new measure of compulsive buying. *Journal of Consumer Research*, 35(4), 622–639. <https://dx.doi.org/10.1086/591108>
- Roberts, J. A., Manolis, C., & Tanner, J. F. (J.), Jr. (2003). Family structure, materialism, and compulsive buying: A reinquiry and extension. *Journal of the Academy of Marketing Science*, 31(3), 300–311. <https://dx.doi.org/10.1177/0092070303031003007>
- Rosen, L.D., Whaling, K., Rab, S., Carrier, L.M., & Cheever, N.A. (2013). Is Facebook creating “iDisorders”? The link between clinical symptoms of psychiatric disorders and

- technology use, attitudes and anxiety. *Computers in Human Behavior*, 29, 1243–1254.
<https://dx.doi.org/10.1016/j.chb.2012.11.012>
- Rothberg, M. B., Arora, A., Hermann, J., St. Marie, P., & Visintainer, P. (2010). Phantom vibration syndrome among medical staff: A cross sectional survey. *British Medical Journal*, 341(12), 6914. <https://dx.doi.org/10.1136/bmj.c6914>
- Saima, & Khan, M. A. (2020). Effect of social media influencer marketing on consumers' purchase intention and the mediating role of credibility. *Journal of Promotion Management*, 27(4), 503–523. <https://dx.doi.org/10.1080/10496491.2020.1851847>
- Sampasa-Kanyinga, H., & Lewis, R. F. (2015). Frequent use of social networking sites is associated with poor psychological functioning among children and adolescents. *Cyberpsychology, Behavior, and Social Networking*, 18(7), 380–385.
<https://dx.doi.org/10.1089/cyber.2015.0055>
- Santora, J. (2021, April 22). *100 Influencer marketing statistics for 2021*. Influencer Marketing Hub. <https://influencermarketinghub.com/influencer-marketing-statistics/>
- Sarstedt, M., Bengart, P., Shaltoni, A. M., & Lehmann, S. (2017). The use of sampling methods in advertising research: A gap between theory and practice. *International Journal of Advertising*, 37(4), 650–663. <https://dx.doi.org/10.1080/02650487.2017.1348329>
- Segment. (2017). *The 2017 state of personalization report*. <http://grow.segment.com/Segment-2017-Personalization-Report.pdf>
- Shah, F. A., & Tandon, V. (2020). Role of compulsive buying behavior in gaming industry: a study of developing country. *Delhi Business Review*, 21(2), 39–47.
<https://dx.doi.org/10.51768/dbr.v21i2.212202005>
- Shanahan, J., & Morgan, M. (1999). *Television and its viewers: Cultivation theory and research* (1st ed.). Cambridge University Press.
- Shao, Z., Zhang, L., Li, X., & Guo, Y. (2019). Antecedents of trust and continuance intention in mobile payment platforms: The moderating effect of gender. *Electronic Commerce Research and Applications*, 33, 100823. <https://dx.doi.org/10.1016/j.elerap.2018.100823>
- Sharif, S. P., & Yeoh, K. K. (2018). Excessive social networking sites use and online compulsive buying in young adults: The mediating role of money attitude. *Young Consumers*, 19(3), 310–327. <https://dx.doi.org/10.1108/yc-10-2017-00743>

- Shoham, A., & Makovec Brenčič, M. (2003). Compulsive buying behavior. *Journal of Consumer Marketing*, 20(2), 127–138. <https://dx.doi.org/10.1108/07363760310464596>
- Shrum, L. J., Lee, J., Burroughs, J. E., & Rindfleisch, A. (2010). An online process model of second-order cultivation effects: How television cultivates materialism and its consequences for life satisfaction. *Human Communication Research*, 37(1), 34–57. <https://dx.doi.org/10.1111/j.1468-2958.2010.01392.x>
- Sirgy, M. J., Gurel-Atay, E., Webb, D., Cicic, M., Husic, M., Ekici, A., Herrmann, A., Hegazy, I., Lee, D. J., & Johar, J. S. (2012). Linking advertising, materialism, and life satisfaction. *Social Indicators Research*, 107(1), 79–101. <https://dx.doi.org/10.1007/s11205-011-9829-2>
- Sirgy, M. J., Lee, D.-J., Larsen, V., & Wright, N. (1998). Satisfaction with material possessions and general well-being: The role of materialism. *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 11, 103-118. https://www.researchgate.net/publication/309592636_Satisfaction_with_Material_Possessions_and_General_Well-Being_The_Role_of_Materialism
- Skues, J. L., Williams, B., & Wise, L. (2012). The effects of personality traits, self-esteem, loneliness, and narcissism on Facebook use among university students. *Computers in Human Behavior*, 28(6), 2414-2419. <https://dx.doi.org/10.1016/j.chb.2012.07.012>
- Sprout Social. (2020). *Sprout social index: Above & beyond* (No. 16). <https://media.sproutsocial.com/uploads/2020-Sprout-Social-Index-Above-and-Beyond.pdf>
- Stein, J.-P., Krause, E., & Ohler, P. (2019). Every (Insta)gram counts? Applying cultivation theory to explore the effects of Instagram on young users' body image. *Psychology of Popular Media Culture, OnlineFirst*. <https://dx.doi.org/10.1037/ppm0000268>
- Strickland, A. C. (2014). *Exploring the effects of social media use on the mental health of young adults*, [Master's Thesis, University of Central Florida Orlando] STARS. <https://stars.library.ucf.edu/honorsthesis1990-2015/1684>
- Stock, R. M. (2010). How does product program innovativeness affect customer satisfaction? A comparison of goods and services. *Journal of the Academy of Marketing Science*, 39(6), 813–827. <https://dx.doi.org/10.1007/s11747-010-0215-4>

- Tankovska, H. (2021, April 16). *Online social network activities in the Netherlands 2019, by age group*. Statista. <https://www.statista.com/statistics/575564/online-social-network-activities-in-the-netherlands-by-age-group/>
- The Merriam-Webster Dictionary. (n.d.). *Definition of social media*. Retrieved May 22, 2021, from <https://www.merriam-webster.com/dictionary/social%20media>
- Tobbin, P., & Adjei, J. (2012). Understanding the characteristics of early and late adopters of technology. *International Journal of E-Services and Mobile Applications*, 4(2), 37–54. <https://dx.doi.org/10.4018/jesma.2012040103>
- Valence, G., d’Astous, A., & Fortier, L. (1988). Compulsive buying: Concept and measurement. *Journal of Consumer Policy*, 11(4), 419–433. <https://dx.doi.org/10.1007/bf00411854>
- Van Der Veer, N., Boekee, S., & Hoekstra, H. (2020). Nationale social media onderzoek 2020: Het grootste trendonderzoek van Nederland naar het gebruik en de verwachtingen van social media [National social media research 2020: The biggest trend research of the Netherlands into the use and the expectations of social media]. <https://www.newcom.nl/socialmedia2020>
- van Raaij, W. (1981). Economic psychology. *Journal of Economic Psychology*, 1(1), 1–24. [https://dx.doi.org/10.1016/0167-4870\(81\)90002-7](https://dx.doi.org/10.1016/0167-4870(81)90002-7)
- Veenhoven, R. (1996). The study of life satisfaction. In W. E. Saris, R. Veenhoven, A. C. Scherpenzeel, & B. Bunting (Eds.), *A comparative study of satisfaction with life in Europe* (pp. 1–12). Eötvös University Press. <https://personal.eur.nl/veenhoven/Pub1990s/96d-full.pdf>
- Vogels, E. A. (2019, September 9). *Millennials stand out for their technology use, but older generations also embrace digital life*. Pew Research Center. <https://www.pewresearch.org/fact-tank/2019/09/09/us-generations-technology-use/>
- Westbrook, R. A., & Oliver, R. L. (1981). Developing better measures of consumer satisfaction: Some preliminary results. In K. B. Monroe & A. Abor (Eds.), *Advances in Consumer Research* (Vol. 8, pp. 94–99). Association for Consumer Research. <https://www.acrwebsite.org/volumes/9791/volumes/v08/NA%20-%202008>
- Wilczek, B. (2018). Media use and life satisfaction: The moderating role of social events. *International Review of Economics*, 65(2), 157–184. <https://dx.doi.org/10.1007/s12232-017-0290-7>

- Wilson, J. (2014). *Essentials of business research: A guide to doing your research project* (2nd ed.). SAGE Publications Ltd.
- Yao, M. Z., & Zhong, Z. J. (2014). Loneliness, social contacts and internet addiction: A cross-lagged panel study. *Computers in Human Behavior*, *30*, 164-170.
<https://dx.doi.org/10.1016/j.chb.2013.08.007>
- Yurchisin, J., & Johnson, K., K.P. (2004). Compulsive buying behavior and its relationship to perceived social status associated with buying, materialism, self-esteem, and apparel product involvement. *Family and Consumer Sciences Research Journal*, *32*(3), 291-314.
<https://dx.doi.org/10.1177/1077727X03261178>
- Zhou, S., Xue, F., & Zhou, P. (2002). Self-esteem, life-satisfaction and materialism: Effects of advertising images on Chinese college students. In C. R. Taylor (Ed.), *New directions in international advertising research* (Vol. 12, pp. 243–261). Emerald Publishing Limited.
[https://dx.doi.org/10.1016/S1474-7979\(02\)12029-1](https://dx.doi.org/10.1016/S1474-7979(02)12029-1)
- Zijlstra, T., Durand, A., Hoogendoorn-Lanser, S., & Harms, L. (2020). Early adopters of mobility-as-a-service in the Netherlands. *Transport Policy*, *97*, 197–209.
<https://dx.doi.org/10.1016/j.tranpol.2020.07.019>

Appendix A

Screen 1

Dear participant,

Welcome and thank you for participating in this survey. This survey is part of the Master thesis by Olivia Yuen, a Media & Business student at Erasmus University. The purpose of this survey is to get a better understanding of peoples' social media exposure, their online buying behavior, along with their satisfaction with products purchased online.

Please be aware that your participation is completely voluntarily, meaning that you can quit at any time during your participation. There are no right or wrong answers to the questions of this questionnaire. Furthermore, your personal information will be kept strictly confidential and the findings of this survey will be used solely for academic purposes. The results of this research study may be published, however your name will not be published. Therefore, your anonymity is guaranteed at all times. Completing the survey takes approximately 10 minutes.

If you have any questions during or after your participation, please feel free to contact me, Olivia Yuen (kyoliviayuen@eur.nl).

I understand the above and agree on participating in this research.

Screen 2

Before continuing with this survey, please answer the following to determine whether you are eligible for participation.

(Q1) What is your age? Please use the dropdown menu:

< Dropdown answer options >

- 17 years or younger
- 18
- 19
- 20
-
-
- 34
- 35
- 36 years or older

(Q2) Do you currently live in The Netherlands?

- Yes
- No

(Q3) Do you use social media (e.g., Facebook, Instagram, TikTok)

- Never
- Seldom
- Sometimes
- Frequently
- Always

At this point, respondents who are 17 years or younger and are not living in The Netherlands, and never use social media will be forwarded to an automated message saying “Thank you for your interest in this study. Regrettably, you do not fit the target group of interest.”

Screen 3

Thank you for your answers. You fit the target group of interest. Before continuing with this survey, please answer the following two questions about your demographic background.

(Q4) What gender do you identify with?

- Male
- Female
- Other
- Prefer not to say

(Q5) What is the highest educational level that you have followed?

- Primary school
- Secondary school/ High school
- Vocational degree (MBO)
- University of Applied Sciences degree (HBO)
- Bachelor's degree (university)
- Master's degree (university)
- Ph.D., MBA, or other equivalent
- Other, namely

Screen 4

On the next page the main of the survey will start. The first questions pertain to your use of modern technology and social media.

Screen 5

(Q6) How often do you use a PC or laptop?

- Never
- Almost never
- A few times a month

- A few times a week
- (Almost) every day

Respondents who response 'never' will skip Q7 and redirected to Q8

(Q7) On days that you use a PC or laptop, how long do you use the PC or laptop?

- 0 to 1 hour(s) per day
- 1 to 2 hour(s) per day
- 2 to 3 hours per day
- 3 to 4 hours per day
- More than 4 hours per day

(Q8) How often do you use a tablet?

- Never
- Almost never
- A few times a month
- A few times a week
- (Almost) every day

Respondents who response 'never' will skip Q9 and redirected to Q10

(Q9) On days that you use a tablet, how long do you use the tablet?

- 0 to 1 hour(s) per day
- 1 to 2 hour(s) per day
- 2 to 3 hours per day
- 3 to 4 hours per day
- More than 4 hours per day

(Q10) How much time on average do you spend on your mobile phone?

- I don't own a mobile phone

- 0 to 1 hour(s) per day
- 1 to 2 hour(s) per day
- 2 to 3 hours per day
- 3 to 4 hours per day
- More than 4 hours per day

Screen 6

On the next page, you will be asked how much time you spend on average on each social media platform on different devices. This is categorized into two groups, the first one is your time on average you spend for social media total on your pc, laptop, and/or tablet, and the second group is your time on average you spend for social media on your mobile phone.

Screen 7

Please select the box that is applicable to you on how much time on average you spend on the social platforms given below in total on your PC, laptop, and/or tablet.

PC / laptop /and/or tablet	Never	0 to 1 hour (s) per day	1 to 2 hour(s) per day	2 to 3 hours per day	3 to 4 hours per day	More than 4 hours per day
(Q11_1) Facebook	1	2	3	4	5	6
(Q11_2) Instagram	1	2	3	4	5	6
(Q11_3) YouTube	1	2	3	4	5	6
(Q11_4) Snapchat	1	2	3	4	5	6
(Q11_5) TikTok	1	2	3	4	5	6

Mobile phone	Never	0 to 1 hour (s) per day	1 to 2 hour(s) per day	2 to 3 hours per day	3 to 4 hours per day	More than 4 hours per day
(Q12_1) Facebook	1	2	3	4	5	6
(Q12_2) Instagram	1	2	3	4	5	6
(Q12_3) YouTube	1	2	3	4	5	6
(Q12_4) Snapchat	1	2	3	4	5	6
(Q12_5) TikTok	1	2	3	4	5	6

Screen 8

In the previous part, you have filled in how often you use social media. Often, advertisements are being shown on social media.

For this survey, we will discuss three different types of advertisements on social media. The first type of advertisements is sponsored posts of brands by influencers.

On the next page, questions will be asked whether you have seen sponsored post from influencers and how often you see these sponsored posts on social media.

Screen 9

The picture below is an example of a sponsored post from an influencer on Instagram.



(Q13) Have you seen advertisements sponsored posts from influencers on social media?

- Yes
- No

(Q14) How often do you see a sponsored posts from influencers on social media?

- Never
- Almost never
- Once a month
- A few times a month
- Once a week
- A few times a week

- (Almost) every day
-

Screen 10

On the next page, questions will be asked about whether you have **bought products after seeing sponsored posts from influencers and how often you buy from these sponsored posts on social media.**

Screen 11

(Q15) Have you bought products after these sponsored posts from influencers on social media?

- Yes
- No

(Q16) How often do you buy products after you have seen it from sponsored posts from influencers on social media?

- Never
- Almost never
- Once a month
- A few times a month
- Once a week
- A few times a week
- (Almost) every day

(Q17) Please select for each platform how often you buy products from after seeing sponsored posts.

Sponsored posts	Never	Very rarely	Rarely	Occasionally	Frequently	Very frequently
(Q17_1) Facebook	1	2	3	4	5	6
(Q17_2) Instagram	1	2	3	4	5	6
(Q17_3) YouTube	1	2	3	4	5	6
(Q17_4) Snapchat	1	2	3	4	5	6
(Q17_5) TikTok	1	2	3	4	5	6

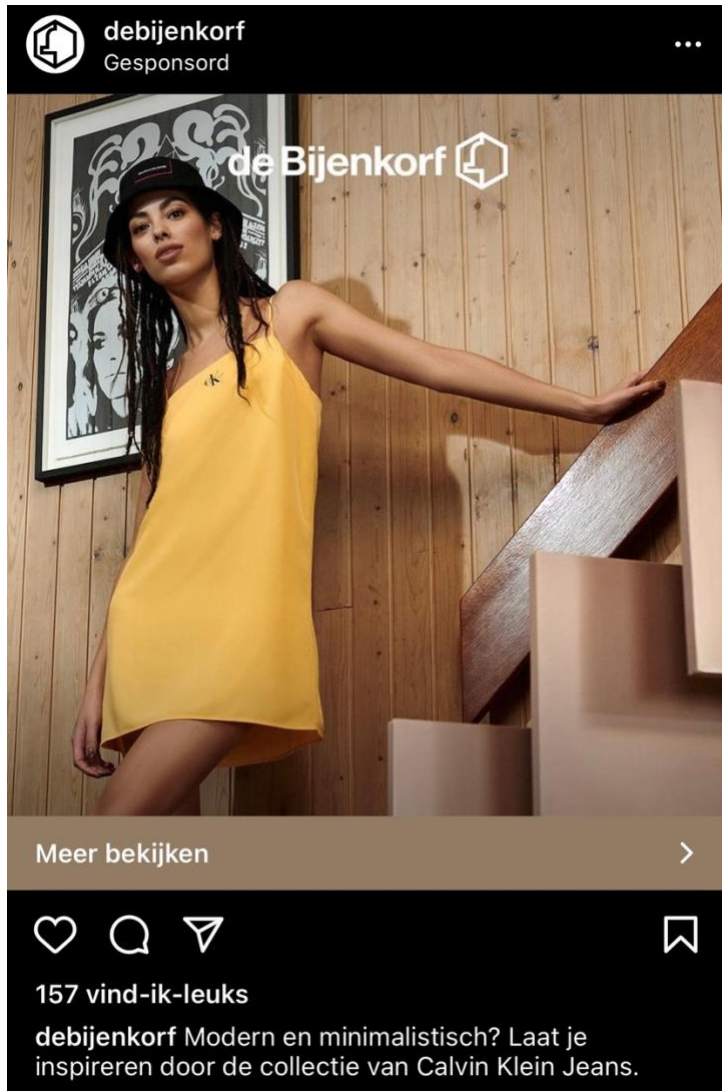
Screen 12

The second type of advertisement is personalized advertising, tailored based on your online profile of interests.

On the next page, questions will be asked on whether you have seen personalized advertisements and how often you see these personalized advertisements on social media.

Screen 13

Below is an example of a personalized advertisement on Instagram.



(Q18) Have you seen personalized advertisements on social media?

- Yes
- No

(Q19) How often do you see personalized advertisements on social media?

- Never
- Almost never
- Once a month
- A few times a month

- Once a week
 - A few times a week
 - (Almost) every day
-

Screen 14

On the next page, questions will be asked whether you have **bought products after seeing personalized advertisements and how often you buy from these personalized advertisements on social media.**

Screen 15

(Q20) Have you bought products after seeing personalized advertisements on social media?

- Yes
- No

(Q21) How often do you buy products after you have seen it from personalized advertisements on social media?

- Never
- Almost never
- Once a month
- A few times a month
- Once a week
- A few times a week
- (Almost) every day

(Q22) Please select for each platform how often you buy products from after seeing personalized advertisements.

Personalized advertisements	Never	Very rarely	Rarely	Occasionally	Very frequently	Always
(Q22_1) Facebook	1	2	3	4	5	6
(Q22_2) Instagram	1	2	3	4	5	6
(Q22_3) YouTube	1	2	3	4	5	6
(Q22_4) Snapchat	1	2	3	4	5	6
(Q22_5) TikTok	1	2	3	4	5	6

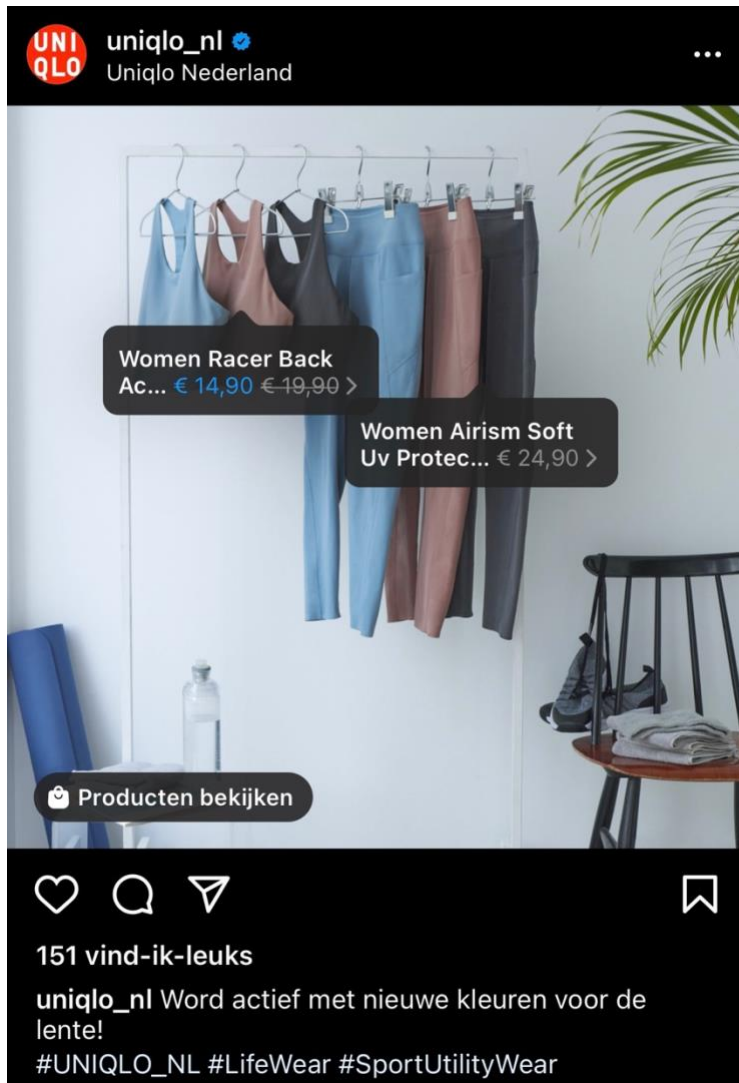
Screen 16

The third type of advertisement is posted on the brand own social media account, this is a brand or company you already have liked or followed on social media.

On the next page, questions will be asked on whether you have seen advertisements posted on a brand's own social media account you already follow/like and how often you see these brands' own social media advertisements on social media.

Screen 17

Below is an example of a brand's own social media advertisement on Instagram.



(Q23) Have you seen brands' own social media advertisements on social media?

- Yes
- No

(Q24) How often do you see brands' own social media advertisements on social media?

- Never
- Almost never
- Once a month
- A few times a month
- Once a week

- A few times a week
 - (Almost) every day
-

Screen 18

On the next page, questions will be asked about whether you have **bought products after seeing brands' own social media advertisements and how often you buy from these brands' own advertisements social media on social media.**

Screen 19

Q25) Have you bought products after seeing brands' own social media advertisements on social media?

- Yes
- No

(Q26) How often do you buy products after you have seen it from brands' own social media advertisements on social media?

- Never
- Almost never
- Once a month
- A few times a month
- Once a week
- A few times a week
- (Almost) every day

(Q27) How often are you more likely to buy products from brands' own social media advertisements on the given platforms below? Please select for each platform how often you buy products from after seeing brands' own social media advertisements.

Brands' own social media advertisements	Never	Very rarely	Rarely	Occasionally	Very frequently	Always
(Q27_1) Facebook	1	2	3	4	5	6
(Q27_2) Instagram	1	2	3	4	5	6
(Q27_3) YouTube	1	2	3	4	5	6
(Q27_4) Snapchat	1	2	3	4	5	6
(Q27_5) TikTok	1	2	3	4	5	6

Screen 20

(Q28) Before continuing on with this survey, please answer the following question:

As a recap, did you ever buy something after seeing one of the three forms (sponsored posts, personalized advertising, and brands' own social media advertising)?

- Yes
- No

At this point, respondents that have selected 'no' will be forwarded to screen 26 for the Life Satisfaction. Respondents that have selected 'yes' will be forwarded to screen 21 for Compulsive Buying Scale.

Screen 21

In the previous part, you have filled in how often you see different kinds of advertisements separately (sponsored ads, personalized advertising, and brands' own social media advertising) on social media and the products you have bought after seeing advertisements.

Continuing on in this survey, the different kinds of advertisements are now combined together when referring to 'social media advertisements'.

On the next page, questions will be asked about products you have bought (online and/or in-store) after seeing them from social media advertisements.

Screen 22

Below are seven statements you may agree or disagree. For each statement, please select the answer option for each statement that best indicates **how you feel about products you have bought after you have seen them from social media advertisements.**

	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
(Q29_1) I have often bought a product that I did not need, while knowing that I have very little money left.	1	2	3	4	5	6	7
(Q29_2) I am a reckless spender.	1	2	3	4	5	6	7
(Q29_3) I often buy things even though I can't afford them.	1	2	3	4	5	6	7
(Q29_4) When I have money, I cannot help but spend part or the whole of it.	1	2	3	4	5	6	7
(Q29_5) Much of my life centers around buying things.	1	2	3	4	5	6	7

(Q29_6) For me, shopping is a way of facing the stress of my daily life and relaxing.	1	2	3	4	5	6	7
(Q29_7) I sometimes feel that something inside pushes me to go shopping.	1	2	3	4	5	6	7

Screen 23

Think of your latest purchase you have bought (online and/or in-store) after seeing it from social media advertisements. On the next page, questions will be asked on how satisfied you are with the **latest item/product you have bought (online and/or in-store) after seeing it from social media advertisements.**

Screen 24

Below are twelve statements in which you may agree or disagree. For each statement, please select the answer option for each statement that best indicates how you feel about **how satisfied you are with the latest item/product you have bought after seeing these social media advertisements.**

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
(Q30_1) This is one of the best items I could have bought	1	2	3	4	5
(Q30_2) This item is exactly what I need	1	2	3	4	5

(Q25_3) This item hasn't worked out as well as I thought it would.	1	2	3	4	5
(Q30_4) I am satisfied with my decision to buy this item.	1	2	3	4	5
(Q30_5) Sometimes I have mixed feelings about keeping it.	1	2	3	4	5
(Q30_6) My choice to buy this item was a wise one	1	2	3	4	5
(Q30_7) If I could do it over again, I'd buy a different make/model.	1	2	3	4	5
(Q30_8) I have truly enjoyed this item.	1	2	3	4	5
(Q30_9) I feel bad about my decision to buy this item.	1	2	3	4	5
(Q30_10) I am not happy that I bought this item.	1	2	3	4	5
(Q30_11) Owning this item has been a good experience.	1	2	3	4	5
(Q30_12) I'm sure it was the right thing to buy this item.	1	2	3	4	5
(Q30_13) I'm satisfied with all my purchases in general	1	2	3	4	5

(Q30_13) I'm satisfied with all my purchases in general

- Strongly agree
 - Somewhat agree
 - Neither agree nor disagree
 - Somewhat disagree
 - Strongly disagree
-

Screen 25

The next page contains the last questions of this survey. Questions will be asked about how satisfied you are with yourself and your life.

Screen 26

Below are five statements with which you may agree or disagree. For each statement, please select the one answer option which best indicates how you feel about that statement.

	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
(Q31_1) In most ways my life is close to my ideal.	1	2	3	4	5	6	7
(Q31_2) The conditions of my life are excellent.	1	2	3	4	5	6	7
(Q31_3) I am satisfied with my life.	1	2	3	4	5	6	7
(Q31_4) So far I have gotten the important things I want in life.	1	2	3	4	5	6	7
(Q31_5) If I could live my life over, I would change almost nothing.	1	2	3	4	5	6	7

Screen 27 Ending Screen

(Q32) You have now reached the end of the questionnaire. Thank you for your time and effort. Your help is highly appreciated! If you have questions or comments about this questionnaire, please list them below.

[Add text box]

PLEASE PRESS THE NEXT BUTTON TO STORE ALL YOUR ANSWERS.
