

Nijmegen School of Managements

Business administration master specialization: marketing

**The bright side of materialism: Disentangling the relationship between
materialism and purchase intention in social influencer marketing**

Date: 14-06-2020

Joeri van Kuppeveld

S4364325

Supervisor: Dr. N. Belei

Second examiner: Dr. S. Ritter

ABSTRACT

While materialism is a topic which is heavily researched (Chia, 2010; Duh, 2015; Schaefer, Hermans, & Parker, 2004; Duh, 2015; Kamal, Chu, & Pedram, 2019; Muncy & Eastmen, 1998; Wella Yanti, Martini, & Sapta, 2019), research regarding different forms of materialism and their impact on social relationships is still sparse (Pieters, 2013). This study aimed to advance the existing literature by finding out which influence the three different types of materialism have on parasocial relationships and how this influences purchase intention. The conceptual model for this study was composed of 5 variables (material measure, material medicine, material mirth, PSR, and purchase intention) and was tested using a multiple hierarchal regression and a simple regression. Results indicated that the subtypes of materialism that are extrinsically motivated and based on comparison (material measure and material medicine) had a positive influence on PSR, while the subtype of materialism that is intrinsically motivated (material mirth) had a negative influence on PSR. Additionally, PSR showed to have a positive effect on purchase intention.

Based on these results it can be concluded that materialists who are extrinsically motivated form more parasocial relationships than materialists that are intrinsically motivated. It can be explained that comparing's one own success and future with an influencer that is thought of as being more successful or having a better future leads to the follower forming parasocial relationships with this influencer. The forming of these parasocial relationships eventually lead to increased purchase intention. Finally concluding that materialism increases the extent to which parasocial relationships are formed in an online context, thereby making materialistic customers more susceptible to buying items that are advertised through social influencer marketing

This study yields multiple contributions. Firstly, it sets the first steps in finding out how materialism and its subtypes directly influence relationships or in this case parasocial relationships (Pieters, 2013). Secondly, it opposed previous research that stated that materialism leads to worse relationships (Awanis et al., 2017; Gentina et al., 2018; Kasser & Ryan, 2001; Pieters, 2013; Van Boven et al., 2010).). Thirdly, it reaffirms Pieters' (2013) statement that materialism should be looked in subtypes. Lastly, it paints a clear picture of the role materialism plays in influencer marketing and purchase intention. Focusing on people that experience material measure or material medicine might help marketers in increasing PSR and therefore making these people more susceptible to buy and gaining the eventual goal of marketing which is increasing purchase intention.

INTRODUCTION

For most of us, a life without social media is nowadays unimaginable. Social media is getting more popular every year, as 3.1 billion people are expected to use social media in 2021; almost half a billion more than the number of individuals using it in 2018 (Clement, 2019). Digitalization and the upcoming rise of the internet have made social media one of the most important ways for us to communicate, as well as for companies to distribute product information and advertise their products. Social media provides enormous opportunities: not only is the number of people that are active on social media rising, but they are also getting more engaged, spending more time on social media each day (Alalwan, 2018).

This rise in the number of social media users and their increasing engagement encourages companies to find new marketing strategies to profit from these growing media channels. Social media is among the best possibilities available to get in touch with potential customers. It is important to bare in mind that the use of social media for commercial purposes is different from traditional marketing: *“It contradicts the primary reasons for consumers to interact with the media, which are seldom commercial”* (Liljander, Gummerus & Söderlund, 2015, p. 611). For this reason, companies were in need of new strategies to get in touch with their consumers. This search for new strategies resulted in a new form of marketing: influencer marketing.

Influencer marketing

Influencer marketing constitutes a new research field, involving social media influencers, or simply ‘influencers’, who promote a brand or product on social media, either in cooperation with a company or not (Tabellion & Esch, 2019). *“Social media influencers are referred to as people who have built a sizeable social network of people following them. In addition, they are seen as a regard for being a trusted tastemaker in one or several niches.”* (De Veirman, Cauberghe & Hudders, 2017, p. 798). Their trustworthiness together with the expertise of the influencer, the attractiveness of the source, and the experienced similarity between the influencer and the follower act as key factors in determining whether a customer forms a relationship with the influencer and therefore truly gets influenced (Lou & Kim, 2019; Tabellion & Esch, 2019). These one-sided and non-reciprocal relationships that audiences form with online figures or celebrities, and in this case with the social influencer, are also known as parasocial relationships (Lou & Kim, 2019).

Parasocial relationships

The term of parasocial relationships (PSR) was initially used to describe the intimate and long term connections that audiences form with celebrities (Horton & Wohl, 1956), but

nowadays is possibly even more relevant to describe the relationships that individuals establish with social influencers through following them on social networking sites (Kim, Ko, & Kim, 2015; Lou & Kim, 2019). These parasocial relationships are thought to increase favorability towards the brand promoted by the influencer and thereby make consumers more susceptible to buy, thereby acting as the underlying mechanism through which influencer marketing increases purchase intention. Hence, increasing customers' purchase intentions constitutes the main goal of advertising and influencer marketing (Cramphorn & Meyer, 2009). The driving force that underlies this relationship between parasocial relations and purchase intention is materialism (Lou and Kim, 2019).

Materialism

Over the past few decades, materialism and its many consequences have been a topic of large interest amongst academics. One of the reasons for this interest is the common concern about the younger generations becoming more and more materialistic, as the importance placed on material values becomes an increasingly important aspect of many people's lives (Chia, 2010; Duh, 2015; Schaefer, Hermans, & Parker, 2004). Materialism can be defined as the extent to which a person values possessions and their belief that the acquisition of material possessions increases their happiness and life satisfaction (Lee & Ahn, 2016).

On the one hand, materialism can be beneficial for economic wealth through underlying mechanisms such as purchase intention (Duh, 2015; Kamal, Chu, & Pedram, 2019; Muncy & Eastman, 1998; Wella Yanti, Martini, & Sapti, 2019). Purchase intention refers to a customer's tendency to buy a certain product (Martins et al., 2019; Schlosser, White, & Lloyd, 2006), such that an increase in purchase intention reflects an increase in the probability of a certain product being bought.

On the other hand, materialism has a negative impact on subjective well-being, as well as a tendency to "crowd out" social relationships (Awani, Schlegelmilch, & Cui, 2017; Gentina, Shrum, & Lowrey, 2018; Pieters, 2013; Van Boven, Campbell, & Gilovich, 2010). The latter can be illustrated by findings indicating that individuals who are more materialistic tend to attach less value to their social relationships (Kasser & Ryan, 2001) and tend to rate them as less favorable. This phenomenon is further supported by the fact that those social relationships are not only rated as less favorable by the individuals themselves, but also by their friends and family (Solberg, Diener, & Robinson, 2004). For these reasons, materialism has sometimes even been said to be detrimental to society, despite its economic benefits (Burroughs & Rindfleish, 2002; Van Boven et al., 2010).

The relationship between materialism and purchase intention appears to be well established (Duh, 2015; Kamal et al., 2019; Muncy & Eastmen, 1998; Wella Yanti et al., 2019). In addition, parasocial relationships have been shown to have a positive influence on purchase intention (Lou & Kim, 2019). However, materialism is also found to have negative consequences for the social relationships of individuals (Awanis et al., 2017; Gentina et al., 2018; Kasser & Ryan, 2001; Pieters, 2013; Van Boven et al., 2010), and it is thinkable that these may undermine the effectiveness of social influencer marketing. More specifically, materialism may not always be bad in that it can help cut through the exposure to influencer marketing and therefore decreases purchase intention. The aim of the current study therefore is to examine whether materialism decreases the extent to which parasocial relationships are formed in an online context and thereby making materialistic customers less susceptible to buying items that are advertised through social influencer marketing.

Research Question and Contributions

The main research question to be answered in the current study is whether materialism decreases the extent to which parasocial relationships are formed in an online context, thereby making materialistic customers less susceptible to buying items that are advertised through social influencer marketing. The contribution of the current study is fourfold.

First of all, it will provide additional insight into the specific role of materialism in social relationships by further looking into how materialism influences the parasocial relations that audiences form with social influencers. As it turns out, different types of materialism have a differential impact on social relationships (Pieters, 2013), such that the effect of materialism on parasocial relationships may not be unidimensional either. Disentangling these distinct effects of different subtypes of materialism means responding to the stressed need to further clarify how materialism influences social relationships (Pieters, 2013).

Secondly, it aims to replicate the effect of parasocial relationships on purchase intentions (Cramphorn & Meyer, 2009; Kim et al., 2015; Lou & Kim, 2019). To the best knowledge of the author, the role of parasocial relationships in increasing purchase intentions has to date not even been studied a handful of times. Despite the results of the studies that have taken place being unambiguous, accepting this effect for a scientific fact demands more replication; a need that is emphasized by a substantial number of recent studies in the social sciences failing to replicate their original results (Maxwell, Lau, Howard, Anderson, & Kazak, 2015). Acknowledging this need, this study aims to gather further support for the acceptance as well as the generalization of the effect of parasocial relationships on purchase intentions in an online context.

Thirdly, it will lead to a better understanding of the effect of materialism on purchase intentions through social influencer marketing. Even though materialism is generally known for its enhancing effect on buyers' susceptibility to buy, the current study approaches it from a different angle and looks into how materialism can decrease this eagerness to consume. This is done by means of examining the impact of materialism on parasocial relationships and the effect that flows from parasocial relations to purchase intention. It may possibly be the case that, however counterintuitive, more materialism does not always lead to increased purchase intention, meaning that this study provides novel and specific insights into the relationship between materialism on purchase intention as mediated by parasocial relationships.

Lastly, it will add to the existing literature concerning the relatively new topic of online influencer marketing, by means of further investigating the factors that influence the process. More in-depth research about this topic will help the marketers in forming a better understanding about the process of influencer marketing and, in turn, what aspects should be focused on. For instance, it can provide marketers with insights into what target groups are most susceptible to this marketing strategy. If materialistic individuals are less susceptible to influencer marketing, this means that the target group is formed by less or even non-materialistic individuals. This can be beneficial, for the reason that these non-materialistic individuals can be thought of as the ones who usually are less susceptible to marketing strategies trying to convince them of buying.

THE THREE SUBTYPES OF MATERIALISM

Richins and Dawson (1992, p. 308) define materialism as "*a set of centrally held beliefs about the importance of possessions in one's life*". Subsequently, Burroughs and Rindfleisch (2002, p. 349) extend the definition by further describing materialism as "*the value a consumer places on the acquisition and possession of material objects*". It is this importance of possession and consumption that distinguishes materialism from any other personality trait (Lee & Ahn, 2016). Even though based on these definitions it can be generally described as the value one attaches to possessions and the belief that the acquisition of material possessions increases one's happiness and life satisfaction (Lee & Ahn, 2016), materialism certainly is not a unidimensional construct. For instance, Richins and Dawson (1992) proposed three subtypes of materialism: (1) acquisition centrality, (2) the role of acquisition in the pursuit of happiness, and (3) the role of possessions in defining success; sometimes more briefly referred to as mirth, measure, and medicine, respectively (Pieters, 2013). It is important to distinguish between those subtypes in the current study, for the reason that they might lead to different outcomes.

Material Mirth

The first subtype, acquisition centrality, involves the gratification consumers experience when they acquire or own material possessions; the goal is to consume a large number of things (Richins & Dawson, 1992). Acquisition centrality has been described as “*consumption for the sake of consumption*” (Csikszentmihalyi & Rochberg-Halton, 1978, p. 231). The lack of comparison with something or someone else and the genuine enjoyment of buying points toward a process of intrinsic motivation in this subtype of materialism. A first behavioral example that characterizes acquisition centrality is buying things because it gives pleasure, not because they need it. Additionally, those individuals usually enjoy spending money on impractical things and creating a life that is as luxurious as it can be (Richins & Dawson, 1992). Note that the acquisition and the eventual possession of items are important here, but without comparing these possessions to those of others and largely independent of the monetary value or status of the item. Hence, here possessions are a means for creating a happy life of hedonism, or material *mirth* (Pieters, 2013).

Material Medicine

The second subtype, which is the role of acquisition in the pursuit of happiness, involves the feeling that material possessions are the most important way of increasing personal happiness and social progress (Ward & Wackman, 1971). As opposed to what is the case in material mirth, here happiness is not just chased through purchasing items in general, but specifically through comparing one’s own suboptimal current situation to a better future with more or nicer possessions, subsequently leading individuals to purchase those items. Important is that here, individuals are extrinsically motivated by a future ideal that they want to achieve through the purchase of certain items. There is a deficit in happiness that is not attempted to be solved by means of experiences, personal relationships, or achievements, but through acquisition and possessions (Richins & Dawson, 1992). This subtype of materialism is for example characterized by the belief that the ability to afford more things will lead to more happiness. Furthermore, individuals are convinced that life would be better with certain items that they do not own yet, such that they wish to purchase those items (Richins & Dawson, 1992). Following Pieters (2013), this subtype of materialism can be regarded as a material *medicine* because here possessions form a drug, with the goal of improving happiness.

Material Measure

Lastly, the third subtype of materialism is possession-defined success, where the number, quality, and value of possessions accumulated define one’s success (Richins & Dawson, 1992). Possessions are looked at in terms of their monetary worth instead of the

satisfaction they yield, and success is based on a comparison with others based on their material possessions. It is this comparison with others that distinguishes possession-defined success from the two subtypes of materialism: here, it is all about status. Again, individuals are extrinsically motivated, but this time by others and what those others possess. To further illustrate, this subtype is characterized by the admiration of individuals with expensive possessions, such as big houses, expensive cars, and exclusive clothes. Other examples of what characterizes possession-defined success are the belief that the acquisition of certain material possessions is one of the most important achievements in life and the conviction that success can be measured in life through the things one owns (Richins & Dawson, 1992). Overall, here possessions are seen as a material *measure* of success (Pieters, 2013).

Materialism and Parasocial Relationships

As mentioned earlier, both material medicine and material measure are extrinsically motivated by the future and by others, respectively (Pieters, 2013). Such extrinsic motivations lead to feelings of less autonomy and more external control, which in turn is associated with stronger negative consequences for an individual's well-being and relationships (Deci & Ryan, 2000). In addition, material medicine is characterized by attaching less value to personal relationships as a means for improving one's happiness, and more so to material possessions. Material measure as well is extrinsically motivated, but, on its turn, is strongly characterized by comparing one's possessions to those of others, such that a certain kind of competition between oneself and others is inherent to this subtype of materialism. In line with these characterizations, both material medicine and material measure negatively impact the social relationships of an individual by reducing the satisfaction they get from friendships, as well as by increasing loneliness over time (Ahuvia & Wong, 1995; Pieters, 2013). On the contrary, material mirth does not involve any future ideals or comparisons with others but evolves around the gratification one experiences when acquiring or owning material possessions. Thereby, it can be said to be less extrinsically motivated and more intrinsically motivated than the other two subtypes of materialism. This idea is supported by the finding that material mirth decreases loneliness over time, without affecting or being affected by one's satisfaction with friendships (Pieters, 2013).

With regard to the main research question of the current study, being whether materialism decreases the extent to which parasocial relationships are formed in an online context, three hypotheses can be formulated based on the results outlined above. It is hypothesized that whereas (H1a) material medicine and (H1b) material measure are negatively

related to the strength of the parasocial relationships between individuals and the influencers they are following, (H1c) material mirth is positively related to this relationship.

PURCHASE INTENTIONS AS A RESULT OF PARASOCIAL RELATIONSHIPS

The enormous popularity of social media nowadays provides huge opportunities for companies to advertise their products. However, because users seldom engage in social media for commercial purposes (Liljander et al., 2015), new strategies were needed in order to get in touch with consumers through social media. This is how social influencer marketing came into play, which involves influential individuals promoting a brand or product through their social media channel (Tabellion & Esch, 2019). These influential individuals are referred to as social media influencers, or simply ‘influencers’, and they represent a relatively new type of independent third party endorser who built a substantial social network of followers and who shape their audiences’ attitudes through their social media channels (Freberg, Graham, McGaughey, & Freberg, 2011; De Veirman et al., 2017). Through their social network, social media influencers craft their own authentic ‘personal brand’, which in turn is used by companies and advertisers as a means to reach potential consumers (Hearn & Schoenhoff, 2016). This distinguishes social media influencers from traditional celebrities, who have legal ownership and control over their public appearance and have agents to search for opportunities to sell their views and opinions. Important to note as well is that social media influencers are generally seen as trusted tastemakers, leading their advertisements of an item or brand to be perceived as more trustworthy and informative than other, more traditional, types of marketing (De Veirman et al., 2017; Hwang & Zhang, 2018).

The main goal of any marketing strategy is to persuade potential consumers through increasing their favorability towards the brand and eventually make them more susceptible to buy; hence, to increase their purchase intentions (Kim, Ko, & Kim, 2015; Schlosser, White, & Lloyd, 2006). Purchase intentions indicate the probability that consumers are willing to buy a product in the future, regardless of their purchase history with other companies (Schlosser et al., 2006; Martins et al., 2019; Wu, Yeh, & Hsiao, 2011). An increase in purchase intention therefore means an increase in the probability of purchasing. This taken together with the fact that it reflects consumers’ behavior instead of beliefs (Heath & Feldwick, 2008), makes purchase intentions the most important indicator of the success of advertisements.

Given that, once again, online advertisements are regarded as more trustworthy and informative than traditional ones (Hwang & Zhang, 2018), social influencer marketing forms a powerful tool in enhancing purchase intentions. The mechanism underlying this relationship

between social influencer marketing and purchase intentions is that of parasocial relationships; the intimate and long-term connections that audiences form with social influencers by following them on social networking sites (Kim et al., 2015; Lou & Kim, 2019). Whether a customer forms such a relationship with an influencer and subsequently truly gets influenced is dependent upon multiple factors, amongst which are the trustworthiness and the expertise of the influencer, the attractiveness of the source, and the experienced similarity between the influencer and the follower (Lou & Kim, 2019; Tabellion & Esch, 2019). Once established, the intense feeling of connectedness that characterizes the one-sided parasocial relationship between customers and social influencers leads to both a direct impact of parasocial relationships on purchase intentions (Lou & Kim, 2019) and an indirect impact through practical values such as the favorability towards the advertised brand and product attributes (Cramphorn & Meyer, 2009; Kim et al., 2015). Altogether, parasocial relationships are thought to increase favorability towards the brand or item promoted by the influencer and make consumers more susceptible to buy.

As an important part of examining whether materialism decreases the extent to which parasocial relationships are formed in an online context, such that materialistic customers would be less susceptible to buying items that are advertised through social influencer marketing, it is hypothesized that (H2) stronger parasocial relationships lead to increased purchase intentions amongst customers.

THE EFFECT OF MATERIALISM ON PURCHASE INTENTION THROUGH PSR

A general consensus exists about the relationship between materialism and increased purchase intention (Duh, 2015; Kamal et al., 2019; Muncy & Eastmen, 1998; Wella Yanti et al., 2019). Purchase intention can be thought of as a central part of materialism, with materialism incorporating the extent to which a person values possessions and their conviction that possessing material goods increases their happiness and life satisfaction (Lee & Ahn, 2016). From this, it follows that materialistic individuals have a higher tendency to buy certain goods and thereby a higher purchase intention (Martins et al., 2019; Schlosser et al., 2006).

In addition, parasocial relationships are as well known to positively impact purchase intentions (Lou & Kim, 2019), for the reason that they are the working mechanism underlying the effect of social influencer marketing on purchase intentions. As a result of the intense feeling of connectedness that is part of the parasocial relationship between customers and social influencers, the customers are more susceptible to buy the items that the influencer is promoting; their purchase intentions increase.

However, certain subtypes of materialism are also known to have negative consequences for the social relationships of individuals (Awanis et al., 2017; Gentina et al., 2018; Kasser & Ryan, 2001; Pieters, 2013; Van Boven et al., 2010). Because of this, some materialists may be more susceptible to buy items an influencer is promoting than others. More specifically, it is hypothesized that material medicine and material measure, as opposed to material mirth, reduce the formation of parasocial relationships, such that these subtypes of materialism may in fact undermine the effectiveness of social influencer marketing in increasing purchase intentions amongst customers. This implies that material mirth is the only subtype of materialism that actually increases purchase intentions through social influencer marketing. As such, materialism may not always be bad in that it can help cut through the exposure to influencer marketing and thereby weaken the effectiveness of social influencer marketing in increasing purchase intentions.

Taken together, the aim of the current study is to examine whether certain kinds of materialism decrease the extent to which parasocial relationships are formed in an online context and thereby make materialistic customers less susceptible to the effects of social influencer marketing. The hypothesized relationships between the subtypes of materialism and the formation of parasocial relationships, as well as between parasocial relationships and purchase intentions, are graphically depicted in the conceptual model in *Figure 1* below.

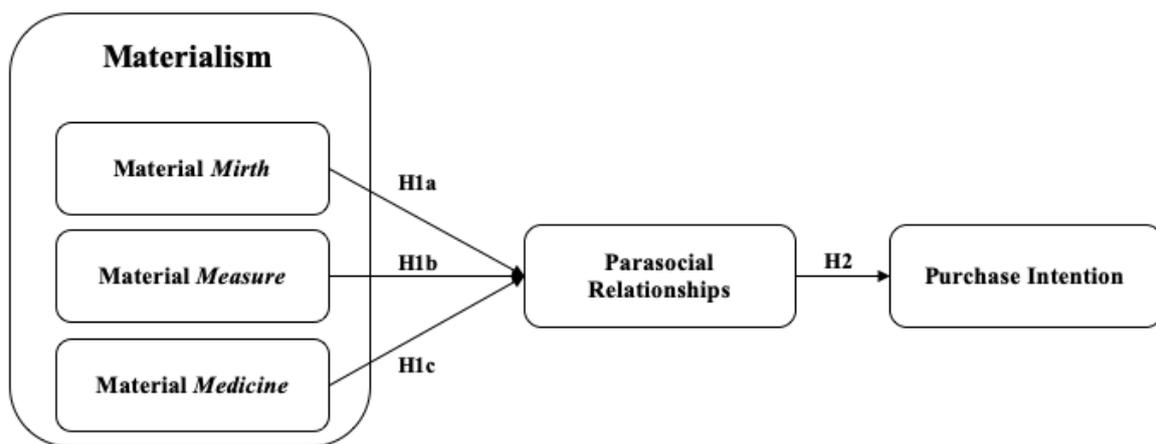


Figure 1. Conceptual model

METHOD

Participants and design

Adolescents aged 18-65 were recruited from the 16th of April till the 4th of May 2020. Because of specific circumstances, namely the COVID-19 epidemic, all respondents were targeted through online ways such as social media. To get the best sample of the population, the respondents were asked

to further spread the survey. Participants were asked to answer a couple of ‘screening questions’ that divided them into different groups; participants who could recall a favorite influencer, participants who could not recall a favorite influencer but were able to recognize a famous influencer and participants who could not recall or recognize any influencer. The questions asked for this were if (1) the participant was active on social media, (2) whether the participant is following any social

Table 1 | Demographics of the study sample.

Measure	Items	Frequency	Percentage
Average social media use	Never	0	0
	Less than once a day	0	0
	1-2 times	3	4.5
	3-5 times	7	10.6
	6-10	18	27.3
	11-20 times	16	24.2
	21-40 times	16	24.2
Type of favorite influencer *	More than 40 times	6	9.1
	Fashion	24	36.4
	Gaming	7	10.6
	Health living	13	19.7
	Travel	16	24.4
	Lifestyle	35	53.0
	Food	13	19.7
	Pets	1	1.5
	Parenting	3	4.5
	Other	19	28.8
Social media use*	YouTube	52	78.7
	Instagram	61	92.4
	Facebook	56	84.8
	Twitter	10	15.2
	Snapchat	39	59.1
	Other	8	12.1
Social media used to follow influencers*	YouTube	38	57.6
	Instagram	58	87.9
	Facebook	3	4.5
	Twitter	2	3.0
	Snapchat	3	4.5
	Other	4	6.1

**Indicates multiple option – ‘select all that apply.’ With total percentage exceeding 100*

influencers, and if so, (3) to fill in the name of the influencer they were able to recall. To make sure every participant was informed about what a social media influencer includes, a definition was given that was based on the definition of Lou and Kim (2019 but translated to influencers which are more known in and around the Netherlands (see *appendix*). Additionally, examples of profiles were given through four pictures which can be found in the *appendix*. Only participants older than 16 years were allowed to participate in the survey based on article 5 paragraph 1 of the ‘Uitvoeringswet Algemene verordening gegevensbescherming’. A total of 133 respondents finished the survey of which 93 participants were able to recall a favorite influencer. Based on the guidelines of Lou and Kim (2019) all the named influencers that did

not fit the definition were excluded. After excluding the cases that did not meet the definition of social media influencers and cleaning the data, 66 respondents remained plus an additional 28 participants that could not recall an influencer but were able to recognize one. For example, actors, models, and athletes were removed from the analysis. The participants had an average age of 24.79($SD = 5.92$), the median time spent on social media platforms is 11 – 20 times per day. 92.4% of them use Instagram, with 84.8% having Facebook accounts and 78.7% using YouTube. 53% of the social media influencers are from the lifestyle domain, 36.4% from fashion, and 24.4% travel. 87.9% used Instagram to follow their favorite influencer, 57.6% used YouTube, and 4.5% used Facebook (See *Table 1* for the demographics of the study sample).

Survey Procedure

The current study aims to examine whether materialism decreases the extent to which parasocial relationships are formed in an online context and thereby making materialistic customers less susceptible to buying items that are advertised through social influencer marketing. It has done so through a survey where the concepts materialism, parasocial relationships, and purchase intention were measured.

After answering the first three screening question mentioned above, participants qualified for two different parts of the survey, the part that knew or followed a social media influencer and the part that did not. For the participants that knew or followed a social media influencer, the next question asked them to state their favorite social media influencer, what type of influencer he/she is and which social media platform they use to follow this influencer. This is a common procedure in studies focusing on parasocial relationships because the assumption is that if individuals experience parasocial relationships, they will most likely form this relationship with an influencer they consider to be their favorite (Bond, 2018). This influencer's name then was inserted into the questions regarding parasocial relationships and purchase intention. Participants then were asked questions regarding perceived parasocial relationships, purchase intention, materialism, and ended with the control variables engagement and age which measured the respondent's activity on social media and their date of birth. The survey took around 9-11 minutes to complete.

MEASUREMENT

Parasocial relationships

The next part of the survey measured the parasocial relationships the participant has formed with their favorite social influencer. The scale parasocial relationships is measured with

13 randomized items as developed by Rosean and Dibble (2016), through a 5-point Likert scale. These items were based on the study of Hartman, Stuke, and Daschman (2008), which looked into the parasocial relations that are formed with racecar drivers. The first item of this questionnaire, originally meant to assess participants' attitudes towards race car drivers, was transformed into an item asking respondents for their favorite social influencer instead, as mentioned in the introduction of the survey. The remaining 12 items were answered based on the chosen influencer and include '[favorite influencer] makes me feel comfortable, as if I am with a friend', 'I look forward to seeing his/her posts', and 'I see he/she as a natural, down-to-earth person'. The full list of measurements can be found in **Table 2**. All the items are randomized and forced response. The scale has been validated in earlier studies with a Cronbach's alpha of .93 (Lou & Kim, 2019)

Purchase intentions

After assessing the extent to which parasocial relationships have been formed, 3 items of purchase intention were measured with the items used by Lou and Kim (2019) that build on the first item of the previous scale ('*Who is your favorite influencer?*') and were again measured through a 5-point Likert scale. This scale included items like 'Likely to buy certain products because of his/her posts' and 'Probable that I may purchase the products/brands that he/she has promoted if I happen to need one' and are randomized and forced response in the survey. The full list of measurements can be found in **Table 2**. Previous studies have validated this scale with a Cronbach's alpha of .89 (Lou & Kim, 2019).

Materialism

Subsequently, materialism and its three subtypes were measured with the 18-items Richins and Dawson (1992) instrument through a 5-point Likert scale. Material mirth was measured through 7 items, including 'I usually buy only the things I need' (reversed), 'Buying things gives me a lot of pleasure', and 'I like a lot of luxury in my life'. The Cronbach's alpha of this scale was between .71 and .75 over three different surveys (Richins & Dawson, 1992). Material medicine was measured through 5 items including 'I have all the things I really need to enjoy' (reversed), 'My life would be better if I owned certain things I do not have', and 'I would be happier if I owned nicer things'. The Cronbach's alpha for this scale was between .73 and .83 (Richins & Dawson, 1992). Material Measure was measured through 6 items including 'I admire people who own expensive homes, cars, and clothes', 'I like to own things that impress people', and 'I do not pay much attention to material objects other people own'. The full list of measurements can be found in **Table 2**. Previous studies have found a Cronbach's alpha for this scale of between .74 and .78 (Richins & Dawson,

1992). All 18 items of the three different types of materialism are randomized and forced response in the study. The overall Cronbach's alpha that previous studies found for the scale of materialism were between .80 and .88 (Richins & Dawson, 1992). *Table 2* presents detailed information about the items and the means.

Participants without a favorite influencer

Participants who did not have a favorite influencer were asked if they used social media. If they did, they were asked if they recognized any of the following influencers: MrBeast, Pewdiepie, Casey Neistat, KSI, Logan Paul, Anna Nooshin, Enzo Knol, Monica Geuze, Yara Michels, Dylan Haegens, Brad Lau, Rosanna Pansino, Laura Vitale, Kwebbelkop, Gamemeneer, Toysreview Ryan, Ninja, Michelle Lewin, Joe Wicks, Calsnape, Daniel Kordan, Janni Olsson Delér, Oliver Proudlock, Chiara Ferragni, Julia Hengel, Negin Mirsalehi, Jiff Pom, Loki the Wolfdog, Nala the Cat, Juniper the Fox, Doug the Pug, Ilana Wiles, Heather Armstrong, and other. They were given a maximum of 15 influencers (including other) based on the question which genre of social media they were or would be most interested in (fashion, gaming, health living, travel, lifestyle, food, pets, parenting, other). An image was used with the name and pictures of these influencers for extra clarification. The influencers mentioned above form a diverse group of well-known YouTubers and Instagrammers from around the world and some influencers that are specifically famous in the Netherlands because most participants are expected to be from the Netherlands. If any of these influencers were selected, this name would then be used in the parasocial relationships and purchase intention questions that followed. The survey ended with the materialism items and the control variables.

The participants who did not know any influencer or did not use social media were asked why they were not following any social influencer or did not use social media. After this question, they proceeded with the questions about materialism and the control variables.

Ethics

The survey started with information about the goal of the current study and where the data will be used for. Participants were informed about their confidentiality and how their information will be used. All their information has been anonymized, and the participants were able to withdraw from the survey at any moment to avoid any risk of harm. As stated earlier, only participants that were older than 16 years old could participate, and therefore participants younger than 16 years were asked to leave the survey. After this information, the participants were asked for consent. An email address for contact was also noted if participants had any questions or remarks about the survey.

Table 2 / Descriptives of the measurements.

Constructs (M, SD)	Items	Mean	SD
Parasocial Relationships (2.77, .79)	PSR_1: [Favorite influencer] makes me feel comfortable, as if I am with a friend	2.77	1.04
	PSR_2: I would love to meet [Favorite influencer] in person	2.80	1.21
	PSR_3: [Favorite influencer] would fit in well with my group of friends	2.88	1.13
	PSR_4: I would invite [Favorite influencer] to my party	2.73	1.22
	PSR_5: [Favorite influencer] is the kind of persona I would like to play/hang out with	2.65	1.05
	PSR_6: If [Favorite influencer] lived in my neighborhood we would be friends	2.76	.86
Purchase Intention (2.88, 1.08)	PI_1: Likely to buy certain products because of [Favorite influencer's] posts	3.20	1.24
	PI_2: Possible that I will visit some online stores or actual stores because of [Favorite influencer's] post	2.67	1.31
	PI_3: Probable that I may purchase the products/brands that [Favorite influencer] has promoted if I happen to need one	2.79	1.21
Material Mirth (3.32, .803)	Mirth_1: I usually buy only the things I need	3.40*	1.24
	Mirth_2: I try to keep my life simple, as far as possessions are concerned	3.38*	.86
	Mirth_3: I put less emphasis on material things than most people I know	3.18*	.89
Material Medicine (3.09, .901)	Medicine_1: My life would be better if I owned certain things I don't have	3.23	1.08
	Medicine_2: I'd be happier if I could afford to buy more things	2.92	1.04
	Medicine_3: It sometimes bothers me quite a bit that I can't afford to buy all the things I'd like	3.11	1.15
Material Measure (3.74, .71)	Measure_1: I admire people who own expensive homes, cars, and clothes.	3.79	1.12
	Measure_2: Some of the most important achievements in life include acquiring material possessions.	3.82	1.01
	Measure_3: I don't place much emphasis on the amount of material objects people own as a sign of success.	3.89*	.83
	Measure_4: The things I own say a lot about how well I'm doing in life	3.42	1.04
	Measure_5: I like to own things that impress people	3.77	1.02
	Measure_6: I don't pay much attention to the material objects other people own	3.73*	1.06

*Based on the reversed scores

RESULTS

Measurement validation

A confirmatory factor analysis was performed to measure the different scales of the study. To increase the Cronbach's α of the different scales, items that had low communalities and/or cross-loaded were removed. A total of 6 materialism and PSR items were removed. This led to the new Cronbach's α of the different constructs to be above the acceptable threshold based on Fields (2013) of .70 (see **Table 3**). The loadings ranged from .531 to .912 (see **Table 3**).

Table 3 / Reliability analysis of measurement items.

Constructs	Items	Loadings	Cronbach's α
Parasocial relationships	PSR_1	.591	.813
	PSR_2	.563	
	PSR_3	.667	
	PSR_4	.546	
	PSR_5	.912	
	PSR_6	.685	
Purchase intention	PI_1	.892	.830
	PI_2	.630	
	PI_3	.858	
Materialism	Mirth_1	.751	.837
	Mirth_2	.737	
	Mirth_3	.560	
Material Mirth	Medicine_1	.782	.765
	Medicine_2	.772	
	Medicine_3	.624	
Material Medicine	Measure_1	.773	.789
	Measure_2	.589	
	Measure_3	.531	
	Measure_4	.614	
	Measure_5	.650	
	Measure_6	.564	

Regression analysis

A hierarchical linear regression was performed to test the first three hypotheses controlled by a control variable, namely age. Results indicated that the model had a good fit in both step 1 (only control variable) and step 2 of the hierarchical regression ($F(1, 65) = 6.996, p = .010$ and $F(4, 65) = 8.835, p < .001$). Multicollinearity is analyzed through the multicollinearity statistics (see **Table 4**). The tolerances for all variables were above the set margins of bigger than .20 and smaller than 10 based on Fields (2013), making collinearity not a problem for this analysis.

Table 4 / Output hierarchical regression analysis

	<i>b</i>	<i>SE B</i>	β	<i>P</i>	Collinearity tolerance
Homoscedasticity					
was analyzed by					
the scatterplot and					
showed no clear					
pattern which					
indicated that					
there was no					
heteroscedasticity					
Step 1					
Constant	12.55	2.59		$P = .001$	
Age	.27	.10	.31	$P = .001$	1.00
Step 2					
Constant	3.41	3.54		$P = .338$	
Age	.16	.09	.18	$P = .098$.90
Material Mirth	-.68	.32	-.29	$P = .037$.57
Material Measure	.57	.15	.47	$P = .001$.69
Material Medicine	.65	.23	.35	$P = .007$.68

Note: $R^2 = .10$ for Step 1; $\Delta R^2 = .33$ for Step 2 ($P < .001$)

(See **Appendix**). The control variable age did explain only a small part of the variance (R^2

= .10, $F(1, 65) = 6.996, p = .010$). When material mirth, medicine and measure were included in the model, the explained variance increased with .33 to .37 ($R^2 = .37, F(4, 65) = 8.835, p < .001$). As stated earlier, the ANOVA of step 2 of the model indicated that the model had a good fit ($F(4, 65) = 8.835, p < .001$). H1a hypothesized that material medicine would relate negatively to the strength of the parasocial relationships between individuals and the influencers they are following. Results indicated that material medicine did indeed have a significant influence on parasocial relationships. However, this relationship was positive instead of negative ($\beta = .37, p = .007$) and therefore h1a was not supported. H1b hypothesized that material measure would relate negatively to the strength of the parasocial relationships between individuals and the influencers they are following. Like material medicine, material measure had a significant negative relationship with PSR ($\beta = .47, p < .001$) and therefore also h1b was not supported. H1c hypothesized that material mirth would relate positively to the strength of the parasocial relationships between individuals and the influencers they are following. Material mirth had a negative relationship with PSR ($\beta = -.29, p = .037$) and therefore also h1c was not supported. The power for this regression analysis was .99 and was calculated with G*Power (Faul, Erdfelder, Buchner, & Lang, 2009).

A simple linear regression was performed to test the second hypothesis, namely the relationship between PSR and purchase intention. Results indicated that the model had a good fit ($F(1, 65) = 5.216, p = .026$)

The tolerance of multicollinearity for PSR was above the set margins (see *Table 5*), making collinearity

Table 5 | Output simple regression analysis

	<i>b</i>	<i>SE B</i>	β	<i>P</i>	Collinearity tolerance
Constant	5.23	1.53		$P = .001$	
PSR	.18	.08	.28	$P = .026$	1

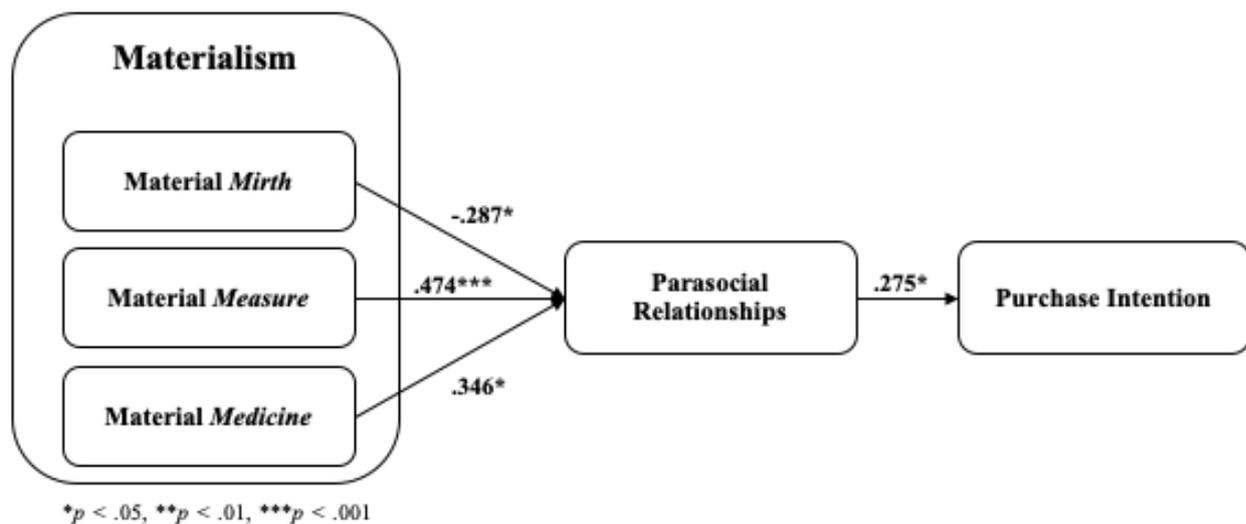
Note: $R^2 = .08 (P = .026)$

not a problem for this analysis. Homoscedasticity was analyzed by the scatterplot and showed no clear pattern which indicated that there was no heteroscedasticity (See **Appendix**). PSR explained only a small part of the variance ($R^2 = .08, F(1, 65) = 5.216, p = .026$). H2 hypothesizes that stronger parasocial relationships lead to increased purchase intentions amongst customers. Results indicated that PSR did have a significant influence on purchase intention ($\beta = .28, p = .026$). Therefore, h2 was supported. **Figure 2** summarizes the significant relationships between the variables. The power for this regression analysis was only .66 and was calculated with G*Power (Faul, Erdfelder, Buchner, & Lang, 2009).

Additionally, the current study also investigated the differences between participants that could recall a social influencer and the participants that could not recall a social influencer but were able to recognize a social influencer. A hierarchal linear regression was performed

for the latter group and compared to the former group. Results indicated that the model did not have a good fit in both step 1 (only control variable) and step 2 of the hierarchical regression ($F(1, 25) = 3.594, p = .070$ and $F(4, 25) = 1.280, p = .309$). The outcomes that came with the regression (all independent variables non-significant, $R^2 = .20, F(4, 25) = 1.280, p = .309$) were therefore not useable. Interestingly, the group that could not recall but were able to recognize famous influencers scored higher on PSR than people who could recall a social influencer. An independent samples t-test was performed to look at this difference in means and if this difference was significant. On average, participants that could not recall but were able to recognize famous influencers scored higher in PSR ($M = 3.79, SE = .20$), than those that were able to recall a social influencer ($M = 2.77, SE = .10$). This difference, 1.02, was significant $t(92) = -4.680, p < .001$ and represented a medium-sized effect, $d = 0.59$. The same test was done for purchase intention. On average participants that could not recall but could recognize famous influencers scored higher on purchase intention ($M = 4.25, SE = .23$), than those that were able to recall a social influencer ($M = 2.88, SE = .13$). This difference, 1.37, was significant $t(92) = -5.404, p < .001$ and represented a medium-sized effect, $d = 0.491$.

Figure 2 | Conceptual model with β values



DISCUSSION

While materialism is a topic which is heavily researched (Chia, 2010; Duh, 2015; Schaefer, Hermans, & Parker, 2004; Duh, 2015; Kamal, Chu, & Pedram, 2019; Muncy & Eastmen, 1998; Wella Yanti, Martini, & Septa, 2019), research regarding different forms of materialism and their impact on social relationships is still sparse (Pieters, 2013). This study aimed to advance the existing literature by finding out which influence the three different types

of materialism have on parasocial relationships. The findings of the current study revealed that material measure and material medicine are positively related to PSR, while material mirth is negatively related to PSR. These three subtypes play an important role in forming PSR with explained variance higher than thirty percent. PSR on its turn shows to have a positive relationship with purchase intention. Additionally, participants who were able to recognize but not recall a social influencer scored higher on both PSR and purchase intention than the participants who were able to recall a social influencer. The major findings of this study are elaborated below.

Differential effect of subtypes materialism

The first major finding of the current study contains the positive effect material measure and material medicine have on parasocial relationships. These findings oppose previous research that found materialism to have negative consequences for relationships of individuals (Awanis et al., 2017; Gentina et al., 2018; Kasser & Ryan, 2001; Pieters, 2013; Van Boven et al., 2010). Only material mirth showed a negative effect on PSR, however, this form of materialism was the only form that is not known for having negative consequences for relationships of individuals and therefore also opposes this research and the hypothesis. It can be explained that the negative consequences of materialism on social relationships do not hold up for parasocial relationships. In the case of parasocial relationships, it is the comparison of one's self with influencers that have obtained the idealized status and future that form the reason for people to start forming relationships with this influencer. In the mind of the follower, this influencer is happier or more successful because he/she obtained more possessions. This is further explained by the results, people that defined success based on possessions (measure), as well as people who use acquisition as the pursuit of happiness (medicine), showed to have a positive significant effect on PSR. These two subtypes are characterized by people that compare their own's future and possessions with other people's 'more successful' future and possessions. Opposingly, people that seek possessions for material mirth are not motivated by extrinsic factors and showed to have a negative significant relationship with PSR. These findings add to the research about the antecedents of PSR and reaffirm Pieter's (2013) statement that materialism should be looked at as different subtypes instead of as just one item to prevent the masking of underlying relationships.

Influence of PSR on purchase intention

The second major finding of this study relates to the relationship of PSR with purchase intention. Like stated earlier, comparing one's self with other people that have obtained the idealized status and future form the reason for these people to start following and forming

relationships with this person. Nowadays, with the presence of social media, influencers play an important role as these idealized persons. In the mind of the follower, this influencer is happier or more successful because he/she obtained more possessions. Their goal of acquiring more possessions to obtain this idealized future leads to an increase in willingness to buy and therefore an increase in purchase intention. This is further explained by the results that showed PSR to have a positive significant influence on purchase intention. This finding replicates the effect of PSR on purchase intention from previous research (Cramphorn & Meyer, 2009; Kim et al., 2015; Lou & Kim, 2019).

The difference in recall and recognition

Additionally, results indicated that participants that could not recall a favorite influencer but were able to recognize famous influencers scored higher on PSR and purchase intention. This contradicts the statement of Bond (2018) who stated that people who experience PSR will most likely have PSR with the favorite influencer they could recall. A possible explanation is that famous influencers that are easily recognizable evoke more PSR and purchase intention than the influencers that people can recall. A side note to this result is that the sample for these specific participants was small (N=28). Future research could dive further into this because current studies mainly focus on people that are able to recall an influencer.

Practical implications

The findings of this study add to the existing literature concerning the relatively new topic of online influencer marketing as it explains the relationship of materialism with purchase intention through PSR. More in-depth research about this topic helps the marketers in forming a better understanding of the process of influencer marketing and what aspects should be focused on. This study gives more information about which role materialism plays in forming parasocial relationships and therefore how it can affect influencer marketing. It gives a clearer image of which people are more susceptible to this form of marketing. As stated earlier, people who value material possessions by measure of success or medicine for happiness form more parasocial relationships than people who experience material mirth. **Extrinsic motivators like the comparison of a follower's possessions or status with that of an influencer form the main reason for them to start forming these parasocial relationships with the influencer.** Investing in influencers that have acquired a lot of possessions or are described as successful seems to be the key to increasing PSR when it comes to materialistic people. These findings can help marketers make influencer marketing more efficient and therefore make people more susceptible to buy and thus increasing purchase intention which is the eventual goal of marketing. Additionally, it might be interesting to look at using the more recognizable

influencers of the Netherlands and the world in an influencer marketing campaign because these influencers seemed to evoke PSR and purchase intention more easily.

LIMITATION AND FURTHER DIRECTIONS

This study also comes with its limitation. Firstly, because of difficult times namely the COVID-19 epidemic, a good and big enough sample of the population was difficult to gather. Because of quarantine, all respondents were gathered through social media, which made it hard to find enough respondents. Future research could find more respondents to make the results even more representative. Secondly, using an English survey for mainly Dutch-speaking respondents led to less useable responses. A large number of respondents did not understand or read the definition of a social influencer and therefore wrote down the name of a person that did not fit into this category. These responses were therefore excluded from the analysis. Additionally, the English survey might have led to some extra items in the materialism and PSR scales that had to be deleted, possibly because not every question was understood like it was supposed to. Future research outside English speaking countries could use a translated version of the survey to improve the understanding of the questions.

Future research should further investigate the difference between normal relationships and parasocial relationships. The current study looked at parasocial relationships similarly as to normal relationships, but the results indicated that this is not possible. Additionally, future research could investigate the difference between people that are able to recall an influencer and people that are only able to recognize an influencer. Current research only looks at people that are able to recall an influencer. Results from the current study show that people that were only able to recognize an influencer showed higher PSR and purchase intention than people that were able to recall an influencer.

CONCLUSION

The main research question to be answered in this study was whether materialism decreases the extent to which parasocial relationships are formed in an online context, thereby making materialistic customers less susceptible to buying items that are advertised through social influencer marketing. The current study hypothesized that whereas (H1a) materialism and (H1b) material measure are negatively related to the strength of the parasocial relationships between individuals and the influencers they are following, (H1c) materialism is positively related to this relationship. All of these hypotheses had to be rejected based on the results. It can be concluded that materialism does not decrease the extent to which parasocial

relationships are formed in an online context but does play a major role in forming these relationships with an explained variance of higher than thirty percent. Results showed that both material measure and material medicine increase parasocial relationships. The only form of materialism that decreased PSR is material mirth which was expected to increase PSR because of its relative social nature. The last hypothesis (H2), which hypothesized that stronger parasocial relationships lead to increased purchase intention is supported. Results showed that PSR increased purchase intention. Finally concluding that materialism increases the extent to which parasocial relationships are formed in an online context, thereby making materialistic customers more susceptible to buying items that are advertised through social influencer marketing

References

- Ahuvia, A., & Wong, N. (1995). Materialism: Origins and implications for personal well-being. *ACR European Advances*, 2, 172-178.
- Alalwan, A. A. (2018). Investigating the impact of social media advertising features on customer purchase intention. *International Journal of Information Management*, 42, 65-77. doi:10.1016/j.ijinfomgt.2018.06.001
- Awanis, S., Schlegelmilch, B. B., & Cui, C. C. (2017). Asia's materialists: Reconciling collectivism and materialism. *Journal of International Business Studies*, 48(8), 964-991. doi:10.1057/s41267-017-0096-6
- Bond, B. J. (2018). Parasocial Relationships with Media Personae: Why They Matter and How They Differ Among Heterosexual, Lesbian, Gay, and Bisexual Adolescents. *Media Psychology*, 21(3), 457-485. doi:10.1080/15213269.2017.1416295
- Burroughs, J. E., & Rindfleisch, A. (2002). Materialism and Well-Being: A Conflicting Values Perspective. *Journal of Consumer Research*, 29(3), 348-370. doi:10.1086/344429
- Chia, S. C. (2010). How Social Influence Mediates Media Effects on Adolescents' Materialism. *Communication research*, 37(3), 400-419. doi:10.1177/0093650210362463
- Clement, J. (2019). Number of global social network users 2010-2021. Retrieved from <https://www.statista.com/statistics/278414/number-of-worldwide-social-network-users/>
- Cramphorn, M. F., & Meyer, D. (2009). The Gear Model of Advertising - Modelling Human Response to Advertising Stimuli. *International Journal of Market Research*, 51(3), 1-17. doi:10.1177/147078530905100310
- Csikszentmihalyi, M., & Rochberg-Halton, E. (1978). Reflections on materialism: People and things. *University of Chicago Magazine*, 70(3), 7-15.
- De Veirman, M., Cauberghe, V., & Hudders, L. (2017). Marketing through Instagram influencers: the impact of number of followers and product divergence on brand attitude. *International Journal of Advertising*, 36(5), 798-828. doi:10.1080/02650487.2017.1348035
- Deci, E. L., & Ryan, R. M. (2000). The "What" and "Why" of Goal Pursuits: Human Needs and the Self-Determination of Behavior. *Psychological Inquiry*, 11(4), 227-268. doi:10.1207/s15327965pli1104_01
- Duh, H. I. (2015). Antecedents and Consequences of Materialism: An Integrated Theoretical Framework. *Journal of Economics and Behavioral Studies*, 7(1(J)), 20-35. doi:10.22610/jeps.v7i1(J).560

- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods*, *41*, 1149-1160.
- Field, Andy. *Discovering statistics using IBM SPSS statistics*. sage, 2013.
- Freberg, K., Graham, K., McGaughey, K., & Freberg, L. A. (2011). Who are the social media influencers? A study of public perceptions of personality. *Public Relations Review*, *37*(1), 90-92. doi:10.1016/j.pubrev.2010.11.001
- Gentina, E., Shrum, L. J., & Lowrey, T. M. (2016). Coping with Loneliness Through Materialism: Strategies Matter for Adolescent Development of Unethical Behaviors. *Journal of Business Ethics*, *152*(1), 103-122. doi:10.1007/s10551-016-3329-x
- Hartmann, T., Stuke, D. & Daschmann, G. (2008). Positive Parasocial Relationships with Drivers Affect Suspense in Racing Sport Spectators. *Journal of Media Psychology: Theories, Methods, and Applications*, *20*(1), 24–34. doi:10.1027/1864-1105.20.1.24.
- Hearn, A., & Schoenhoff, S. (2016). From celebrity to influencer. *A companion to celebrity*. Wiley: London, 194-212.
- Heath, R., & Feldwick, P. (2008). Fifty Years Using the Wrong Model of Advertising. *International Journal of Market Research*, *50*(1), 29-59. doi:10.1177/147078530805000105
- Horton, D., & Richard Wohl, R. (1956). Mass communication and para-social interaction: Observations on intimacy at a distance. *Psychiatry*, *19*(3), 215-229.
- Hwang, K., & Zhang, Q. (2018). Influence of parasocial relationship between digital celebrities and their followers on followers' purchase and electronic word-of-mouth intentions, and persuasion knowledge. *Computers in Human Behavior*, *87*, 155-173. doi:10.1016/j.chb.2018.05.029
- Kamal, S., Chu, S.-C., & Pedram, M. (2013). Materialism, attitudes, and social media usage and their impact on purchase intention of luxury fashion goods among American and Arab young generations. *Journal of Interactive Advertising*, *13*(1), 27-40.
- Kasser, T., & Ryan, R. M. (2001). Be careful what you wish for: Optimal functioning and the relative attainment of intrinsic and extrinsic goals. In P. Schmuck & K. M. Sheldon (Eds.), *Life goals and well-being: Towards a positive psychology of human striving* (p. 116–131). Hogrefe & Huber Publishers.
- Kim, H., Ko, E., & Kim, J. (2015). SNS users' para-social relationships with celebrities: social media effects on purchase intentions. *Journal of Global Scholars of Marketing Science*, *25*(3), 279-294. doi:10.1080/21639159.2015.1043690

- Lee, M. S. W., & Ahn, C. S. Y. (2016). Anti-consumption, Materialism, and Consumer Well-being. *Journal of Consumer Affairs*, 50(1), 18-47. doi:10.1111/joca.12089
- Liljander, V., Gummerus, J., & Söderlund, M. (2015). Young consumers' responses to suspected covert and overt blog marketing. *Internet Research*, 25(4), 610-632. doi:10.1108/intr-02-2014-0041
- Lou, C., & Kim, H. K. (2019). Fancying the New Rich and Famous? Explicating the Roles of Influencer Content, Credibility, and Parental Mediation in Adolescents' Parasocial Relationship, Materialism, and Purchase Intentions. *Frontiers in Psychology*, 10(2567). doi:10.3389/fpsyg.2019.02567
- Martins, J., Costa, C., Oliveira, T., Gonçalves, R., & Branco, F. (2019). How smartphone advertising influences consumers' purchase intention. *Journal of Business Research*, 94, 378-387. doi:10.1016/j.jbusres.2017.12.047
- Maxwell, S. E., Lau, M. Y. , Howard, G. S. , Anderson, N. B. & Kazak, A. E. (2015). Is Psychology Suffering From a Replication Crisis? : What Does “Failure to Replicate” Really Mean? *American Psychologist*, 70(6), 487–498. doi:10.1037/a0039400
- Muncy, J. A., & Eastman, J. K. (1998). Materialism and consumer ethics: An exploratory study. *Journal of Business Ethics*, 17(2), 137-145. doi:10.1023/a:1005723832576
- Pieters, R. (2013). Bidirectional Dynamics of Materialism and Loneliness: Not Just a Vicious Cycle. *Journal of Consumer Research*, 40(4), 615-631. doi:10.1086/671564
- Richins, M. L., & Dawson, S. (1992). A Consumer Values Orientation for Materialism and Its Measurement: Scale Development and Validation. *Journal of Consumer Research*, 19(3), 303-316. doi:10.1086/209304
- Rosaen, S. F., & Dibble, J. L. (2016). Clarifying the Role of Attachment and Social Compensation on Parasocial Relationships with Television Characters. *Communication Studies*, 67(2), 147-162. doi:10.1080/10510974.2015.1121898
- Schaefer, A. D., Hermans, C. M., & Parker, R. S. (2004). A cross-cultural exploration of materialism in adolescents. *International Journal of Consumer Studies*, 28(4), 399-411. doi:10.1111/j.1470-6431.2004.00395.x
- Schlosser, A. E., White, T. B., & Lloyd, S. M. (2006). Converting Web Site Visitors into Buyers: How Web Site Investment Increases Consumer Trusting Beliefs and Online Purchase Intentions. *Journal of Marketing*, 70(2), 133-148. doi:10.1509/jmkg.70.2.133
- Solberg, E., Diener, E., & Robinson, M. (2004). Why are materialists less satisfied? *Psychology and consumer culture: The struggle for a good life in a materialistic world*. doi:10.1037/10658-003

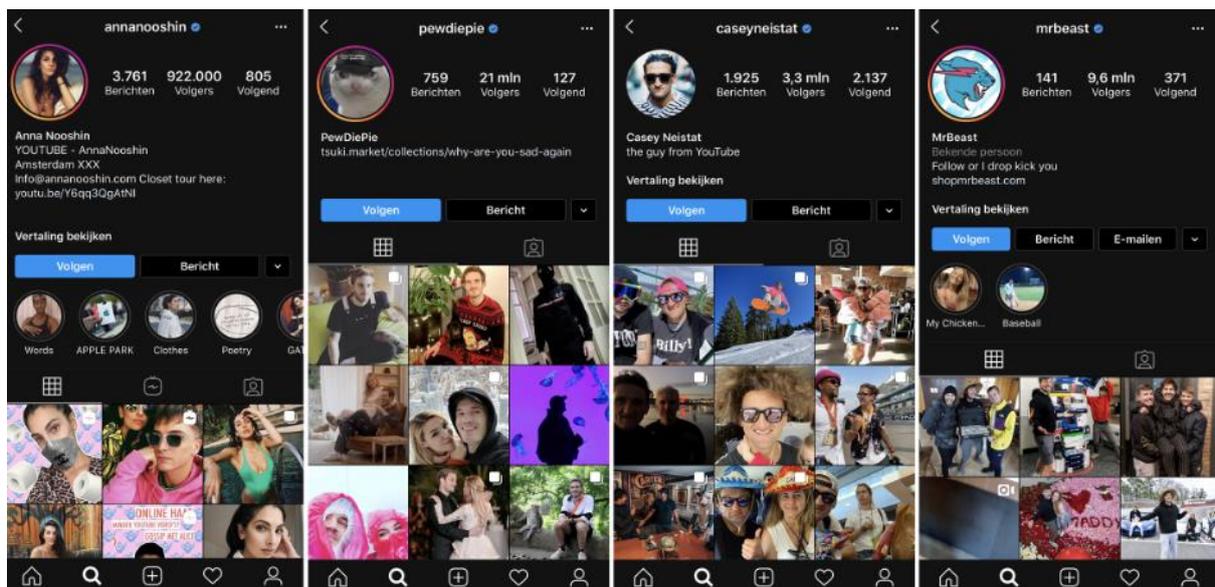
- Tabellion J., Esch FR. (2019) Influencer Marketing and its Impact on the Advertised Brand. In: Bigne E., Rosengren S. (eds) *Advances in Advertising Research X. European Advertising Academy* (pp. 29-41). doi:10.1007/978-3-658-24878-9_3
- Van Boven, L., Campbell, M. C., & Gilovich, T. (2010). Stigmatizing materialism: on stereotypes and impressions of materialistic and experiential pursuits. *Pers Soc Psychol Bull*, 36(4), 551-563. doi:10.1177/0146167210362790
- Ward, S., & Wackman, D. (1971). Family and media influences on adolescent consumer learning. *American behavioral scientist*, 14(3), 415-427.
- Wella Yanti, K. D., Martini, L. K. B., & Sapta, I. K. S. (2019). The Effect of Social, Individual, and Materialism Factors on the Purchase of Purchasing Luxury Mixed Bags and Consumer Attitudes as a Mediation Variable (Behavior Study in Career Women in Denpasar). *International Journal of Contemporary Research and Review*, 10(02), 21297-21308. doi:10.15520/ijcrr.v10i02.659
- Wu, P. C. S., Yeh, G. Y.-Y., & Hsiao, C.-R. (2011). The effect of store image and service quality on brand image and purchase intention for private label brands. *Australasian Marketing Journal (AMJ)*, 19(1), 30-39. doi:10.1016/j.ausmj.2010.11.001

APPENDIX

Definition of social influencers

Social media influencers are digital personalities who have amassed large number of followers across one or several social media platforms (e.g., YouTube, Instagram, twitter) and carry influence over others. Compared with traditional celebrities, influencers are “regular people” who become online “celebrities” by creating content on social media, e.g., philanthropist YouTuber *MrBeast*, gaming YouTuber *PewDiePie*, Instagram star *Loki the Wolfdog*, fashion influencer *Anna Nooshin*, YouTuber *Casey Neistat*, among other influencers in areas like toys, gaming, healthy living, travel lifestyle, food, etc.

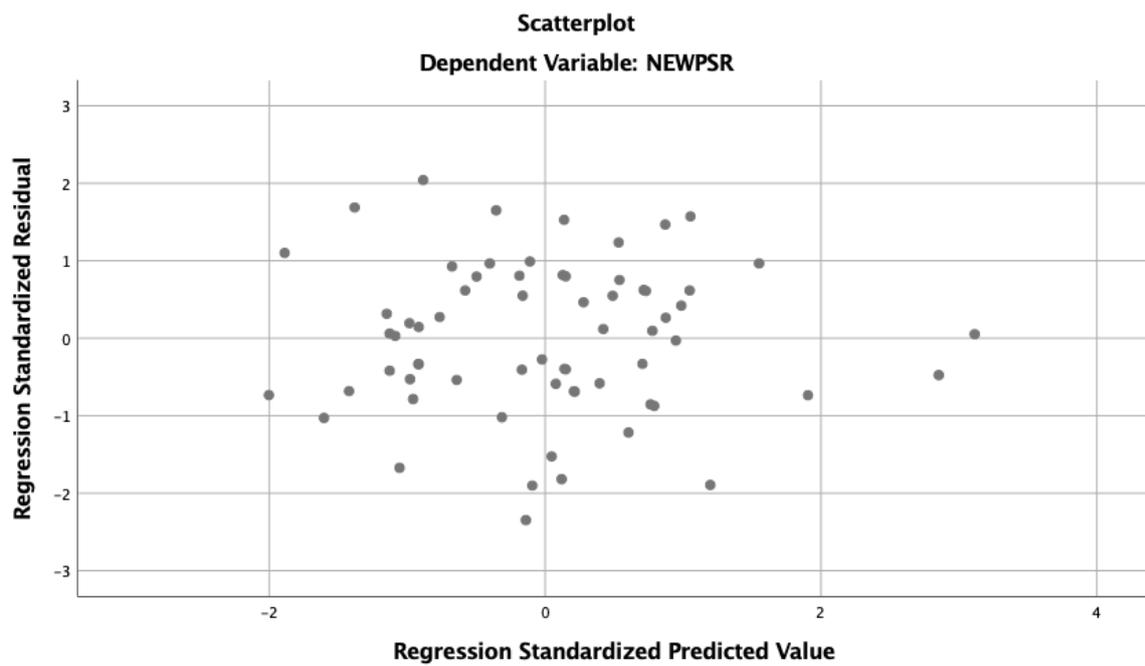
Example profiles



Example influencers



Scatterplot homoscedasticity hierarchal regression analysis



Scatterplot homoscedasticity simple regression analysis

